

# Alpha Essentials

The Reliable Source for  
Industry-Standard Cable

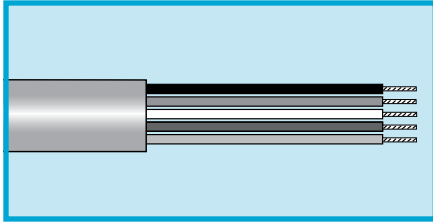
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# Communication and Control

300 V Unshielded, Multiconductor, PVC, PVC

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**UL AWM 2509, 2576**  
**UL CL2**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- Unbalanced intercom and sound systems
- Remote circuit controls
- Telephones
- Low-voltage circuits

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG and CL2)

## Conductor Color Coding

- Chart D

## Materials

- Stranded tinned copper conductors
- PVC insulation
- Slate PVC jacket

## Availability

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

## UL AWM 2509, UL CMG

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M33403</b>	3	0.191	4.85	0.020	0.51
<b>M33404</b>	4	0.209	5.31	0.020	0.51
<b>M33406</b>	6	0.251	6.38	0.020	0.51
<b>M33408</b>	8	0.273	6.93	0.020	0.51
<b>M33410</b>	10	0.320	8.13	0.020	0.51
<b>M33412</b>	12	0.331	8.41	0.020	0.51
<b>M33415</b>	15	0.362	9.19	0.020	0.51

## UL AWM 2509, UL CMG

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

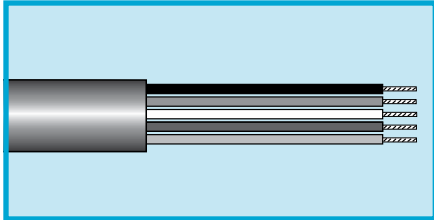
Stranding: 16/30 (7 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
Color Code D

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	Mm
<b>M33502</b>	2	0.208	5.28	0.025	0.64
<b>M33503</b>	3	0.220	5.59	0.025	0.64
<b>M33504</b>	4	0.241	6.12	0.025	0.64
<b>M33505</b>	5	0.264	6.71	0.025	0.64
<b>M33506</b>	6	0.288	7.32	0.025	0.64
<b>M33507</b>	7	0.288	7.32	0.025	0.64
<b>M33508</b>	8	0.313	7.95	0.025	0.64
<b>M33510</b>	10	0.366	9.30	0.025	0.64
<b>M33512</b>	12	0.378	9.60	0.025	0.64
<b>M33515</b>	15	0.423	10.74	0.030	0.76



# Communication and Control

## 300 V Unshielded, Multiconductor, PVC, PVC



**UL AWM 2464**  
**UL CL2**  
**CSA AWM I/II A/B FT4**

### Applications

- Control and signal wiring
- Computers
- Instrumentation

### Operating Temperature

- -20°C to +90°C (CSA)
- -20°C to +80°C (AWM)

### Conductor Color Coding

- See tables

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

#### 20 AWG (0.50 mm<sup>2</sup>)

Stranding: 10/30 (10 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
<b>882002</b>	2	0.202	5.13	0.032	0.81	R
<b>882003</b>	3	0.213	5.41	0.032	0.81	R
<b>882004</b>	4	0.231	5.87	0.032	0.81	R
<b>882005</b>	5	0.251	6.38	0.032	0.81	R
<b>882006</b>	6	0.272	6.91	0.032	0.81	R
<b>882007</b>	7	0.272	6.91	0.032	0.81	R
<b>882008</b>	8	0.293	7.44	0.032	0.81	R
<b>882010</b>	10	0.318	8.08	0.032	0.81	R

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

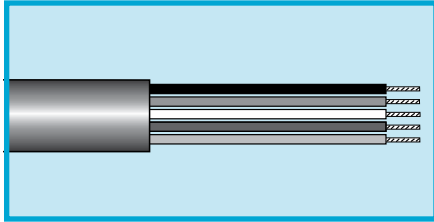
Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
<b>881802</b>	2	0.222	5.64	0.032	0.81	R
<b>881803</b>	3	0.234	5.94	0.032	0.81	F
<b>881804</b>	4	0.255	6.48	0.032	0.81	R
<b>881805</b>	5	0.278	7.06	0.032	0.81	R
<b>881806</b>	6	0.289	7.34	0.032	0.81	R
<b>881807</b>	7	0.302	7.67	0.032	0.81	R
<b>881808</b>	8	0.341	8.66	0.032	0.81	R
<b>881809</b>	9	0.379	9.63	0.032	0.81	R
<b>881812</b>	12	0.408	10.36	0.032	0.81	F

# Communication and Control

300 V Unshielded, Multiconductor, PVC, PVC

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Essentials



**UL AWM 2509 VW-1**  
**UL CM**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart D

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>1895C</b>	2	0.180	4.57	0.020	0.51
<b>1896C</b>	3	0.191	4.85	0.020	0.51
<b>1896/4C</b>	4	0.209	5.31	0.020	0.51
<b>1896/5C</b>	5	0.230	5.84	0.020	0.51
<b>1896/6C</b>	6	0.251	6.38	0.020	0.51
<b>1896/7C</b>	7	0.251	6.38	0.020	0.51
<b>1896/8C</b>	8	0.273	6.93	0.020	0.51
<b>1896/9C</b>	9	0.301	7.65	0.023	0.58
<b>1896/10C</b>	10	0.320	8.13	0.020	0.51
<b>1896/12C</b>	12	0.331	8.41	0.020	0.51
<b>1896/15C</b>	15	0.382	9.70	0.030	0.76

### 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>1897C</b>	2	0.198	5.03	0.020	0.51
<b>1898C</b>	3	0.210	5.33	0.020	0.51
<b>1898/4C</b>	4	0.231	5.87	0.020	0.51
<b>1898/5C</b>	5	0.254	6.45	0.020	0.51
<b>1898/6C</b>	6	0.278	7.06	0.020	0.51
<b>1898/7C</b>	7	0.278	7.06	0.020	0.51
<b>1898/8C</b>	8	0.313	7.95	0.025	0.64
<b>1898/9C</b>	9	0.337	8.56	0.025	0.64
<b>1898/10C</b>	10	0.366	9.30	0.025	0.64
<b>1898/12C</b>	12	0.378	9.60	0.025	0.64
<b>1898/15C</b>	15	0.423	10.74	0.030	0.76
<b>1898/19C</b>	19	0.455	11.56	0.030	0.76
<b>1898/25C</b>	25	0.544	13.82	0.035	0.89

### 16 AWG (1.32 mm<sup>2</sup>)

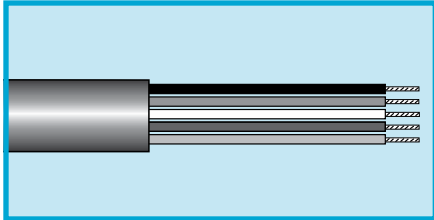
Stranding 19/0.0117 (19 x 0.29 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>1899C</b>	2	0.222	5.64	0.020	0.51
<b>1899/3C</b>	3	0.236	5.99	0.020	0.51
<b>1899/4C</b>	4	0.260	6.60	0.020	0.51



# Communication and Control

300 V Unshielded, Multiconductor, PVC, PVC



**UL CL2 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CL2)

### Conductor Color Coding

- Chart D

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

#### 14 AWG (2.09 mm<sup>2</sup>)

Stranding: 41/30 (41 x 0.25 mm)  
Insulation thickness: 0.020 (0.51 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>1891C</b>	2	0.268	6.81	0.020	0.51
<b>1891/3C</b>	3	0.286	7.26	0.020	0.51

#### 12 AWG (3.31 mm<sup>2</sup>)

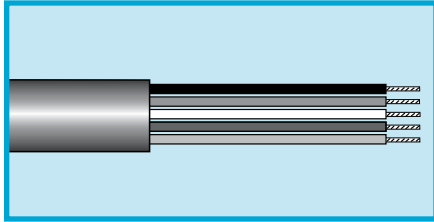
Stranding: 65/30 (65 x 0.25 mm)  
Insulation thickness: 0.020 (0.51 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>1892C</b>	2	0.312	7.92	0.023	0.58
<b>1892/3C</b>	3	0.333	8.46	0.023	0.58

# Communication and Control

300 V Unshielded, Multiconductor, PVC, PVC

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**UL AWM 2576 (150 V) VW-1  
UL CM  
CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart D

### Materials

- Stranded or solid tinned copper conductors
- PVC insulation
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### 22 AWG (0.35 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1172C	2	0.164	4.17	0.032	0.81
1173C	3	0.172	4.37	0.032	0.81
1174C	4	0.185	4.70	0.032	0.81
1175C	5	0.200	5.08	0.032	0.81
1176C	6	0.215	5.46	0.032	0.81
1177C	7	0.215	5.46	0.032	0.81
1178C	8	0.230	5.84	0.032	0.81
1179C	9	0.246	6.25	0.032	0.81
1180C	10	0.264	6.71	0.032	0.81
1181C	12	0.272	6.91	0.032	0.81
1181/15C	15	0.294	7.47	0.032	0.81
1181/20C	20	0.326	8.28	0.032	0.81
1181/25C	25	0.364	9.25	0.032	0.81
1181/30C	30	0.385	9.78	0.032	0.81
1181/40C	40	0.429	10.90	0.032	0.81
1181/50C	50	0.478	12.14	0.035	0.89
1181/60C	60	0.520	13.21	0.035	0.89

### 22 AWG (0.32 mm²)

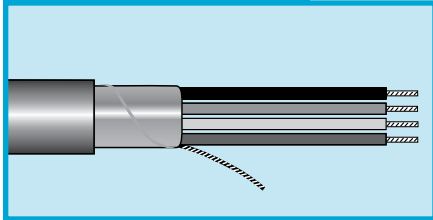
Stranding: Solid  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1793C	2	0.157	3.99	0.032	0.81



# Communication and Control

300 V Foil Shield, Multiconductor, PVC, PVC  
Computer Cable



**UL AWM 2464**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- Control and signal wiring
- Computers
- Instrumentation

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

## Conductor Color Coding

- See tables

## Materials

- Stranded tinned copper conductors
- PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

## Availability

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

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

Stranding: 7/28 (10 x 0.32 mm)  
Insulation thickness: 0.016 (0.41 mm)  
Color Code D

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M4660	2	0.211	5.36	0.032	0.81
M4661	3	0.222	5.64	0.032	0.81
M4662	4	0.240	6.10	0.032	0.81
M4664	6	0.282	7.16	0.032	0.81
M4665	8	0.304	7.72	0.032	0.81
M4666	10	0.351	8.92	0.032	0.81
M4668	15	0.393	9.98	0.032	0.81
M4670	20	0.437	11.10	0.032	0.81
M4672	25	0.491	12.47	0.032	0.81
M4673	30	0.520	13.21	0.032	0.81
M4675	40	0.625	15.88	0.053	1.35
M4677	50	0.685	17.40	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)  
Color Code D

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M4690	2	0.229	5.82	0.032	0.81
M4691	3	0.241	6.12	0.032	0.81
M4692*	2	0.229	5.82	0.032	0.81
M4693*	3	0.241	6.12	0.032	0.81
M4694	4	0.262	6.65	0.032	0.81
M4696	6	0.309	7.85	0.032	0.81
M4697	8	0.334	8.48	0.032	0.81
M4698	10	0.387	9.83	0.032	0.81
M4700	15	0.436	11.07	0.032	0.81
M4702	20	0.485	12.32	0.032	0.81
M4704	25	0.545	13.84	0.032	0.81
M4706	30	0.620	15.75	0.053	1.35
M4708	40	0.690	17.53	0.053	1.35

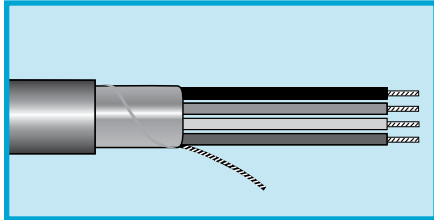
\*Conductor color coding: 1 Brown, 2 Blue, 3 Green/Yellow.



# Communication and Control

300 V Foil Shield, Multiconductor, PVC, PVC  
Computer Cable

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**UL AWM 2464**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- Control and signal wiring
- Computers
- Instrumentation

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

## Conductor Color Coding

- Chart D

## Materials

- Stranded tinned copper conductors
- PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward
- Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

## Availability

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

16 AWG (1.32 mm<sup>2</sup>)

Stranding: 19/0.0117 (19 x 0.30 mm)  
Insulation thickness: 0.016 (0.41 mm)

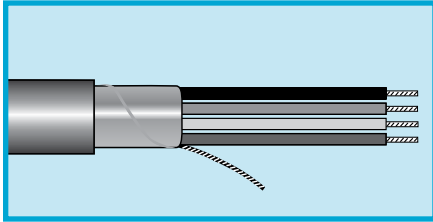
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M4720</b>	2	0.253	6.43	0.032	0.81
<b>M4721</b>	3	0.267	6.78	0.032	0.81
<b>M4722*</b>	2	0.253	6.43	0.032	0.81
<b>M4723*</b>	3	0.267	6.78	0.032	0.81
<b>M4724</b>	4	0.291	7.39	0.032	0.81
<b>M4726</b>	6	0.345	8.76	0.032	0.81
<b>M4728</b>	8	0.374	9.50	0.032	0.81
<b>M4730</b>	10	0.435	11.05	0.032	0.81
<b>M4732</b>	15	0.489	12.42	0.032	0.81

\*Conductor color coding: 1 Brown, 2 Blue, 3 Green/Yellow.



# Communication and Control

300 V Foil Shield, Multiconductor, PVC, PVC  
Computer Cable



**UL AWM 2464**  
**UL CL2**  
**CSA AWM I/II A/B FT4**

## Applications

- Sound broadcast
- Instrumentation

## Operating Temperature

- -20°C to +80°C

## Conductor Color Coding

- Chart R

## Materials

- Stranded tinned copper conductors
- PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward  
Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

## Availability

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

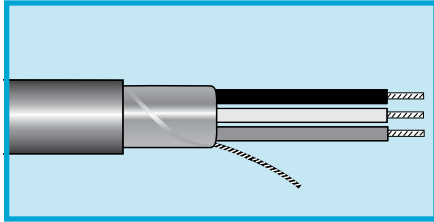
## 24 AWG (0.22 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1012405	5	0.190	4.83	0.035	0.89
1012407	7	0.205	5.21	0.035	0.89
1012409	9	0.236	5.99	0.035	0.89

# Communication and Control

## 300 V Foil Shield, Multiconductor, PVC, PVC



**UL AWM 2576 (150 V) VW-1**  
**UL CM**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart D

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

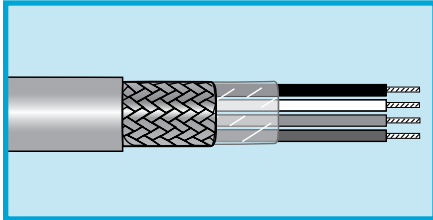
24 AWG (0.23 mm <sup>2</sup> )					
Stranding: 7/32 (7 x 0.20 mm) Insulation thickness: 0.010 (0.25 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1212C	2	0.156	3.96	0.032	0.81
1213C	3	0.163	4.14	0.032	0.81
1214C	4	0.174	4.42	0.032	0.81
1215C	5	0.187	4.75	0.032	0.81
1216C	6	0.201	5.11	0.032	0.81
1217C	7	0.201	5.11	0.032	0.81
1218C	8	0.214	5.44	0.032	0.81
1219C	9	0.228	5.79	0.032	0.81
1219/10C	10	0.244	6.20	0.032	0.81
1219/12C	12	0.251	6.38	0.032	0.81
1219/15C	15	0.270	6.86	0.032	0.81
1219/20C	20	0.298	7.57	0.032	0.81
1219/25C	25	0.332	8.43	0.032	0.81
1219/37C	37	0.376	9.55	0.032	0.81
1219/40C	40	0.390	9.91	0.032	0.81
1219/50C	50	0.427	10.85	0.032	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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1292C	2	0.168	4.27	0.032	0.81
1293C	3	0.176	4.47	0.032	0.81
1294C	4	0.189	4.80	0.032	0.81
1295C	5	0.204	5.18	0.032	0.81
1296C	6	0.219	5.56	0.032	0.81
1297C	7	0.219	5.56	0.032	0.81
1298C	8	0.234	5.94	0.032	0.81
1299C	9	0.250	6.35	0.032	0.81
1299/10C	10	0.268	6.81	0.032	0.81
1299/12C	12	0.276	7.01	0.032	0.81
1299/15C	15	0.298	7.57	0.032	0.81
1299/20C	20	0.330	8.38	0.032	0.81
1299/25C	25	0.368	9.35	0.032	0.81
1299/30C	30	0.389	9.88	0.032	0.81
1299/37C	37	0.418	10.62	0.032	0.81
1299/40C	40	0.433	11.00	0.032	0.81
1299/50C	50	0.482	12.24	0.035	0.89

# Communication and Control

300 V Braid Shield, Multiconductor, PVC, PVC

Audio Video Cable



## UL AWM 2095 CSA CMG FT4

### Applications

- Audio and sound systems experiencing high flexing and needing additional tensile strength

### Operating Temperature

- -20°C to +80°C (AMW)
- -20°C to +75°C (CMG)

### Conductor Color Coding

- Chart D

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Tinned copper braid shield, 85% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

Bulk, cut to length

(Minimums may apply)

### UL 2095

#### 22 AWG (0.035mm<sup>2</sup>)

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M3202	2	0.189	4.80	0.020	0.51
M13203	3	0.199	5.05	0.020	0.51
M3204	4	0.215	5.46	0.020	0.51

### UL 2095

#### 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M3206	2	0.205	5.21	0.020	0.51
M3207	3	0.216	5.49	0.020	0.51
M3208	4	0.234	5.94	0.020	0.51
M13209*	6	0.300	7.62	0.032	0.81
M13210*	12	0.396	10.06	0.040	1.02

\*UL AWM 2464. Conductor color code Chart F

### UL 2095

#### 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M3212	2	0.223	5.66	0.020	0.51
M3213	3	0.235	5.97	0.020	0.51
M3214	4	0.256	6.50	0.020	0.51

### UL 2095

#### 16 AWG (1.32 mm<sup>2</sup>)

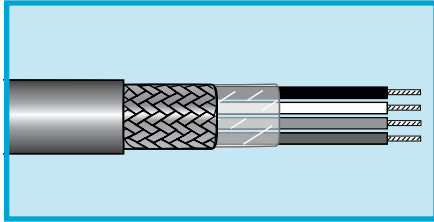
Stranding: 19/0.0117 (19 x 0.30 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M3216	2	0.247	6.27	0.020	0.51
M3217	3	0.261	6.63	0.020	0.51

# Communication and Control

300 V Braid Shield, Multiconductor, PVC, PVC

Alpha  
Essentials



**UL AWM 2095 VW-1**  
**UL AWM 1108**  
**(Single-Conductor Cables)**  
**UL CM**  
**CSA CMG FT4**

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

## Conductor Color Coding

- Chart D

## Materials

- Stranded or solid tinned copper conductors
- PVC insulation
- Clear polyester wrap (multiconductor only)
- Bare copper braid shield, 75% coverage
- Slate PVC jacket

## Availability

100 ft (30.5 m)  
 500 ft (152 m)  
 1000 ft (305 m)

22 AWG (0.32 mm <sup>2</sup> )					
Stranding: Solid					
Insulation thickness: 0.020 (0.51 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1775C	2	0.195	4.95	0.020	0.51

22 AWG (0.35 mm <sup>2</sup> )					
Stranding: 7/30 (7 x 0.25 mm)					
Insulation thickness: 0.016 (0.41 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1735	1	0.124	3.15	0.020	0.51
1736C	2	0.189	4.80	0.020	0.51
1737C	3	0.199	5.05	0.020	0.51
1738C	4	0.215	5.46	0.020	0.51

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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1741C	2	0.205	5.21	0.020	0.51
1742C	3	0.216	5.49	0.020	0.51
1743C	4	0.234	5.94	0.020	0.51

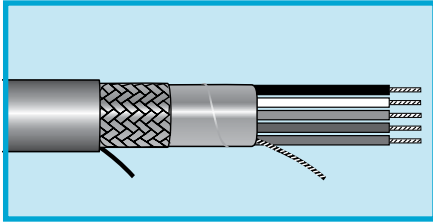
18 AWG (0.81 mm <sup>2</sup> )					
Stranding: 16/30 (16 x 0.25 mm)					
Insulation thickness: 0.016 (0.41 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1745	1	0.141	3.58	0.020	0.51
1746C	2	0.223	5.66	0.020	0.51
1747C	3	0.235	5.97	0.020	0.51
1747/4C	4	0.256	6.50	0.020	0.51

16 AWG (1.32 mm <sup>2</sup> )					
Stranding: 19/0.0117 (19 x 0.30 mm)					
Insulation thickness: 0.016 (0.41 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1748C	2	0.247	6.27	0.020	0.51
1749C	3	0.261	6.63	0.020	0.51



# Communication and Control

300 V Foil/Braid Shield, Multiconductor, PVC, PVC  
Computer Cable



**UL AWM 2464**  
**UL CMG**  
**CSA CMG FT4**

### Applications

- Computer and control

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

### Conductor Color Coding

- Chart D

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Foil + braid shield  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid,  
70% coverage
- Slate PVC jacket

### Availability

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

## 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M5360</b>	2	0.233	5.92	0.032	0.81
<b>M5361</b>	3	0.241	6.12	0.032	0.81
<b>M5362</b>	4	0.262	6.65	0.032	0.81
<b>M5364</b>	6	0.304	7.72	0.032	0.81
<b>M5365</b>	8	0.326	8.28	0.032	0.81
<b>M5366</b>	10	0.373	9.47	0.032	0.81
<b>M5368</b>	15	0.415	10.54	0.032	0.81
<b>M5370</b>	20	0.459	11.66	0.032	0.81
<b>M5372</b>	25	0.513	13.03	0.032	0.81
<b>M5375</b>	40	0.653	16.59	0.053	1.35
<b>M5377</b>	50	0.713	18.11	0.053	1.35

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

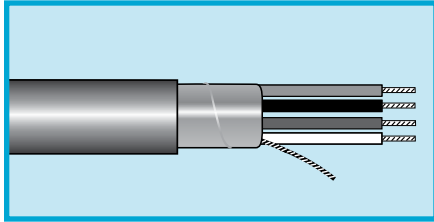
Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M5390</b>	2	0.251	6.38	0.032	0.81
<b>M5391</b>	3	0.263	6.68	0.032	0.81
<b>M5392*</b>	2	0.251	6.38	0.032	0.81
<b>M5393*</b>	3	0.263	6.68	0.032	0.81
<b>M5394</b>	4	0.284	7.21	0.032	0.81
<b>M5396</b>	6	0.328	8.33	0.032	0.81
<b>M5397</b>	8	0.356	9.04	0.032	0.81
<b>M5398</b>	10	0.409	10.39	0.032	0.81
<b>M5400</b>	15	0.456	11.58	0.032	0.81
<b>M5402</b>	20	0.507	12.88	0.032	0.81



# Communication and Control

300 V Unshielded and Braid Shield,  
Multiconductor, PVC, PVC



**UL AWM 2785 VW-1**  
**UL CM**  
**CSA CMG FT4**

## Operating Temperature

- -20°C to +75°C (CM)
- -20°C to +60°C (AWM, CMG)

## Conductor Color Coding

See tables

## Materials

- Stranded tinned copper conductors
- PVC insulation
- Tinned copper braid shield, 80% coverage
- Slate PVC jacket

## Availability

100 ft (30.5 m)\*  
500 ft (152 m)\*  
1000 ft (305 m)

\*Parts 1243, 1243/4, and 1243/5 only

## 22 AWG Composite Shielded and Unshielded, UL AWM 2785, UL CM, and CSA CMG

22 AWG (0.35 mm <sup>2</sup> )							
Stranding 7/30 (7 x 0.25 mm) Insulation Thickness 0.016 (0.41 mm)							
Part No.	Conductors	Nominal Diameter		Jacket Thickness		Configuration	
		Inch	mm	Inch	mm	Shielded	Unshielded
<b>1243</b>	3	0.190	4.83	0.020	0.51	1	2
<b>1243/4</b>	4	0.185 x 0.285	4.70 x 7.24	0.020	0.51	2	2
<b>1243/5</b>	5	0.195 x 0.300	4.95 x 7.62	0.020	0.51	3	2

Conductor Color Coding  
Shielded: 1 White, 2 Black, 3 Red  
Unshielded: 1 Black, 2 Red

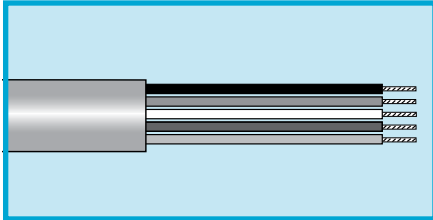
## 22 and 18 AWG Unshielded, UL CM and CSA CMG Only

22 AWG (0.35 mm <sup>2</sup> )				18 AWG (0.81 mm <sup>2</sup> )			
Stranding: 7/30 (7 x 0.25 mm) Insulation thickness: 0.010 (0.25 mm)				16/30 (16 x 0.25 mm) 0.018 (0.45 mm)			
Part No.	Conductors		Nominal Diameter		Jacket Thickness		
	22 AWG	18 AWG	Inch	mm	Inch	mm	
<b>1826C</b>	4	2	0.241	6.12	0.025	0.63	
<b>1827C</b>	5	2	0.247	6.27	0.028	0.71	
<b>1828C</b>	6	2	0.261	6.63	0.028	0.71	

Conductor Color Coding  
22 AWG: Chart I  
18 AWG: Chart D

# Communication and Control

300 V Unshielded, Multiconductor, SR-PVC/PVC, PVC  
Audio/Video Cable



**UL AWM 2464, 2509, 2576,  
UL CM, CMG  
CSA CM, CMG FT4**

## Applications

- Unbalanced intercom and sound systems
- Remote circuit control
- Low-voltage circuits

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM, CMG)

## Conductor Color Coding

- See tables

## Materials

- Stranded tinned copper conductors
- PVC or semirigid PVC insulation
- Slate PVC jacket

## Availability

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

### UL AWM 2509, UL CMG, PVC Insulation

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
Color Code J

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M13302</b>	2	0.174	4.42	0.025	0.64

### UL AWM 2576, UL CM, PVC Insulation (150 V)

**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.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
<b>M13303</b>	3	0.172	4.37	0.032	0.81	Black, Green, Red
<b>M13304</b>	4	0.185	4.70	0.032	0.81	O
<b>M13305</b>	5	0.200	5.08	0.032	0.81	O
<b>M13306</b>	6	0.215	5.46	0.032	0.81	O
<b>M13307</b>	7	0.215	5.46	0.032	0.81	O
<b>M13308</b>	8	0.230	5.84	0.032	0.81	O
<b>M13309</b>	9	0.246	6.25	0.032	0.81	O
<b>M13310</b>	10	0.264	6.71	0.032	0.81	O
<b>M13312</b>	12	0.272	6.91	0.032	0.81	O
<b>M13315</b>	15	0.310	7.87	0.040	1.02	F
<b>M13320</b>	20	0.342	8.69	0.040	1.02	F
<b>M13325</b>	25	0.380	9.65	0.040	1.02	F
<b>M13330</b>	30	0.401	10.19	0.040	1.02	F
<b>M13340</b>	40	0.445	11.30	0.040	1.02	F
<b>M13350</b>	50	0.498	12.65	0.045	1.14	F

### UL AWM 2464, UL CM, PVC Insulation

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

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.013 (0.33 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
<b>M13404</b>	4	0.219	5.56	0.032	0.81	O
<b>M13405</b>	5	0.238	6.05	0.032	0.81	O
<b>M13407</b>	7	0.257	6.53	0.032	0.81	O
<b>M13409</b>	9	0.303	7.70	0.035	0.89	O
<b>M13412</b>	12	0.336	8.53	0.035	0.89	O
<b>M13415</b>	15	0.374	9.50	0.040	1.02	F

### UL AWM 2509, UL CMG, PVC Insulation

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

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

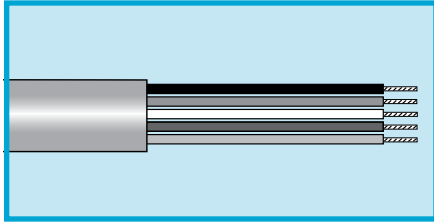
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M13402</b>	2	0.180	4.57	0.020	0.51



# Communication and Control

300 V Unshielded, Multiconductor, SR-PVC, PVC

Audio/Video Cable



**UL AWM 2464, 2509, 2598**  
**UL CM, CMG**  
**UL CL2, CL3**  
**CSA CM, CMG FT4**

## Applications

- Unbalanced intercom and sound systems
- Remote circuit control
- Low-voltage circuits

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM, CMG, CL2, CL3)

## Conductor Color Coding

- See tables

## Materials

- Stranded tinned copper conductors
- PVC or semirigid PVC insulation
- Slate PVC jacket

## Availability

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

### UL AWM 2509, UL CMG, PVC Insulation

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M13502</b>	2	0.198	5.03	0.020	0.51

### UL AWM 2598, UL CM, PVC Insulation

**18 AWG (0.96 mm<sup>2</sup>)**

Stranding: 19/30 (19 x 0.25 mm)  
 Insulation thickness: 0.018 (0.46 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
<b>M13503</b>	3	0.249	6.32	0.032	0.81	O
<b>M13504</b>	4	0.272	6.91	0.032	0.81	O
<b>M13505</b>	5	0.297	7.54	0.032	0.81	O
<b>M13507</b>	7	0.333	8.46	0.037	0.94	O
<b>M13509</b>	9	0.387	9.83	0.037	0.94	O
<b>M13512</b>	12	0.437	11.10	0.040	1.02	F
<b>M13515</b>	15	0.485	12.32	0.045	1.14	F
<b>M13519</b>	19	0.520	13.21	0.045	1.14	F
<b>M13525</b>	25	0.636	16.15	0.060	1.52	F

### UL AWM 2463, UL CL2 or CL3, PVC Insulation

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

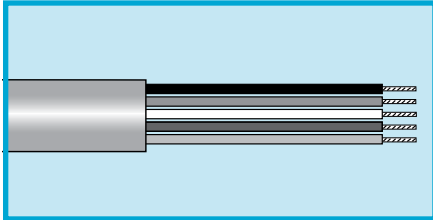
Stranding: 19/0.0147 (19 x 0.37 mm)  
 Insulation thickness: 0.032 (0.81 mm)  
 Color Code F

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approval
		Inch	mm	Inch	mm	
<b>M13582</b>	2	0.346	8.79	0.035	0.89	CL2
<b>M13584</b>	4	0.404	10.26	0.035	0.89	CL3

# Communication and Control

300 V Unshielded, Multiconductor, SR-PVC, PVC

Audio/Video Cable



**UL AWM 2464, 2509, 2576**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- Unbalanced intercom and sound systems
- Remote circuit controls
- Telephones
- Low-voltage circuits

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

## Conductor Color Coding

- Chart E for AWM 2464
- Chart D for AWM 2576

## Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Slate PVC jacket

## Availability

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

Bulk, cut to length

(Minimums may apply)

## UL AWM 2464, UL CMG

### 24 AWG (0.22 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M38902</b>	2	0.155	3.94	0.032	0.81
<b>M38903</b>	3	0.162	4.11	0.032	0.81
<b>M38904</b>	4	0.173	4.39	0.032	0.81
<b>M38906</b>	6	0.200	5.08	0.032	0.81
<b>M38908</b>	8	0.213	5.41	0.032	0.81
<b>M38910</b>	10	0.243	6.17	0.032	0.81
<b>M38915</b>	15	0.269	6.83	0.032	0.81
<b>M38920</b>	20	0.297	7.54	0.032	0.81
<b>M38925</b>	25	0.331	8.41	0.032	0.81
<b>M38930</b>	30	0.349	8.86	0.032	0.81
<b>M38940</b>	40	0.389	9.88	0.032	0.81
<b>M38950</b>	50	0.426	10.82	0.032	0.81

## UL AWM 2576, UL CMG

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

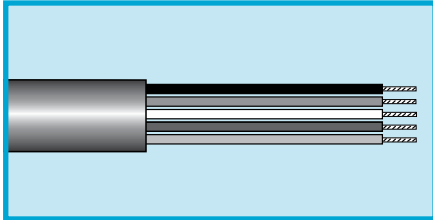
Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Color Code D

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M33302</b>	2	0.164	4.16	0.032	0.81
<b>M33303</b>	3	0.175	4.45	0.032	0.81
<b>M33304</b>	4	0.188	4.78	0.032	0.81
<b>M33305</b>	5	0.203	5.16	0.032	0.81
<b>M33306</b>	6	0.218	5.54	0.032	0.81
<b>M33308</b>	8	0.233	5.92	0.032	0.81
<b>M33310</b>	10	0.267	6.78	0.032	0.81
<b>M33312</b>	12	0.275	6.99	0.032	0.81
<b>M33315</b>	15	0.297	7.54	0.032	0.81
<b>M33320</b>	20	0.329	8.36	0.032	0.81
<b>M33325</b>	25	0.367	9.32	0.032	0.81



# Communication and Control

300 V Unshielded, Multiconductor, SR-PVC, PVC  
Computer Cable



**UL AWM 2464**  
**UL CL2**  
**CSA AWM I/II A/B FT4**

### Applications

- Control and signal wiring
- Computers
- Instrumentation

### Operating Temperature

- -20°C to +105°C (CSA)
- -20°C to +90°C (CL2)
- -20°C to +80°C (AWM)

### Conductor Color Coding

- See tables

### Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

#### 24 AWG (0.22 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
<b>882402</b>	2	0.152	3.86	0.032	0.81	E
<b>882403</b>	3	0.159	4.04	0.032	0.81	E
<b>882404</b>	4	0.170	4.32	0.032	0.81	E

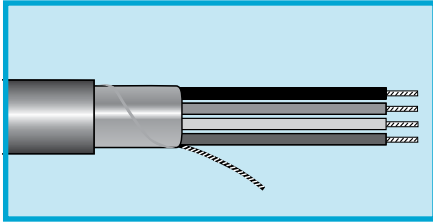
#### 22 AWG (0.35 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
<b>882202</b>	2	0.164	4.17	0.032	0.81	R
<b>882203</b>	3	0.172	4.37	0.032	0.81	R
<b>882204</b>	4	0.185	4.70	0.032	0.81	R
<b>882205</b>	5	0.200	5.08	0.032	0.81	R
<b>882206</b>	6	0.215	5.46	0.032	0.81	R
<b>882207</b>	7	0.215	5.46	0.032	0.81	R
<b>882208</b>	8	0.230	5.84	0.032	0.81	R
<b>882209</b>	9	0.246	6.25	0.032	0.81	R
<b>882210</b>	10	0.264	6.71	0.032	0.81	R
<b>882212</b>	12	0.272	6.91	0.032	0.81	R
<b>882215</b>	15	0.294	7.47	0.032	0.81	F
<b>882220</b>	20	0.326	8.28	0.032	0.81	F

# Communication and Control

300 V Foil Shield, Multiconductor, SR-PVC, PVC  
Computer Cable



**UL AWM 2464**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- Computer and control

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

## Conductor Color Coding

- Chart E

## Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

## Availability

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

### 24 AWG (0.22 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M4602</b>	2	0.159	4.04	0.032	0.81
<b>M4603</b>	3	0.166	4.22	0.032	0.81
<b>M4604</b>	4	0.178	4.52	0.032	0.81
<b>M4606</b>	6	0.204	5.18	0.032	0.81
<b>M4607</b>	8	0.217	5.51	0.032	0.81
<b>M4608</b>	10	0.247	6.27	0.032	0.81
<b>M4610</b>	15	0.273	6.93	0.032	0.81
<b>M4612</b>	20	0.301	7.65	0.032	0.81
<b>M4614</b>	25	0.335	8.51	0.032	0.81
<b>M4616</b>	30	0.353	8.97	0.032	0.81

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

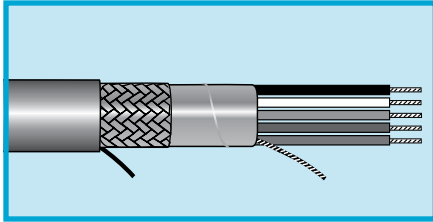
Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M4633</b>	2	0.171	4.34	0.032	0.81
<b>M4634</b>	3	0.179	4.55	0.032	0.81
<b>M4635</b>	4	0.192	4.88	0.032	0.81
<b>M4636</b>	6	0.222	5.64	0.032	0.81
<b>M4638</b>	8	0.237	6.02	0.032	0.81
<b>M4640</b>	10	0.271	6.88	0.032	0.81
<b>M4642</b>	15	0.301	7.65	0.032	0.81
<b>M4644</b>	20	0.333	8.46	0.032	0.81
<b>M4646</b>	25	0.371	9.42	0.032	0.81
<b>M4648</b>	30	0.392	9.96	0.032	0.81
<b>M4650</b>	40	0.436	11.07	0.032	0.81
<b>M4652</b>	50	0.479	12.17	0.032	0.81

# Communication and Control

300 V Foil/Braid Shield, Multiconductor, SR-PVC, PVC  
Computer Cable

Alpha  
Essentials



**UL AWM 2464**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- RS-232
- Modems
- Multiplexers
- Serial data interfaces

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

## Conductor Color Coding

- Chart D

## Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Foil + braid shield  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid,  
65% coverage
- Slate PVC jacket

## Availability

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

## 65% Braid Coverage

28 AWG (0.08 mm<sup>2</sup>)

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

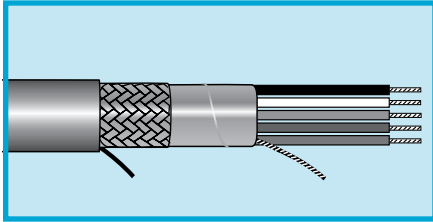
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M2403	3	0.165	4.19	0.032	0.81
M2404	4	0.175	4.45	0.032	0.81
M2405	5	0.185	4.70	0.032	0.81
M2406	6	0.196	4.98	0.032	0.81
M2407	7	0.196	4.98	0.032	0.81
M2408	8	0.206	5.23	0.032	0.81
M2409	9	0.217	5.51	0.032	0.81
M2410	10	0.230	5.84	0.032	0.81
M2412	15	0.251	6.38	0.032	0.81
M2414	25	0.300	7.62	0.032	0.81

Mutual capacitance: 25 pF/ft (82 pF/m)  
Ground capacitance: 45 pF/ft (147.6 pF/m)



# Communication and Control

300 V Foil/Braid Shield, Multiconductor, SR-PVC, PVC  
Computer Cable



**UL AWM 2464**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- RS-232
- Modems
- Multiplexers
- Serial data interfaces

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

## Conductor Color Coding

- Chart D

## Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Foil + braid shield  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid, 65% or  
70% coverage
- Slate PVC jacket

## Availability

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

## 65% Braid Coverage

24 AWG (0.22 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
M2438	3	0.185	4.70	0.032	0.81	O
M2439	4	0.196	4.98	0.032	0.81	O
M2440	5	0.209	5.31	0.032	0.81	O
M2441	6	0.223	5.66	0.032	0.81	O
M2442	7	0.223	5.66	0.032	0.81	O
M2443	8	0.236	5.99	0.032	0.81	O
M2444	9	0.250	6.35	0.032	0.81	O
M2445	10	0.266	6.76	0.032	0.81	O
M2447	15	0.292	7.42	0.032	0.81	F
M2449	25	0.354	8.99	0.032	0.81	F

Mutual capacitance: 32 pF/ft (105 pF/m)  
Ground capacitance: 58 pF/ft (190 pF/m)

## 70% Braid Coverage

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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M5333	2	0.193	4.90	0.032	0.81
M5334	3	0.201	5.11	0.032	0.81
M5335	4	0.214	5.44	0.032	0.81
M5336	6	0.244	6.20	0.032	0.81
M5338	8	0.259	6.58	0.032	0.81
M5340	10	0.293	7.44	0.032	0.81
M5342	15	0.323	8.20	0.032	0.81
M5344	20	0.355	9.02	0.032	0.81
M5346	25	0.393	9.98	0.032	0.81
M5348	30	0.414	10.52	0.032	0.81
M5350	40	0.458	11.63	0.032	0.81
M5352	50	0.501	12.73	0.032	0.81

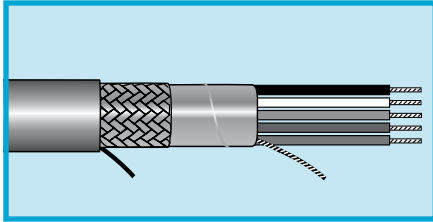
Mutual capacitance: 36 pF/ft (118.1 pF/m)  
Ground capacitance: 65 pF/ft (213.3 pF/m)

Part No. M5333:  
Mutual capacitance: 39 pF/ft (128 pF/m)  
Ground capacitance: 70 pF/ft (229.7 pF/m)



# Communication and Control

300 V Foil/Braid Shield, Multiconductor, SR-PVC, PVC  
Computer Cable



**UL AWM 2464**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- RS-232
- Modems
- Multiplexers
- Serial data interfaces

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

## Conductor Color Coding

- Chart D

## Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Foil + braid shield  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid, 65% or  
70% coverage
- Slate PVC jacket

## Availability

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

## 65% Braid Coverage

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

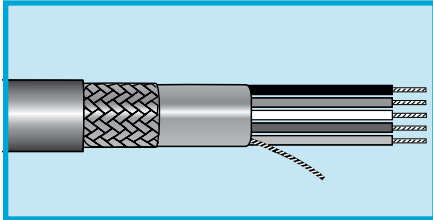
Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
M2473	3	0.198	5.03	0.032	0.81	O
M2474	4	0.211	5.36	0.032	0.81	O
M2475	5	0.226	5.74	0.032	0.81	O
M2476	6	0.241	6.12	0.032	0.81	O
M2477	7	0.241	6.12	0.032	0.81	O
M2478	8	0.256	6.50	0.032	0.81	O
M2479	9	0.272	6.91	0.032	0.81	O
M2480	10	0.290	7.37	0.032	0.81	O
M2481	15	0.320	8.13	0.032	0.81	F
M2482	25	0.390	9.91	0.032	0.81	F

Mutual capacitance: 36 pF/ft (118.1 pF/m)  
Ground capacitance: 65 pF/ft (213.3 pF/m)

# Communication and Control

300 V Foil/Braid Shield, Multiconductor, SR-PVC, PVC



**UL AWM 2464 VW-1**  
**UL CL2**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CL2)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart D

### Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Foil + braid shield  
Aluminum/polyester/aluminum foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire equal in size to the conductor
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

**28 AWG (0.08 mm<sup>2</sup>)**

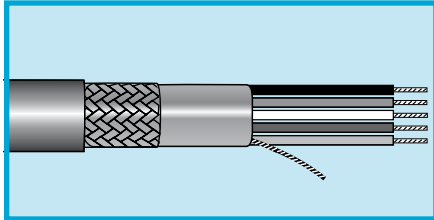
Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3463*</b>	3	0.171	4.34	0.035	0.89
<b>3464C</b>	4	0.181	4.60	0.035	0.89
<b>3465C</b>	5	0.191	4.85	0.035	0.89
<b>3466C</b>	6	0.202	5.13	0.035	0.89
<b>3467C</b>	7	0.202	5.13	0.035	0.89
<b>3468C</b>	8	0.212	5.38	0.035	0.89
<b>3469C</b>	9	0.223	5.66	0.035	0.89
<b>3470C</b>	10	0.236	5.99	0.035	0.89
<b>3470/15C</b>	15	0.267	6.78	0.035	0.89
<b>3470/25C</b>	25	0.312	7.92	0.035	0.89
<b>3470/37C</b>	37	0.347	8.81	0.035	0.89
<b>3470/50C</b>	50	0.397	10.08	0.035	0.89

\*UL AWM 2464/CSA CMG only.

# Communication and Control

300 V Overall Foil/Braid Shield, Multiconductor,  
SR-PVC, PVC



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

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- See table below for 3-conductor through 10-conductor cables
- Chart F for 15-conductor through 50-conductor cables

### Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Foil + braid shield  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire, 24 AWG (0.22 mm<sup>2</sup>),  
7/32 (7 x 0.22 mm)  
Tinned copper braid,  
65% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### 24 AWG (0.22 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6327	3	0.185	4.70	0.032	0.81
6328	4	0.196	4.98	0.032	0.81
6329	5	0.209	5.31	0.032	0.81
6330	6	0.223	5.66	0.032	0.81
6331	7	0.223	5.66	0.032	0.81
6332	8	0.236	5.99	0.032	0.81
6333	9	0.250	6.35	0.032	0.81
6334	10	0.266	6.76	0.032	0.81
6335	15	0.292	7.42	0.032	0.81
6336	25	0.354	8.99	0.032	0.81
6337	37	0.398	10.11	0.032	0.81
6338	50	0.449	11.40	0.032	0.81

Mutual capacitance: 32 pF/ft (105 pF/m)  
Ground capacitance: 58 pF/ft (190 pF/m)

### 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6339	3	0.198	5.03	0.032	0.81
6340	4	0.211	5.36	0.032	0.81
6341	5	0.226	5.74	0.032	0.81
6342	6	0.241	6.12	0.032	0.81
6343	7	0.241	6.12	0.032	0.81
6344	8	0.256	6.50	0.032	0.81
6345	9	0.272	6.91	0.032	0.81
6346	10	0.290	7.37	0.032	0.81
6347	15	0.320	8.13	0.032	0.81
6348	25	0.390	9.91	0.032	0.81
6349	37	0.440	11.18	0.032	0.81
6350	50	0.540	13.72	0.053	1.35

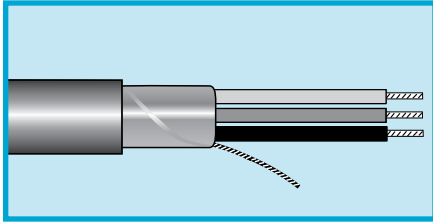
Mutual capacitance: 36 pF/ft (118 pF/m)  
Ground capacitance: 65 pF/ft (213 pF/m)

### Color Coding: 3 through 10 Conductors

1 Black	6 Blue
2 White	7 Orange
3 Red	8 Yellow
4 Green	9 Violet
5 Brown	10 Slate

# Communication and Control

## 300 V Foil Shield, Multiconductor, PE, PVC



**UL AWM 2092, 2093,  
2094 VW-1**  
**UL CMG**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +75°C (CMG)
- -20°C to +60°C (AWM)

### Conductor Color Coding

- 1 Black, 2 Red, 3 Natural,  
4 Green

### Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire (see table for sizes)
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m), spool or box  
1000 ft (305 m), spool or box

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

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.016 (0.41 mm)  
24 AWG (0.22 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		AWM
		Inch	mm	Inch	mm	
<b>2400C</b>	2	0.156	3.96	0.020	0.51	2092

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
22 AWG (0.35 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		AWM
		Inch	mm	Inch	mm	
<b>2401C*</b>	2	0.168	4.27	0.020	0.51	2092
<b>2402C</b>	2	0.168	4.27	0.020	0.51	2092
<b>2403C</b>	3	0.178	4.52	0.020	0.51	2093
<b>2404C</b>	4	0.194	4.93	0.020	0.51	2094

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

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.016 (0.41 mm)  
20 AWG (0.50 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		AWM
		Inch	mm	Inch	mm	
<b>2411C*</b>	2	0.184	4.67	0.020	0.51	2092
<b>2412C</b>	2	0.184	4.67	0.020	0.51	2092
<b>2413C</b>	3	0.195	4.95	0.020	0.51	2093
<b>2414C</b>	4	0.213	5.41	0.020	0.51	2094

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

Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
20 AWG (0.50 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		AWM
		Inch	mm	Inch	mm	
<b>2421C*</b>	2	0.202	5.13	0.020	0.51	2092
<b>2422C</b>	2	0.202	5.13	0.020	0.51	2092
<b>2423C</b>	3	0.214	5.44	0.020	0.51	2093
<b>2424C</b>	4	0.235	5.97	0.020	0.51	2094

#### 16 AWG (1.32 mm<sup>2</sup>)

Stranding: 19/0.117 (19 x 0.30 mm)  
Insulation thickness: 0.016 (0.41 mm)  
18 AWG (0.81 mm<sup>2</sup>) drain wire

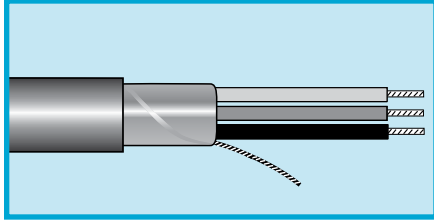
Part No.	Conductors	Nominal Diameter		Jacket Thickness		AWM
		Inch	mm	Inch	mm	
<b>2432C</b>	2	0.226	5.74	0.020	0.51	2092
<b>2433C</b>	3	0.240	6.10	0.020	0.51	2093



\*Color code: 1 black, 2 natural.

# Communication and Control

## 150 V Foil Shield, Multiconductor, PE, PVC



14 AWG (2.08 mm <sup>2</sup> )						
Stranding: 41/30 (41 x 0.25 mm)						
Insulation thickness: 0.020 (0.51 mm)						
16 AWG (1.32 mm <sup>2</sup> ) drain wire						
Part No.	Conductors	Nominal Diameter		Jacket Thickness		UL
		Inch	mm	Inch	mm	
2442C	2	0.292	7.42	0.030	0.76	CL2

**UL CL2**  
**CSA AWM I/II A/B FT4**

### Operating Temperature

- -20°C to +75°C (CL2)
- -20°C to +60°C (AWM)

### Conductor Color Coding

- 1 Black, 2 Red, 3 Natural, 4 Green

### Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire (see table for sizes)
- Slate PVC jacket

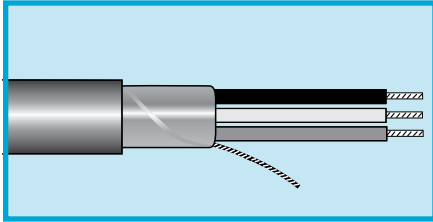
### Availability

100 ft (30.5 m)  
500 ft (152 m), spool or box  
1000 ft (305 m), spool or box

12 AWG (3.29 mm <sup>2</sup> )						
Stranding: 65/30 (65 x 0.25 mm)						
Insulation thickness: 0.020 (0.51 mm)						
14 AWG (2.08 mm <sup>2</sup> ) drain wire						
Part No.	Conductors	Nominal Diameter		Jacket Thickness		UL
		Inch	mm	Inch	mm	
2444C	2	0.330	8.38	0.030	0.76	CL2

# Communication and Control

300 V Foil Shield, Multiconductor, PP, PE, PVC/PVC



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

### Operating Temperature

- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- 1 White, 2 Black, 3 Red, 4 Green
- 1 Black, 2 Red, 3 White, 4 Green

### Materials

- Stranded tinned copper conductors (except 2460C)
- PP, PE, or PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward  
1243/3C: foil facing inward
- Stranded tinned copper drain wire (except 2460C)
- Slate PVC jacket  
2461C: slate or black

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### Polypropylene Insulation

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

Stranding: 7/30 (7 x 0.25 mm) or solid  
Insulation Thickness: 0.008 (0.20 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Configuration	
		Inch	mm	Inch	mm	Shielded	Unshielded
<b>2460C</b>	2 (solid)	0.126	3.20	0.020	0.51	2	0
<b>2461C</b>	2	0.136	3.45	0.020	0.51	2	0

### Polyethylene Insulation

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

Stranding: 7/28 (7 x 0.32 mm)  
Insulation Thickness: 0.014 (0.36 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Configuration	
		Inch	mm	Inch	mm	Shielded	Unshielded
<b>1243/3C*</b>	3	0.210	5.33	0.030	0.76	2	1
<b>2464C**</b>	4	0.165	4.19	0.020	0.51	2	2

\*Two conductors twisted and foil shielded. Overall foil shield.  
\*\*Unshielded.

### PVC Insulation

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

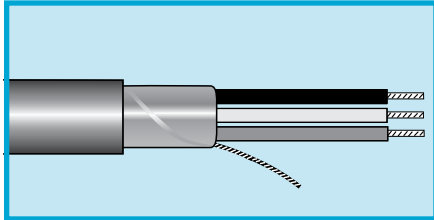
Stranding: 7/28 (7 x 0.32 mm)  
Insulation Thickness: 0.015 (0.38 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Configuration	
		Inch	mm	Inch	mm	Shielded	Unshielded
<b>2465C</b>	4	0.240	6.10	0.030	0.76	2	2

# Communication and Control

300 V Foil Shield, Multiconductor, SR-PVC, PVC

Alpha  
Essentials



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

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart F

### Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### 24 AWG (0.22 mm²)

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

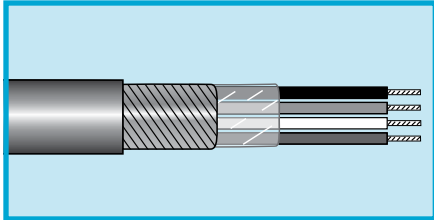
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6300/3*</b>	3	0.163	4.14	0.032	0.81
<b>6300/4*</b>	4	0.174	5.44	0.032	0.81
<b>6305</b>	5	0.187	4.75	0.032	0.81
<b>6306*</b>	6	0.201	5.11	0.032	0.81
<b>6300/8*</b>	8	0.214	5.44	0.032	0.81
<b>6300/10*</b>	10	0.244	6.20	0.032	0.81
<b>6307</b>	15	0.270	6.86	0.032	0.81
<b>6308</b>	20	0.298	7.57	0.032	0.81
<b>6309</b>	25	0.332	8.43	0.032	0.81
<b>6310</b>	30	0.366	9.30	0.040	1.02
<b>6311</b>	40	0.406	10.31	0.040	1.02
<b>6312</b>	50	0.453	11.51	0.045	1.14

Mutual capacitance: 32 pF/ft (105 pF/m)  
Ground capacitance: 58 pF/ft (190 pF/m)



# Communication and Control

## 300 V Spiral Shield, Multiconductor, PVC, PVC



### AWM 2095 AWM 1108 (Single-conductor cables)

#### Operating Temperature

- 20°C to +80°C

#### Conductor Color Coding

- 1 Black, 2 Red, 3 White, 4 Green, 5 Yellow, 6 Blue

#### Materials

- Stranded tinned copper conductors
- PVC insulation
- Clear polyester wrap (multiconductor only)
- Bare copper spiral shield, 95% coverage
- Slate PVC jacket

#### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2254/1	1	0.112	2.84	0.020	0.51
2254	2	0.177	4.50	0.020	0.51
2254/3	3	0.187	4.75	0.020	0.51
2254/4	4	0.206	5.23	0.020	0.51
2254/6	6	0.243	6.17	0.020	0.51

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

Stranding: 10/30 (10 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2256/1	1	0.119	3.02	0.020	0.51
2256	2	0.191	4.85	0.020	0.51
2256/3	3	0.202	5.13	0.020	0.51
2256/4	4	0.223	5.66	0.020	0.51
2256/6	6	0.264	6.71	0.020	0.51

#### 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2258/1	1	0.129	3.28	0.020	0.51
2258	2	0.214	5.44	0.020	0.51
2258/3	3	0.226	5.74	0.020	0.51
2258/4	4	0.247	6.27	0.020	0.51

#### 16 AWG (1.32 mm<sup>2</sup>)

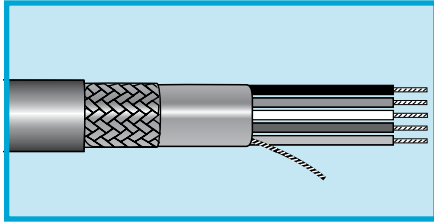
Stranding: 26/30 (26 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2260	2	0.240	6.10	0.020	0.51
2260/3	3	0.254	6.45	0.020	0.51

# Communication and Control

300 V Foil/Braid Shield, Multiconductor, Foam PP, PVC  
Low-Capacitance Data Cable

Alpha  
Essentials



**UL AWM 2919 (30 V) VW-1**  
**UL CL2**  
**CSA CMG FT4**

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CL2)
- -20°C to +60°C (CMG)

## Conductor Color Coding

- Chart D for 3-conductor to 9-conductor cables
- Chart F for 25-conductor cables

## Materials

- Stranded tinned copper conductors
- Foam polypropylene insulation
- Foil + braid shield  
Aluminum/polyester/aluminum foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire equal in size to conductor
- Tinned copper braid shield, 65% coverage
- Slate PVC jacket

## Availability

1000 ft (305 m)

28 AWG (0.08 mm <sup>2</sup> )					
Stranding: 7/36 (7 x 0.13 mm)					
Insulation thickness: 0.013 (0.33 mm)					
Part No.*	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3483</b>	3	0.184	4.67	0.035	0.89
<b>3484C</b>	4	0.195	4.95	0.035	0.89
<b>3488C</b>	8	0.232	5.89	0.035	0.89
<b>3489C</b>	9	0.245	6.22	0.035	0.89
<b>3490/25C</b>	25	0.348	8.84	0.035	0.89

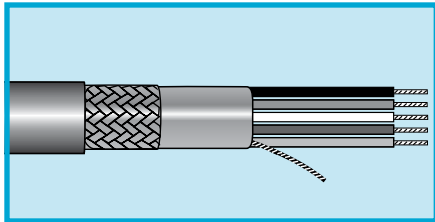
Mutual capacitance: 12 pF/ft (39.4 pF/m)  
Ground capacitance: 20 pF/ft (65.6 pF/m)

\*C suffix part no. are CL2 approved.



# Communication and Control

300 V Foil/Braid Shield, Multiconductor, Foam PE, PVC  
Low-Capacitance Data Cable



**UL AWM 2919 (30 V) VW-1  
UL CM  
CSA CMH FT1**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMH)

### Conductor Color Coding

- Chart F for 15 through 37 conductors. Other parts, see table at right.

### Materials

- Stranded tinned copper conductors
- Foam polyethylene insulation
- Foil + braid shield  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid,  
65% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

## 24 AWG (0.22 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6351</b>	3	0.217	5.51	0.035	0.89
<b>6352</b>	4	0.231	5.87	0.035	0.89
<b>6353</b>	5	0.248	6.30	0.035	0.89
<b>6354</b>	6	0.265	6.73	0.035	0.89
<b>6355</b>	7	0.265	6.73	0.035	0.89
<b>6356</b>	8	0.282	7.16	0.035	0.89
<b>6357</b>	9	0.300	7.62	0.035	0.89
<b>6358</b>	10	0.320	8.13	0.035	0.89
<b>6359</b>	15	0.353	8.97	0.035	0.89
<b>6360</b>	25	0.432	10.97	0.035	0.89
<b>6361</b>	37	0.514	13.06	0.048	1.22

Mutual capacitance: 12 pF/ft (39.4 pF/m)  
Ground capacitance: 22 pF/ft (72.2 pF/m)

### Color Coding

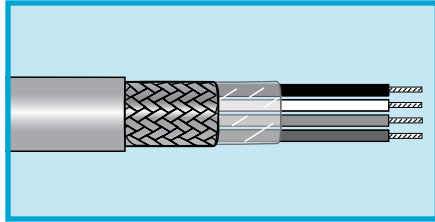
1 Black	5 Brown	9 Violet
2 White	6 Blue	10 Slate
3 Red	7 Orange	
4 Green	8 Yellow	



# Communication and Control

300 V Braid Shield, Multiconductor, PE, PVC  
Audio/Video Cable

Alpha  
Essentials



**UL AWM 2092, 2093, 2094**  
**UL CM**

## Applications

- Sensing
- Recording
- Monitoring devices
- Telemetry

## Operating Temperature

- -20°C to +75°C (CM)
- -20°C to +60°C (AWM)

## Conductor Color Coding

- Chart H

## Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Tinned copper braid shield, 90% coverage
- Slate PVC jacket

## Availability

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

### 24 AWG (0.20 mm<sup>2</sup>)

Stranding: 10/34 (10 x 0.16 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		UL AWM
		Inch	mm	Inch	mm	
M1102	2	0.177	4.50	0.020	0.51	2092
M1103	3	0.186	4.72	0.020	0.51	2093
M1104	4	0.200	5.08	0.020	0.51	2094
M1105	5	0.217	5.51	0.020	0.51	2094
M1106	6	0.234	5.94	0.020	0.51	2094

### 22 AWG (0.38 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		UL AWM
		Inch	mm	Inch	mm	
M1112	2	0.193	4.90	0.020	0.51	2092
M1113	3	0.203	5.16	0.020	0.51	2093
M1114	4	0.220	5.59	0.020	0.51	2094
M1115	5	0.239	6.07	0.020	0.51	2094
M1116	6	0.258	6.55	0.020	0.51	2094

### 20 AWG (0.52 mm<sup>2</sup>)

Stranding: 26/34 (26 x 0.16 mm)  
Insulation thickness: 0.016 (0.41 mm)

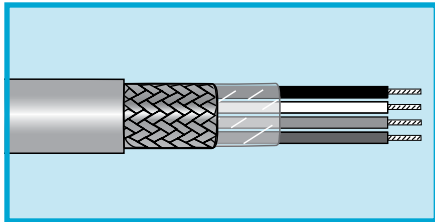
Part No.	Conductors	Nominal Diameter		Jacket Thickness		UL AWM
		Inch	mm	Inch	mm	
M1122	2	0.229	5.82	0.032	0.81	2092
M1123	3	0.246	6.25	0.035	0.89	2093
M1124	4	0.264	6.71	0.035	0.89	2094
M1125	5	0.285	7.24	0.035	0.89	2094
M1126	6	0.306	7.77	0.035	0.89	2094
M1128	8	0.328	8.33	0.035	0.89	2094
M1130	10	0.375	9.53	0.035	0.89	2094
M1132	12	0.386	9.80	0.035	0.89	2094
M1135	15	0.417	10.59	0.035	0.89	2094
M1140	20	0.464	11.79	0.035	0.89	2094



# Communication and Control

300 V Braid Shield, Multiconductor, PE, PVC

Audio/Video Cable



**UL AWM 2092, 2093, 2094  
UL CM**

## Applications

- Sensing, recording, monitoring devices, and telemetry

## Operating Temperature

- -20°C to +75°C (CM)
- -20°C to +60°C (AWM)

## Conductor Color Coding

- Chart H

## Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Tinned copper braid shield, 90% coverage
- Slate PVC jacket

## Availability

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

Bulk, cut to length

(Minimums may apply)

18 AWG (0.82 mm<sup>2</sup>)

Stranding: 41/34 (41 x 0.16 mm)  
Insulation thickness: 0.016 (0.41 mm)

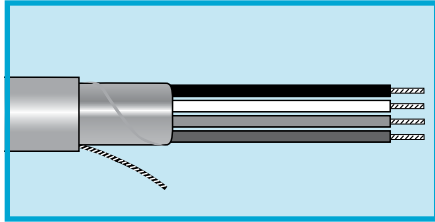
Part No.	Conductors	Nominal Diameter		Jacket Thickness		UL AWM
		Inch	mm	Inch	mm	
M1142	2	0.253	6.43	0.035	0.89	2092
M1143	3	0.265	6.73	0.035	0.89	2093
M1144	4	0.286	7.26	0.035	0.89	2094
M1146	6	0.333	8.46	0.035	0.89	2094

# Communication and Control

350 V Foil Shield, Overall, Multiconductor, PP, HDPE

Direct Burial, Audio/Video Cable

Alpha  
Essentials



## 20 AWG (0.51 mm<sup>2</sup>)

Stranding: : 10/30 (10 x 0.25 mm)  
Insulation thickness: 0.013 (0.33 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
<b>M39047</b>	2	0.193	4.90	0.035	0.89	O
<b>M39048</b>	3	0.202	5.13	0.035	0.89	O
<b>M39049</b>	10	0.319	8.10	0.040	1.02	O
<b>M39050</b>	15	0.363	9.22	0.045	1.14	F

Mutual capacitance: 22.2 pF/ft (72.8 pF/m)  
Ground capacitance: 40 pF/ft (131.2 pF/m)  
Except Part No. M39047:  
Mutual capacitance: 24.5 pF/ft (80.3 pF/m)  
Ground capacitance: 44 pF/ft (144.3 pF/m)

## Applications

- Direct burial audio and data transmission

## Operating Temperature

- -20°C to +80°C

## Conductor Color Coding

- See table

## Materials

- Solid tinned copper conductors
- Polypropylene insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward
- 22 AWG (0.32 mm<sup>2</sup>) solid tinned copper drain wire
- Black high-density polyethylene jacket

## Features

- Direct Burial

## Availability

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

Bulk, cut to length

(Minimums may apply)

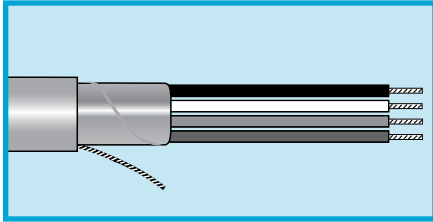
CA  
PROP  
65

RoHS  
Compliant

CE

# Communication and Control

300 V Foil Shield, Overall, Multiconductor, PE, PVC  
Audio/Video Cable



**UL AWM 2092, 2093, 2094**  
**UL CMG**  
**CSA CMG**  
**CSA FT4**

## Applications

- Audio and sound systems requiring small-diameter cable with 100% shield coverage

## Operating Temperature

- -20°C to +75°C (CMG)
- -20°C to +60°C (AWM)

## Conductor Color Coding

- AWM 2092: 1 Black, 2 Red (except Part No. M3222: Black, Natural)
- AWM 2093: 1 Black, 2 Red, 3 Natural
- AWM 2094: 1 Black, 2 Red, 3 Natural, 4 Green

## Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire (see tables for size)
- Slate PVC jacket

## Availability

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

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
22 AWG (0.35 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		UL AWM
		Inch	mm	Inch	mm	
<b>M3226</b>	2	0.171	4.34	0.020	0.51	2092

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

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.016 (0.41 mm)  
20 AWG (0.56 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		UL AWM
		Inch	mm	Inch	mm	
<b>M3232</b>	2	0.187	4.75	0.020	0.51	2092
<b>M3233</b>	3	0.198	5.03	0.020	0.51	2093
<b>M3234</b>	4	0.216	5.49	0.020	0.51	2094

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

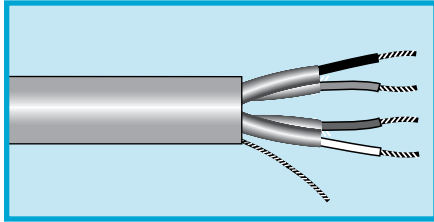
Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
20 AWG (0.56 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		UL AWM
		Inch	mm	Inch	mm	
<b>M3242</b>	2	0.205	5.21	0.020	0.51	2092
<b>M3243</b>	3	0.217	5.51	0.020	0.51	2093
<b>M3244</b>	4	0.238	6.05	0.020	0.51	2094



# Communication and Control

300 V Individually Foil Shielded Pairs, Multipair,  
PP/PE/SR-PVC, PVC  
Audio/Video Cable



**UL AWM 2464, 2493, 2919  
(30 V)  
UL CM  
CSA CM**

## Applications

- Audio and sound systems

## Operating Temperature

- -20°C to +80°C (AWM 2464)
- -20°C to +75°C (CM)
- -20°C to +60°C (AWM 2919, 2493)

## Conductor Color Coding

- AWM 2919: Chart K
- AWM 2493: Chart A
- AWM 2464 and CM: Black/Red, Green/White

## Materials

- Solid or stranded tinned copper conductors
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire equal in size to conductor (unless noted)
- Polyethylene, polypropylene, or semirigid PVC insulation (see tables)
- Slate PVC jacket

## Availability

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

### AWM 2493, UL CM, Polypropylene Insulation

#### 22 AWG (0.32 mm<sup>2</sup>)

Stranding: Solid  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M39039</b>	6	0.362	9.19	0.050	1.27
<b>M39040</b>	9	0.415	10.54	0.050	1.27
<b>M39041</b>	11	0.459	11.66	0.050	1.27
<b>M39042</b>	15	0.507	12.88	0.050	1.27

### UL CM, Polypropylene Insulation, Unshielded

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.008 (0.20 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M4473</b>	2	0.150	3.81	0.19	0.48

### AWM 2919, UL CM, Polypropylene Insulation, Unshielded

#### 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
<b>M13103</b>	3	0.271	6.88	0.032	0.81
<b>M13106</b>	6	0.349	8.86	0.032	0.81
<b>M13109</b>	9	0.412	10.46	0.032	0.81
<b>M13111</b>	11	0.466	11.84	0.035	0.89
<b>M13112</b>	12	0.466	11.84	0.035	0.89
<b>M13115</b>	15	0.537	13.64	0.050	1.27
<b>M13117</b>	17	0.577	14.66	0.050	1.27
<b>M13119</b>	19	0.577	14.66	0.050	1.27
<b>M13127</b>	27	0.685	17.40	0.050	1.27
<b>M13130</b>	37	0.766	19.46	0.050	1.27

### AWM 2464, UL CM, SR-PVC Insulation

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

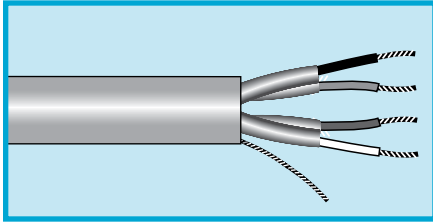
Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M13142</b>	2	0.284	7.21	0.032	0.81



# Communication and Control

300 V Individually Foil Shielded Pairs, Multipair, PP  
Audio/Video Cable



**UL AWM 2919 (30 V)**  
**UL CMG**  
**CSA CMG**

## Applications

- Audio and sound systems

## Operating Temperature

- -20°C to +75°C (CMG)
- -20°C to +60°C (AWM 2919)

## Conductor Color Coding

- Chart K

## Materials

- Stranded tinned copper conductors
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire equal in size to conductor (unless noted)
- Polypropylene insulation
- Slate PVC jacket

## Availability

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

### AWM 2919, UL CMG, Polypropylene Insulation

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

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.013 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M13143</b>	3	0.319	8.10	0.032	0.81
<b>M13146</b>	6	0.426	10.82	0.035	0.89
<b>M13149</b>	9	0.523	13.28	0.047	1.19

### AWM 2919, UL CMG, Polypropylene Insulation

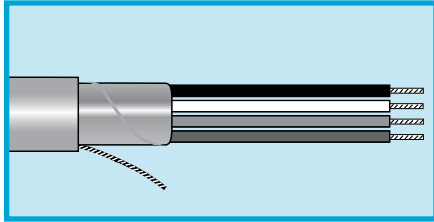
#### 18 AWG (0.81 mm<sup>2</sup>)

Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
Drain wire: 20 AWG (0.56 mm<sup>2</sup>)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M13173</b>	3	0.376	9.55	0.032	0.81
<b>M13176</b>	6	0.529	13.44	0.047	1.19
<b>M13179</b>	9	0.618	15.70	0.047	1.19
<b>M13182</b>	12	0.692	17.58	0.047	1.19

# Communication and Control

300 V Foil Shield, Multiconductor, PE or SR-PVC, PVC  
Audio/Video Cable



**UL AWM 2092, 2093, 2094,  
2464**  
**UL CM, CMG, CL2**  
**CSA CMG FT4**

## Applications

- Lightweight, low-cost small-diameter cable for audio and sound systems

## Operating Temperature

- -20°C to +80°C (AWM 2464)
- -20°C to +75°C (CM, CMG)
- -20°C to +60°C (AWM 2092, 2093, 2094)

## Conductor Color Coding

(Unless noted)

- 2-conductor: Black, Clear
- 3-conductor: Black, Red, Clear
- 4-conductor: Black, Red, White, Green

## Materials

- Polyethylene or semirigid PVC insulation (see tables)
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire (see tables for size)
- Slate PVC jacket

## Availability

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

### Polyethylene Insulation

#### 24 AWG (0.22 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.016 (0.41 mm)  
24 AWG (0.22 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approval	Color Code
		Inch	mm	Inch	mm		
M13222	2	0.166	4.22	0.025	0.64	2092, CM	Black, Clear

Mutual capacitance: 18 pF/ft (59 pF/m)  
Ground capacitance: 32 pF/ft (105 pF/m)

### Semi-Rigid PVC Insulation

#### 24 AWG (0.22 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.010 (0.51 mm)  
24 AWG (0.22 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approval	Color Code
		Inch	mm	Inch	mm		
M39024	3	0.166	4.22	0.032	0.81	2464, CMG	O
M39025	4	0.174	4.42	0.032	0.81	2464, CMG	O
M39026	5	0.187	4.75	0.032	0.81	2464, CMG	O
M39027	6	0.201	5.11	0.032	0.81	2464, CMG	O
M39028	7	0.201	5.11	0.032	0.81	2464, CMG	O
M39029	8	0.214	5.44	0.032	0.81	2464, CMG	O
M39030	9	0.228	5.79	0.032	0.81	2464, CMG	O
M39031	10	0.247	6.27	0.032	0.81	2464, CMG	O
M39032	15	0.273	6.93	0.032	0.81	2464, CMG	F
M39033	20	0.301	7.65	0.032	0.81	2464, CMG	F
M39034	25	0.335	8.51	0.032	0.81	2464, CMG	F
M39035	30	0.369	9.37	0.040	1.02	2464, CMG	F
M39036	40	0.409	10.39	0.040	1.02	2464, CMG	F
M39037	50	0.456	11.58	0.045	1.14	2464, CMG	F

Mutual capacitance: 32 pF/ft (105 pF/m)  
Ground capacitance: 58 pF/ft (190.3 pF/m)

### Polyethylene Insulation

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

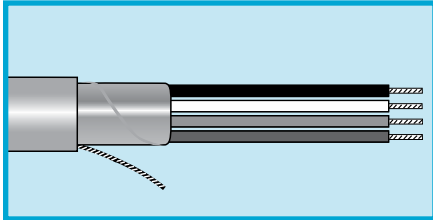
Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
22 AWG (0.35 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approvals
		Inch	mm	Inch	mm	
M13226	2	0.178	4.52	0.025	0.64	2092, CM
M13227	3	0.204	5.18	0.033	0.84	2093, CM

Mutual capacitance: 20 pF/ft (65.6 pF/m)  
Ground capacitance: 36 pF/ft (118.1 pF/m)

# Communication and Control

300 V Foil Shield, Multiconductor, PE or SR-PVC, PVC  
Audio/Video Cable



**UL AWM 2092, 2093, 2094,  
2464**  
**UL CM, CMG, CL2**  
**CSA CMG FT4**

## Applications

- Lightweight, low-cost small-diameter cable for audio and sound systems

## Operating Temperature

- -20°C to +80°C (AWM 2464)
- -20°C to +75°C (CM, CMG)
- -20°C to +60°C (AWM 2092, 2093, 2094)

## Conductor Color Coding

- 2-conductor: Black, Clear
- 3-conductor: Black, Red, Clear
- 4-conductor: Black, Red, White, Green

## Materials

- Polyethylene or semirigid PVC insulation (see tables)
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire (see tables for size)
- Slate PVC jacket

## Availability

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

### Polyethylene Insulation

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

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.016 (0.41 mm)  
20 AWG (0.56 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approvals
		Inch	mm	Inch	mm	
M13232	2	0.200	5.08	0.028	0.71	2092, CM
M13233	3	0.221	5.61	0.033	0.84	2093, CM

Mutual capacitance: 23 pF/ft (75.4 pF/m)  
Ground capacitance: 41 pF/ft (134.5 pF/m)

### Polyethylene Insulation

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

Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.019 (0.48 mm)  
20 AWG (0.56 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approvals
		Inch	mm	Inch	mm	
M13242	2	0.230	5.84	0.028	0.71	2092, CM
M13243	3	0.253	6.43	0.033	0.84	2093, CM

Mutual capacitance: 24.1 pF/ft (79.1 pF/m)  
Ground capacitance: 43 pF/ft (141.1 pF/m)

### SR-PVC Insulation

#### 18 AWG (0.96 mm<sup>2</sup>)

Stranding: 19/30 (19 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)  
20 AWG (0.56 mm<sup>2</sup>) drain wire

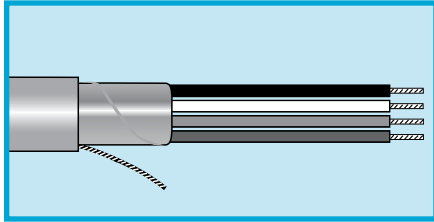
Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approvals
		Inch	mm	Inch	mm	
M13244	4	0.249	6.32	0.035	0.89	2464, CMG

Mutual capacitance: 47 pF/ft (154.2 pF/m)  
Ground capacitance: 85 pF/ft (278.9 pF/m)



# Communication and Control

300 V Foil Shield, Multiconductor, PE or SR-PVC, PVC  
Audio/Video Cable



**UL AWM 20253**  
**UL CM, CL2**  
**CSA CM**

## Applications

- Lightweight, low-cost small-diameter cable for audio and sound systems

## Operating Temperature

- -20°C to +80°C (AWM 20253)
- -20°C to +75°C (CM)

## Conductor Color Coding

- 2-conductor: Black, Clear
- 3-conductor: Black, Red, Clear
- 4-conductor: Black, Red, White, Green

## Materials

- Polyethylene or semirigid PVC insulation (see tables)
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward
- Stranded tinned copper drain wire (see tables for size)
- Slate PVC jacket

## Availability

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

### Polyethylene Insulation

#### 16 AWG (1.32 mm<sup>2</sup>)

Stranding: 19/0.0117 (19 x 0.30 mm)  
Insulation thickness: 0.032 (0.81 mm)  
18 AWG (0.81 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approvals
		Inch	mm	Inch	mm	
M13247	2	0.317	8.05	0.032	0.81	20253, CM, CL2
M13248	3	0.336	8.53	0.032	0.81	20253, CM, CL2

Mutual capacitance: 20.5 pF/ft (67.2 pF/m)  
Ground capacitance: 37 pF/ft (121.4 pF/m)

### Polyethylene Insulation

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

Stranding: 19/0.0147 (19 x 0.37 mm)  
Insulation thickness: 0.032 (0.81 mm)  
16 AWG (1.31 mm<sup>2</sup>) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approvals
		Inch	mm	Inch	mm	
M13249	2	0.345	8.78	0.035	0.89	20253, CM, CL2

Mutual capacitance: 22.5 pF/ft (73.8 pF/m)  
Ground capacitance: 40 pF/ft (131.2 pF/m)

### Polyethylene Insulation

#### 12 AWG (3.29 mm<sup>2</sup>)

Stranding: 19/0.0185 (19 x 0.47 mm)  
Insulation thickness: 0.037 (0.81 mm)  
14 AWG (2.08 mm<sup>2</sup>) drain wire

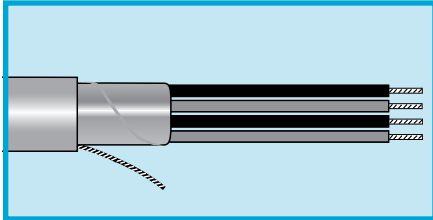
Part No.	Conductors	Nominal Diameter		Jacket Thickness		Approvals
		Inch	mm	Inch	mm	
M13250	2	0.421	10.69	0.040	1.02	20253, CM, CL2

Mutual capacitance: 25 pF/ft (82 pF/m)  
Ground capacitance: 44 pF/ft (144.3 pF/m)

# Communication and Control

300 V Foil Shield, Multiconductor, PP, PVC

Miniature Audio/Video Cable



**UL CM**  
**CSA CM**

## Applications

- Audio, broadcast, and sound systems
- Instrumentation

## Operating Temperature

- -20°C to +75°C

## Conductor Color Coding

- 1 Black, 2 Red

## Materials

- Stranded tinned copper conductors
- Polypropylene insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket (M4326)  
Black PVC jacket (M14328)

## Availability

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

Bulk, cut to length

(Minimums may apply)

24 AWG (0.22 mm <sup>2</sup> )					
Stranding: 7/32 (7 x 0.20 mm)					
Insulation thickness: 0.008 (0.20 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M14328*</b>	2	0.124	3.15	0.020	0.51

Mutual capacitance: 25 pF/ft (82 pF/m)  
Ground capacitance: 45 pF/ft (147.6 pF/m)

\*Black jacket.

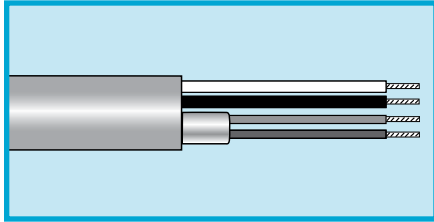
22 AWG (0.35 mm <sup>2</sup> )					
Stranding: 7/30 (7 x 0.25 mm)					
Insulation thickness: 0.008 (0.20 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M4326</b>	2	0.136	3.45	0.020	0.51

Mutual capacitance: 28 pF/ft (91.8 pF/m)  
Ground capacitance: 50 pF/ft 164 pF/m)

# Communication and Control

300 V/350 V Unshielded and Shielded, Multiconductor,  
PVC/PE/PP, PVC

Composite Audio/Video Cable



**UL CM**  
**CSA CM**

**Operating Temperature**

- -20°C to +90°C (CM)
- -20°C to +80°C

**Conductor Color Coding**

- See tables

**Materials**

- Stranded tinned copper conductors

- PVC insulation (polypropylene or polyethylene, as noted)
- Aluminum/polyester foil shield, 25% minimum overlap  
Stranded tinned copper drain wire (see tables for size)
- PVC jacket (see tables for colors)

**Availability**

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
(Minimums may apply)

**24/22 AWG Composite Shielded and Unshielded, UL CM, Slate Jacket**

		24 AWG (0.22 mm <sup>2</sup> )				22 AWG (0.35 mm <sup>2</sup> )				
		Stranding: 7/32 (7 x 0.20 mm) 22 AWG (0.35 mm <sup>2</sup> ) drain wire (M14477) 24 AWG (0.22 mm <sup>2</sup> ) drain wire (M14478)				Stranding: 7/30 (7 x 0.25 mm)				
Part No.	Conductors	Nominal Diameter		Insulation Thickness		Jacket Thickness		Configuration		Insulation
		Inch	mm	Inch	mm	Inch	mm	Shielded	Unshielded	
<b>M14477</b> <b>(300 V)</b>	4 (24 AWG)	0.239	6.07	0.016	0.41	0.028	0.71	4**	—	PVC
	2 (22 AWG)							—	2 Blue, White	PVC
<b>M14478*</b> <b>(350 V)</b>	8 (24 AWG)	0.295	7.49	0.012	0.30	0.030	0.81	8†	—	PE
	2 (22 AWG)							—	2 White, Blue	PVC

\*Cable has two quads of four shielded conductors, each quad individually shielded. One quad has a red shield; the other has a green shield. Not CMG.

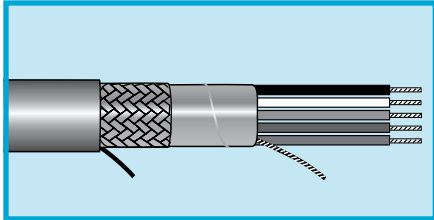
\*\*Conductor color coding: Black, green, red, yellow.

†Conductor color coding: Slate, white, blue, green, black, red, yellow, orange.



# Communication and Control

300 V Foil/Braid Shield, Multiconductor, Foam PP, PVC  
Low Capacitance Computer Cable



**UL AWM 2919 (30 V)**  
**UL CM VW-1**  
**CSA CM**

## Applications

- RS-232, RS-422
- Modems
- Multiplexers
- Serial data interfaces

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)

## Conductor Color Coding

- Chart O

## Materials

- Stranded tinned copper conductors
- Foam polypropylene insulation
- Foil + braid shield  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid,  
65% coverage
- Slate PVC jacket

## Availability

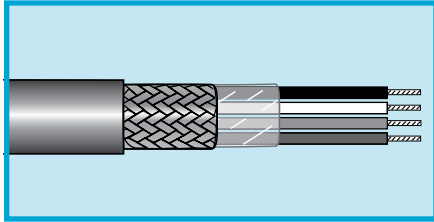
100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length  
(Minimums may apply)

24 AWG (0.22 mm <sup>2</sup> )					
Stranding: 7/32 (7 x 0.20 mm) Insulation thickness: 0.016 (0.41 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M2456</b>	3	0.217	5.51	0.035	0.89
<b>M2457</b>	4	0.231	5.87	0.035	0.89
<b>M2458</b>	5	0.248	6.30	0.035	0.89
<b>M2459</b>	6	0.265	6.73	0.035	0.89
<b>M2460</b>	7	0.265	6.73	0.035	0.89
<b>M2461</b>	8	0.282	7.16	0.035	0.89
<b>M2462</b>	9	0.300	7.62	0.035	0.89
<b>M2463</b>	10	0.320	8.13	0.035	0.89

Mutual capacitance: 11.9 pF/ft (39 pF/m)  
Ground capacitance: 21.4 pF/ft (70.2 pF/m)

# Communication and Control

450 V Braid Shield, Multiconductor, PVC, PVC



## Operating Temperature

- -20°C to +80°C

## Conductor Color Coding

- Chart D

## Materials

- Stranded tinned copper conductors
- PVC insulation
- Clear polyester wrap
- Bare copper braid shield, 75% coverage
- Slate PVC jacket

## Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

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

Stranding: 41/30 (41 x 0.25 mm)  
Insulation thickness: 0.020 (0.51 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1750	2	0.299	7.59	0.020	0.51
1751	3	0.317	8.05	0.020	0.51

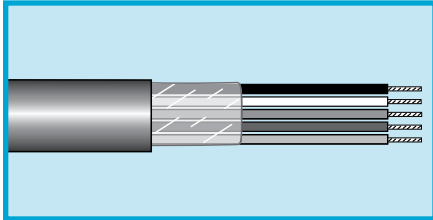
### 12 AWG (3.29 mm<sup>2</sup>)

Stranding: 65/30 (65 x 0.25 mm)  
Insulation thickness: 0.020 (0.51 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1760	2	0.337	8.56	0.020	0.51
1761	3	0.358	9.09	0.020	0.51

# Communication and Control

## 600 V Unshielded, Multiconductor, PVC, PVC



### UL AWM 2463 VW-1

#### Operating Temperature

- -20°C to +80°C

#### Conductor Color Coding

- Chart F

#### Materials

- Stranded tinned copper conductors
- PVC insulation
- Clear polyester wrap
- Slate PVC jacket

#### Availability

- 100 ft (30.5 m)
- 500 ft (152 m)
- 1000 ft (305 m)

#### 16 AWG (1.32 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>1064</b>	4	0.395	10.03	0.047	1.19
<b>1065</b>	5	0.430	10.92	0.047	1.19
<b>1067</b>	7	0.468	11.89	0.047	1.19
<b>1069</b>	9	0.577	14.66	0.063	1.60
<b>1072</b>	12	0.640	16.26	0.063	1.60
<b>1075</b>	15	0.694	17.63	0.063	1.60
<b>1079</b>	19	0.749	19.02	0.065	1.65
<b>1085</b>	25	0.907	23.04	0.083	2.11

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

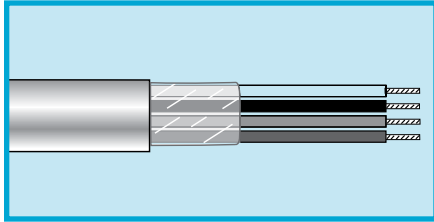
Stranding 19 x 0.0147 (19 x 0.37 mm)  
Insulation thickness: 0.047 (1.19 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>1274</b>	4	0.503	12.78	0.047	1.19
<b>1275</b>	5	0.584	14.83	0.063	1.60
<b>1277</b>	7	0.635	16.13	0.063	1.60
<b>1279</b>	9	0.744	18.90	0.065	1.60
<b>1282</b>	12	0.867	22.02	0.083	2.11

# Communication and Control

600 V Unshielded, Multiconductor, IRR PVC, PVC

Alpha  
Essentials



**MIL-DTL-16878/1 (Type B)**  
**UL AWM 2576 (150 V) VW-1**

### Operating Temperature

- -55°C to +105°C (MIL)
- -55°C to +80°C (AWM)

### Conductor Color Coding

- 1 White, 2 Black, 3 Red, 4 Green

### Materials

- Stranded tinned copper conductors
- Irradiated PVC insulation
- Clear polyester wrap
- White PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

#### 24 AWG (0.22 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6622</b>	2	0.155	3.94	0.032	0.81
<b>6623</b>	3	0.162	4.11	0.032	0.81
<b>6624</b>	4	0.173	4.39	0.032	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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6632</b>	2	0.167	4.24	0.032	0.81
<b>6633</b>	3	0.175	4.44	0.032	0.81
<b>6634</b>	4	0.188	4.78	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6642</b>	2	0.183	4.65	0.032	0.81
<b>6643</b>	3	0.192	4.88	0.032	0.81
<b>6644</b>	4	0.207	5.26	0.032	0.81

#### 18 AWG (0.89 mm<sup>2</sup>)

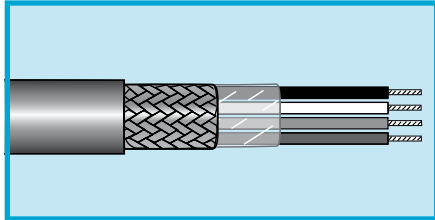
Stranding: 7/26 (7 x 0.40 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6652</b>	2	0.203	5.16	0.032	0.81
<b>6653</b>	3	0.214	5.44	0.032	0.81
<b>6654</b>	4	0.232	5.89	0.032	0.81



# Communication and Control

600 V Braid Shield, Multiconductor, PVC, PVC



## MIL-DTL-16878/1 (Type B)

### Operating Temperature

- -55°C to +105°C

### Conductor Color Coding

- Chart F

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Clear polyester wrap
- Tinned copper braid shield, 90% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
1000 ft (305 m)

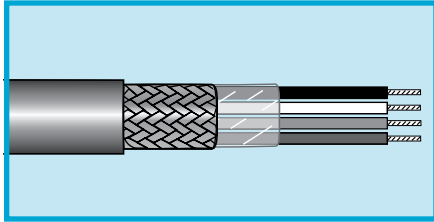
28 AWG (0.09 mm<sup>2</sup>)

Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3302</b>	2	0.119	3.02	0.012	0.30
<b>3303</b>	3	0.124	3.15	0.012	0.30
<b>3304</b>	4	0.134	3.40	0.012	0.30
<b>3306</b>	6	0.161	4.09	0.015	0.38
<b>3308</b>	8	0.171	4.34	0.015	0.38
<b>3310</b>	10	0.201	5.11	0.018	0.46
<b>3312</b>	12	0.206	5.23	0.018	0.46
<b>3315</b>	15	0.236	5.99	0.020	0.51
<b>3320</b>	20	0.261	6.63	0.022	0.56

# Communication and Control

1000 V Braid Shield, Multiconductor, PVC, PVC



## MIL-DTL-16878/2 (Type C)

### Operating Temperature

- -55°C to +105°C

### Conductor Color Coding

- Chart F

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Clear polyester wrap
- Tinned copper braid shield, 90% coverage
- Slate PVC jacket

### Availability

- 100 ft (30.5 m)
- 1000 ft (305 m)

### 18 AWG (0.96 mm<sup>2</sup>)

Stranding: 19/30 (19 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3405</b>	5	0.303	7.70	0.025	0.64
<b>3408</b>	8	0.364	9.25	0.030	0.76
<b>3410</b>	10	0.429	10.90	0.035	0.89
<b>3412</b>	12	0.442	11.23	0.035	0.89
<b>3415</b>	15	0.488	12.40	0.040	1.02
<b>3420</b>	20	0.550	13.97	0.045	1.14
<b>3430</b>	30	0.667	16.94	0.055	1.40

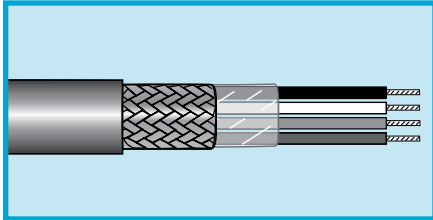
### 16 AWG (1.23 mm<sup>2</sup>)

Stranding: 19/29 (19 x 0.29 mm)  
Insulation thickness: 0.018 (0.45 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3444</b>	4	0.316	8.03	0.031	0.79
<b>3446</b>	6	0.376	9.55	0.034	0.86
<b>3450</b>	10	0.487	12.37	0.044	1.12
<b>3452</b>	12	0.509	12.93	0.048	1.22

# Communication and Control

600 V Braid Shield, Multiconductor, PVC/Nylon, PVC



## MIL-DTL-16878/17 (Type B/N)

### Operating Temperature

- 55°C to +105°C

### Conductor Color Coding

- 1 White, 2 Black, 3 Red, 4 Green (unless otherwise noted)

### Materials

- Stranded tinned copper conductors
- PVC/nylon insulation
- Clear polyester wrap (multiconductor only)
- Tinned copper braid shield, 90% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

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

Stranding: 7/34 (7 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm) PVC/0.003 (0.08 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3200</b>	1	0.087	2.21	0.010	0.25
<b>3201</b>	2	0.143	3.63	0.014	0.36
<b>3202</b>	3	0.150	3.81	0.014	0.36
<b>3203</b>	4	0.166	4.22	0.016	0.41

### 24 AWG (0.24 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm) PVC/0.003 (0.08 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3210</b>	1	0.093	2.36	0.010	0.25
<b>3211</b>	2	0.159	4.04	0.016	0.41
<b>3212</b>	3	0.167	4.24	0.016	0.41
<b>3213</b>	4	0.182	4.62	0.017	0.43

### 22 AWG (0.38 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm) PVC/0.003 (0.08 mm) nylon

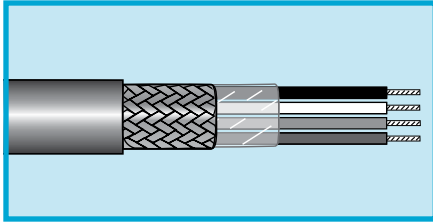
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3220</b>	1	0.100	2.54	0.010	0.25
<b>3221</b>	2	0.173	4.39	0.016	0.41
<b>3222</b>	3	0.184	4.67	0.017	0.43
<b>3223</b>	4	0.203	5.16	0.019	0.49
<b>3335*</b>	5	0.228	5.79	0.020	0.51
<b>3336*</b>	6	0.246	6.25	0.020	0.64
<b>3337*</b>	8	0.274	6.96	0.025	0.64

\*Color code chart F.

# Communication and Control

600 V Braid Shield, Multiconductor, IRR PVC, PVC

Alpha  
Essentials



## MIL-DTL-16878/1 (Type B)

### Operating Temperature

- 55°C to +105°C

### Conductor Color Coding

- Chart G

### Materials

- Stranded tinned copper conductors
- Irradiated PVC insulation
- Clear polyester wrap
- Tinned copper braid shield, 90% coverage
- White PVC jacket

### Availability

1000 ft (305 m)

### 24 AWG (0.22 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
7622	2	0.163	4.14	0.025	0.64
7623	3	0.170	4.32	0.025	0.64
7624	4	0.181	4.60	0.025	0.64

### 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
7631	1	0.122	3.10	0.025	0.64
7632	2	0.175	4.45	0.025	0.64
7633	3	0.183	4.65	0.025	0.64
7634	4	0.196	4.98	0.025	0.64

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
7661	1	0.130	3.30	0.025	0.64
7662	2	0.191	4.85	0.025	0.64
7663	3	0.200	5.08	0.025	0.64
7664	4	0.215	5.46	0.025	0.64

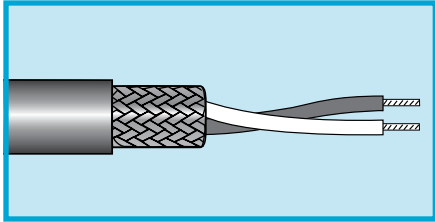
### 18 AWG (0.89 mm<sup>2</sup>)

Stranding: 7/26 (7 x 0.40 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
7671	1	0.140	3.56	0.025	0.64
7672	2	0.211	5.35	0.025	0.64
7673	3	0.222	5.64	0.025	0.64
7674	4	0.240	6.09	0.025	0.64

# Communication and Control

600 V Braid Shield, Multiconductor, PE, PVC  
Audio Cable



## Materials

- Bare copper conductors
- Polyethylene insulation
- Tinned copper braid shield, 95% coverage
- PVC jacket

## Operating Temperature

- -20°C to +60°C

## Availability

- 100 ft (30.5 m)
- 1000 ft (305 m)

## Conductor Color Coding

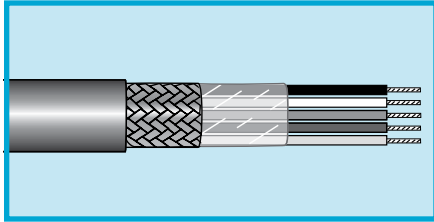
- 1771: White, Blue  
Black, Red, or Orange jacket
- 1772: White, Blue, White, Blue  
Black, Brown, Slate, or  
Yellow jacket

Part No.	Conductors	Wire Size		Stranding		Nominal Diameter		Shield	Jacket Thickness		Insulation Thickness		Capacitance	
		AWG	mm <sup>2</sup>	AWG	mm	Inch	mm		Inch	mm	Inch	mm	pF/ft	pF/m
1771	2	23	0.29	60/40	60 x 0.08	0.243	6.17	Braid	0.040	1.01	0.020	0.51	17.9	58.7
1772	4	25	0.20	40/40	40 x 0.08	0.239	6.07	Braid	0.044	1.11	0.014	0.35	18	69.1

# Communication and Control

600 V Braid Shield, Multiconductor, PE, PVC

Alpha  
Essentials



## 20 AWG (0.52 mm<sup>2</sup>)

Stranding: 26/34 (26 x 0.16 mm)  
Insulation thickness: 0.015 (0.38 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1712	2	0.221	5.61	0.030	0.76
1713	3	0.248	6.30	0.035	0.88
1715	4	0.266	6.76	0.035	0.88
1716	5	0.285	7.24	0.035	0.88
1717	6	0.306	7.77	0.035	0.88
1719	8	0.327	8.31	0.035	0.88
1721	10	0.373	9.47	0.035	0.88
1723	12	0.384	9.75	0.035	0.88
1726	15	0.421	10.69	0.035	0.88
1728	20	0.462	11.73	0.035	0.88

### Operating Temperature

- -20°C to +60°C

### Conductor Color Coding

- Chart H

### Materials

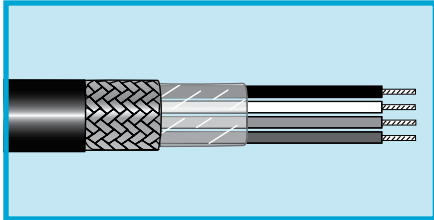
- Stranded tinned copper conductors
- Polyethylene insulation
- Clear polyester wrap
- Braided tinned copper shield, 85% coverage
- Slate PVC jacket

### Availability

- 100 ft (30.5 m)
- 500 ft (152 m)
- 1000 ft (305 m)

# Communication and Control

600 V Braid Shield, Multiconductor, Rubber, Polychloroprene



## 18 AWG (0.82 mm<sup>2</sup>)

Stranding: 41/34 (41 x 0.16 mm)  
Insulation thickness: 0.020 (0.51 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1450	2	0.298	7.57	0.045	1.14
1454	6	0.392	9.96	0.045	1.14

### Operating Temperature

- -20°C to +60°C

### Conductor Color Coding

- Chart H

### Materials

- Stranded tinned copper conductors
- EPDM rubber insulation
- Clear polyester wrap
- Tinned copper braid shield, 85% coverage
- Black polychloroprene jacket

### Availability

- 100 ft (30.5 m)
- 500 ft (152 m)
- 1000 ft (305 m)

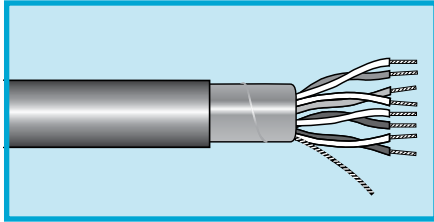
## 16AWG (1.31 mm<sup>2</sup>)

Stranding: 65/34 (65 x 0.16 mm)  
Insulation thickness: 0.026 (0.65 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1450/16	2	0.327	8.31	0.036	0.91
1451/16	3	0.350	8.89	0.037	0.94

# Communication and Control

300 V Foil Shield, Multipair, SR-PVC or PP, PVC  
Computer Cable



**UL AWM 2464**  
**UL CMG**  
**CSA CMG FT4**

### Applications

- RS-232
- Modems
- Multiplexers
- Serial data interfaces

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

### Conductor Color Coding

- See tables

### Materials

- Solid or stranded tinned copper conductors
- Semirigid PVC or polypropylene insulation
- Aluminum/polyester foil shield, 25% overlap min. Foil facing inward
- Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

### Availability

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

### SR-PVC Insulation

#### 24 AWG (0.22 mm<sup>2</sup>)

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M13190	1	0.159	4.04	0.032	0.81
M13191	2	0.215	5.46	0.032	0.81
M13192	3	0.227	5.77	0.032	0.81
M13193	4	0.246	6.25	0.032	0.81
M13194	5	0.267	6.78	0.032	0.81
M13195	6	0.289	7.34	0.032	0.81
M13196	7	0.289	7.34	0.032	0.81
M13197	8	0.311	7.90	0.032	0.81
M13198	9	0.334	8.48	0.032	0.81
M13199	10	0.360	9.14	0.032	0.81
M4758*	11	0.360	9.14	0.032	0.81
M13200	15	0.402	10.21	0.032	0.81
M3189	19	0.432	10.97	0.032	0.81
M13201	25	0.510	12.95	0.035	0.89

\*Color code Chart B

### SR-PVC Insulation

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

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M4770	2	0.235	5.97	0.032	0.81
M4771	3	0.248	6.30	0.032	0.81
M4772	4	0.269	6.83	0.032	0.81
M4773	5	0.293	7.44	0.032	0.81
M4774	6	0.318	8.08	0.032	0.81
M4775	9	0.369	9.37	0.032	0.81

### Polypropylene Insulation

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

Stranding: Solid  
Insulation thickness: 0.008 (0.20 mm)  
Color Code K

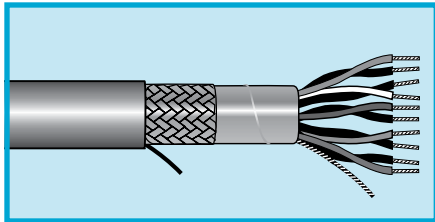
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
M3190	38	0.610	15.49	0.045	1.14



# Communication and Control

300 V Foil/Braid Shield, Multipair, SR-PVC, PVC

Computer Cable



**UL AWM 1061**  
**UL AWM 2343**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- Control, signal, and data transmission computers
- Industrial and electronic equipment

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

## Conductor Color Coding

- Chart B

## Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward  
Stranded tinned copper drain wire equal in size to conductor
- Tinned copper braid, 70% coverage
- Slate PVC jacket

## Availability

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

### 24 AWG (0.22 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
<b>M5650</b>	5	0.351	8.92	0.063	1.60
<b>M5651</b>	7	0.373	9.47	0.063	1.60
<b>M5652</b>	12	0.455	11.56	0.063	1.60
<b>M5653</b>	15	0.486	12.34	0.063	1.60
<b>M5654</b>	19	0.516	13.11	0.063	1.60

Mutual capacitance: 23.1 pF/ft (75.8 pF/m)  
Ground capacitance: 42 pF/ft (137.8 pF/m)

Part No. M5650  
Mutual capacitance: 25 pF/ft (82 pF/m)  
Ground capacitance: 45 pF/ft (147.6 pF/m)

### 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
<b>M5660</b>	5	0.377	9.58	0.063	1.60
<b>M5661</b>	7	0.402	10.21	0.063	1.60
<b>M5662</b>	12	0.496	12.60	0.063	1.60
<b>M5665</b>	27	0.666	16.92	0.063	1.60
<b>M5666</b>	37	0.735	18.67	0.063	1.60

Ground capacitance: 49 pF/ft (160.8 pF/m)

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

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
<b>M5670</b>	5	0.413	10.49	0.063	1.60
<b>M5671</b>	7	0.442	11.23	0.063	1.60

Mutual capacitance: 27 pF/ft (88.6 pF/m)  
Ground capacitance: 49 pF/ft (160.8 pF/m)

Part No. M5670  
Mutual capacitance: 29 pF/ft (95.1 pF/m)  
Ground capacitance: 52 pF/ft (170.6 pF/m)

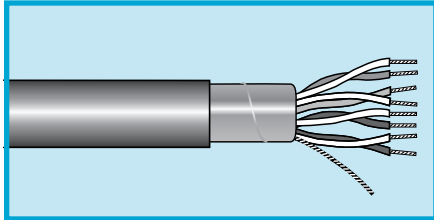


# Communication and Control

300 V Foil Shield, Multipair, Foam PP, PVC

Low Capacitance Computer Cable

Alpha  
Essentials



**UL AWM 2493**

**UL CM**

**CSA CM FT4**

## Applications

- RS-232
- RS-422

## Operating Temperature

- -20°C to +75°C (CM)
- -20°C to +60°C (AWM)

## Conductor Color Coding

- Chart K

## Materials

- Stranded tinned copper conductors
- Foam polypropylene insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

## Availability

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

Bulk, cut to length

(Minimums may apply)

**24 AWG (0.22 mm<sup>2</sup>)**

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.0185 (0.47 mm)

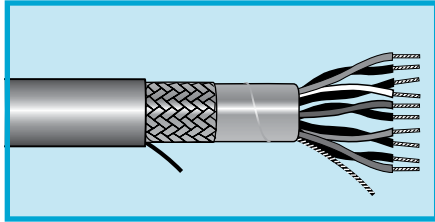
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M39249</b>	2	0.323	8.20	0.048	1.22
<b>M39250</b>	3	0.340	8.64	0.048	1.22
<b>M39251</b>	4	0.369	9.37	0.048	1.22
<b>M39252</b>	6	0.436	11.07	0.048	1.22

Mutual capacitance: 12.5 pF/ft (41 pF/m)  
Ground capacitance: 23 pF/ft (75.5 pF/m)



# Communication and Control

## 300 V Foil/Braid Shield, Multipair, Foam PP, PVC



**UL AWM 2919 (30 V)**  
**UL CM**  
**CSA CM**

### Applications

- RS-422
- Modems
- Multiplexers

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)

### Conductor Color Coding

- Chart M

### Materials

- Stranded tinned copper conductors
- Foam polypropylene insulation
- Foil + braid shield  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid,  
65% coverage
- Slate PVC jacket

### Availability

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

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

Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.0145 (0.37 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M2487</b>	2	0.234	5.94	0.032	0.81
<b>M2488</b>	3	0.252	6.40	0.032	0.81
<b>M2489</b>	4	0.271	6.88	0.032	0.81
<b>M2490</b>	5	0.292	7.42	0.032	0.81
<b>M2492</b>	7	0.314	7.98	0.032	0.81
<b>M2493</b>	8	0.336	8.53	0.032	0.81

Mutual capacitance: 11 pF/ft (36.1 pF/m)  
Ground capacitance: 20 pF/ft (65.6 pF/m)

### 24 AWG (0.22 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.0125 (0.32 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M3420</b>	2	0.257	6.53	0.035	0.89
<b>M3421</b>	3	0.269	6.83	0.035	0.89
<b>M3422</b>	4	0.290	7.37	0.035	0.89
<b>M3423</b>	5	0.314	7.98	0.035	0.89
<b>M3424</b>	6	0.338	8.59	0.035	0.89
<b>M3425</b>	7	0.338	8.59	0.035	0.89
<b>M3426</b>	8	0.363	9.22	0.035	0.89
<b>M3427</b>	10	0.417	10.59	0.035	0.89
<b>M3428*</b>	12.5	0.429	10.90	0.035	0.89

Mutual capacitance: 12.5 pF/ft (41 pF/m)  
Ground capacitance: 22 pF/ft (72.2 pF/m)

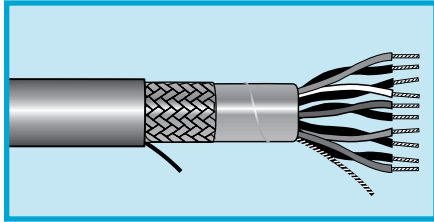
\*Discrete conductor is polyethylene insulated.

# Communication and Control

300 V Foil/Braid Shield, Multipair, PE, PVC

Low-Capacitance, 100-Ohm Computer Cable

Alpha  
Essentials



**UL AWM 2960 (30 V)**

**UL 2919 (30 V)**

**UL CM**

**CSA CM**

## Applications

- RS-422
- Modems
- Multiplexers

## Operating Temperature

- -20°C to +80°C (AWM 2919)
- -20°C to +75°C (CM)
- -20°C to +60°C (AWM 2960)

## Conductor Color Coding

- Chart K for 28 AWG
- Chart M for 24 AWG

## Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Foil + braid shield  
Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire equal in size to conductor
- Tinned copper braid, 90% coverage (65% where noted)
- Slate PVC jacket

## Availability

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

Bulk, cut to length

(Minimums may apply)

## UL AWM 2960, CM

**28 AWG (0.08 mm<sup>2</sup>)**

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
<b>M3970</b>	2	0.205	5.21	0.032	0.81
<b>M3971</b>	3	0.214	5.44	0.032	0.81
<b>M3972</b>	4	0.229	5.82	0.032	0.81
<b>M3973</b>	5	0.246	6.25	0.032	0.81
<b>M3974</b>	7	0.263	6.68	0.032	0.81
<b>M3975</b>	9	0.299	7.59	0.032	0.81
<b>M3977</b>	12	0.329	8.36	0.032	0.81
<b>M3931</b>	13	0.335	8.51	0.032	0.81
<b>M3978</b>	18	0.377	9.58	0.032	0.81
<b>M3979</b>	25	0.440	11.18	0.032	0.81

Mutual capacitance: 15.5 pF/ft (50.9 pF/m)  
Ground capacitance: 27.5 pF/ft (90.2 pF/m)

## UL AWM 2919, CM

**24 AWG (0.22 mm<sup>2</sup>)**

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.016 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>M3993<sup>†</sup></b>	1	0.208	5.28	0.035	0.89
<b>M3980*</b>	2	0.274	6.96	0.032	0.81
<b>M3990<sup>†</sup></b>	2	0.280	7.11	0.035	0.89
<b>M3981*</b>	3	0.288	7.32	0.032	0.81
<b>M3991<sup>†</sup></b>	3	0.294	7.47	0.035	0.89
<b>M3982*</b>	4	0.312	7.92	0.032	0.81
<b>M3992<sup>†</sup></b>	4	0.318	8.08	0.035	0.89
<b>M3983*</b>	5	0.339	8.61	0.032	0.81
<b>M3940*</b>	6	0.367	9.32	0.032	0.81
<b>M3984*</b>	7	0.367	9.32	0.032	0.81
<b>M3985*</b>	9	0.424	10.77	0.032	0.81
<b>M3986*</b>	10	0.457	11.61	0.032	0.81
<b>M3987*</b>	12	0.482	12.24	0.037	0.94

Mutual capacitance: 15.5 pF/ft (50.9 pF/m)  
Ground capacitance: 27.5 pF/ft (90.2 pF/m)

<sup>†</sup>120-ohm impedance  
Mutual capacitance: 12.8 pF/ft (42 pF/m)  
Ground capacitance: 23 pF/ft (75 pF/m)

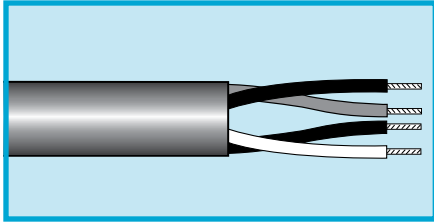
\*65% braid coverage.



# Communication and Control

300 V Unshielded, Multipair, PVC, PVC

Alpha  
Essentials



**UL AWM 2464, 2576 VW-1  
UL CM  
CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart A

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Slate PVC jacket

### Availability

1000 ft (305 m)

#### 22 AWG (0.32 mm<sup>2</sup>)

Stranding: Solid  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1300C	1	0.157	3.99	0.032	0.81
1302C	2	0.215	5.46	0.032	0.81
1304C	3	0.226	5.74	0.032	0.81
1305C	4	0.246	6.25	0.032	0.81
1306C	5	0.267	6.78	0.032	0.81
1307C	6	0.289	7.34	0.032	0.81
1308/11C	11	0.362	9.19	0.032	0.81
1309C	13	0.382	9.70	0.032	0.81
1310C	16	0.414	10.52	0.032	0.81
1313C	27	0.537	13.64	0.040	1.02

#### UL AWM 2576

#### 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
1317C	2	0.231	5.87	0.032	0.81
1318C	3	0.244	6.20	0.032	0.81
1319C	4	0.265	6.73	0.032	0.81
1320C	5	0.289	7.34	0.032	0.81
1322C	6	0.320	8.13	0.035	0.89
1323C	9	0.371	9.42	0.035	0.89
1324C	11	0.401	10.19	0.035	0.89
1325C	12	0.414	10.52	0.035	0.89
1327C	15	0.460	11.68	0.040	1.02
1327/19C	19	0.493	12.52	0.040	1.02

#### UL AWM 2464

#### 18AWG (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
1131C	1	0.225	5.72	0.032	0.81
1132C	2	0.332	8.43	0.035	0.89
1133C	3	0.356	9.04	0.037	0.94
1134C	4	0.396	10.06	0.040	1.02
1135C	5	0.444	11.28	0.045	1.14
1136C	6	0.484	12.29	0.045	1.14
1138C	8	0.534	13.56	0.050	1.27
1139C	9	0.584	14.83	0.055	1.40
1149C	19	0.791	20.09	0.070	1.78



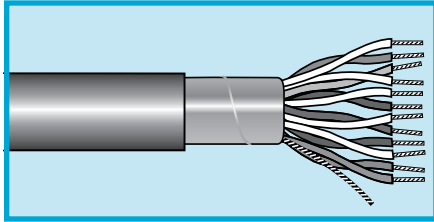
Alpha Wire | [www.alphawire.com](http://www.alphawire.com) | 1-800-52 ALPHA

Specifications subject to change. For complete specifications and availability, visit [www.alphawire.com](http://www.alphawire.com).

# Communication and Control

300 V Overall Foil Shield, Multipair, SR-PVC, PVC

Alpha  
Essentials



**UL AWM 2464**  
**UL CM**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart K

### Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward
- Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

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
5471C	1	0.156	3.96	0.032	0.81
5472C	2	0.212	5.38	0.032	0.81
5473C	3	0.224	5.69	0.032	0.81
5474C	4	0.243	6.17	0.032	0.81
5475C	5	0.270	6.86	0.035	0.89
5476C	6	0.292	7.42	0.035	0.89
5477C	7	0.292	7.42	0.035	0.89
5478C	8	0.316	8.03	0.035	0.89
5479C	9	0.343	8.71	0.037	0.83
5480C	10	0.373	9.47	0.040	1.02
5480/15C	15	0.415	10.54	0.040	1.02
5480/19C	19	0.445	11.30	0.040	1.02
5480/25C	25	0.527	13.39	0.045	1.14
5480/50C *	50	0.699	17.75	0.053	1.35

\*Color code chart C.

### Individually Shielded, 22 AWG (0.35 mm<sup>2</sup>), 7/30 (7 x .025) Tinned Copper Drain Wire UL VW-1

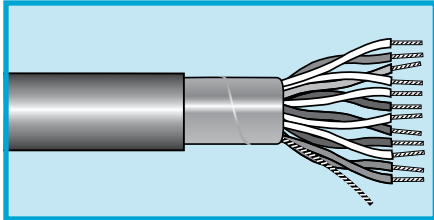
20 AWG (0.56 mm <sup>2</sup> )					
Stranding: 7/28 (7 x 0.33 mm)					
Insulation thickness: 0.010 (0.25 mm)					
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6416	2	0.295	7.49	0.041	1.04

Mutual capacitance: 55 pF/ft (180 pF/m)  
Ground capacitance: 95 pF/ft (312 pF/m)



# Communication and Control

300 V Overall Foil Shield, Multipair, PVC, PVC



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

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart K

### Materials

- Solid tinned copper conductors
- PVC insulation
- Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing inward
- Stranded tinned copper drain  
wire equal in size to conductor
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

22 AWG (0.32 mm<sup>2</sup>)

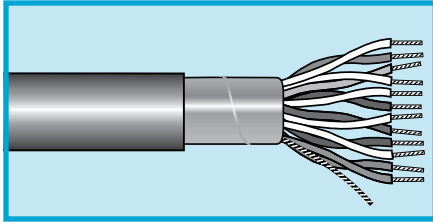
Stranding: Solid  
Insulation thickness: 0.013 (0.33 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5902C	2	0.238	6.05	0.032	0.81
5905C	4	0.273	6.93	0.032	0.81
5906C	6	0.329	8.36	0.035	0.89
5909C	9	0.385	9.78	0.037	0.94
5909/15C	15	0.471	11.96	0.040	1.02
5909/19C	19	0.506	12.85	0.040	1.02

# Communication and Control Cable

300 V Overall Foil Shield, Multipair, PVC, PVC

Alpha  
Essentials



**UL PLTC/CM**  
**UL VW-1**  
**CSA CMG FT4**

## Operating Temperature

- -20°C to +105°C (CM)
- -20°C to +60°C (CMG)

## Conductor Color Coding

- Black and Red pairs, numbered

## Materials

- Stranded tinned copper conductors
- PVC insulation
- Aluminum/polyester foil shield, 25% overlap min. Foil facing inward
- Stranded tinned copper drain wire, 24 AWG (0.22 mm<sup>2</sup>), 7/32 (7 x 0.20)
- Slate PVC jacket

## Features

- UL Sunlight Resistant

## Availability

500 ft (152 m)  
1000 ft (305 m)

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.013 (0.33 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6417</b>	2	0.267	6.78	0.038	0.97
<b>6418</b>	3	0.291	7.39	0.043	1.09
<b>6419</b>	4	0.315	8.00	0.043	1.09
<b>6420</b>	6	0.370	9.40	0.043	1.09
<b>6421</b>	9	0.447	11.35	0.053	1.35
<b>6422</b>	11	0.480	12.19	0.053	1.35
<b>6423</b>	15	0.545	13.84	0.053	1.35
<b>6424</b>	19	0.593	15.06	0.063	1.60
<b>6425</b>	27	0.698	17.73	0.063	1.60
<b>6426</b>	51	0.914	23.22	0.075	1.91

### 18 AWG (0.96 mm<sup>2</sup>)

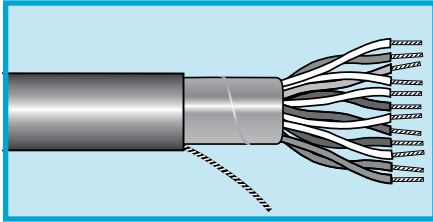
Stranding: 19/30 (19 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6427</b>	2	0.362	9.19	0.043	1.09
<b>6428</b>	3	0.403	10.24	0.053	1.35
<b>6429</b>	4	0.438	11.13	0.053	1.35
<b>6430</b>	6	0.518	13.16	0.053	1.35
<b>6431</b>	9	0.622	15.80	0.063	1.60
<b>6432</b>	11	0.671	17.04	0.063	1.60
<b>6433</b>	15	0.751	19.08	0.063	1.60



# Communication and Control

150 and 300 V Overall Foil Shield, Multipair, PVC, PVC



**UL AWM 2576 VW-1 (150 V)**  
**UL AWM 2464 VW-1 (300 V)**  
**UL CM**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart A

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward  
Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
 500 ft (152 m)  
 1000 ft (305 m)

### 150 V, AWM 2576

**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
2211C	1	0.168	4.27	0.032	0.81
2212C	2	0.232	5.89	0.032	0.81
2213C	3	0.245	6.22	0.032	0.81
2214C	4	0.266	6.76	0.032	0.81
2215C	5	0.290	7.37	0.032	0.81
2216C	6	0.315	8.00	0.032	0.81
2219C	9	0.372	9.45	0.035	0.89
2219/12C	12	0.415	10.54	0.035	0.89
2219/15C	15	0.451	11.46	0.035	0.89
2219/19C	19	0.494	12.55	0.040	1.02
2219/23C	23	0.545	13.84	0.040	1.02
2219/27C	27	0.589	14.96	0.040	1.02

### 300 V, AWM 2464

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

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

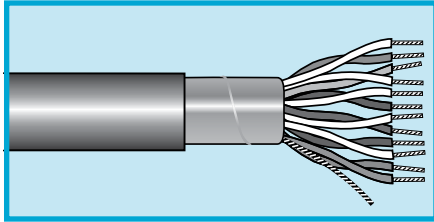
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2241C	1	0.226	5.74	0.032	0.81
2242C	2	0.333	8.46	0.035	0.89
2243C	3	0.357	9.07	0.037	0.94
2244C	4	0.397	10.08	0.040	1.02
2245C	5	0.445	11.30	0.045	1.14
2246C	6	0.485	12.32	0.045	1.14
2248C	8	0.535	13.59	0.050	1.27
2249C	9	0.585	14.86	0.055	1.40
2249/12C	12	0.652	16.56	0.055	1.40
2249/19C	19	0.792	20.12	0.070	1.78



# Communication and Control

300 V Overall Foil Shield, Multipair, HDPE, PVC

Low-Capacitance, Extended-Distance Cable



**UL AWM 2919 (30 V) VW-1**  
**UL CM**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart M

### Materials

- Stranded tinned copper conductors
- High-density polyethylene insulation
- Aluminum/polyester/aluminum foil shield, 25% overlap min.  
Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### 24 AWG (0.22 mm<sup>2</sup>)

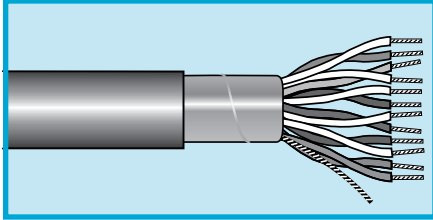
Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6083C</b>	3	0.235	5.97	0.035	0.89
<b>6084C</b>	4	0.254	6.45	0.035	0.89
<b>6087C</b>	7	0.297	7.54	0.035	0.89
<b>6089C</b>	9	0.342	8.69	0.035	0.89
<b>6089/18C</b>	18	0.440	11.18	0.035	0.89

Characteristic impedance: 100 ohms  
Mutual capacitance: 15 pF/ft (49.2 pF/m)  
Ground capacitance: 27 pF/ft (88.6 pF/m)

# Communication and Control

300 V Overall Foil Shield, Multipair, Foam PP, PVC  
Low-Capacitance Data Cable



**UL AWM 2919 (30 V) VW-1  
UL CM  
CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart A

### Materials

- Stranded tinned copper conductors
- Foam polypropylene insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

### Availability

500 ft (152 m)  
1000 ft (305 m)

### 24 AWG (0.22 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6202C	2	0.258	6.55	0.035	0.89
6203C	3	0.272	6.91	0.035	0.89
6204C	4.5*	0.304	7.72	0.035	0.89
6205C	5	0.323	8.20	0.035	0.89
6206C	6	0.351	8.92	0.035	0.89
6207C	7	0.351	8.92	0.035	0.89
6208C	8	0.379	9.63	0.035	0.89
6209C	9	0.408	10.36	0.035	0.89
6210C	10	0.441	11.20	0.035	0.89
6210/12C	12.5*	0.455	11.56	0.035	0.89
6210/15C	15	0.496	12.60	0.035	0.89
6210/18C	18.5*	0.554	14.07	0.050	1.27
6210/25C	25	0.655	16.64	0.050	1.27

\*Single conductor colors: 4.5 = black, 12.5 = red, 18.5 = white

Characteristic impedance: 105 ohms  
Mutual capacitance: 12.5 pF/ft (41 pF/m)  
Ground capacitance: 22 pF/ft (72 pF/m)

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.020 (0.51 mm)

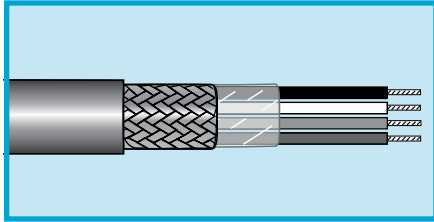
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6212C	2	0.304	7.72	0.035	0.89
6213C	3	0.322	8.18	0.035	0.89
6216C	6	0.420	10.67	0.035	0.89
6217C	7	0.420	10.67	0.035	0.89
6218C	8	0.456	11.58	0.035	0.89

Characteristic impedance: 105 ohms  
Mutual capacitance: 12.5 pF/ft (41 pF/m)  
Ground capacitance: 22 pF/ft (72 pF/m)

# Communication and Control

600 V Braid Shield, Multiconductor, PVC/Nylon, PVC

Alpha  
Essentials



## MIL-DTL-16878/17 (Type B/N)

### Operating Temperature

- 55°C to +105°C

### Conductor Color Coding

- 1 White, 2 Black, 3 Red, 4 Green (unless otherwise noted)

### Materials

- Stranded tinned copper conductors
- PVC/nylon insulation
- Clear polyester wrap (multiconductor only)
- Tinned copper braid shield, 90% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### 20 AWG (0.61 mm<sup>2</sup>)

Stranding: 19/32 (19 x 0.20 mm)  
Insulation thickness: 0.010 (0.25 mm) PVC/0.003 (0.08 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3230</b>	1	0.108	2.74	0.010	0.25
<b>3231</b>	2	0.195	4.95	0.019	0.49
<b>3232</b>	3	0.205	5.21	0.019	0.49
<b>3233</b>	4	0.227	5.77	0.021	0.53

### 18 AWG (0.96 mm<sup>2</sup>)

Stranding: 19/30 (19 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm) PVC/0.003 (0.08 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3240</b>	1	0.122	3.10	0.012	0.30
<b>3241</b>	2	0.219	5.56	0.021	0.53
<b>3242</b>	3	0.233	5.92	0.022	0.56
<b>3243</b>	4	0.261	6.63	0.023	0.58

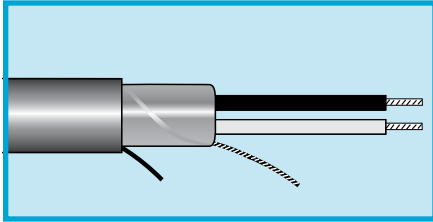
### 16 AWG (1.23 mm<sup>2</sup>)

Stranding: 19/29 (19 x 0.29 mm)  
Insulation thickness: 0.010 (0.25 mm) PVC/0.003 (0.08 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3245</b>	1	0.136	0.136	0.016	0.41
<b>3246</b>	2	0.241	0.241	0.023	0.58
<b>3247</b>	3	0.254	0.254	0.023	0.58
<b>3248</b>	4	0.279	0.279	0.025	0.64

# Communication and Control

600 V Overall Foil Shield, Multipair, PE, PVC



## UL AWM 2106 VW-1

### Operating Temperature

- -20°C to +60°C

### Conductor Color Coding

- Black, Clear

### Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire one even AWG size smaller than conductor
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### 16 AWG (1.32 mm<sup>2</sup>)

Stranding: 19/0.0117 (19 x 0.30 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2471	1	0.314	7.98	0.035	0.89

Mutual capacitance: 20.5 pF/ft (67.3 pF/m)  
Ground capacitance: 37 pF/ft (121.4 pF/m)

### 14 AWG (1.94 mm<sup>2</sup>)

Stranding: 19/27 (19 x 0.36 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2472	1	0.344	8.74	0.035	0.89

Mutual capacitance: 22.7 pF/ft (74.5 pF/m)  
Ground capacitance: 41 pF/ft (134.5 pF/m)

### 12 AWG (3.08 mm<sup>2</sup>)

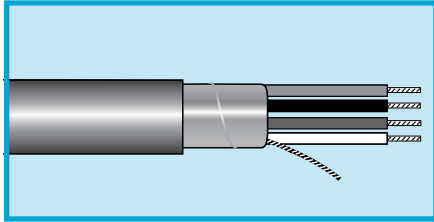
Stranding: 19/25 (19 x 0.45 mm)  
Insulation thickness: 0.037 (0.94 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2473	1	0.412	10.46	0.040	1.02

Mutual capacitance: 23.9 pF/ft (78.4 pF/m)  
Ground capacitance: 43 pF/ft (141.1 pF/m)

# Communication and Control

400 V Multiconductor, Multipair, PE, PVC  
Foil Shielded Pairs and Overall Foil Shield



## 25 AWG (0.18 mm<sup>2</sup>)

Stranding: 3/33 TC +4/33 TCW (3 x 0.18 +4 x 0.18 mm)  
Insulation thickness: 0.013 (0.33 mm)

Part No.	Conductors	Pairs	Nominal Diameter		Jacket Thickness	
			Inch	mm	Inch	mm
2468	2	1	0.165	4.19	0.020	0.51

### Operating Temperature

- 20°C to +60°C

### Conductor Color Coding

- Conductors: 1 White, 2 Green  
Pair: Black-Red

### Materials

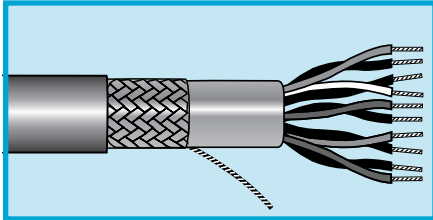
- Stranded tinned and steel-coated copper conductors
- Polyethylene insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward
- Stranded tinned copper drain wire, 25 AWG (0.18 mm<sup>2</sup>), 7/33 (7 x 0.18 mm)
- Slate PVC jacket

### Availability

- 100 ft (30.5 m)
- 500 ft (152 m)
- 1000 ft (305 m)

# Communication and Control

300 V Overall Foil/Braid Shield, Multipair, SR-PVC, PVC



**UL AWM 2464 VW-1**  
**UL CL2**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CL2)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart A

### Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Foil + braid shield  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid,  
65% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

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

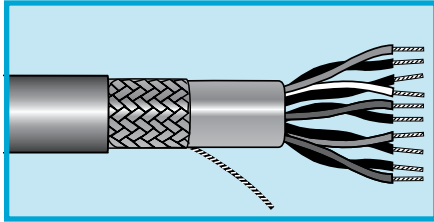
Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness		Availability
		Inch	mm	Inch	mm	
<b>3472C</b>	2	0.211	5.36	0.035	0.89	100
<b>3474C</b>	4	0.235	5.97	0.035	0.89	100
<b>3475C</b>	5	0.258	6.55	0.035	0.89	100, 1000
<b>3476C</b>	6	0.275	6.99	0.035	0.89	100
<b>3477C</b>	7	0.275	6.99	0.035	0.89	100
<b>3480C</b>	10	0.332	8.43	0.035	0.89	100, 500, 1000
<b>3480/12C</b>	12.5	0.342	8.69	0.035	0.89	100, 500, 1000
<b>3480/18C</b>	18	0.389	9.88	0.035	0.89	100, 500, 1000
<b>3480/25C</b>	25	0.446	11.33	0.035	0.89	100, 500, 1000

# Communication and Control

300 V Overall Foil/Braid Shield, Multipair, SR-PVC, PVC

Alpha  
Essentials



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

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- See tables

### Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Foil + braid shield  
Aluminum/polyester foil, 25% overlap min. Foil facing outward  
Stranded tinned copper drain wire, 24 AWG  
Tinned copper braid, 65% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### 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		Color Code
		Inch	mm	Inch	mm	
<b>6362</b>	2	0.234	5.94	0.032	0.81	M
<b>6363</b>	3	0.246	6.25	0.032	0.81	M
<b>6364</b>	4	0.265	6.73	0.032	0.81	M
<b>6365</b>	5	0.286	7.26	0.032	0.81	M
<b>6366</b>	6	0.308	7.82	0.032	0.81	M
<b>6367</b>	7	0.308	7.82	0.032	0.81	M
<b>6368</b>	10	0.379	9.63	0.032	0.81	M
<b>6369</b>	12.5	0.389	9.62	0.032	0.81	M
<b>6370</b>	15	0.421	10.69	0.032	0.81	M
<b>6371</b>	18	0.451	11.46	0.032	0.81	M
<b>6372</b>	25	0.523	13.28	0.032	0.81	M

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

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
<b>6373</b>	2	0.254	6.45	0.032	0.81	A
<b>6374</b>	3	0.267	6.78	0.032	0.81	A
<b>6375</b>	4	0.288	7.32	0.032	0.81	A
<b>6376</b>	5	0.312	7.92	0.032	0.81	Chart below
<b>6377</b>	6	0.337	8.56	0.032	0.81	A
<b>6378</b>	7	0.337	8.56	0.032	0.81	A
<b>6379</b>	8	0.363	9.22	0.032	0.81	Chart below
<b>6380</b>	10	0.418	10.62	0.032	0.81	A
<b>6381</b>	12.5	0.430	10.92	0.032	0.81	A
<b>6382</b>	15	0.467	11.86	0.032	0.81	A
<b>6383</b>	18	0.500	12.70	0.032	0.81	A
<b>6384</b>	25	0.595	15.11	0.032	0.81	A

### Color Code Chart (Part No. 6376 and 6379)

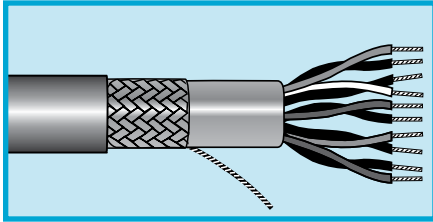
Pair No.	Color	Pair No.	Color
1	Black, Red	5	Black, Yellow
2	Black, White	6	Black, Brown
3	Black, Green	7	Black, Orange
4	Black, Blue	8	Red, White



# Communication and Control

300 V Overall Foil/Braid Shield, Multipair, PE, PVC

Low-Capacitance Data Cable



**UL AWM 2960 VW-1**

**UL CL2**

**CSA CMH FT1**

### Operating Temperature

- -20°C to +75°C (CL2)
- -20°C to +60°C (AWM, CMH)

### Conductor Color Coding

- Chart K

### Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Foil + braid shielding  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid,  
90% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

### 28 AWG (0.089 mm²)

Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)

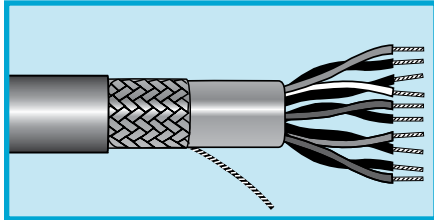
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6390</b>	2	0.211	5.36	0.035	0.89
<b>6391</b>	3	0.220	5.59	0.035	0.89
<b>6392</b>	4	0.235	5.97	0.035	0.89
<b>6393</b>	5	0.252	6.40	0.035	0.89
<b>6394</b>	7	0.269	6.83	0.035	0.89
<b>6395</b>	9	0.305	7.75	0.035	0.89
<b>6396</b>	12	0.335	8.51	0.035	0.89
<b>6397</b>	13	0.341	8.66	0.035	0.89
<b>6398</b>	18	0.383	9.73	0.035	0.89
<b>6399</b>	25	0.440	11.18	0.035	0.89
<b>6400</b>	31	0.470	11.94	0.035	0.89

Characteristic impedance: 100 ohms  
Mutual capacitance: 15.5 pF/ft (50.9 pF/m)  
Ground capacitance: 27.5 pF/ft (90.2 pF/m)

# Communication and Control

300 V Overall Foil/Braid Shield, Multipair, PE, PVC

Low-Capacitance Data Cable



**UL AWM 2919 VW-1**  
**UL CM**  
**CSA CM FT1**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)

### Conductor Color Coding

- Chart M

### Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Foil + braid shielding  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid, 65% or  
90% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

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

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.016 (0.41 mm)  
65% braid coverage

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6401</b>	2	0.280	7.11	0.035	0.89
<b>6402</b>	3	0.294	7.47	0.035	0.89
<b>6403</b>	4	0.318	8.08	0.035	0.89
<b>6404</b>	5	0.345	8.76	0.035	0.89
<b>6405</b>	6	0.373	9.47	0.035	0.89
<b>6406</b>	7	0.373	9.47	0.035	0.89
<b>6407</b>	9	0.430	10.92	0.035	0.89
<b>6408</b>	10	0.463	11.76	0.035	0.89
<b>6409</b>	12	0.478	12.14	0.035	0.89

Characteristic impedance: 100 ohms  
Mutual capacitance: 15.5 pF/ft (50.9 pF/m)  
Ground capacitance: 27.5 pF/ft (90.2 pF/m)

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

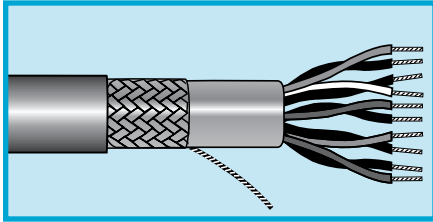
Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.016 (0.41 mm)  
90% braid coverage

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6412</b>	1	0.208	5.28	0.035	0.89
<b>6413</b>	2	0.280	7.11	0.035	0.89
<b>6414</b>	3	0.294	7.47	0.035	0.89
<b>6415</b>	4	0.318	8.08	0.035	0.89

Characteristic impedance: 120 ohms  
Mutual capacitance: 12.8 pF/ft (42 pF/m)  
Ground capacitance: 23 pF/ft (75.5 pF/m)

# Communication and Control

300 V Overall Foil/Braid Shield, Multipair, Foam PP, PVC  
Low-Capacitance Data Cable



**UL AWM 2919 (30 V) VW-1  
CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

### Conductor Color Coding

- Chart M

### Materials

- Stranded tinned copper conductors
- Foam polypropylene insulation
- Foil + braid shielding  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward  
Stranded tinned copper drain  
wire equal in size to conductor  
Tinned copper braid,  
65% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

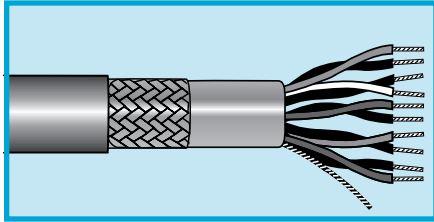
28 AWG (0.089 mm <sup>2</sup> )					
Stranding: 7/36 (7 x 0.13 mm) Insulation thickness: 0.013 (0.33 mm)					
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>3492C</b>	2	0.270	5.84	0.035	0.89
<b>3493C</b>	3	0.282	6.12	0.035	0.89
<b>3494C</b>	4	0.302	6.73	0.035	0.89
<b>3495C</b>	5	0.315	7.21	0.035	0.89
<b>3496C</b>	6	0.341	7.75	0.035	0.89
<b>3498C</b>	8	0.326	8.28	0.035	0.89
<b>3500/12C</b>	12.5	0.381	9.67	0.035	0.89
<b>3500/18C</b>	18	0.439	11.15	0.035	0.89

Mutual capacitance: 12 pF/ft (39.3 pF/m)  
Ground capacitance: 20 pF/ft (65.5 pF/m)

# Communication and Control

300 V Overall Foil/Braid Shield, Multipair, Foam PP, PVC  
Low-Capacitance Data Cable

Alpha  
Essentials



**UL AWM 2919 (30 V) VW-1**  
**UL CM**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart M

### Materials

- Stranded tinned copper conductors
- Foam polypropylene insulation
- Foil + braid shielding  
Aluminum/polyester foil shield,  
25% overlap min.  
Foil facing outward
- Stranded tinned copper drain  
wire equal in size to conductor
- Tinned copper braid,  
65% coverage
- Slate PVC jacket

### Availability

500 ft (152 m)  
1000 ft (305 m)

## 24 AWG (0.23 mm²)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.016 (0.41 mm)

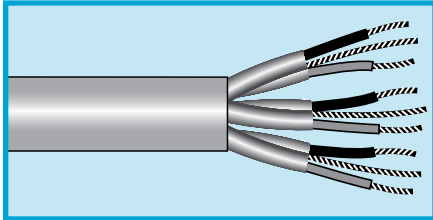
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6222C</b>	2	0.270	6.86	0.035	0.89
<b>6223C</b>	3	0.282	7.16	0.035	0.89
<b>6224C</b>	4	0.302	7.67	0.035	0.89
<b>6225C</b>	5	0.315	8.00	0.035	0.89
<b>6226C</b>	6	0.341	8.66	0.035	0.89
<b>6227C</b>	7	0.341	8.66	0.035	0.89
<b>6228C</b>	8	0.370	9.40	0.035	0.89
<b>6230C</b>	10	0.427	10.85	0.035	0.89
<b>6230/12C</b>	12.5	0.440	11.18	0.035	0.89
<b>6230/15C</b>	15	0.495	12.57	0.040	1.02

Characteristic impedance: 105 ohms  
Mutual capacitance: 12.5 pF/ft (41 pF/m)  
Ground capacitance: 22 pF/ft (72 pF/m)



# Communication and Control

300 V Individually Foil Shielded Pairs, Multipair, PVC, PVC



**UL AWM 2464 (300 V) VW1  
UL CM  
CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart A

### Materials

- Stranded tinned copper conductors
- PVC insulation
- Individual aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward
- Stranded tinned copper drain wire
- PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
22 AWG (0.35 mm<sup>2</sup>) drain wire

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6052C	2	0.316	8.03	0.043	1.09
6053C	3	0.334	8.48	0.043	1.09
6054C	4	0.364	9.25	0.043	1.09
6056C	6	0.451	11.46	0.053	1.35
6059C	9	0.522	13.26	0.053	1.35
6059/11C	11	0.581	14.76	0.053	1.35
6059/15C	15	0.644	16.36	0.053	1.35
6059/19C	19	0.698	17.73	0.063	1.60

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

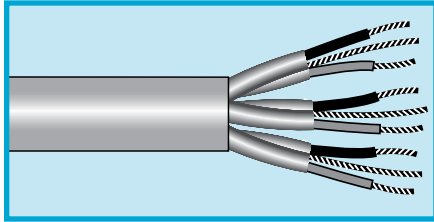
Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
20 AWG (0.51 mm<sup>2</sup>) drain wire

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6062C	2	0.376	9.55	0.043	1.09
6063C	3	0.418	10.62	0.053	1.35
6064C	4	0.456	11.58	0.053	1.35
6066C	6	0.541	13.74	0.053	1.35
6069C	9	0.650	16.51	0.063	1.60
6069/15C	15	0.804	20.42	0.063	1.60

# Communication and Control

300 V Individually Foil Shielded Pairs, Multipair, PP, PVC

Alpha  
Essentials



**UL 2493 VW-1**  
**UL CM, CMG**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +75°C (CM)
- -20°C to +60°C (AWM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart A

### Materials

- Solid or stranded tinned copper conductors
- Polypropylene insulation
- Individual aluminum/polyester foil shield, 25% overlap min. Foil facing inward
- Solid or stranded tinned copper drain wire, 22 AWG
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)



### 22 AWG (0.32 mm<sup>2</sup>)

Stranding: Solid  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness		UL
		Inch	mm	Inch	mm	
6000C	3	0.278	7.06	0.047	1.19	CM
6008C	15	0.492	12.50	0.047	1.19	CM

Characteristic impedance: 62 ohms  
Mutual capacitance: 25 pF/ft (82 pF/m)  
Ground capacitance: 45 pF/ft (147 pF/m)

### 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		UL
		Inch	mm	Inch	mm	
6010C	3	0.298	7.57	0.048	1.22	CMG
6012C	6	0.378	9.60	0.048	1.22	CMG
6014C	9	0.436	11.07	0.048	1.22	CMG
6016C	11	0.483	12.27	0.048	1.22	CMG
6017C	12	0.483	12.27	0.048	1.22	CMG
6018C	15	0.565	14.35	0.063	1.60	CM
6019C	17	0.593	15.06	0.063	1.60	CM
6020C	19	0.593	15.06	0.063	1.60	CM
6022C	27	0.698	17.73	0.063	1.60	CM

Characteristic impedance: 55 ohms  
Mutual capacitance: 28 pF/ft (91.9 pF/m)  
Ground capacitance: 50 pF/ft (164 pF/m)

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

Stranding: 7/28 (7 x 0.33 mm)  
Insulation thickness: 0.013 (0.33 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness		UL
		Inch	mm	Inch	mm	
6032C	2	0.331	8.41	0.047	1.19	CMG
6033C	3	0.349	8.86	0.047	1.19	CMG
6036C	6	0.450	11.43	0.047	1.19	CMG
6039C	9	0.555	14.10	0.063	1.60	CMG
6042C	12	0.615	15.62	0.063	1.60	CMG

Characteristic impedance: 61 ohms  
Mutual capacitance: 25 pF/ft (82 pF/m)  
Ground capacitance: 45 pF/ft (147.6 pF/m)

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

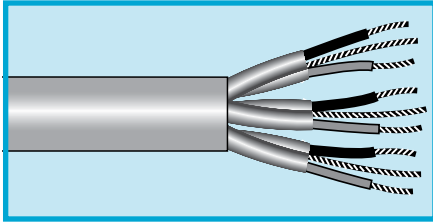
Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness		UL
		Inch	mm	Inch	mm	
6023C	3	0.406	10.31	0.047	1.19	CM
6024C	6	0.561	14.25	0.063	1.60	CM
6025C	9	0.650	16.51	0.063	1.60	CM

Characteristic impedance: 59 ohms  
Mutual capacitance: 26 pF/ft (85.3 pF/m)  
Ground capacitance: 47 pF/ft (154.2 pF/m)

# Communication and Control

350 V Individually Foil Shielded Pairs, Multipair, PP, PE  
Direct Burial



## 20 AWG (0.51 mm<sup>2</sup>)

Stranding: 10/30 (10 x 0.25 mm)  
Insulation thickness: 0.008 (0.20 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6314</b>	3	0.291	7.39	0.040	1.02
<b>6315</b>	6	0.385	9.78	0.045	1.14

Characteristic impedance: 48 ohms  
Mutual capacitance: 31 pF/ft (101.7 pF/m)  
Ground capacitance: 56 pF/ft (183.7 pF/m)

### Operating Temperature

- -20°C to +80°C

### Conductor Color Coding

- Chart A

### Materials

- Stranded tinned copper conductors
- Polypropylene insulation
- Individual aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire, 22 AWG
- Black polyethylene jacket

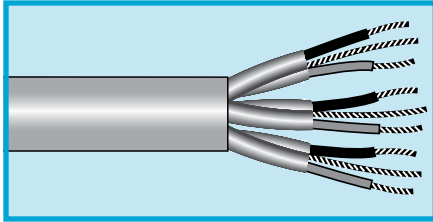
### Availability

1000 ft (305 m)  
500 ft (152 m)

# Communication and Control

300 V Individually Foil Shielded Pairs, Multipair, PE, PVC

Alpha  
Essentials



**UL AWM 2919 (30 V) VW-1**  
**UL CM**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

- Chart A

### Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Individual aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward
- Stranded tinned copper drain wire equal in size to conductor
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

### 24 AWG (0.22 mm<sup>2</sup>)

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

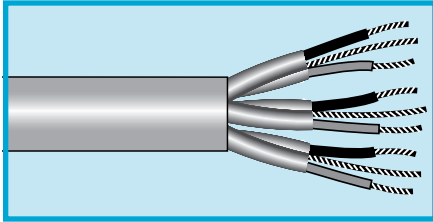
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6385</b>	3	0.247	6.27	0.035	0.89
<b>6386</b>	6	0.317	8.05	0.035	0.89
<b>6387</b>	9	0.368	9.35	0.035	0.89
<b>6388</b>	12	0.411	10.44	0.035	0.89

Characteristic impedance: 60 ohms  
Mutual capacitance: 25 pF/ft (82 pF/m)  
Ground capacitance: 47 pF/ft (154.2 pF/m)



# Communication and Control

300 V Individually Foil Shielded Pairs, Multipair, PP, PVC



**UL CMG**  
**CSA CMG FT4**

### Operating Temperature

- -20°C to +75°C (CM)
- -20°C to +60°C (CMG)

### Conductor Color Coding

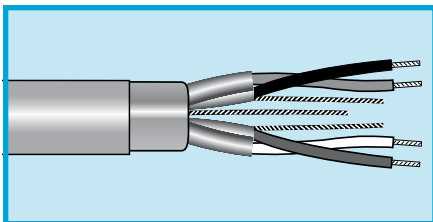
- See tables

### Materials

- Stranded tinned copper conductors
- Polypropylene insulation
- Individual aluminum/polyester foil shield, 25% overlap min. Stranded tinned copper drain wire (see tables for sizes)
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)



### Individually Shielded Pairs

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)  
24 AWG (0.22 mm<sup>2</sup>) drain wire  
Foil facing outward

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>2466C</b>	2	0.170	4.32	0.020	0.51

Characteristic impedance: 60 ohms  
Mutual capacitance: 25 pF/ft (82 pF/m)  
Ground capacitance: 45 pF/ft (147.6 pF/m)

Color code: 1 Red-Black, 2 Green-White.

### Individually Shielded Pairs, UL CM

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.008 (0.20 mm)  
24 AWG (0.22 mm<sup>2</sup>) drain wire  
Foil facing outward

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>2463C</b>	4	0.230	5.84	0.020	0.51

Characteristic impedance: 53 ohms  
Mutual capacitance: 29 pF/ft (95.1 pF/m)  
Ground capacitance: 52 pF/ft (170.6 pF/m)

Color code: 1 Red-Black, 2 Green-White, 3 White/Red-White/Black, 4 White/Green-White/Yellow.

### Individually Shielded Pairs

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

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.015 (0.38 mm)  
22 AWG (0.35 mm<sup>2</sup>) drain wire  
Foil facing inward

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>2467C</b>	4	0.340	8.64	0.030	0.76

Characteristic impedance: 66 ohms  
Mutual capacitance: 23 pF/ft (75.5 pF/m)  
Ground capacitance: 41 pF/ft (134.5 pF/m)

Color code: 1 Red-Black, 2 Green-White, 3 White/Red-White/Black, 4 White/Green-White/Yellow.

### Individually Shielded Pairs +Overall Shield, AWM 2717

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.009 (0.23 mm)  
22 AWG (0.35 mm<sup>2</sup>) drain wire  
Foil facing inward

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>1243/2C</b>	2	0.245	6.22	0.030	0.76

Characteristic impedance: 57 ohms  
Mutual capacitance: 27 pF/ft (88.6 pF/m)  
Ground capacitance: 49 pF/ft (160.7 pF/m)

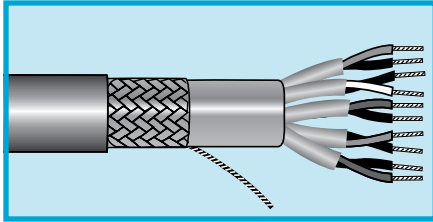
Color code: 1 Red-Black, 2 Green-White.



# Communication and Control

300 V Individually Foil Shielded Pairs and Overall Foil/Braid, Multipair, Foam PE, PVC

Low-Capacitance Data Cable



**UL AWM 2493 VW-1**  
**UL CM**  
**CSA CM FT1**

### Operating Temperature

- -20°C to +75°C (CM)
- -20°C to +60°C (AWM, CMG)

### Conductor Color Coding

- Chart A
- (See table at right for Part No. 6319 and 6322)

### Materials

- Stranded tinned copper conductors
- Foam polyethylene insulation
- Individual aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire, 24 AWG
- Overall foil + braid shielding  
Aluminum/polyester foil, 25% overlap min.  
Foil facing outward  
Stranded tinned copper drain wire equal in size to conductor  
Tinned copper braid, 65% coverage
- Slate PVC jacket

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

## 24 AWG (0.22 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.019 (0.49 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>6316</b>	2	0.349	8.86	0.048	1.22
<b>6317</b>	3	0.353	8.97	0.048	1.22
<b>6318</b>	4	0.397	10.08	0.048	1.22
<b>6319*</b>	5	0.430	10.92	0.048	1.22
<b>6320</b>	6	0.464	11.79	0.048	1.22
<b>6321</b>	7	0.464	11.79	0.048	1.22
<b>6322*</b>	8	0.499	12.67	0.048	1.22
<b>6323</b>	10	0.606	15.39	0.063	1.60
<b>6324</b>	15	0.687	17.45	0.063	1.60
<b>6325</b>	18	0.721	18.31	0.063	1.60
<b>6326</b>	25	0.901	22.89	0.085	2.16

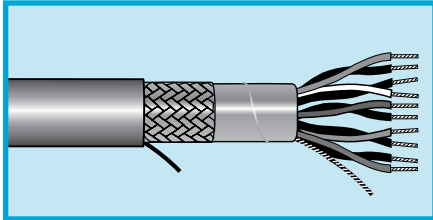
Characteristic impedance: 100 ohms  
Mutual capacitance: 12.5 pF/ft (41 pF/m)  
Ground capacitance: 22 pF/ft (72.2 pF/m)

### \*Color Code

Pair No.	Color	Pair No.	Color
1	Black, Red	5	Black, Yellow
2	Black, White	6	Black, Brown
3	Black, Green	7	Black, Orange
4	Black, Blue	8	Red, White

# Communication and Control

300 V Foil/Braid Shield, Multipair, SR-PVC, PVC  
Computer Cable



**UL AWM 2343**  
**UL CMG**  
**CSA CMG FT4**

## Applications

- Control, signal, and data transmission computers
- Industrial and electronic equipment

## Operating Temperature

- -20°C to +80°C (AWM)
- -20°C to +75°C (CMG)

## Conductor Color Coding

- Chart B

## Materials

- Stranded tinned copper conductors
- Semirigid PVC insulation
- Aluminum/polyester foil shield, 25% overlap min.  
Foil facing outward  
Stranded tinned copper drain wire equal in size to conductor  
Tinned copper braid, 70% coverage
- Slate PVC jacket

## Availability

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

### 24 AWG (0.22 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
<b>M5650</b>	5	0.351	8.92	0.063	1.60
<b>M5651</b>	7	0.373	9.47	0.063	1.60
<b>M5652</b>	12	0.455	11.56	0.063	1.60
<b>M5653</b>	15	0.486	12.34	0.063	1.60
<b>M5654</b>	19	0.516	13.11	0.063	1.60

Mutual capacitance: 23.1 pF/ft (75.8 pF/m)  
Ground capacitance: 42 pF/ft (137.8 pF/m)

Part No. M5650  
Mutual capacitance: 25 pF/ft (82 pF/m)  
Ground capacitance: 45 pF/ft (147.6 pF/m)

### 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
<b>M5660</b>	5	0.377	9.58	0.063	1.60
<b>M5661</b>	7	0.402	10.21	0.063	1.60
<b>M5662</b>	12	0.496	12.60	0.063	1.60
<b>M5665</b>	27	0.666	16.92	0.063	1.60
<b>M5666</b>	37	0.735	18.67	0.063	1.60

Ground capacitance: 49 pF/ft (160.8 pF/m)

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

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
<b>M5670</b>	5	0.413	10.49	0.063	1.60
<b>M5671</b>	7	0.442	11.23	0.063	1.60

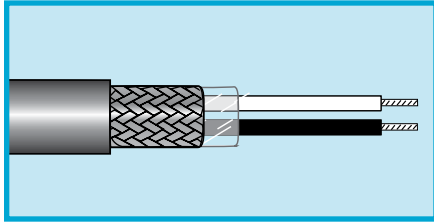
Mutual capacitance: 27 pF/ft (88.6 pF/m)  
Ground capacitance: 49 pF/ft (160.8 pF/m)

Part No. M5670  
Mutual capacitance: 29 pF/ft (95.1 pF/m)  
Ground capacitance: 52 pF/ft (170.6 pF/m)



# Communication and Control

Braid or Spiral Shield, Multiconductor, PE, PVC  
Microphone Cable



### Operating Temperature

- -20°C to +60°C

### Conductor Color Coding

- 1 White, 2 Black

### Materials

- Stranded tinned copper conductors
- Polyethylene insulation
- Clear polyester wrap (multiconductor only)

- Braided tinned copper or spiral wrapped tinned copper shield, 90% coverage (85% for part no. 1712)
- Slate PVC jacket

### Availability

- 100 ft (30.5 m)
- 500 ft (152 m)
- 1000 ft (305 m)

## 1-Conductor Cable for High-Impedance Microphones

Part No.	Voltage Rating	Wire Size		Stranding		Nominal Diameter		Shield	Jacket Thickness		Insulation Thickness		Capacitance	
		AWG	mm <sup>2</sup>	AWG	mm	Inch	mm		Inch	mm	Inch	mm	pF/ft	pF/m
1706*	4000	20	0.52	26/34	26 x 0.16	0.182	4.62	Braid	0.030	0.76	0.031	0.79	38	125
1703	3500	24	0.20	10/34	10 x 0.16	0.146	3.71	Braid	0.030	0.76	0.020	0.50	36	118
1702**	1000	26	0.14	7/34	7 x 0.16	0.101	2.57	Spiral	0.020	0.51	0.016	0.41	35	115
1705	1000	24	0.20	10/34	10 x 0.16	0.106	2.69	Spiral	0.020	0.51	0.016	0.41	41	135

\*UL AWM 1150, 300 V.

\*\*1702 has 3 strands of tinned copper and 4 strands of tinned Copperweld.

## 2-Conductor Cable for Low-Impedance Microphones

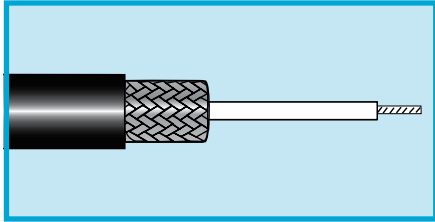
Part No.	Voltage Rating	Wire Size		Stranding		Nominal Diameter		Shield	Jacket Thickness		Insulation Thickness		Capacitance*	
		AWG	mm <sup>2</sup>	AWG	mm	Inch	mm		Inch	mm	Inch	mm	pF/ft	pF/m
1709	1000	24	0.20	10/34	10 x 0.16	0.185	4.70	Spiral	0.030	0.76	0.016	0.41	32	105
1710	1000	22	0.38	19/34	19 x 0.16	0.239	6.07	Braid	0.025	0.64	0.025	0.63	30	98
1712	600	20	0.52	26/34	26 x 0.16	0.221	5.61	Braid	0.030	0.76	0.015	0.38	44	144

\*Capacitance between one conductor and remaining conductors connected to shield.

# Communication and Control

Braid or Spiral Shield, Single Conductor, PE, PVC

Microphone Cable



### Operating Temperature

- -20°C to +60°C

### Materials

- Stranded tinned copper conductors\*
- Polyethylene insulation
- Braided tinned copper or spiral wrapped tinned copper shield
- Slate PVC jacket

### Availability

- 100 ft (30.5 m)
- 500 ft (152 m)
- 1000 ft (305 m)
- Bulk, cut to length  
(Minimums may apply)

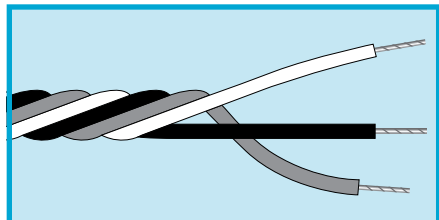
Part No.	Voltage	Wire Size		Stranding		Nominal Diameter		Shield	Jacket Thickness		Insulation Thickness		Capacitance	
		AWG	mm <sup>2</sup>	AWG	mm	Inch	mm		Inch	mm	Inch	mm	pF/ft	pF/m
<b>M3601*</b>	300	30	0.05	7/38*	7 x 0.10	0.086	2.18	Braid	0.016	0.41	0.012	0.30	32	105.0
<b>M3633*</b>	1000	26	0.14	7/34*	7 x 0.16	0.101	2.57	Spiral	0.020	0.50	0.016	0.41	35	114.8
<b>M3605</b>	3500	24	0.20	10/34	10 x 0.16	0.146	3.71	Braid	0.030	0.76	0.020	0.50	36	118.1
<b>M3635</b>	1000	24	0.20	10/34	10 x 0.16	0.106	2.69	Spiral	0.020	0.50	0.016	0.41	41	134.5
<b>M3611</b>	4000	20	0.52	26/34	26 x 0.16	0.180	4.57	Braid	0.030	0.76	0.030	0.76	39	128.0

\*M3601 and M3633 have 3 strands of tinned copper and 4 strands of tinned Copperweld.

# Communication and Control

200 V Unshielded and Shielded, Multiconductor PVC, PVC  
Hi-Fi and Stereo Cable

Alpha  
Essentials



## Operating Temperature

- -20°C to +80°C

## Conductor Color Coding

- 1 Black, 2 Red, 3 White, 4 Green

## Materials

- Stranded tinned copper conductors
- PVC insulation
- Conductors twisted in an extra tight lay

## Availability

100 ft (30.5 m)

1000 ft (305 m)

## Miniature Shielded Cable

### Conductor Color Coding

- 1 Black, 2 Red, 3 White, 4 Green

### Materials

- Stranded tinned copper conductors
- Color-coded PVC insulation
- Tinned copper braid shield, 80% coverage
- Clear PVC jacket

### Availability

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

### 32 AWG (0.03 mm<sup>2</sup>)

Stranding: 7/40 (7 x 0.08 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter	
		Inch	mm
1101	3	0.063	1.60
1102	4	0.072	1.83

### 30 AWG (0.05 mm<sup>2</sup>)

Stranding: 7/38 (7 x 0.10 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter	
		Inch	mm
1115	2	0.064	1.63
1116	3	0.070	1.78

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

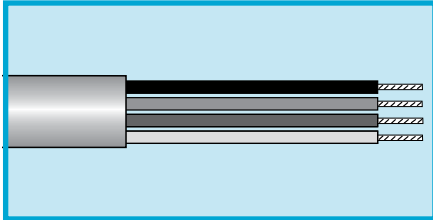
Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1120	2	0.115	2.92	0.010	0.25
1121	3	0.120	3.05	0.010	0.25
1122	4	0.130	3.30	0.010	0.25



# Communication and Control

150 V Unshielded Multiconductor PP, PVC  
Silver Satin Oval Telephone Cable



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

Stranding: 7/34 (7 x 0.16 mm)  
Insulation thickness: 0.009 (0.23 mm)

Part No.	Conductors	Nominal Outer Dimension		Jacket Thickness	
		Inch	mm	Inch	mm
1604	4	0.090 x 0.190	2.28 x 4.83	0.020	0.51
1606	6	0.090 x 0.270	2.28 x 6.85	0.024	0.61
1608	8	0.090 x 0.350	2.28 x 8.89	0.024	0.61

## Temperature Rating

- -20°C to +60°C

## Conductor Color Coding

- See table

## Materials

- Stranded bare copper conductors
- Polypropylene insulation
- Silver PVC jacket

## Conductor Color Coding

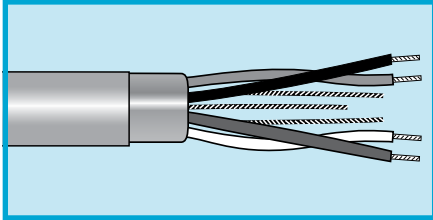
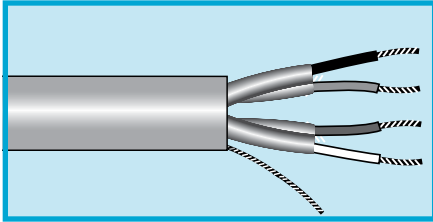
Conductor No.	1604	1606	1608
1	Black	White	Slate
2	Red	Black	Orange
3	Green	Red	Black
4	Yellow	Green	Red
5		Yellow	Green
6		Blue	Yellow
7			Blue
8			Brown

## Availability

328 ft (100 m), box  
1000 ft (305 m), box

# Communication and Control

300 V Individually Foil Shielded Pairs or Overall Foil Shielded, Multipair, Foam PP, PVC



## Individually Foil Shielded Pairs

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

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.023 (0.58)

Part No.	Pairs	Nominal Diameter		Jacket Thickness		AWM
		Inch	mm	Inch	mm	
<b>6073C</b>	3	0.374	9.50	0.048	1.22	2493
<b>6076C</b>	6	0.483	12.27	0.048	1.22	2493
<b>6079C</b>	9	0.597	15.16	0.065	1.65	2493

Characteristic impedance: 115 ohms  
Mutual capacitance: 12 pF/ft (41 pF/m)

## Overall Foil Shield

### 22 AWG (0.32 mm<sup>2</sup>)

Stranding: Solid  
Insulation thickness: 0.023 (0.58)

Part No.	Pairs	Nominal Diameter		Jacket Thickness		AWM
		Inch	mm	Inch	mm	
<b>6072C*</b>	2	0.42	9.50	0.035	0.89	2668

Characteristic impedance: 150 ohms  
Mutual capacitance: 8.8 pF/ft (28.9 pF/m)

\*Black jacket.

**UL AWM 2493, 2668 VW-1  
UL CM  
CSA CMG FT4**

## Operating Temperature

- -20°C to +75°C (CM)
- -20°C to +60 (AWM, CMG)

## Conductor Color Coding

- Chart K

## Materials

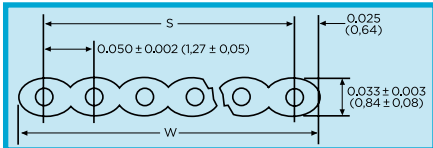
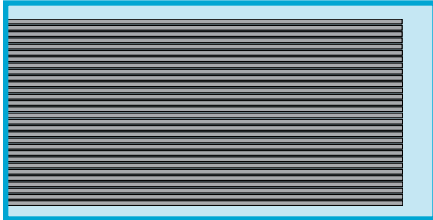
- Solid or stranded tinned copper conductors
- Foam polypropylene insulation
- Individual aluminum/polyester foil shield, 25% overlap min.  
Foil facing inward  
Stranded tinned copper drain wire, 24 AWG
- Slate PVC jacket (unless otherwise noted)

## Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)

# Communication and Control

300 V Unshielded, Flat Cable,  
0.050 (1.27 mm) Centerline



## UL AWM 2651, 20932 VW-1

### Operating Temperature

- 20°C to +105°C

### Materials

- Stranded tinned copper conductors
- Extruded PVC insulation (slate cable)
- Thermally bonded PVC with clear PVC covering (color-coded cable)

### Color

- AWM 2651: Slate cable, with Red polarity stripe on leading edge
- AWM 20932: color-coded cable: Brown, Red, Orange, Yellow, Green, Blue, Violet, Slate, White, Black . . . repeats

### Electrical Characteristics

- Capacitance: 14 pF/ft (45.9 pF/m) nom. at 1 MHz
- Propagation delay: 1.4 ns/ft (4.6 ns/m) @ 0.18 ns risetime
- Impedance: 105 ohms (G-S-G configuration)
- Near-end crosstalk: 3.2%
- Far-end crosstalk: 11.5%
- Crosstalk measured on adjacent lines, 1 ns risetime, 10 ft (3.05 m) length

### Availability

100 ft (30.5 m)

Spools may contain multiple lengths

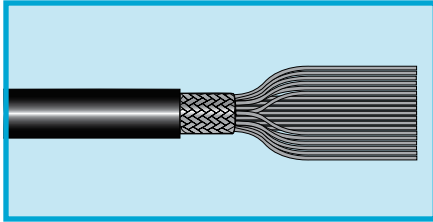
28 AWG (0.09 mm <sup>2</sup> )							
Stranding: 7/36 (7 x 0.13 mm) Insulation thickness: 0.010 (0.25 mm)							
Part No.		Conductors	Width (W)		Span (S)		
Slate (AWM 2651)	Color Coded (AWM 20932)		Inch	mm	Inch	mm	
<b>3580/9</b>	<b>3583/9</b>	9	0.45	11.43	0.40	10.16	
<b>3580/10</b>	<b>3583/10</b>	10	0.50	12.70	0.45	11.43	
<b>3580/14</b>	<b>3583/14</b>	14	0.70	17.78	0.65	16.51	
<b>3580/15</b>	<b>3583/15</b>	15	0.75	19.05	0.70	17.78	
<b>3580/16</b>	<b>3583/16</b>	16	0.80	20.32	0.75	19.05	
<b>3580/20</b>	<b>3583/20</b>	20	1.00	25.40	0.95	24.13	
<b>3580/24</b>	<b>3583/24</b>	24	1.20	30.48	1.15	29.21	
<b>3580/25</b>	<b>3583/25</b>	25	1.25	31.75	1.20	30.48	
<b>3580/26</b>	<b>3583/26</b>	26	1.30	33.02	1.25	31.75	
<b>3580/34</b>	<b>3583/34</b>	34	1.70	43.18	1.65	41.91	
<b>3580/37</b>	<b>3583/37</b>	37	1.85	46.99	1.80	45.72	
<b>3580/40</b>	<b>3583/40</b>	40	2.00	50.80	1.95	49.53	
<b>3580/50</b>	<b>3583/50</b>	50	2.50	63.50	2.45	62.23	
<b>3580/60</b>	<b>3583/60</b>	60	3.00	76.20	2.95	74.93	
<b>3580/64</b>	<b>3583/64</b>	64	3.20	81.28	3.15	80.01	



# Communication and Control

300 V Foil + Braid Shield, Round to Flat  
Flat Cable, 0.050 (1.27 mm) Centerline

Alpha  
Essentials



**UL AWM 20381 (300 V)**  
**UL CL2 (150 V)**

## Operating Temperature

- -20°C to +105°C

## Materials

- Stranded tinned copper conductors
- PVC insulation
- Foil + braid shield  
Aluminum/polyester  
Tinned copper braid  
(90% coverage)
- Black PVC jacket,  
0.032 (0.81) thick

## Configuration

- Flat cable termination area is  
0.75 (19 mm) long and occurs  
every 1.5 (38 mm)

## Electrical Characteristics

- Capacitance: 24 pF/ft (78.7  
pF/m) nom at 1 MHz
- Impedance: 70 ohms

## Availability

100 ft (30.5 m)

Spools may contain multiple lengths

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

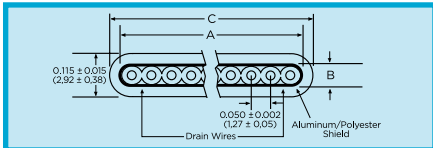
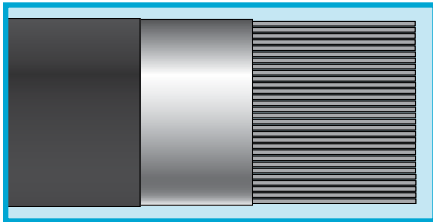
Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Nominal Width	
		Inch	mm	Inch	mm
3585/25	25	0.34	8.64	1.20	30.48
3585/26	26	0.35	8.89	1.65	41.91
3585/40	40	0.40	10.20	1.95	49.53
3585/50	50	0.46	11.70	2.45	62.23



# Communication and Control

150 V, Jacketed, Foil Shield, Flat Cable,  
0.050 (1.27 mm) Centerline



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

Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nom. Core Width (A)		Nom. Jacket Width (C)	
		Inch	mm	Inch	mm
3590/10	10	0.50	12.70	0.57	14.48
3590/14	14	0.70	17.78	0.77	19.56

**UL AWM 2912**  
**UL Type CL2**

### Operating Temperature

- -20°C to +105°C

### Materials

- Stranded tinned copper conductors
- Extruded Slate PVC insulation with Red polarity stripe
- Aluminum/polyester/aluminum foil shield
- Two 28 AWG (0.09 mm<sup>2</sup>) stranded tinned copper drain wires
- Slate PVC jacket, 0.030 (0.08 mm) thick

### Electrical Characteristics

- Capacitance: 20 pF/ft (65.6 pF/m) nom. at 1 MHz
- Propagation delay: 1.45 ns/ft (4.8 ns/m) at 0.18 ns risetime
- Impedance: 70 ohms
- Near-end crosstalk: 5.5%
- Far-end crosstalk: 1.6%
- Crosstalk measured on adjacent lines, 3.5 ns risetime

### Availability

100 ft (30.5 m)

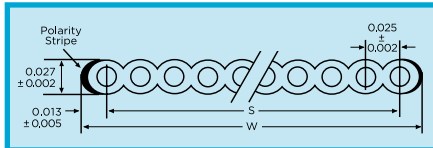
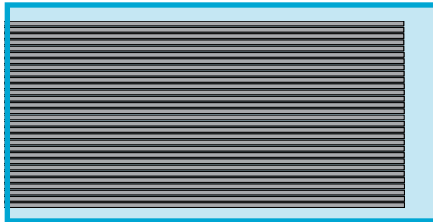
Spools may contain multiple lengths



# Communication and Control

150 V Unshielded, Flat Cable,  
0.025 (0.64 mm) Centerline

Alpha  
Essentials



## 30 AWG (0.05 mm<sup>2</sup>)

Stranding: Solid  
Insulation thickness: 0.013 (0.33 mm)

Part No.	Conductors	Width (W)		Span (S)	
		Inch	mm	Inch	mm
3582/26	26	0.65	16.51	0.625	15.88
3582/40	40	1.00	25.40	0.975	24.76
3582/50	50	1.25	31.75	1.225	31.15
3582/60	60	1.50	38.10	1.475	37.46

## UL AWM 2678 VW-1

### Operating Temperature

- -20°C to +105°C

### Color

- Slate, with Red polarity stripe on leading edge

### Materials

- Solid bare copper conductors
- PVC insulation

### Electrical Characteristics

- Capacitance:
  - 24.9 pF/ft (82 pF/m) nom. (G-S-G) at 1 kHz
  - 14.3 pF/ft (47 pF/m) nom. (G-S) at 1 kHz
- Propagation delay: 1.52 ns/ft (4.9 ns/m)
- Impedance:
  - 78 ohms (G-S-G single-ended configuration)
  - 131 ohms nom. (G-S differential configuration)
- Skew: 0.036 ns/ft (0.12 ns/m) max

### Availability

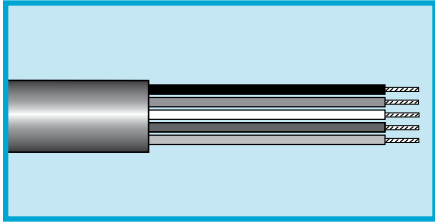
100 ft (30.5 m)

Spools may contain multiple lengths



# Low Smoke Zero-Halogen Cable

300 V Unshielded, Multiconductor, LSZH



UL CMG  
CSA FT4

## Operating Temperature

- -20°C to +75°C

## Materials

- Stranded tinned copper conductors
- LSZH insulation
- Slate LSZH jacket

## LSZH Properties

- Stranded tinned copper conductors
- LSZH insulation
- Slate LSZH jacket

## Conductor Color Coding

- Chart D

Alpha Wire's LSZH communication and control cable combines LSZH-rated insulation and jackets with the rugged performance you expect from Alpha Wire products. The specially formulated LSZH material minimizes the effects from smoke and harmful corrosive gases in the event of combustion. Low smoke means easier visibility in exiting the area and reduced danger of smoke inhalation, while low toxicity means no harm to people from halogenated gases.

### LSZH Unshielded Multiconductor

#### 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1172L	2	0.150	3.81	0.025	0.64
1173L	3	0.158	4.01	0.025	0.64
1174L	4	0.171	4.34	0.025	0.64
1175L	5	0.186	4.72	0.025	0.64
1176L	6	0.201	5.11	0.025	0.64
1177L	7	0.201	5.11	0.025	0.64
1178L	8	0.216	5.48	0.025	0.64
1179L	9	0.232	5.89	0.025	0.64
1180L	10	0.250	6.35	0.025	0.64

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

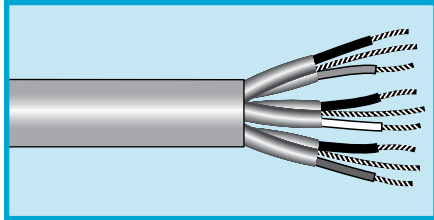
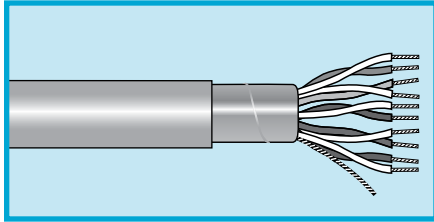
Stranding: 7/28 (0.32 mm)  
Insulation thickness: 0.016 (0.40 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1895L	2	0.190	4.83	0.025	0.64
1896L	3	0.201	5.11	0.025	0.64
1896/4L	4	0.219	5.56	0.025	0.64
1896/5L	5	0.240	6.10	0.025	0.64
1896/6L	6	0.261	6.63	0.025	0.64



# Low-Smoke Zero-Halogen Cable

300 V Foil Shielded, Multipair, LSZH



## Operating Temperature

- -20°C to +75°C

## Materials

- Stranded tinned copper conductors
- LSZH insulation (Polypropylene insulation for individually foil shielded pairs)
- Aluminum/polyester shielding, with 25% overlap min. Foil facing inward
- Tinned copper drain wire sized the same as the conductors
- Slate LSZH jacket

## Ratings

- LSZH Flammability: Passes IEC 60332-1
- LSZH Acid Gas Generation: Passes IEC 60754-1 and 60754-2
- LSZH Smoke Emission: Passes IEC 61034-2

## Conductor Color Coding

- See tables

Alpha Wire's LSZH communication and control cable combines LSZH-rated insulation and jackets with the rugged performance you expect from Alpha Wire products. The specially formulated LSZH material minimizes the effects from smoke and harmful corrosive gases in the event of combustion. Low smoke means easier visibility in exiting the area and reduced danger of smoke inhalation, while low toxicity means no harm to people from halogenated gases.

### 24 AWG (0.22 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
5471L	1	0.156	3.86	0.030	0.76
5472L	2	0.208	5.28	0.030	0.76
5473L	3	0.220	5.59	0.030	0.76
5474L	4	0.229	5.82	0.250	0.64
5475L	5	0.250	6.35	0.250	0.64
5476L	6	0.272	6.91	0.250	0.64
5477L	7	0.272	6.91	0.250	0.64
5478L	8	0.294	7.47	0.250	0.64
5479L	9	0.317	8.05	0.250	0.64
5480L	10	0.343	8.71	0.250	0.64

### 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
2466L <sup>†</sup>	2	0.190	4.83	0.030	0.76
6010L	3	0.254	6.45	0.025	0.64
2463L <sup>††</sup>	4	0.240	6.10	0.025	0.64
6012L	6	0.335	8.57	0.025	0.64
6014L	9	0.394	10.01	0.025	0.64
6017L	12	0.453	11.51	0.030	0.76

\*Conductor color coding: 1 Red-Black, 2 Green-White, White/Red-White/Black, 4 White/Green-White/Yellow.  
<sup>†</sup>0.009 (0.23) insulation thickness.

<sup>††</sup>0.008 (0.20) insulation thickness.

## 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 A1

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

## Multipair Cables

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

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

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

Chart K					
Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	Black + Red	14	Green + White	27	Brown + Orange
2	Black + White	15	Green + Blue	28	Orange + Yellow
3	Black + Green	16	Green + Yellow	29	Violet + Orange
4	Black + Blue	17	Green + Brown	30	Violet + Red
5	Black + Yellow	18	Green + Orange	31	Violet + White
6	Black + Brown	19	White + Blue	32	Violet + Green
7	Black + Orange	20	White + Yellow	33	Violet + Blue
8	Red + White	21	White + Brown	34	Violet + Yellow
9	Red + Green	22	White + Orange	35	Violet + Brown
10	Red + Blue	23	Blue + Yellow	36	Violet + Black
11	Red + Yellow	24	Blue + Brown	37	Slate + White
12	Red + Brown	25	Blue + Orange		
13	Red + Orange	26	Brown + Yellow		

## Multipair Cables

Chart L					
Pair No.	Color Combination			Pair No.	Color Combination
1	White + Blue	10	Red + Slate	19	Yellow + Brown
2	White + Orange	11	Black + Blue	20	Yellow + Slate
3	White + Green	12	Black + Orange	21	Violet + Blue
4	White + Brown	13	Black + Green	22	Violet + Orange
5	White + Slate	14	Black + Brown	23	Violet + Green
6	Red + Blue	15	Black + Slate	24	Violet + Brown
7	Red + Orange	16	Yellow + Blue	25	Violet + Slate
8	Red + Green	17	Yellow + Orange		
9	Red + Brown	18	Yellow + Green		

Chart M					
Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	Blue/White + White/Blue	10	Slate/Red + Red/Slate	19	Brown/Yellow + Yellow/Brown
2	Orange/White + White/Orange	11	Blue/Black + Black/Blue	20	Slate/Yellow + Yellow/Slate
3	Green/White + White/Green	12	Orange/Black + Black/Orange	21	Blue/Violet + Violet/Blue
4	Brown/White + White/Brown	13	Green/Black + Black/Green	22	Orange/Violet + Violet/Orange
5	Slate/White + White/Slate	14	Brown/Black + Black/Brown	23	Green/Violet + Violet/Green
6	Blue/Red + Red/Blue	15	Slate/Black + Black/Slate	24	Brown/Violet + Violet/Brown
7	Orange/Red + Red/Orange	16	Blue/Yellow + Yellow/Blue	25	Slate/Violet + Violet/Slate
8	Green/Red + Red/Green	17	Orange/Yellow + Yellow/Orange		
9	Brown/Red + Red/Brown	18	Green/Yellow + Yellow/Green		

Chart N	
Pair No.	Color Combination
1	Black + Yellow
2	Red + Violet
3	Blue + Brown
4	Orange + Green
5	Black/White + White/Black
6	Brown/White + White/Brown
7	Red/White + White/Red
8	Orange/White + White/Orange
9	Yellow/White + White/Yellow
10	Green/White + White/Green
11	Blue/White + White/Blue
12	Violet/White + White/Violet

Chart Q	
Pair No.	Color Combination
1	Black + White
2	Red + Green
3	Brown + Blue
4	Orange + Yellow
5	Violet + Slate
6	Tan + Pink
7	White/Blue + Blue/White
8	White/Brown + Brown/White
9	White/Orange + Orange/White
10	White/Green + Green/White
11	White/Red + Red/White
12	White/Black + Black/White
13	Yellow/Blue + Blue/Yellow
14	Yellow/Brown + Brown/Yellow
15	Yellow/Orange + Orange/Yellow
16	Yellow/Red + Red/Yellow
17	Yellow/Black + Black/Yellow
18	Yellow/Violet + Violet/Yellow

## Multiconductor Cables

Chart D													
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	95	White	Red	Black	Violet
28	White	Black	Blue		62	White	Black	Red	96	White	Red	Green	Yellow
29	White	Black	Brown		63	White	Black	Red	97	White	Red	Green	Blue
30	White	Black	Orange		64	White	Black	Red	98	White	Red	Green	Brown
31	White	Black	Slate		65	White	Black	Red	99	White	Red	Green	Orange
32	White	Black	Violet		66	White	Black	Red	100	White	Red	Green	Slate
33	White	Black	Black		67	White	Black	Red					
34	White	Red	Black		68	White	Black	Green					

Chart D1	
No.	Color
1	Black
2	Red
3	White
4	Green
5	Yellow
6	Blue

Chart CE	
No.	Color
1	Green/Yellow
2	Lt. Blue
3	Black
4	Brown

Chart D2					
No.	Base Color	Stripe	No.	Base Color	Stripe
1	Black		14	White	Orange
2	White		15	White	Green
3	Red		16	White	Brown
4	Green		17	White	Slate
5	Brown		18	Red	Blue
6	Blue		19	Red	Orange
7	Orange		20	Red	Green
8	Yellow		21	Red	Brown
9	Violet		22	Red	Slate
10	Slate		23	Green	Blue
11	Pink		24	Green	Orange
12	Tan		25	Green	Brown
13	White	Blue			

## 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					

Chart F											
No.	Base Color	1st Stripe	2nd Stripe	No.	Base Color	1st Stripe	2nd Stripe	No.	Base Color	1st Stripe	2nd Stripe
1	Black			21	Orange	Green		41	Green	White	Blue
2	White			22	Black	White	Red	42	Orange	Red	Green
3	Red			23	White	Black	Red	43	Blue	Red	Green
4	Green			24	Red	Black	White	44	Black	White	Blue
5	Orange			25	Green	Black	White	45	White	Black	Blue
6	Blue			26	Orange	Black	White	46	Red	White	Blue
7	White	Black		27	Blue	Black	White	47	Green	Orange	Red
8	Red	Black		28	Black	Red	Green	48	Orange	Red	Blue
9	Green	Black		29	White	Red	Green	49	Blue	Red	Orange
10	Orange	Black		30	Red	Black	Green	50	Black	Orange	Red
11	Blue	Black		31	Green	Black	Orange	51	White	Black	Orange
12	Black	White		32	Orange	Black	Green	52	Red	Orange	Black
13	Red	White		33	Blue	White	Orange	53	Green	Red	Blue
14	Green	White		34	Black	White	Orange	54	Orange	Black	Blue
15	Blue	White		35	White	Red	Orange	55	Blue	Black	Orange
16	Black	Red		36	Orange	White	Blue	56	Black	Orange	Green
17	White	Red		37	White	Red	Blue	57	White	Orange	Green
18	Orange	Red		38	Black	White	Green	58	Red	Orange	Green
19	Blue	Red		39	White	Black	Green	59	Green	Black	Blue
20	Red	Green		40	Red	White	Green	60	Orange	Green	Blue

Chart G								
No.	Base Color	Stripe	No.	Base Color	Stripe	No.	Base Color	Stripe
1	White		6	Blue		11	White	Black
2	Black		7	Brown		12	White	Brown
3	Red		8	Orange		13	White	Red
4	Green		9	Slate		14	White	Orange
5	Yellow		10	Violet		15	White	Yellow

# Conductor Color Coding

## Multiconductor Cables

Chart H								
No.	Base Color	Stripe	No.	Base Color	Stripe	No.	Base Color	Stripe
1	Black		8	Orange		15	White	Blue
2	White		9	Slate		16	White	Brown
3	Red		10	Violet		17	White	Violet
4	Green		11	White	Black	18	White	Slate
5	Yellow		12	White	Red	19	Black	Red
6	Blue		13	White	Green	20	Black	Yellow
7	Brown		14	White	Yellow			

Chart I	
No.	Color
1	Green
2	White
3	Brown
4	Blue
5	Orange
6	Yellow

Chart J					
No.	Base Color	Stripe	No.	Base Color	Stripe
1	Black		20	Yellow	Blue
2	Red		21	Brown	Blue
3	Blue		22	Black	Orange
4	Orange		23	Red	Orange
5	Yellow		24	Blue	Orange
6	Brown		25	Yellow	Orange
7	Red	Black	26	Brown	Orange
8	Blue	Black	27	Black	Yellow
9	Orange	Black	28	Red	Yellow
10	Yellow	Black	29	Blue	Yellow
11	Brown	Black	30	Orange	Yellow
12	Black	Red	31	Brown	Yellow
13	Blue	Red	32	Black	Brown
14	Orange	Red	33	Red	Brown
15	Yellow	Red	34	Blue	Brown
16	Brown	Red	35	Orange	Brown
17	Black	Blue	36	Yellow	Brown
18	Red	Blue	37	Black	
19	Orange	Blue			

Chart I2		
No.	Color	Stripe
1	Brown	
2	Blue	
3	Green	Yellow

Chart J1		
No.	Base Color	Stripe
1	Black #1	
2	Red #2	
3	Blue #3	
4	Orange #4	
5	Yellow #5	
6	Brown #6	
7	Red	Black #7
8	Blue	Black #8
9	Orange	Black #9
10	Yellow	Black #10
11	Brown	Black #11
12	Black	Red #12

Chart KW			
No.	Color	No.	Color
1	Green/Yellow	34	Black #33
2	Black #1	35	Black #34
3	White/Black*	36	Black #35
4	Black #3	37	Black #36
5	Black #4	38	Black #37
6	Black #5	39	Black #38
7	Black #6	40	Black #39
8	Black #7	41	Black #40
9	Black #8	42	Black #41
10	Black #9	43	Black #42
11	Black #10	44	Black #43
12	Black #11	45	Black #44
13	Black #12	46	Black #45
14	Black #13	47	Black #46
15	Black #14	48	Black #47
16	Black #15	49	Black #48
17	Black #16	50	Black #49
18	Black #17	51	Black #50
19	Black #18	52	Black #51
20	Black #19	53	Black #52
21	Black #20	54	Black #53
22	Black #21	55	Black #54
23	Black #22	56	Black #55
24	Black #23	57	Black #56
25	Black #24	58	Black #57
26	Black #25	59	Black #58
27	Black #26	60	Black #59
28	Black #27	61	Black #60
29	Black #28	62	Black #61
30	Black #29	63	Black #62
31	Black #30	64	Black #63
32	Black #31	65	Black #64
33	Black #32		

\*The white/black neutral conductor is used only on 18 and 16 AWG cables with conductor counts of 12 or greater.

## Multiconductor Cables

Chart KX					
No.	Color			No.	Color
1	Green/Yellow	23	Black #22	45	Black #44
2	Black #1	24	Black #23	46	Black #45
3	Black #2	25	Black #24	47	Black #46
4	Black #3	26	Black #25	48	Black #47
5	Black #4	27	Black #26	49	Black #48
6	Black #5	28	Black #27	50	Black #49
7	Black #6	29	Black #28	51	Black #50
8	Black #7	30	Black #29	52	Black #51
9	Black #8	31	Black #30	53	Black #52
10	Black #9	32	Black #31	54	Black #53
11	Black #10	33	Black #32	55	Black #54
12	Black #11	34	Black #33	56	Black #55
13	Black #12	35	Black #34	57	Black #56
14	Black #13	36	Black #35	58	Black #57
15	Black #14	37	Black #36	59	Black #58
16	Black #15	38	Black #37	60	Black #59
17	Black #16	39	Black #38	61	Black #60
18	Black #17	40	Black #39	62	Black #61
19	Black #18	41	Black #40	63	Black #62
20	Black #19	42	Black #41	64	Black #63
21	Black #20	43	Black #42	65	Black #64
22	Black #21	44	Black #43		

Chart LW					
No.	Color	No.	Color	No.	Color
1	Green/Yellow	23	Dk. Blue #22	45	Dk. Blue #44
2	Dk. Blue #1	24	Dk. Blue #23	46	Dk. Blue #45
3	White/Blue*	25	Dk. Blue #24	47	Dk. Blue #46
4	Dk. Blue #3	26	Dk. Blue #25	48	Dk. Blue #47
5	Dk. Blue #4	27	Dk. Blue #26	49	Dk. Blue #48
6	Dk. Blue #5	28	Dk. Blue #27	50	Dk. Blue #49
7	Dk. Blue #6	29	Dk. Blue #28	51	Dk. Blue #50
8	Dk. Blue #7	30	Dk. Blue #29	52	Dk. Blue #51
9	Dk. Blue #8	31	Dk. Blue #30	53	Dk. Blue #52
10	Dk. Blue #9	32	Dk. Blue #31	54	Dk. Blue #53
11	Dk. Blue #10	33	Dk. Blue #32	55	Dk. Blue #54
12	Dk. Blue #11	34	Dk. Blue #33	56	Dk. Blue #55
13	Dk. Blue #12	35	Dk. Blue #34	57	Dk. Blue #56
14	Dk. Blue #13	36	Dk. Blue #35	58	Dk. Blue #57
15	Dk. Blue #14	37	Dk. Blue #36	59	Dk. Blue #58
16	Dk. Blue #15	38	Dk. Blue #37	60	Dk. Blue #59
17	Dk. Blue #16	39	Dk. Blue #38	61	Dk. Blue #60
18	Dk. Blue #17	40	Dk. Blue #39	62	Dk. Blue #61
19	Dk. Blue #18	41	Dk. Blue #40	63	Dk. Blue #62
20	Dk. Blue #19	42	Dk. Blue #41	64	Dk. Blue #63
21	Dk. Blue #20	43	Dk. Blue #42	65	Dk. Blue #64
22	Dk. Blue #21	44	Dk. Blue #43		

\*The white/blue neutral conductor is used only on 18 and 16 AWG cables with conductor counts of 12 or greater.

Chart LX	
No.	Color
1	Green/Yellow
2	Dk. Blue #1
3	Dk. Blue #2
4	Dk. Blue #3
5	Dk. Blue #4
6	Dk. Blue #5
7	Dk. Blue #6
8	Dk. Blue #7
9	Dk. Blue #8
10	Dk. Blue #9
11	Dk. Blue #10

Chart O			
No.	Color	No.	Color
1	Black	9	Violet
2	White	10	Slate
3	Red	11	Pink
4	Green	12	Tan
5	Brown	13	Black/White
6	Blue	14	Red/White
7	Orange	15	Green/White
8	Yellow		

# Conductor Color Coding

Chart P	
No.	Color
1	White
2	Black
3	Red
4	Green
5	Blue
6	Brown
7	Yellow
8	Orange

Chart R						
No.	Base Color	1st Stripe	2nd Stripe	No.	Color	Color
1	Black			16	White	Black
2	Red			17	White	Red
3	Green			18	White	Green
4	White			19	White	Yellow
5	Brown			20	White	Blue
6	Blue			21	White	Brown
7	Orange			22	White	Orange
8	Yellow			23	White	Slate
9	Violet			24	White	Violet
10	Slate			25	White	Black
11	Pink			26	White	Black
12	Tan			27	White	Black
13	Red	Green		28	White	Black
14	Red	Yellow		29	White	Black
15	Red	Black		30	White	Black
						Red
						Green
						Yellow
						Blue
						Brown
						Orange

Chart RW					
No.	Color	No.	Color	No.	Color
1	Green/Yellow	23	Red #22	45	Red #44
2	Red #1	24	Red #23	46	Red #45
3	White/Red*	25	Red #24	47	Red #46
4	Red #3	26	Red #25	48	Red #47
5	Red #4	27	Red #26	49	Red #48
6	Red #5	28	Red #27	50	Red #49
7	Red #6	29	Red #28	51	Red #50
8	Red #7	30	Red #29	52	Red #51
9	Red #8	31	Red #30	53	Red #52
10	Red #9	32	Red #31	54	Red #53
11	Red #10	33	Red #32	55	Red #54
12	Red #11	34	Red #33	56	Red #55
13	Red #12	35	Red #34	57	Red #56
14	Red #13	36	Red #35	58	Red #57
15	Red #14	37	Red #36	59	Red #58
16	Red #15	38	Red #37	60	Red #59
17	Red #16	39	Red #38	61	Red #60
18	Red #17	40	Red #39	62	Red #61
19	Red #18	41	Red #40	63	Red #62
20	Red #19	42	Red #41	64	Red #63
21	Red #20	43	Red #42	65	Red #64
22	Red #21	44	Red #43		

\*The white/red neutral conductor is used only on 18 and 16 AWG cables with conductor counts of 12 or greater.

Chart RX	
1	Green/Yellow
2	Red #1
3	Red #2
4	Red #3
5	Red #4
6	Red #5
7	Red #6
8	Red #7
9	Red #8
10	Red #9
11	Red #10
12	Red #11