

# Multi-Conductor, Foil Shield

NEC Type CL2 and CM (UL) c(UL) CMH

## Product Construction:

### Conductor:

- 24 thru 12 AWG fully annealed solid or stranded tinned copper per ASTM B-33

### Insulation:

- Premium-grade, color-coded polyethylene
- Premium-grade, color-coded polypropylene
- Color code: See charts below

### Shield:

- 100% Flexfoil® aluminum/polyester, 25% overlap, foil facing out
- Stranded tinned copper drain wire

### Jacket:

- PVC, gray
- Temperature range: -20°C to +75°C

## Applications:

- Recording studios and sound stages
- Broadcast and sound systems
- Computers
- Industrial equipment control
- Suggested voltage rating: 300 or 600 volts

## Features:

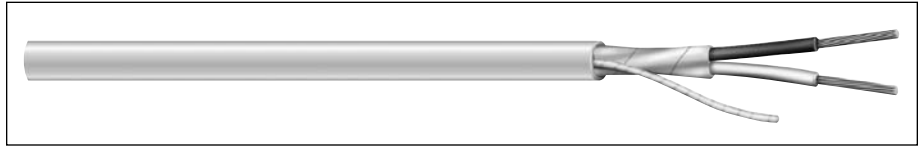
- Excellent electrical properties
- Superior shielding effectiveness
- 25% shield overlap provides excellent shielding efficiency
- Good flexibility

## Compliances:

- UL Style 2092 (UL: 60°C, 300V)
- UL Style 2093 (UL: 60°C, 300V)
- UL Style 2094 (UL: 60°C, 300V)
- UL Style 2106 (UL: 60°C, 600V)
- UL Style 2107 (UL: 60°C, 600V)
- UL Style 2464 (UL: 80°C, 300V)
- NEC Article 725 Type CL2 (UL: 75°C)
- NEC Article 800 Type CM (UL: 75°C)
- RoHS Compliant Directive 2002/95/EC
- Designed to meet UL 70,000 BTU Vertical Tray Flame Test
- CSA CMH (CSA: 60°C)
- Passes CSA CMH Flame Test

## Packaging:

- Please contact Customer Service for packaging and color options



CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOM. JACKET THICKNESS		NOMINAL O.D.		NOM. CAP.***	
				INCHES	mm	INCHES	mm	INCHES	mm	A	B
<b>UL STYLE 2092, CM (UL) c(UL) CMH, 300V</b>											
<b>C2513A</b>	2	24	7/32	0.016	0.41	0.026	0.66	0.167	4.24	18.0	33.0
<b>C2514A</b>	2	22	7/30	0.016	0.41	0.020	0.51	0.167	4.24	20.0	36.0
<b>C2524A</b>	2	20	7/28	0.016	0.41	0.020	0.51	0.183	4.65	22.5	40.5
<b>C2534A</b>	2	18	16/30	0.016	0.41	0.020	0.51	0.201	5.21	25.5	45.5

Polyethylene Insulation, Color Code Chart #1

<b>UL STYLE 2093, CM (UL) c(UL) CMH, 300V</b>											
<b>C2526A</b>	3	22	7/30	0.016	0.41	0.030	0.76	0.196	4.98	18.5	33.5
<b>C2528A</b>	3	20	7/28	0.016	0.41	0.030	0.76	0.210	5.34	21.0	37.5
<b>C2525A</b>	3	20	7/28	0.016	0.41	0.030	0.76	0.213	5.41	21.0	37.0
<b>C2535A</b>	3	18	16/30	0.016	0.41	0.020	0.51	0.213	5.56	23.0	41.0

Polyethylene Insulation, Color Code Chart #1

<b>UL STYLE 2094, CM (UL) c(UL) CMH, 300V</b>											
<b>C2523A</b>	4	22	7/30	0.016	0.41	0.030	0.76	0.213	5.41	18.5	33.5
<b>C2555A</b>	4	20	7/28	0.016	0.41	0.030	0.76	0.234	5.94	20.5	36.5

Polyethylene Insulation, Color Code Chart #1

<b>UL STYLE 2106, CSA, 600V</b>											
<b>C2536A*</b>	2	16	19/.0117	0.031	0.79	0.032	0.81	0.307	7.80	20.0	36.0
<b>C2538A**</b>	2	14	19/.0147	0.031	0.79	0.032	0.81	0.335	8.51	23.0	42.0
<b>C2539A**</b>	2	12	19/.0185	0.032	0.81	0.032	0.81	0.376	9.55	26.0	46.0

\* CM (UL) c(UL) CMH

\*\* CL2

Polyethylene Insulation, Color Code Chart #1

<b>UL STYLE 2107, CM (UL) c(UL) CMH, 600V</b>											
<b>C2537A</b>	3	16	19/.0117	0.031	0.79	0.032	0.81	0.325	8.26	19.0	34.0

Polyethylene Insulation, Color Code Chart #1

<b>UL STYLE 2464, CL2/CM (UL) c(UL) CMH, 300V</b>											
<b>C2540A</b>	2	20	7/28	0.013	0.33	0.032	0.81	0.194	4.9	49.7	89.5

PVC Insulation, Color Code Chart #2

<b>CM (UL) c(UL) CMH, 300V</b>											
<b>C2515A</b>	2	22	Solid	0.007	0.18	0.020	0.51	0.124	3.15	30.0	55.0
<b>C2516A</b>	2	22	7/30	0.008	0.20	0.020	0.51	0.137	3.48	28.0	51.0
<b>C2517A</b>	3	22	7/30	0.008	0.20	0.020	0.51	0.144	3.36	25.0	45.0

Polypropylene Insulation, Color Code Chart #2

\*\*\*A - Capacitance between conductors

\*\*\*B - Capacitance between one conductor and other conductors connected to shield

### Color Code Chart 1

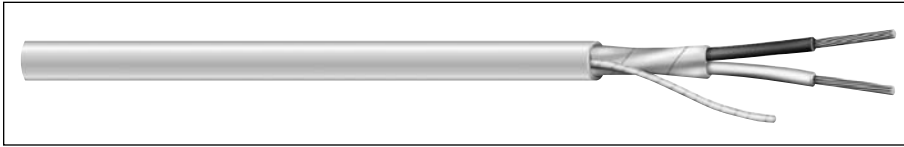
NO. OF COND.	COLOR
1	Black
2	Natural
3	Red
4	Green

### Color Code Chart 2

NO. OF COND.	COLOR
1	Black
2	Red
3	Clear

# Multi-Conductor, Foil Shield

UL 2092, NEC Type CM (UL) c(UL) CMH



CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOM. JACKET THICKNESS		NOMINAL O.D.		NOM. CAP.* pF/ft	
				INCHES	mm	INCHES	mm	INCHES	mm	A	B

### UL STYLE 2092, CM (UL) C(UL) CMH, 300V

<b>C2518A</b>	2	22	7/30	0.016	0.41	0.026	0.66	0.181	4.60	20.0	36.0
<b>C2519A</b>	2	20	7/28	0.016	0.41	0.028	0.71	0.201	5.11	21.5	38.5
<b>C2521A</b>	2	18	16/30	0.018	0.46	0.028	0.71	0.229	5.82	23.5	43.0

Polyethylene Insulation, Color Code Chart #1

### CM (UL) c(UL) CMH, 300V

<b>C2520A</b>	2	22	7/30	0.008	0.20	0.020	0.51	0.137	3.48	28.0	50.0
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Polypropylene Insulation, Color Code Chart #2

\*A - Capacitance between conductors

\*B - Capacitance between one conductor and other conductors connected to shield

#### Color Code Chart 1

NO. OF COND.	COLOR
1	Black
2	Natural

#### Color Code Chart 2

NO. OF COND.	COLOR
1	Black
2	Red

#### Product Construction:

##### Conductor:

- 22 thru 18 AWG fully annealed stranded tinned copper per ASTM B-33

##### Insulation:

- Premium-grade, color-coded polyethylene or polypropylene
- Color code: See charts below

##### Shield:

- 100% aluminum/polyester foil "bonded" to jacket, foil facing in
- Stranded tinned copper drain wire

##### Jacket:

- PVC, gray
- Temperature range: -20°C to +75°C

#### Applications:

- 100% shielded cable where RF shielding is required
- Control circuits
- Data and signal transmission
- Computer interconnections
- Suggested voltage rating: 300 volts

#### Features:

- The jacket and shield are "bonded" for ease of removal on automatic stripping equipment

#### Compliances:

- NEC Article 800 Type CM (UL: 75°C)
- UL Style 2092 (UL: 60°C, 300V)
- Designed to meet UL 70,000 BTU Vertical Tray Flame Test
- CSA CMH (CSA: 60°C)
- RoHS Compliant Directive 2002/95/EC
- Passes CSA CMH Flame Test

#### Packaging:

- Please contact Customer Service for packaging and color options



Underwriters Laboratories Inc.



# Multi-Conductor, Foil Shield

UL 2464, NEC Type CM (UL) c(UL), CSA CMG

## Product Construction:

### Conductor:

- 18 AWG fully annealed stranded tinned copper per ASTM B-33

### Insulation:

- Premium-grade, color-coded S-R PVC
- Color code: See chart below

### Shield:

- 100% Flexfoil® aluminum/polyester, 25% overlap, foil facing out
- Stranded tinned copper drain wire

### Jacket:

- PVC, gray
- Temperature range: -20°C to +80°C

## Applications:

- Audio, broadcast, instrumentation and sound systems
- Suggested voltage rating: 300 volts

## Compliances:

- NEC Article 800 Type CM (UL: 75°C)
- UL Style 2464 (UL: 80°C, 300V)
- CSA CMG (60°C)
- RoHS Compliant Directive 2002/95/EC
- Designed to meet UL 70,000 BTU Vertical Tray Flame Test
- Passes CSA CMG Flame Test

## Packaging:

- Please contact Customer Service for packaging and color options



CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOM. JACKET THICKNESS		NOMINAL O.D.		NOM. CAP.* pF/ft	
				INCHES	mm	INCHES	mm	INCHES	mm	A	B
C2543A	4	18	19/30	0.010	0.25	0.032	0.81	0.238	6.05	47	84.5

\*A - Capacitance between conductors

\*B - Capacitance between one conductor and other conductors connected to shield

## Color Code Chart

NO. OF COND.	COLOR
1	Black
2	Red
3	White
4	Green

# Multi-Conductor, Foil Shield

NEC Type CMP (UL) c(UL)



CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOM. JACKET THICKNESS		NOMINAL O.D.		NOM. CAP.* pF/ft	
				INCHES	mm	INCHES	mm	INCHES	mm	A	B
<b>C8106</b>	3	18	19/30 TC	0.007	0.18	0.014	0.36	0.178	4.27	54.0	95.0
<b>C8114</b>	4	18	19/30 TC	0.007	0.18	0.014	0.36	0.185	4.70	30.0	55.0

\*A – Capacitance between conductors

\*B – Capacitance between one conductor and other conductors connected to shield

### Color Code Chart

NO. OF COND.	COLOR
1	Black
2	White
3	Red
4	Green

### Product Construction:

#### Conductor:

- 18 AWG fully annealed stranded tinned copper per ASTM B-33

#### Insulation:

- Premium-grade, color-coded FEP
- Color code: See chart below

#### Separator:

- Polyester tape with 25% overlap

#### Shield:

- 100% Flexfoil® aluminum/polyester foil with 25% overlap
- Stranded tinned copper drain wire

#### Jacket:

- FEP, red or as requested
- Temperature range: -40°C to +200°C

### Applications:

- Computer systems
- Remote control circuits
- Process control and instrumentation
- Suggested voltage rating: 300 volts

### Compliances:

- NEC Article 800
- Designed to meet NFPA 262 and CSA FT-6 Steiner Tunnel Fire Tests for Plenum Applications

### Features:

- Fire-retardant, low-smoke jacket
- Suitable for outdoor and direct burial
- Chemical-resistant

### Packaging:

- Please contact Customer Service for packaging and color options



Designed to Meet  
 NFPA 262 and CSA FT-6  
 Steiner Tunnel Fire Tests  
 for Plenum Applications  
 Underwriters Laboratories Inc.



# Multi-Conductor, Foil Shield

NEC Type CMP (UL) c(UL) and/or CL2P

## Product Construction:

### Conductor:

- 22 thru 16 AWG fully annealed stranded tinned or bare copper per ASTM B-3, B-8 or B-33
- Class B stranding per ASTM B-8

### Insulation:

- Premium-grade, color-coded Flexguard®
- Color code: See chart below

### Shield:

- 100% Flexfoil® aluminum/polyester foil, with 25% overlap
- Stranded tinned copper drain wire

### Jacket:

- Fluoropolymer, natural
- Temperature range: -20°C to +75°C
- Sequential footage marked to facilitate installations
- Stranded tinned copper drain wire
- Includes ripcord

## Applications:

- Intercom systems
- Background music
- Audio systems
- Power-limited control circuits
- Suggested voltage rating: 150 volts

## Compliances:

- NEC Article 725 (UL: 75°C, 150V)
- NEC Article 800 (UL: 75°C, 300V)
- Designed to meet NFPA 262 and CSA FT-6 Steiner Tunnel Fire Tests for Plenum Applications

## Features:

- Abrasion-, chemical- and water-resistant jacket

## Packaging:

- Please contact Customer Service for packaging and color options



CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOM. JACKET THICKNESS		NOMINAL O.D.		NOM. CAP.**	
				INCHES	mm	INCHES	mm	INCHES	mm	A	B

### 22 AWG CONDUCTORS

<b>C3154*</b>	2	22	7/30 TC	0.006	0.15	0.010	0.25	0.103	2.62	51.0	92.0
<b>C3310*</b>	3	22	7/30 TC	0.006	0.15	0.010	0.25	0.116	2.95	45.0	81.0
<b>C3155*</b>	4	22	7/30 TC	0.006	0.15	0.010	0.25	0.130	3.30	45.0	81.0
<b>C3311*</b>	6	22	7/30 TC	0.006	0.15	0.010	0.25	0.152	3.86	40.0	73.0

### 20 AWG CONDUCTORS

<b>C3320*</b>	2	20	7/28 TC	0.007	0.18	0.010	0.25	0.120	3.05	53.0	96.0
<b>C3321*</b>	3	20	7/28 TC	0.007	0.18	0.010	0.25	0.136	3.45	46.0	84.0
<b>C3322*</b>	4	20	7/28 TC	0.007	0.18	0.010	0.25	0.153	3.89	46.0	84.0

### 18 AWG CONDUCTORS

<b>C3162</b>	2	18	7/26 BC	0.008	0.20	0.010	0.25	0.152	3.86	54.0	98.0
<b>C3164</b>	3	18	7/26 BC	0.008	0.20	0.010	0.25	0.158	4.01	47.0	85.0
<b>C3163</b>	4	18	7/26 BC	0.008	0.20	0.010	0.25	0.178	4.52	47.0	85.0
<b>C3166</b>	6	18	7/26 BC	0.008	0.20	0.010	0.25	0.212	5.38	43.0	76.0
<b>C3180</b>	8	18	7/26 BC	0.008	0.20	0.010	0.25	0.229	5.82	43.0	76.0
<b>C3181</b>	10	18	7/26 BC	0.008	0.20	0.010	0.25	0.273	6.93	43.0	76.0
<b>C3182</b>	12	18	7/26 BC	0.008	0.20	0.012	0.30	0.285	7.24	43.0	76.0

### 16 AWG CONDUCTORS

<b>C3169</b>	2	16	19/0.117 BC	0.008	0.20	0.010	0.25	0.181	4.60	62.0	112.0
<b>C3340</b>	3	16	7/0.192 BC	0.008	0.20	0.010	0.25	0.185	4.70	52.0	93.0
<b>C3341</b>	4	16	7/0.192 BC	0.008	0.20	0.010	0.25	0.210	5.16	52.0	93.0

\*CL2P only

\*\*A - Capacitance between conductors

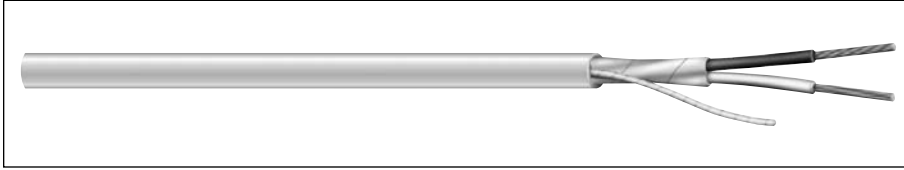
\*\*B - Capacitance between one conductor and other conductors connected to shield

## Color Code Chart

NO. OF COND.	COLOR
1	Black
2	White
3	Red
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Violet
10	Gray
11	Pink
12	Tan

# Multi-Conductor, Foil Shield

NEC Type CMP (UL) c(UL) and CL3P



CATALOG NUMBER	NO. OF COND.	AWG SIZE	COND. STRAND	NOM. INSULATION THICKNESS		NOM. JACKET THICKNESS		NOMINAL O.D.		NOM. CAP.*	
				INCHES	mm	INCHES	mm	INCHES	mm	A	B
<b>22 AWG CONDUCTORS</b>											
C3158	2	22	7/30 TC	0.008	0.20	0.015	0.38	0.127	3.23	51.0	91.0
C3159	4	22	7/30 TC	0.008	0.20	0.015	0.38	0.146	3.71	45.0	81.0
<b>18 AWG CONDUCTORS</b>											
C3060	2	18	Solid BC	0.008	0.20	0.015	0.38	0.148	3.76	67.0	120.0
C3061	4	18	Solid BC	0.008	0.20	0.015	0.38	0.171	4.34	58.0	104.0
C3062	2	18	7/26 BC	0.008	0.20	0.015	0.38	0.164	4.17	61.0	110.0
C3064	3	18	7/26 BC	0.008	0.20	0.015	0.38	0.169	4.29	53.0	96.0
C3063	4	18	7/26 BC	0.008	0.20	0.015	0.38	0.185	4.70	53.0	96.0
C3065	6	18	7/26 BC	0.010	0.25	0.015	0.38	0.230	5.84	48.0	86.0
C3183	10	18	7/26 BC	0.012	0.20	0.015	0.38	0.310	7.87	47.0	84.0
C3184	12	18	7/26 BC	0.010	0.25	0.015	0.38	0.308	7.82	52.5	94.6
<b>16 AWG CONDUCTORS</b>											
C3068	2	16	19/.0117 BC	0.009	0.23	0.015	0.38	0.187	4.75	75.0	134.0

\*A - Capacitance between conductors

\*B - Capacitance between one conductor and other conductors connected to shield

## Color Code Chart

NO. OF COND.	COLOR
1	Black
2	White
3	Red
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Violet
10	Gray
11	Pink
12	Tan

## Product Construction:

### Conductor:

- 22 thru 16 AWG fully annealed stranded tinned or bare copper per ASTM B-3, B-8 or B-33

### Insulation:

- Premium-grade, color-coded Flexguard® PVC
- Color code: See chart below

### Shield:

- 100% Flexfoil® aluminum/polyester foil with 25% overlap, minimum
- Stranded tinned copper drain wire

### Jacket:

- Flexguard® PVC, natural
- Temperature range: 0°C to +75°C
- Sequential footage marked to facilitate installation
- Includes ripcord

## Applications:

- Intercom systems
- Background music
- Audio systems
- Power-limited control circuits
- Suggested voltage rating: 150 volts

## Compliances:

- NEC Article 725 (UL: 75°C, 150V)
- NEC Article 800 (UL: 75°C, 300V)
- Designed to meet NFPA 262 and CSA FT-6 Steiner Tunnel Fire Tests for Plenum Applications

## Features:

- Flexible
- Easy to terminate

## Packaging:

- Please contact Customer Service for packaging and color options



Designed to Meet  
NFPA 262 and CSA FT-6  
Steiner Tunnel Fire Tests  
for Plenum Applications  
Underwriters Laboratories Inc.

