Communication, Control, and Industrial Cable

Get control of demanding applications

The broad range of communication and control cables from Alpha Wire means you can find the right cable for your application. Our cables meet special needs, such as low-capacitance cables for extended transmission of digital signals, such as the extra flexibility of rubber insulation and jackets, or excellent shielding for electrically noisy environments.

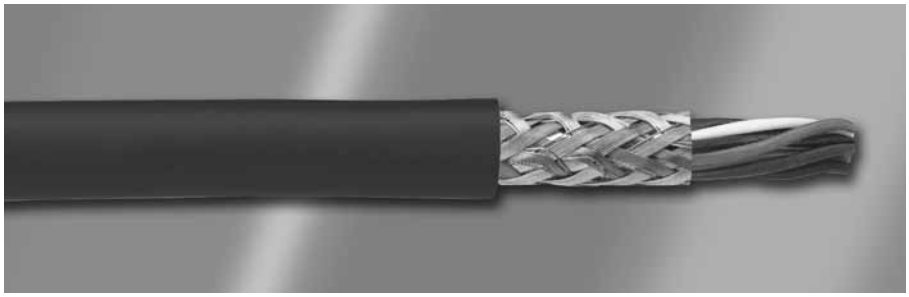
We combine a wide range of insulation materials, shielding variations, conductor counts and gauges, as well as other options to create cables suited to any application. From traditional RS-232 connections to high-speed telemetry and data recording to high-fidelity microphone systems, our experience in materials and expertise in manufacturing means cable built to perform electrically, mechanically, and environmentally.

Our communication and control line includes six main categories:

- **Solar cable:** a full range of solar cables for power and control.
- **Industrial automation cable:** cable for common automation protocols such as ControlNet, DeviceNet, and PROFIBUS.
- **Flexible motor supply cable:** four-conductor double-shielded cable suited for light-duty flexing.
- **Communication and control:** round multiconductor and multipair cable in configurations suited to nearly any application.
- **Low-smoke, zero-halogen cable:** minimizes the effects from smoke and harmful corrosive gases in the event of combustion.
- **Flat cable:** planar multiconductor cable used primarily inside cabinets or equipment.

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Solar Cable



From residential rooftops to solar farms harvesting energy, our solar cables and photovoltaic wire are designed for the harsh environments of solar energy applications—the hot and cold of climate extremes, ozone and UV radiation, moisture, oil, and direct burial. Our specially formulated PVC jackets provide years of reliable service by withstanding the potential environments without failing or degrading.

A full range for power and control

No matter what your need in connecting solar power to the grid, we have wire and cable in a range of gauges and conductor counts to satisfy it.

Our cables meet regulatory and industry requirements for photovoltaic applications.

Applications

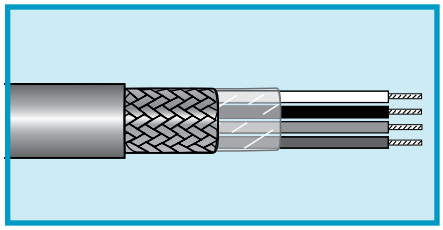
- **Panel monitoring and control**
- **Panel to junction box**
- **Panel to collector**
- **Collector to inverter**
- **Grounding**
- **Motor supply**

Photovoltaic Wire

For single-conductor needs, see page 417 for our line of photovoltaic wires.

Solar Cable

1000 V Braid Shield, Multiconductor, PVC/Nylon, PVC



UL TC-ER
UL WTTC (1000 V)
UL MTW
CSA AWM I/II A/B FT1

Operating Temperature

- -40°C to +90°C (static)
- -30°C to +90°C (dynamic)
- +105°C (CSA)

Conductor Color Coding

- Chart F (page 532)

Materials

- Stranded bare copper conductors
- PVC/nylon insulation
- Clear polyester wrap
- Tinned copper braid shield, 85% coverage
- Green PVC jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I
- UL Direct Burial
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-260: Cross-linked polyolefin for ground identification
- FIT-300: Dual-wall polyolefin with meltable inner wall
- FIT-750: Bonding adhesive-lined cross-linked polyolefin

18 AWG (0.96 mm²)

Stranding: 19/30 (19 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1803CY	3	0.329	8.36	0.050	1.27
SPM1804CY	4	0.354	8.99	0.050	1.27
SPM1805CY	5	0.381	9.68	0.050	1.27
SPM1807CY	7	0.409	10.39	0.050	1.27
SPM1809CY	9	0.466	11.84	0.050	1.27

16 AWG (1.32 mm²)

Stranding: 26/30 (26 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1603CY	3	0.351	8.92	0.050	1.27
SPM1604CY	4	0.378	9.60	0.050	1.27
SPM1605CY	5	0.408	10.36	0.050	1.27
SPM1607CY	7	0.439	11.15	0.050	1.27
SPM1609CY	9	0.509	12.93	0.050	1.27

14 AWG (2.08 mm²)

Stranding: 41/30 (41 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1403CY	3	0.381	9.68	0.050	1.27
SPM1404CY	4	0.412	10.46	0.050	1.27
SPM1405CY	5	0.446	11.33	0.050	1.27
SPM1407CY	7	0.481	12.22	0.050	1.27
SPM1409CY	9	0.590	14.99	0.065	1.65

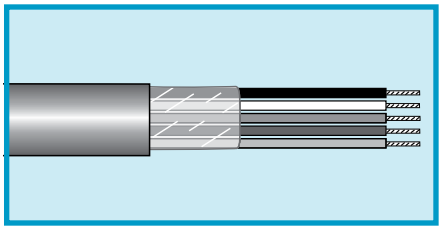
12 AWG (3.29 mm²)

Stranding: 65/30 (65 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1203CY	3	0.422	10.72	0.050	1.27
SPM1204CY	4	0.458	11.63	0.050	1.27
SPM1205CY	5	0.497	12.62	0.050	1.27
SPM1207CY	7	0.574	14.58	0.065	1.65
SPM1209CY	9	0.659	16.74	0.065	1.65

Solar Cable

1000 V Unshielded, Multiconductor, PVC/Nylon, PVC



UL TC-ER
UL WTTC (1000 V)
UL MTW
CSA AWM I/II A/B FT1

Operating Temperature

- -40°C to +90°C (static)
- -30°C to +90°C (dynamic)
- +105°C (CSA)

Conductor Color Coding

- Chart F (page 532)

Materials

- Stranded bare copper conductors
- PVC/nylon insulation
- Clear polyester wrap
- Green PVC jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I
- UL Direct Burial
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-260: Cross-linked polyolefin for ground identification
- FIT-300: Dual-wall polyolefin with meltable inner wall
- FIT-750: Bonding adhesive-lined cross-linked polyolefin

18 AWG (0.96 mm²)

Stranding: 19/30 (19 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1803	3	0.301	7.65	0.050	1.27
SPM1804	4	0.326	8.28	0.050	1.27
SPM1805	5	0.353	8.97	0.050	1.27
SPM1807	7	0.381	9.68	0.050	1.27
SPM1809	9	0.438	11.13	0.050	1.27

16 AWG (1.32 mm²)

Stranding: 26/30 (26 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1603	3	0.323	8.20	0.050	1.27
SPM1604	4	0.350	8.89	0.050	1.27
SPM1605	5	0.380	9.65	0.050	1.27
SPM1607	7	0.411	10.44	0.050	1.27
SPM1609	9	0.475	12.07	0.050	1.27

14 AWG (2.08 mm²)

Stranding: 41/30 (41 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1403	3	0.353	8.97	0.050	1.27
SPM1404	4	0.384	9.75	0.050	1.27
SPM1405	5	0.418	10.62	0.050	1.27
SPM1407	7	0.453	11.51	0.050	1.27
SPM1409	9	0.556	14.12	0.065	1.65

12 AWG (3.29 mm²)

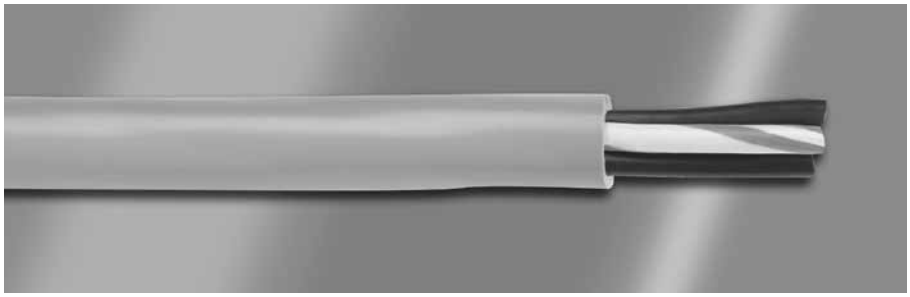
Stranding: 65/30 (65 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1203	3	0.394	10.01	0.050	1.27
SPM1204	4	0.430	10.92	0.050	1.27
SPM1205	5	0.469	11.91	0.050	1.27
SPM1207	7	0.510	12.95	0.050	1.27
SPM1209	9	0.625	15.88	0.065	1.65

RoHS Compliant

Industrial Automation Cable

Seamless communication for robust industrial environments



Whether you are designing a device for error proofing to increase quality or motion sensing to improve safety, trust Alpha Wire for all your Industrial Automation needs.

As industrial automation systems continue to increase in complexity, we understand the challenges that engineers and manufacturers face in designing and interconnecting system components from sensors to top-level controllers. Our range of industrial automation cables combines the industry-leading quality and exceptional reliability you expect with Alpha Wire with the performance to meet the rigorous requirements of the major automation communication architectures.

ControlNet™

Low-loss RG-6/U coax designed to meet the high-speed, time-critical requirements of modern ControlNet factory-floor automation systems.

RS-485

Bringing proven data transmission protocol to the factory floor, rugged RS-485 cables reduce electrical noise sensitivity to keep reliability and performance at world-class levels.

DeviceNet™

Meeting ODVA thick and thin specifications, the cables comply with Allen-Bradley 1485 CPI-A and 1485 CPI-C, and support high data rates (500 kb/s at 100 m and 125 kb/s at 500 m).

Fieldbus and PROFIBUS®

A complete family meets ruggedness, performance, and quality requirements of almost any fieldbus and PROFIBUS application environment.

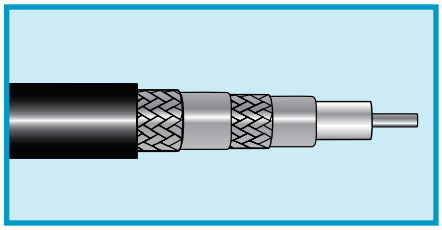
Industrial Twinax

A robust physical media for the transmission of PLC/DCS signals in real-time, high-throughput applications, including Allen-Bradley Data Highway networks. The cables may be installed in the same tray or conduit as 600-volt power cable.

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

ControlNet

300 V, RG-6/U Coaxial Cable, Double Braid and Foil Shielded



Part No.	Nominal Diameter		Center Conductor		Nominal Impedance (ohms)
	Inch	mm	AWG	mm²	
6458	0.298	7.57	18	0.82	75

UL CL2R
UL CMR
CSA CMG FT4

Operating Temperature

- -30°C to +75°C

Materials

- Solid bare Copperweld conductor
- Foam polyethylene insulation
- Shielding: double braid and foil Foil +60% aluminum braid + foil +40% aluminum braid
- Black PVC jacket

Features

- UL Sunlight Resistant
- 75-ohm nominal impedance
- 82% velocity of propagation
- 16.2 pF/ft (53.1 pF/m) nominal capacitance

Availability

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

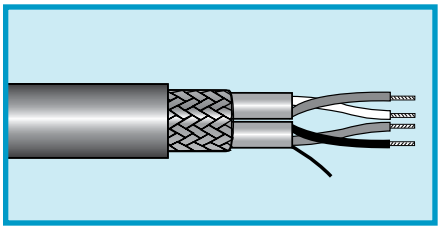
FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin

Nominal Attenuation		
Frequency (MHz)	Attenuation, Nom.	
	dB/100 ft	dB/100 m
1	0.35	1.1
2	0.38	1.2
5	0.45	1.5
10	0.59	1.9
20	0.86	2.8
50	1.37	4.5
100	1.97	6.5
200	2.82	9.3
300	3.48	11.4
400	4.04	13.3

DeviceNet

300 V Power and Data, Class 2, ODVA Thick and Thin Trunks



Part No.	Type	Pairs	Nominal Diameter	
			Inch	mm
6451	Thick	1 Power: 15 AWG (1.75 mm²), 19/0.0135 (19 x 0.35 mm) stranding 1 Data: 18 AWG (0.96 mm²), 19/30 (19 x 0.25 mm) stranding	0.480	12.19
6452	Thin	1 Power: 22 AWG (0.38 mm²), 19/34 (19 x 0.16 mm) stranding 1 Data: 24 AWG (0.24 mm²), 19/36 (19 x 0.13 mm) stranding	0.280	7.11

UL CMG
UL PLTC-ER (Thick)
UL CL2 (Thin)
CSA CMG FT4
CSA AWM I/II A/B FT4

Operating Temperature

- -20°C to +75°C (static)
- 0°C to +80°C (dynamic)

Conductor Color Coding

- Black-red power
- Blue-white data

Materials

- Tinned copper conductors
- Each pair individually foil shielded
- PVC insulation (power pair)
- Foam HDPE insulation (data pair)
- 65% tinned copper braid overall
- Slate PVC jacket

Features

- Oil resistant
- UL Sunlight Resistant
- 120-ohm nominal impedance (data pair)
- Compliant with Allen-Bradley part numbers 1485 CPI-A and 1485 CPI-C

Availability

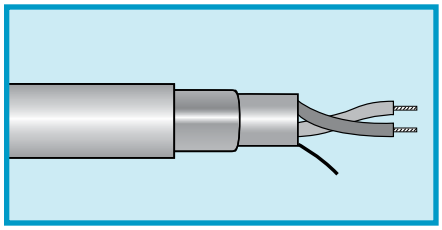
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin

Fieldbus

300 V Single-Pair Cable, Fieldbus Types A and B



Part No.	Fieldbus Type	Pairs	Conductor		Stranding		Nominal Diameter	
			AWG	mm^2	AWG	mm	Inch	mm
6459	A	1	18	0.90	7/26	7 x 0.40	0.253	6.43
6460	B	1	22	0.33	7/0.0096	7 x 0.24	0.196	4.97

UL PLTC-ER
UL CM
UL ITC
CSA CM

Operating Temperature

- -30°C to +105°C

Conductor Color Coding

- Blue-orange

Materials

- Tinned copper conductors
- Polyolefin insulation
- Foil shield
- Orange PVC jacket

Features

- UL Sunlight Resistant
- 100-ohm nominal impedance

Availability

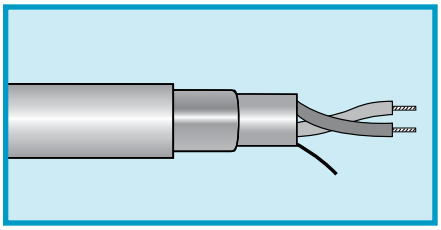
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin

High-Speed Fieldbus

300 V Single-Pair Cable



Part No.	Pairs	Conductor		Stranding		Nominal Diameter	
		AWG	mm^2	AWG	mm	Inch	mm
6461	1	22	0.35	7/30	7 x 0.25	0.351	8.92

UL PLTC
UL CM
CSA CM

Operating Temperature

- -40°C to +75°C

Conductor Color Coding

- Blue-orange

Materials

- Tinned copper conductors
- Foam high-density polyethylene insulation
- Foil shield
- Orange PVC jacket

Features

- UL Sunlight Resistant
- 150-ohm nominal impedance

Availability

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

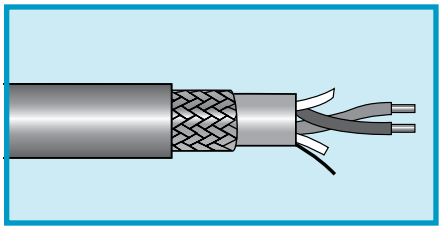
FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

PROFIBUS-DP

300 V Single-Pair Cable



Part No.	Pairs	Conductor		Stranding		Nominal Diameter	
		AWG	mm^2	AWG	mm	Inch	mm
6462	1	22	0.32	Solid		0.315	8.00
6463	1	22	0.35	7/30	7 x 0.25	0.315	8.00

UL AWM 20201 (6462 only)
UL PLTC
UL CMG
CSA CMG FT4

Operating Temperature

- -30°C to +75°C (PLTC, CMG)
- -30°C to +60°C (AWM)

Conductor Color Coding

- Red-green

Materials

- Tinned solid or stranded copper conductors
- Foam high-density polyethylene insulation
- Foil + 65% tinned copper braid shield
- Purple PVC jacket

Features

- UL Sunlight Resistant
- 150-ohm nominal impedance

Availability

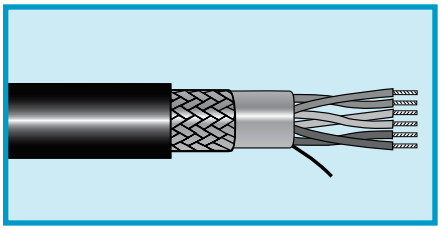
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin

RS-485 Cable

300 V Foil + Braid, Multipair



UL CM, CMG
UL TC, PLTC
CSA CM, CMG FT1

Operating Temperature

- -20°C to +60°C

Conductor Color Coding

- Chart M (page 530), except 6454

Materials

- Tinned copper conductors
- Foam high-density polyethylene insulation
- Foil + 65% tinned copper braid shield
- Black PVC jacket

Features

- UL Sunlight Resistant
- 120-ohm nominal impedance

Availability

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

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin

22 AWG (0.35 mm²)

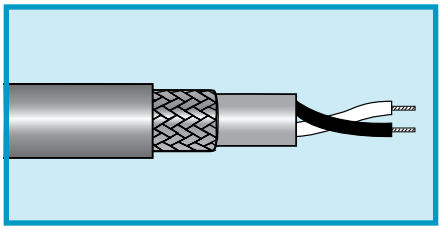
Stranding: 7/30 (7 x 0.25 mm)

Part No.	Pairs	Nominal Diameter		Insulation Thickness		Jacket Thickness	
		Inch	mm	Inch	mm	Inch	mm
6453	1	0.284	7.21	0.028	0.71	0.042	1.07
6454*	1.5	0.300	7.62	0.032	0.81	0.042	1.07
6455	2	0.408	10.36	0.024	0.61	0.053	1.35
6456	3	0.414	10.52	0.022	0.56	0.053	1.35
6457	4	0.448	11.38	0.022	0.56	0.053	1.35

*Conductor color coding: white/orange-orange/white pair, white-blue single conductor.

Industrial Twinax

600 V Foil + Braid Shield, Single Pair



Part No.	Pairs	Conductor		Stranding		Nominal Diameter	
		AWG	mm^2	AWG	mm	Inch	mm
6450	1	18	0.90	7/26	7 x 0.40	0.324	8.23

UL TC, PLTC, ITC
UL CMG
CSA CMG FT4

Operating Temperature

- -40°C to +75°C

Conductor Color Coding

- Blue-white

Materials

- Tinned stranded copper conductors
- Flame-resistant polypropylene insulation
- Foil + 55% tinned copper braid shield
- Blue PVC jacket

Features

- UL Sunlight Resistant
- 78-ohm nominal impedance
- Meets the requirements of Allen-Bradley Data Highway Networks

Availability

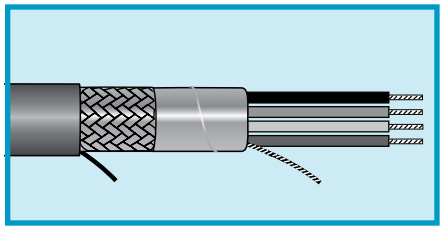
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin

Flexible Motor Supply Cable

Light Duty Flexing
600 V Foil/Braid, Four Conductor



UL TC-ER
UL MTW
UL WTTC
CSA AWM I/II A/B FT4
CE

Operating Temperature

- -5°C to +90°C (flexing)
- -20°C to +90°C (stationary)

Conductor Color Coding

- One yellow/green and three numbered black

Materials

- Finely stranded bare copper conductors
- PVC/nylon insulation
- Foil + braid shield Aluminum/polyester/aluminum foil shield, with 25% overlap and four tinned copper drain wires Tinned copper braid with 70% coverage
- Black PVC jacket

Voltage

- 600 V (UL TC-ER, MTW)
- 1000 V (UL WTTC)

Availability

Bulk, cut to length

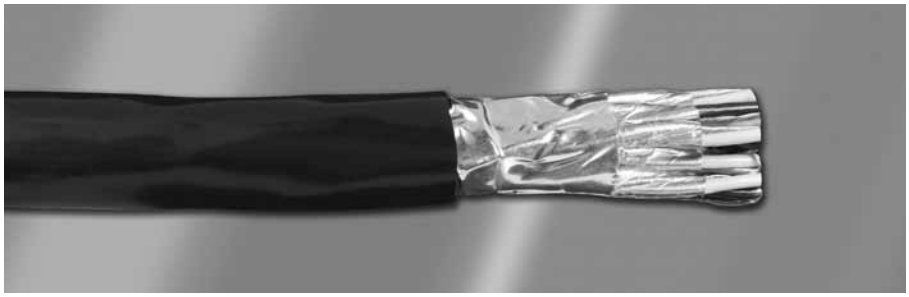
FIT® Tubing Recommendations

- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin
- FIT-600: Highly flexible, cross-linked elastomer

16 to 6 AWG (1.49 to 5.33 mm²)											
Part No.	Conductors	Wire Size		Stranding		Nominal Diameter		Jacket Thickness		Insulation Thickness	
		AWG	mm²	AWG	mm	Inch	mm	Inch	mm	Inch	mm
5660	4	16	1.32	26/30	26 x 0.25	0.381	9.67	0.050	1.27	0.016	0.40
5661	4	14	2.08	41/30	41 x 0.25	0.418	10.61	0.050	1.27	0.016	0.40
5662	4	12	3.30	65/30	65 x 0.25	0.464	11.78	0.050	1.27	0.016	0.40
5663	4	10	5.32	105/30	105 x 0.25	0.579	14.70	0.063	1.60	0.022	0.55
5664	4	8	8.52	168/30	168 x 0.25	0.760	19.30	0.063	1.60	0.032	0.81
5665	4	6	13.49	266/30	266 x 0.25	0.901	22.88	0.083	2.10	0.032	0.81

RoHS Compliant

A Full Range of Communication and Control



Our line-up of standard communication and control cables gives you maximum choice and fewer tradeoffs. By offering you a comprehensive collection of insulation/jacketing materials, shielding options, and conductor counts, you can easily select the cable that meets your most demanding needs. We have cables that go beyond the ordinary to satisfy rigorous requirements of EMI performance, transmission distances, flexibility, and temperature extremes.

Communication and control typical applications:

- Audio systems: speakers, microphones, intercoms
- Broadcast and studio
- Data transmission: RS-232, 422, 485
- CAD/CAM
- Computer peripherals
- Business machines
- Security systems: alarms, cameras, sensors
- Control systems
- Instrumentation systems
- Point-of-sale systems
- Banking systems

Communication and control key features:

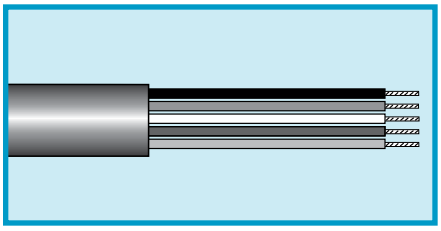
- 1 – 50 conductors, 1 – 50 pairs
- Wide range of insulation/ jacket materials:
  - PVC
  - Irradiated PVC
  - Plenum-rated PVC
  - Semirigid PVC
  - Rubber
  - Polyethylene
  - Polypropylene
  - Foam PP and PE
  - PTFE/FEP
  - LSZH
- Low-capacitance cables for improved transmission distances and signal integrity

Flexible shielding options:

- Unshielded
- Overall foil shield
- Overall foil/braid
- Individual foil-shielded pairs
- Individual foil-shielded pairs with overall foil/braid

Communication and Control Cable

300 V Unshielded, Multiconductor, LSZH



Alpha Wire's LSZH communication and control cable combines LSZH-rated insulation and jackets with the rugged performance you expect from Alpha. 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.

UL CM VW-1
CSA CMG FT4

Operating Temperature

- -20°C to +75°C

Materials

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

LSZH Properties

- LSZH Flammability: Passes IEC 60332-1
- LSZH Acid Gas Generation: Passes IEC 60754-1 and 60754-2
- LSZH Smoke Emission: Passes IEC 61034-2

LSZH Unshielded Multiconductor
Conductor Color Coding: Chart D

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
1172L	2	0.161	4.09	0.028	0.71
1173L	3	0.169	4.29	0.028	0.71
1174L	4	0.189	4.80	0.028	0.71
1175L	5	0.201	5.11	0.028	0.71
1176L	6	0.209	5.31	0.030	0.76
1177L	7	0.209	5.31	0.030	0.76
1178L	8	0.220	5.59	0.030	0.76
1179L	9	0.249	6.32	0.032	0.81
1180L	10	0.260	6.60	0.035	0.88

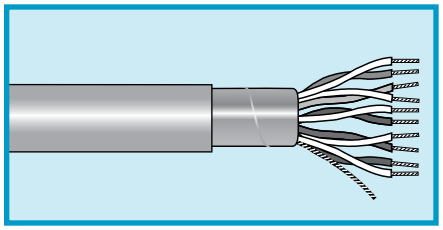
20 AWG (0.56 mm²)

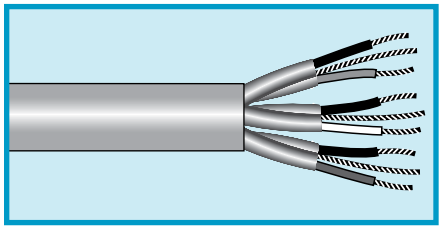
Stranding: 7/28 (0.32 mm)
Insulation thickness: 0.016 (0.40 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1895L	2	0.181	4.60	0.018	0.45
1896L	3	0.189	4.80	0.020	0.50
1896/4L	4	0.209	5.31	0.020	0.50
1896/5L	5	0.232	5.89	0.020	0.50
1896/6L	6	0.276	7.01	0.020	0.50

Communication and Control Cable

300 V Foil Shielded, Multipair, LSZH





Alpha Wire's LSZH communication and control cable combines LSZH-rated insulation and jackets with the rugged performance you expect from Alpha. 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.

UL CM VW-1
CSA CMG FT4

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

LSZH Properties

- LSZH Flammability: Passes IEC 60332-1
- LSZH Acid Gas Generation: Passes IEC 60754-1 and 60754-2
- LSZH Smoke Emission: Passes IEC 61034-2

LSZH Overall Foil Shielded Multipair
Conductor Color Coding: Chart A

24 AWG (0.22 mm²)

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5471L	1	0.161	4.09	0.028	0.71
5472L	2	0.209	5.31	0.028	0.71
5473L	3	0.228	5.79	0.028	0.71
5474L	4	0.240	6.10	0.028	0.71
5475L	5	0.272	6.91	0.030	0.76
5476L	6	0.299	7.59	0.030	0.76
5477L	7	0.299	7.59	0.030	0.76
5478L	8	0.319	8.10	0.032	0.81
5479L	9	0.339	8.61	0.032	0.81
5480L	10	0.378	9.60	0.032	0.81

LSZH Individually Foil-Shielded Pair
Conductor Color Coding: Chart A

22 AWG (0.35 mm²)

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

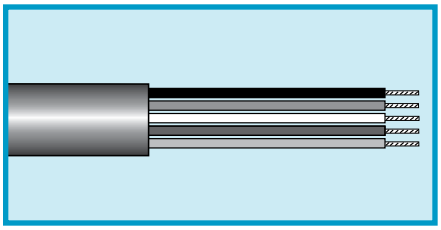
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2466L*†	2	0.161	4.09	0.014	0.35
6010L	3	0.299	7.59	0.047	1.19
2463L*††	4	0.242	6.15	0.020	0.50
6012L	6	0.386	9.80	0.040	1.01
6014L	9	0.441	11.20	0.040	1.01
6017L	12	0.492	12.50	0.040	1.01

*Conductor color coding: 1 Red-Black, 2 Green-White, White/Red-White/Black, 4 White/Green-White/Yellow.
†0.009 (0.23) insulation thickness.
††0.008 (0.20) insulation thickness.

UL LISTED CSA CA PROP 65 RoHS Compliant

Communication and Control

300 V Unshielded, 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 (page 531)

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

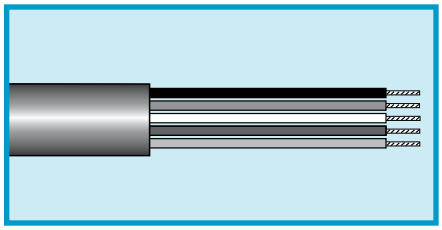
22 AWG (0.32 mm²)

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 Unshielded, Multiconductor, PVC, PVC



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 (page 531)

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 mm²)

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
1895C	2	0.180	4.57	0.020	0.51
1896C	3	0.191	4.85	0.020	0.51
1896/4C	4	0.209	5.31	0.020	0.51
1896/5C	5	0.230	5.84	0.020	0.51
1896/6C	6	0.251	6.38	0.020	0.51
1896/7C	7	0.251	6.38	0.020	0.51
1896/8C	8	0.273	6.93	0.020	0.51
1896/9C	9	0.301	7.65	0.023	0.58
1896/10C	10	0.320	8.13	0.020	0.51
1896/12C	12	0.331	8.41	0.020	0.51
1896/15C	15	0.382	9.70	0.030	0.76

18 AWG (0.81 mm²)

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

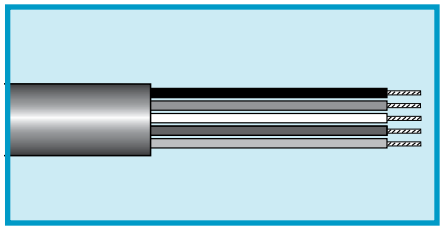
16 AWG (1.32 mm²)

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
1899C	2	0.222	5.64	0.020	0.51
1899/3C	3	0.236	5.99	0.020	0.51
1899/4C	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 (page 531)

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 mm²)

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
1891C	2	0.268	6.81	0.020	0.51
1891/3C	3	0.286	7.26	0.020	0.51

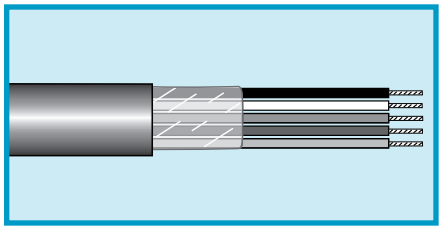
12 AWG (3.31 mm²)

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
1892C	2	0.312	7.92	0.023	0.58
1892/3C	3	0.333	8.46	0.023	0.58

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 (page 532)

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 mm²)

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
1064	4	0.395	10.03	0.047	1.19
1065	5	0.430	10.92	0.047	1.19
1067	7	0.468	11.89	0.047	1.19
1069	9	0.577	14.66	0.063	1.60
1072	12	0.640	16.26	0.063	1.60
1075	15	0.694	17.63	0.063	1.60
1079	19	0.749	19.02	0.065	1.65
1085	25	0.907	23.04	0.083	2.11

14 AWG (2.08 mm²)

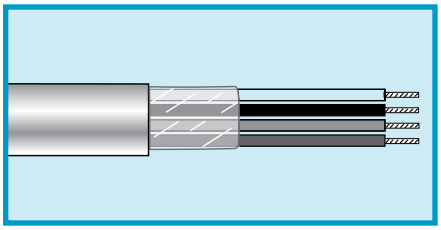
Stranding (19 x 0.0147 (19 x 0.37 mm)
Insulation thickness: 0.047 (1.19 mm)

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

CA PROP 65 RoHS Compliant

Communication and Control

300 V Unshielded, Multiconductor, IRR PVC, PVC



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 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
6622	2	0.155	3.94	0.032	0.81
6623	3	0.162	4.11	0.032	0.81
6624	4	0.173	4.39	0.032	0.81

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
6632	2	0.167	4.24	0.032	0.81
6633	3	0.175	4.44	0.032	0.81
6634	4	0.188	4.78	0.032	0.81

20 AWG (0.56 mm²)

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
6642	2	0.183	4.65	0.032	0.81
6643	3	0.192	4.88	0.032	0.81
6644	4	0.207	5.26	0.032	0.81

18 AWG (0.89 mm²)

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

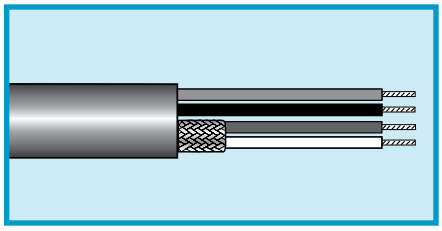
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6652	2	0.203	5.16	0.032	0.81
6653	3	0.214	5.44	0.032	0.81
6654	4	0.232	5.89	0.032	0.81

CA PROP 65 RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

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 mm²)

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
1243	3	0.190	4.83	0.020	0.51	1	2
1243/4	4	0.185 x 0.285	4.70 x 7.24	0.020	0.51	2	2
1243/5	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

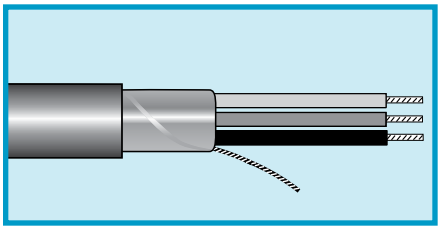
22 AWG (0.35 mm²)	18 AWG (0.81 mm²)
Stranding: 7/30 (7 x 0.25 mm) Insulation thickness: 0.010 (0.25 mm)	16/30 (16 x 0.25 mm) 0.018 (0.45 mm)

Part No.	Conductors		Nominal Diameter		Jacket Thickness	
	22 AWG	18 AWG	Inch	mm	Inch	mm
1826C	4	2	0.241	6.12	0.025	0.63
1827C	5	2	0.247	6.27	0.028	0.71
1828C	6	2	0.261	6.63	0.028	0.71

Conductor Color Coding
22 AWG: Chart I (page 533)
18 AWG: Chart D (page 531)

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 mm²)

Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.016 (0.41 mm)
24 AWG (0.22 mm²) drain wire

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

22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)
22 AWG (0.35 mm²) drain wire

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

20 AWG (0.56 mm²)

Stranding: 7/28 (7 x 0.32 mm)
Insulation thickness: 0.016 (0.41 mm)
20 AWG (0.50 mm²) drain wire

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

18 AWG (0.81 mm²)

Stranding: 16/30 (16 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)
20 AWG (0.50 mm²) drain wire

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

16 AWG (1.32 mm²)

Stranding: 19/0.117 (19 x 0.30 mm)
Insulation thickness: 0.016 (0.41 mm)
18 AWG (0.81 mm²) drain wire

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

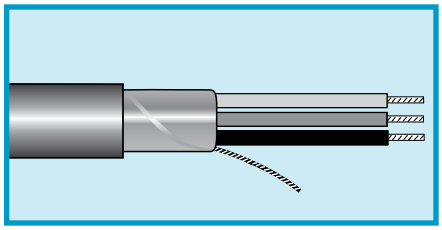
*Color code: 1 black, 2 natural.

UL LISTED CSA CA PROP 65 RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Communication and Control

300 V Foil Shield, Multiconductor, PE, PVC



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

14 AWG (2.08 mm²)

Stranding: 41/30 (41 x 0.25 mm)
Insulation thickness: 0.020 (0.51 mm)
16 AWG (1.32 mm²) 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

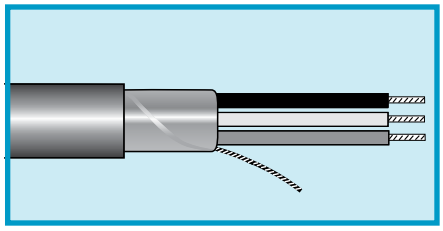
12 AWG (3.29 mm²)

Stranding: 65/30 (65 x 0.25 mm)
Insulation thickness: 0.020 (0.51 mm)
14 AWG (2.08 mm²) 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 mm²)

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
2460C	2 (solid)	0.126	3.20	0.020	0.51	2	0
2461C	2	0.136	3.45	0.020	0.51	2	0

Polyethylene Insulation

20 AWG (0.56 mm²)

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
1243/3C	3	0.210	5.33	0.030	0.76	2	1
2464C	4	0.165	4.19	0.020	0.51	2	2

PVC Insulation

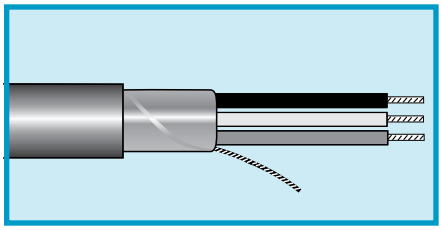
20 AWG (0.56 mm²)

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
2465C	4	0.240	6.10	0.030	0.76	2	2

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 (page 531)

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 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
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

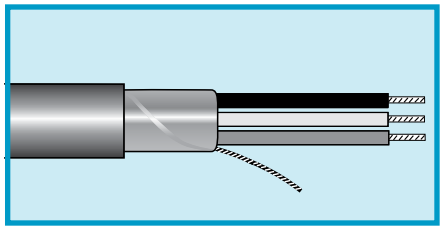
22 AWG (0.35 mm²)

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
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 Foil 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

- Chart F (page 532)

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)

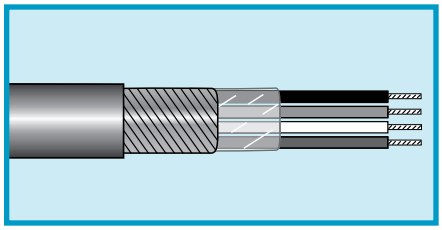
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6300/3*	3	0.163	4.14	0.032	0.81
6300/4*	4	0.174	5.44	0.032	0.81
6305	5	0.187	4.75	0.032	0.81
6306*	6	0.201	5.11	0.032	0.81
6300/8*	8	0.214	5.44	0.032	0.81
6300/10*	10	0.244	6.20	0.032	0.81
6307	15	0.270	6.86	0.032	0.81
6308	20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

*Color coding: 1 Black, 2 White, 3 Red, 4 Green, 5 Brown, 6 Blue, 7 Orange, 8 Yellow, 9 Violet, 10 Slate.

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 mm²)

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 mm²)

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 mm²)

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 mm²)

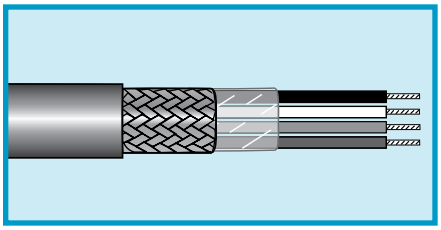
Stranding: 26/30 (26 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)

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

CA PROP 65 RoHS Compliant

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 (page 532)

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 mm²)

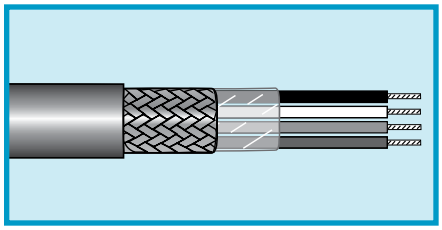
Stranding: 7/36 (7 x 0.13 mm)
Insulation thickness: 0.010 (0.25 mm)

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

CA PROP 65 RoHS Compliant

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 mm²)

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
3200	1	0.087	2.21	0.010	0.25
3201	2	0.143	3.63	0.014	0.36
3202	3	0.150	3.81	0.014	0.36
3203	4	0.166	4.22	0.016	0.41

24 AWG (0.24 mm²)

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
3210	1	0.093	2.36	0.010	0.25
3211	2	0.159	4.04	0.016	0.41
3212	3	0.167	4.24	0.016	0.41
3213	4	0.182	4.62	0.017	0.43

22 AWG (0.38 mm²)

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

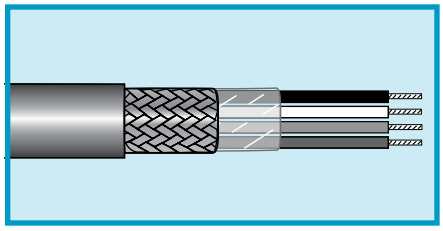
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
3220	1	0.100	2.54	0.010	0.25
3221	2	0.173	4.39	0.016	0.41
3222	3	0.184	4.67	0.017	0.43
3223	4	0.203	5.16	0.019	0.49
3335*	5	0.228	5.79	0.020	0.51
3336*	6	0.246	6.25	0.020	0.64
3337*	8	0.274	6.96	0.025	0.64

*Color code chart F.

CA PROP 65 RoHS Compliant

Communication and Control

600 V Braid Shield, Multipair, 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)

20 AWG (0.61 mm²)

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
3230	1	0.108	2.74	0.010	0.25
3231	2	0.195	4.95	0.019	0.49
3232	3	0.205	5.21	0.019	0.49
3233	4	0.227	5.77	0.021	0.53

18 AWG (0.96 mm²)

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
3240	1	0.122	3.10	0.012	0.30
3241	2	0.219	5.56	0.021	0.53
3242	3	0.233	5.92	0.022	0.56
3243	4	0.261	6.63	0.023	0.58

16 AWG (1.23 mm²)

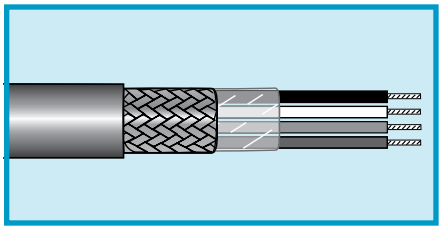
Stranding: 19/29 (19 x 0.29 mm)
Insulation thickness: 0.010 (0.25 mm) PVC/0.003 (0.08 mm) nylon

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

CA PROP 65 RoHS Compliant

Communication and Control

300 V Braid Shield, Multiconductor, PVC, PVC



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 (page 531)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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

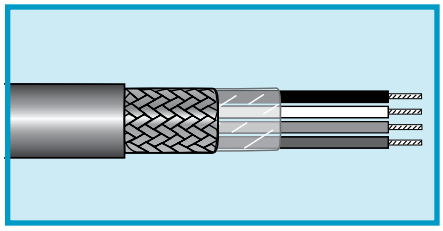
16 AWG (1.32 mm²)

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

450 V Braid Shield, Multiconductor, PVC, PVC



Operating Temperature

- -20°C to +80°C

Conductor Color Coding

- Chart D (page 531)

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 mm²)

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

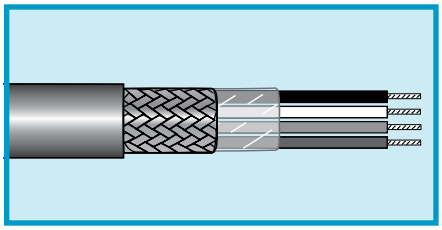
12 AWG (3.29 mm²)

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 Braid Shield, Multiconductor, IRR PVC, PVC



MIL-DTL-16878/1 (Type B)

Operating Temperature

- -55°C to +105°C

Conductor Color Coding

- Chart G (page 532)

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 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
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 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
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 mm²)

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 mm²)

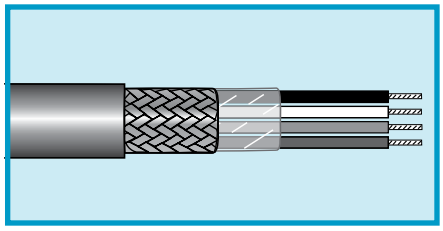
Stranding: 7/26 (7 x 0.40 mm)
Insulation thickness: 0.010 (0.25 mm)

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

CA PROP 65 RoHS Compliant

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 (page 532)

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 mm²)

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
3405	5	0.303	7.70	0.025	0.64
3408	8	0.364	9.25	0.030	0.76
3410	10	0.429	10.90	0.035	0.89
3412	12	0.442	11.23	0.035	0.89
3415	15	0.488	12.40	0.040	1.02
3420	20	0.550	13.97	0.045	1.14
3430	30	0.667	16.94	0.055	1.40

16 AWG (1.23 mm²)

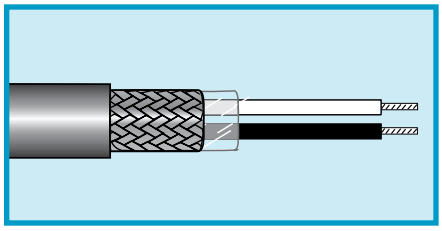
Stranding: 19/29 (19 x 0.29 mm)
Insulation thickness: 0.018 (0.45 mm)

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

CA PROP 65 RoHS Compliant

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	mm²	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

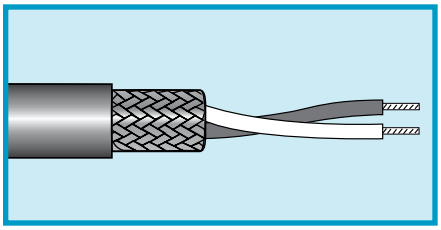
Part No.	Voltage Rating	Wire Size		Stranding		Nominal Diameter		Shield	Jacket Thickness		Insulation Thickness		Capacitance*	
		AWG	mm²	AWG	mm	Inch	mm		Inch	mm	Inch	mm	pF/ft	pF/m
1709	1000	24	0.20	10/34	10 x 0.16	0.185	4.70	Spiral	0.030	0.76	0.016	0.41	32	105
1710	1000	22	0.38	19/34	19 x 0.16	0.239	6.07	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.

CA PROP 65 RoHS Compliant

Communication and Control

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



Operating Temperature

- -20°C to +60°C

Conductor Color Coding

- 1771: White, blue
  Black, red, or orange jacket
- 1772: White, blue, white, blue
  Black, brown, slate, or
  yellow jacket

Materials

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

Availability

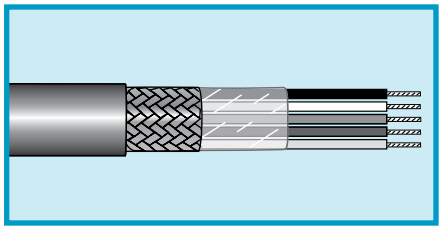
100 ft (30.5 m)
1000 ft (305 m)

Part No.	Conductors	Wire Size		Stranding		Nominal Diameter		Shield	Jacket Thickness		Insulation Thickness		Capacitance	
		AWG	mm^2	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

CA PROP 65 RoHS Compliant

Communication and Control

600 V Multiconductor, PE, PVC
Braid Shield



Operating Temperature

- -20°C to +60°C

Conductor Color Coding

- Chart H (page 533)

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)

20 AWG (0.52 mm²)

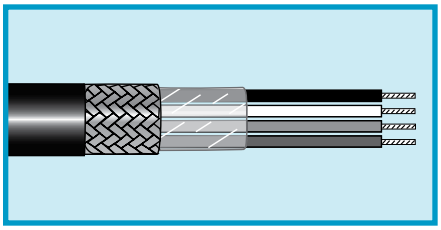
Stranding: 26/34 (26 x 0.16 mm)
Insulation thickness: 0.015 (0.38 mm)

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

CA PROP 65 RoHS Compliant

Communication and Control

600 V Multiconductor, Rubber, Polychloroprene Braid Shield



Operating Temperature

- -20°C to +60°C

Conductor Color Coding

- Chart H (page 533)

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)

18 AWG (0.82 mm²)

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

16AWG (1.31 mm²)

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

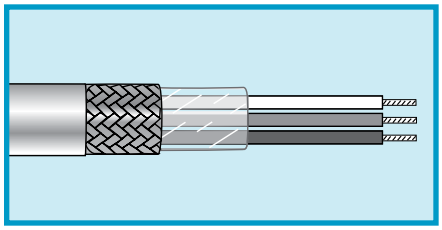
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1450/16	2	0.327	8.31	0.036	0.91
1451/16	3	0.350	8.89	0.037	0.94

CA PROP 65 RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Communication and Control

600 V Multiconductor, PTFE, FEP
Braid Shield



MIL-DTL-16878/4 (Type E)
NEMA HP3-EXBEE

Operating Temperature

- -55°C to +200°C

Conductor Color Coding

- Chart G (page 532)

Materials

- Stranded silver-plated copper conductors
- PTFE insulation
- Clear polyester wrap
- Silver-plated copper braid shield, 90% coverage
- White FEP jacket

Availability

100 ft (30.5 m)
1000 ft (305 m)*
*May contain multiple lengths

24 AWG (0.24 mm²)

Stranding: 19/36 (19 x 0.13 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2831	1	0.087	2.21	0.010	0.25
2831/2	2	0.132	3.35	0.010	0.25
2831/3	3	0.139	3.53	0.010	0.25

22 AWG (0.38 mm²)

Stranding: 19/34 (19 x 0.16 mm)
Insulation thickness: 0.009 (0.23 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2834	1	0.092	2.34	0.010	0.25
2834/2	2	0.142	3.61	0.010	0.25
2834/3	3	0.154	3.91	0.012	0.30

20 AWG (0.62 mm²)

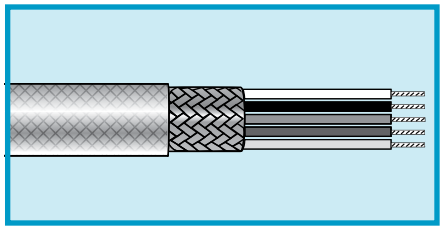
Stranding: 19/32 (19 x 0.20 mm)
Insulation thickness: 0.009 (0.23 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2837/2	2	0.162	4.11	0.012	0.30
2837/3	3	0.171	4.34	0.012	0.30

CA PROP 65 RoHS Compliant

Communication and Control

600 V Multiconductor, TFE, Fiberglass Braid Shield



MIL-DTL-16878/4 (Type E)
NEMA HP3-EXBEE

Operating Temperature

- -55°C to +200°C

Conductor Color Coding

- Chart G (page 532)

Materials

- Stranded silver-plated copper conductors
- TFE insulation
- Silver-plated copper braid shield, 90% coverage
- White PTFE-impregnated fiberglass jacket

Availability

100 ft (30.5 m)
1000 ft (305 m)*
*May contain multiple lengths

24 AWG (0.24 mm²)

Stranding: 19/36 (19 x 0.13 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2811	1	0.100	2.54	0.012	0.30
2811/2	2	0.145	3.68	0.012	0.30
2811/3	3	0.152	3.86	0.012	0.30
2811/4	4	0.164	4.17	0.012	0.30
2811/5	5	0.177	4.50	0.012	0.30
2811/7	7	0.191	4.85	0.012	0.30

22 AWG (0.38 mm²)

Stranding: 19/34 (19 x 0.16 mm)
Insulation thickness: 0.009 (0.23 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2814/2	2	0.155	3.94	0.012	0.30
2814/4	4	0.176	4.47	0.012	0.30
2814/6	6	0.206	5.23	0.012	0.30

20 AWG (0.62 mm²)

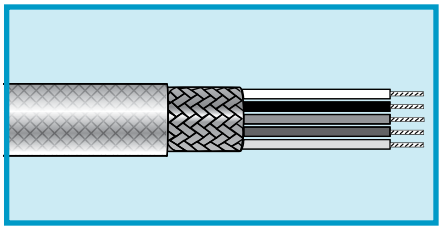
Stranding: 19/32 (19 x 0.20 mm)
Insulation thickness: 0.009 (0.23 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2817/2	2	0.171	4.34	0.012	0.30
2817/3	3	0.180	4.57	0.012	0.30
2817/4	4	0.195	4.95	0.012	0.30
2817/5	5	0.212	5.38	0.012	0.30
2817/6	6	0.230	5.84	0.012	0.30

CA PROP 65 RoHS Compliant

Communication and Control

600 V Multiconductor, TFE, Fiberglass Braid Shield



MIL-DTL-16878/4 (Type E)
NEMA HP3

Operating Temperature

- -55°C to +200°C

Conductor Color Coding

- Chart G (page 532)

Materials

- Stranded silver-plated copper conductors
- TFE insulation
- Silver-plated copper braid shield, 90% coverage
- White PTFE-impregnated fiberglass jacket

Availability

100 ft (30.5 m)
1000 ft (305 m)*
*May contain multiple lengths

18 AWG (0.96 mm²)

Stranding: 19/30 (19 x 0.25 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2819	1	0.125	3.18	0.012	0.30
2819/2	2	0.195	4.95	0.012	0.30
2819/3	3	0.206	5.23	0.012	0.30
2819/4	4	0.224	5.69	0.012	0.30
2819/5	5	0.245	6.22	0.012	0.30

16 AWG (1.32 mm²)

Stranding: 19/29 (19 x 0.29 mm)
Insulation thickness: 0.012 (0.30 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2820	1	0.135	3.43	0.012	0.30
2820/2	2	0.215	5.46	0.012	0.30
2820/3	3	0.228	5.79	0.012	0.30
2820/4	4	0.249	6.32	0.012	0.30

14 AWG (1.23 mm²)

Stranding: 19/27 (19 x 0.36 mm)
Insulation thickness: 0.012 (0.30 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2804/2	1	0.245	6.22	0.012	0.30
2804/3	2	0.260	6.60	0.012	0.30

12 AWG (3.08 mm²)

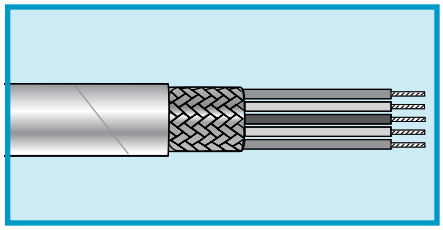
Stranding: 19/25 (19 x 0.46 mm)
Insulation thickness: 0.012 (0.30 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2803/2	2	0.283	7.19	0.012	0.30

CA PROP 65 RoHS Compliant

Communication and Control

600 V Multiconductor, PTFE, PTFE Tape Braid Shield



MIL-DTL-16878/4 (Type E)
NEMA HP3-EXBEE

Operating Temperature

- -55°C to +200°C

Conductor Color Coding

- Chart G (page 532)

Materials

- Stranded silver-plated copper conductors
- PTFE insulation
- Silver-plated copper braid shield, 90% coverage
- White PTFE tape jacket

Availability

100 ft (30.5 m)
1000 ft (305 m)*
*May contain multiple lengths

24 AWG (0.24 mm²)

Stranding: 19/36 (19 x 0.13 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2821	1	0.087	2.21	0.010	0.25
2821/2	2	0.136	3.45	0.012	0.30
2821/3	3	0.143	3.63	0.012	0.30
2821/4	4	0.155	3.94	0.012	0.30
2821/5	5	0.168	4.27	0.012	0.30
2821/6	6	0.182	4.62	0.012	0.30

22 AWG (0.38 mm²)

Stranding: 19/34 (19 x 0.16 mm)
Insulation thickness: 0.009 (0.23 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2824	1	0.092	2.34	0.010	0.25
2824/2	2	0.146	3.71	0.012	0.30
2824/3	3	0.154	3.91	0.012	0.30
2824/4	4	0.167	4.24	0.012	0.30
2824/5	5	0.182	4.62	0.012	0.30
2824/6	6	0.193	4.90	0.012	0.30

20 AWG (0.62 mm²)

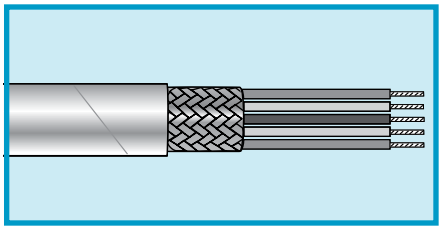
Stranding: 19/32 (19 x 0.20 mm)
Insulation thickness: 0.009 (0.23 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2827	1	0.100	2.54	0.010	0.25
2827/2	2	0.158	4.01	0.012	0.30
2827/3	3	0.171	4.34	0.012	0.30
2827/4	4	0.186	4.72	0.012	0.30
2827/5	5	0.203	5.16	0.012	0.30
2827/6	6	0.221	5.61	0.012	0.30

CA PROP 65 RoHS Compliant

Communication and Control

600 V Multiconductor, PTFE, PTFE Tape Braid Shield



MIL-DTL-16878/4 (Type E)
NEMA HP3-EXBEE

Operating Temperature

- -55°C to +200°C

Conductor Color Coding

- Chart G (page 532)

Materials

- Stranded silver-plated copper conductors
- PTFE insulation
- Silver-plated copper braid shield, 90% coverage
- White PTFE tape jacket

Availability

100 ft (30.5 m)
1000 ft (305 m)*
*May contain multiple lengths

18 AWG (0.96 mm²)

Stranding: 19/30 (19 x 0.25 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2829/2	2	0.186	4.72	0.012	0.30
2829/3	3	0.197	5.00	0.012	0.30
2829/4	4	0.215	5.46	0.012	0.30

16 AWG (1.23 mm²)

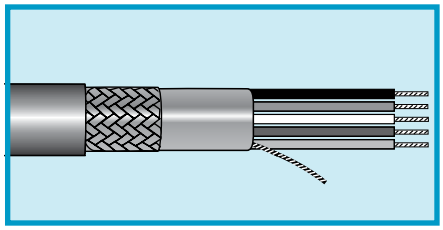
Stranding: 19/29 (19 x 0.29 mm)
Insulation thickness: 0.012 (0.30 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2826	1	0.122	3.10	0.010	0.25
2826/2	2	0.206	5.23	0.012	0.30
2826/3	3	0.219	5.56	0.012	0.30
2826/4	4	0.240	6.10	0.012	0.30

CA PROP 65 RoHS Compliant

Communication and Control

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



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 (page 531)

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 mm²)

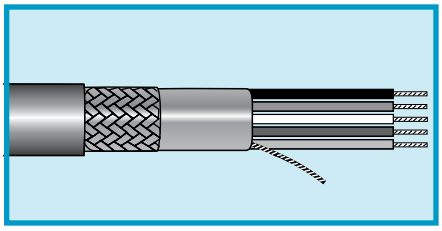
Stranding: 7/36 (7 x 0.13 mm)
Insulation thickness: 0.010 (0.25 mm)

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

*UL AWM 2464/CSA CMG only.

Low Capacitance Data Cable

300 V Multiconductor, FPP, PVC Foil/Braid Shield



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 (page 531) for 3-conductor to 9-conductor cables
- Chart F (page 532) 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 mm²)

Stranding: 7/36 (7 x 0.13 mm)
Insulation thickness: 0.013 (0.33 mm)

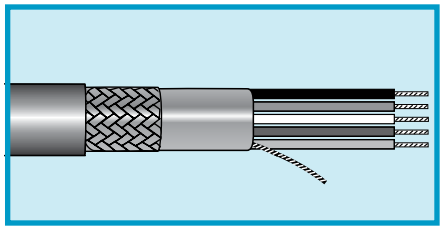
Part No.*	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
3483	3	0.184	4.67	0.035	0.89
3484C	4	0.195	4.95	0.035	0.89
3488C	8	0.232	5.89	0.035	0.89
3489C	9	0.245	6.22	0.035	0.89
3490/25C	25	0.348	8.84	0.035	0.89

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



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 (page 532) for 15-conductor through 50-condcutor cables
- See table below for 3-conductor through 10-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 mm²), 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 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
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 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
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

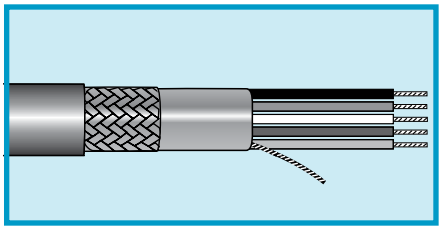
Mutual capacitance: 36 pF/ft (118 pF/m)
Ground capacitance: 65 pF/ft (213 pF/m)

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/Braid Shield, Multiconductor, FPE, 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 (page 532) 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 mm²)

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
6351	3	0.217	5.51	0.035	0.89
6352	4	0.231	5.87	0.035	0.89
6353	5	0.248	6.30	0.035	0.89
6354	6	0.265	6.73	0.035	0.89
6355	7	0.265	6.73	0.035	0.89
6356	8	0.282	7.16	0.035	0.89
6357	9	0.300	7.62	0.035	0.89
6358	10	0.320	8.13	0.035	0.89
6359	15	0.353	8.97	0.035	0.89
6360	25	0.432	10.97	0.035	0.89
6361	37	0.514	13.06	0.048	1.22

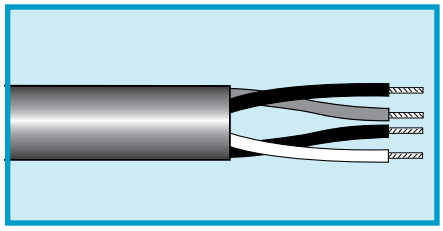
Mutual capacitance: 12 pF/ft (39.4 pF/m)
Ground capacitance: 22 pF/ft (72.2 pF/m)

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 Unshielded, Multipair, PVC, PVC



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 (page 528)

Materials

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

Availability

1000 ft (305 m)

22 AWG (0.32 mm²)

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 mm²)

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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

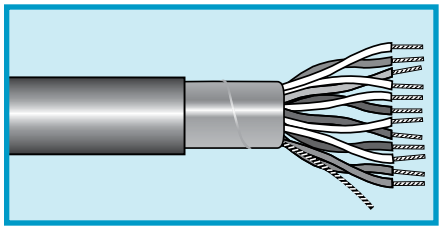
18AWG (0.81 mm²)

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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

Communication and Control

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



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 (page 529)

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 mm²)

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 mm²), 7/30 (7 x .025) Tinned Copper Drain Wire
UL VW-1

20 AWG (0.56 mm²)

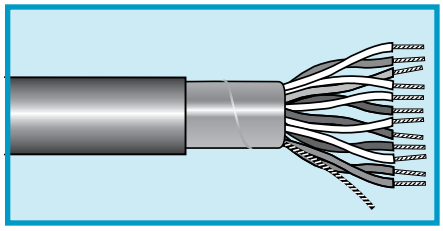
Stranding: 7/28 (7 x 0.33 mm)
Insulation thickness: 0.010 (0.25 mm)

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 (page 529)

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)

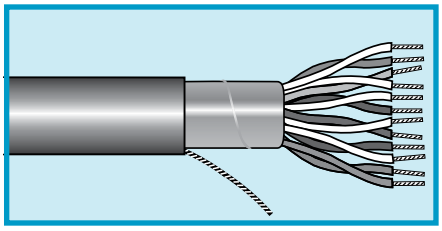
22 AWG (0.32 mm²)

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

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 (page 528)

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 mm²)

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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

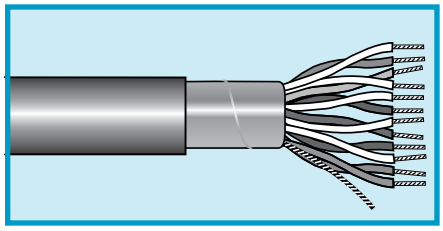
18 AWG (0.81 mm²)

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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
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, PVC, PVC



UL PLTC/CM
UL VW-1
UL Sunlight Resistant
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 mm²), 7/32 (7 x 0.20)
- Slate PVC jacket

Availability

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

22 AWG (0.35 mm²)

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
6417	2	0.267	6.78	0.038	0.97
6418	3	0.291	7.39	0.043	1.09
6419	4	0.315	8.00	0.043	1.09
6420	6	0.370	9.40	0.043	1.09
6421	9	0.447	11.35	0.053	1.35
6422	11	0.480	12.19	0.053	1.35
6423	15	0.545	13.84	0.053	1.35
6424	19	0.593	15.06	0.063	1.60
6425	27	0.698	17.73	0.063	1.60
6426	51	0.914	23.22	0.075	1.91

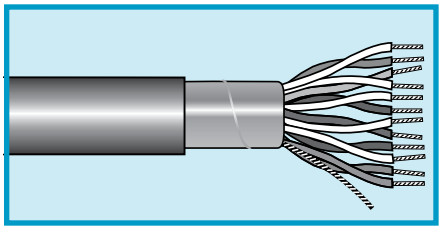
18 AWG (0.96 mm²)

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
6427	2	0.362	9.19	0.043	1.09
6428	3	0.403	10.24	0.053	1.35
6429	4	0.438	11.13	0.053	1.35
6430	6	0.518	13.16	0.053	1.35
6431	9	0.622	15.80	0.063	1.60
6432	11	0.671	17.04	0.063	1.60
6433	15	0.751	19.08	0.063	1.60

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 (page 530)

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 mm²)

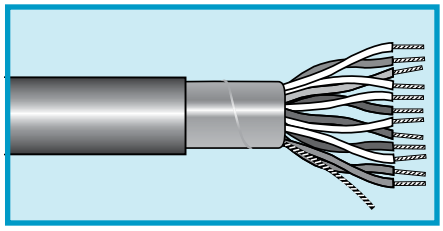
Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6083C	3	0.235	5.97	0.035	0.89
6084C	4	0.254	6.45	0.035	0.89
6087C	7	0.297	7.54	0.035	0.89
6089C	9	0.342	8.69	0.035	0.89
6089/18C	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, 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 M (page 530)

Materials

- Stranded tinned copper conductors
- Polyethylene 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: 0.016 (0.41 mm)

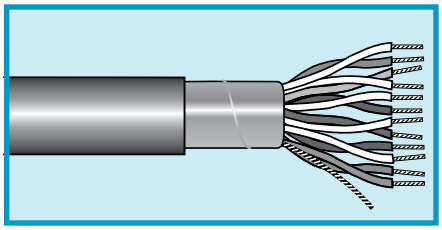
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6301	6	0.351	8.92	0.035	0.89
6304	12.5	0.455	11.56	0.035	0.89

Characteristic impedance: 120 ohms
Mutual capacitance: 12.8 pF/ft (42 pF/m)
Ground capacitance: 23 pF/ft (75.4 pF/m)

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Communication and Control

300 V Overall Foil Shield, Multipair, FPP, 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 (page 528)

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 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
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 mm²)

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

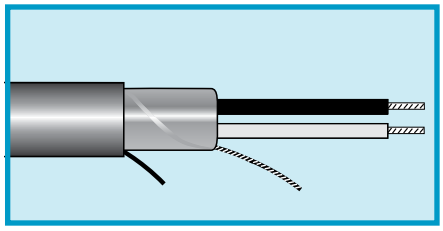
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6212C	2	0.304	7.72	0.035	0.89
6213C	3	0.322	8.18	0.035	0.89
6216C	6	0.420	10.67	0.035	0.89
6217C	7	0.420	10.67	0.035	0.89
6218C	8	0.456	11.58	0.035	0.89
6220C	10	0.563	14.30	0.050	1.27
6220/12C	12.5*	0.580	14.73	0.050	1.27
6220/15C	15	0.631	16.03	0.050	1.27
6220/18C	18.5*	0.667	16.94	0.050	1.27
6220/25C	25	0.793	20.14	0.050	1.27

*Single conductor colors: 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)

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 mm²)

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 mm²)

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 mm²)

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

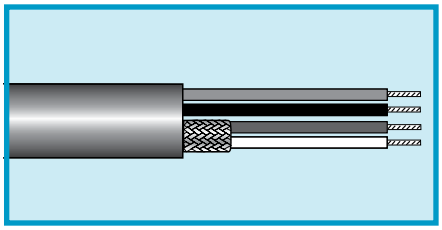
Mutual capacitance: 23.9 pF/ft (78.4 pF/m)
Ground capacitance: 43 pF/ft (141.1 pF/m)

UL LISTED CA PROP 65 RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Communication and Control

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



25 AWG (0.18 mm²)

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 mm²), 7/33 (7 x 0.18 mm)
- Slate PVC jacket

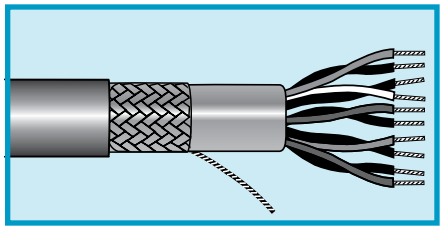
Availability

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

CA PROP 65 RoHS Compliant

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 (page 528)

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 mm²)

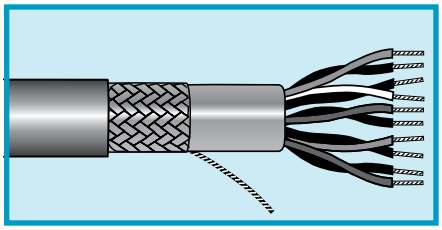
Stranding: 7/36 (7 x 0.13 mm)
Insulation thickness: 0.010 (0.25 mm)

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

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Communication and Control

300 V Overall Foil/Braid Shield, Multipair, 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 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 (0.23 mm²), 7/32 (7 x 0.20 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 (0.23 mm²)

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

22 AWG (0.35 mm²)

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

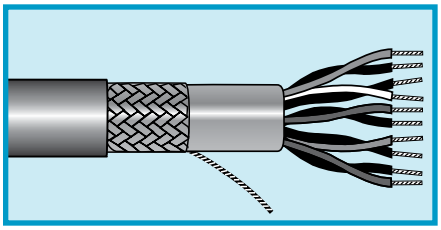
Part No.	Pairs	Nominal Diameter		Jacket Thickness		Color Code
		Inch	mm	Inch	mm	
6373	2	0.254	6.45	0.032	0.81	A
6374	3	0.267	6.78	0.032	0.81	A
6375	4	0.288	7.32	0.032	0.81	A
6376	5	0.312	7.92	0.032	0.81	Chart below
6377	6	0.337	8.56	0.032	0.81	A
6378	7	0.337	8.56	0.032	0.81	A
6379	8	0.363	9.22	0.032	0.81	Chart below
6380	10	0.418	10.62	0.032	0.81	A
6381	12.5	0.430	10.92	0.032	0.81	A
6382	15	0.467	11.86	0.032	0.81	A
6383	18	0.500	12.70	0.032	0.81	A
6384	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 (page 529)

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)

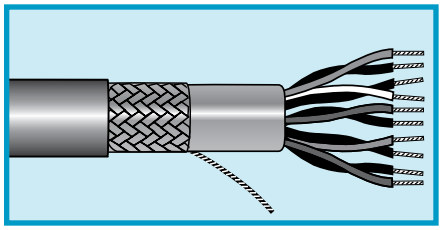
Stranding: 7/36 (7 x 0.13 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6390	2	0.211	5.36	0.035	0.89
6391	3	0.220	5.59	0.035	0.89
6392	4	0.235	5.97	0.035	0.89
6393	5	0.252	6.40	0.035	0.89
6394	7	0.269	6.83	0.035	0.89
6395	9	0.305	7.75	0.035	0.89
6396	12	0.335	8.51	0.035	0.89
6397	13	0.341	8.66	0.035	0.89
6398	18	0.383	9.73	0.035	0.89
6399	25	0.440	11.18	0.035	0.89
6400	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 (page 530)

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 mm²)

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
6401	2	0.280	7.11	0.035	0.89
6402	3	0.294	7.47	0.035	0.89
6403	4	0.318	8.08	0.035	0.89
6404	5	0.345	8.76	0.035	0.89
6405	6	0.373	9.47	0.035	0.89
6406	7	0.373	9.47	0.035	0.89
6407	9	0.430	10.92	0.035	0.89
6408	10	0.463	11.76	0.035	0.89
6409	12	0.478	12.14	0.035	0.89
6410	18	0.580	14.73	0.047	1.19
6411	25	0.671	17.04	0.047	1.19

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 mm²)

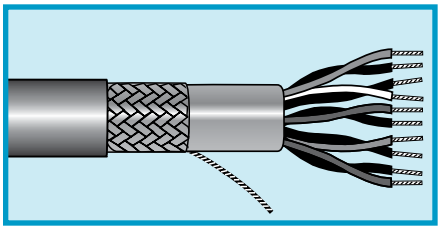
Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.016 (0.41 mm)
90% braid coverage

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6412	1	0.208	5.28	0.035	0.89
6413	2	0.280	7.11	0.035	0.89
6414	3	0.294	7.47	0.035	0.89
6415	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, FPP, PVC Low Capacitance Data Cable



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 M (page 530)

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 mm²)

Stranding: 7/36 (7 x 0.13 mm)
Insulation thickness: 0.013 (0.33 mm)

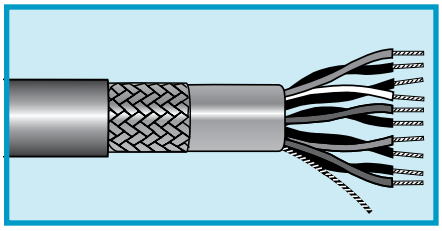
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
3492C	2	0.230	5.84	0.035	0.89
3493C	3	0.241	6.12	0.035	0.89
3494C	4	0.265	6.73	0.035	0.89
3495C	5	0.284	7.21	0.035	0.89
3496C	6	0.305	7.75	0.035	0.89
3498C	8	0.326	8.28	0.035	0.89
3500/12C	12.5	0.381	9.67	0.035	0.89
3500/18C	18	0.439	11.15	0.035	0.89
3500/25C	25	0.531	13.49	0.048	1.22

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

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Communication and Control

300 V Overall Foil/Braid Shield, Multipair, FPP, 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 M (page 530)

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)

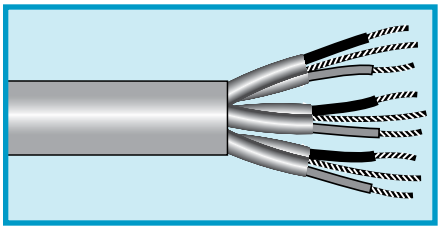
Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6222C	2	0.280	7.11	0.035	0.89
6223C	3	0.294	7.47	0.035	0.89
6224C	4	0.318	8.08	0.035	0.89
6225C	5	0.345	8.76	0.035	0.89
6226C	6	0.373	9.47	0.035	0.89
6227C	7	0.373	9.47	0.035	0.89
6228C	8	0.401	10.19	0.035	0.89
6230C	10	0.463	11.76	0.035	0.89
6230/12C	12.5	0.477	12.12	0.035	0.89
6230/15C	15	0.518	13.16	0.035	0.89
6230/18C	18	0.586	14.88	0.050	1.27
6230/25C	25	0.677	17.20	0.050	1.27

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 2919 (30 V) VW-1
UL CL2
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 (page 528)

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 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)
22 AWG (0.35 mm²) 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
6059/27C	27	0.828	21.03	0.063	1.60

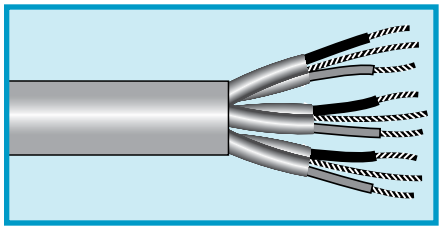
18 AWG (0.81 mm²)

Stranding: 16/30 (16 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)
20 AWG (0.51 mm²) 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



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 (page 528)

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 (0.35 mm²), 7/30 (7 x 0.25 mm)
- Slate PVC jacket

Availability

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

22 AWG (0.32 mm²)

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 mm²)

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 mm²)

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 mm²)

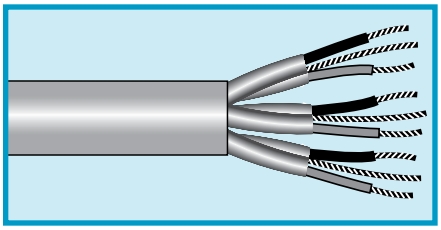
Stranding: 16/30 (16 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)

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

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



UL PLTC
UL CM
UL VW-1
CSA CMG FT4

Operating Temperature

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

Conductor Color Coding

- Black and red pairs, numbered

Materials

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

Availability

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

22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.013 (0.33 mm)
24 AWG (0.23 mm²) drain wire

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6434	2	0.295	7.49	0.043	1.09
6435	3	0. 311	7.89	0.043	1.09
6436	4	0.338	8.58	0.043	1.35
6437	6	0.420	10.66	0.053	1.35
6438	9	0.484	12.29	0.053	1.35
6439	11	0.537	13.63	0.053	1.35
6440	19	0.646	16.40	0.063	1.60
6441	51	1.020	25.90	0.075	1.91

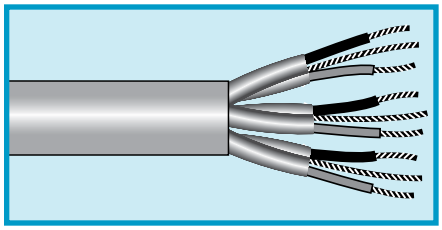
18 AWG (0.96 mm²)

Stranding: 19/30 (19 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)
20 AWG (0.56 mm²) drain wire

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6442	2	0.406	10.31	0.053	1.35
6443	3	0.429	10.90	0.053	1.35
6444	4	0.468	11.89	0.053	1.35
6445	6	0.557	14.15	0.053	1.35
6446	9	0.669	16.99	0.063	1.60
6447	11	0.746	18.95	0.063	1.60
6448	15	0.829	21.06	0.063	1.60

Communication and Control

350 V Individually Foil Shielded Pairs, Multipair, PP, PE Direct Burial



Operating Temperature

- -20°C to +80°C

Conductor Color Coding

- Chart A (page 528)

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 (0.35 mm²), 7/30 (7 x 0.25 mm)
- Black polyethylene jacket

Availability

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

20 AWG (0.51 mm²)

Stranding: 10/30 (10 x 0.25 mm)
Insulation thickness: 0.008 (0.20 mm)

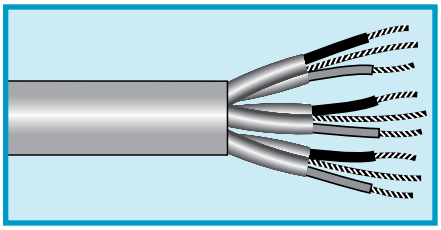
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6314	3	0.291	7.39	0.040	1.02
6315	6	0.385	9.78	0.045	1.14

Characteristic impedance: 48 ohms
Mutual capacitance: 31 pF/ft (101.7 pF/m)
Ground capacitance: 56 pF/ft (183.7 pF/m)

CA PROP 65 RoHS Compliant

Communication and Control

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



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 (page 528)

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 mm²)

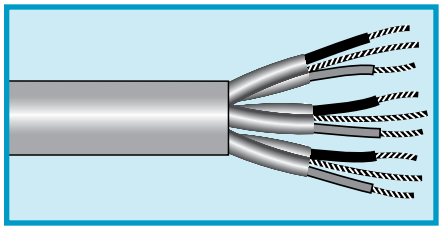
Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
6385	3	0.247	6.27	0.035	0.89
6386	6	0.317	8.05	0.035	0.89
6387	9	0.368	9.35	0.035	0.89
6388	12	0.411	10.44	0.035	0.89
6389	25	0.599	15.21	0.047	1.19

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

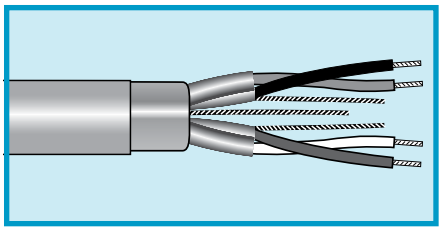
- See tables

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 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.010 (0.25 mm)
24 AWG (0.22 mm²) drain wire
Foil facing outward

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2466C	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 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.008 (0.20 mm)
24 AWG (0.22 mm²) drain wire
Foil facing outward

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2463C	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 mm²)

Stranding: 7/28 (7 x 0.32 mm)
Insulation thickness: 0.015 (0.38 mm)
22 AWG (0.35 mm²) drain wire
Foil facing inward

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
2467C	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 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.009 (0.23 mm)
22 AWG (0.35 mm²) drain wire
Foil facing inward

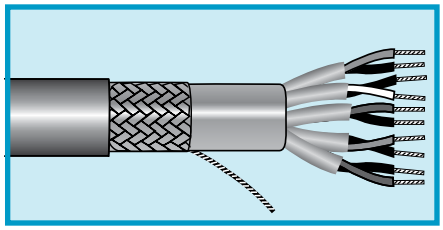
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
1243/2C	2	0.245	6.22	0.030	0.76

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, FPE, 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 (page 528)
- (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 (0.23 mm²), 7/32 (7 x 0.20 mm)
- 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 mm²)

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
6316	2	0.349	8.86	0.048	1.22
6317	3	0.353	8.97	0.048	1.22
6318	4	0.397	10.08	0.048	1.22
6319*	5	0.430	10.92	0.048	1.22
6320	6	0.464	11.79	0.048	1.22
6321	7	0.464	11.79	0.048	1.22
6322*	8	0.499	12.67	0.048	1.22
6323	10	0.606	15.39	0.063	1.60
6324	15	0.687	17.45	0.063	1.60
6325	18	0.721	18.31	0.063	1.60
6326	25	0.901	22.89	0.085	2.16

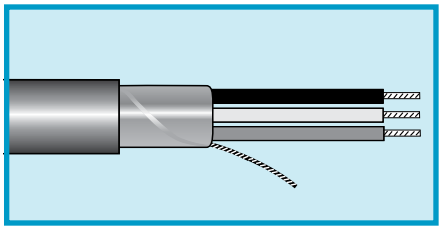
Characteristic impedance: 100 ohms
Mutual capacitance: 12.5 pF/ft (41 pF/m)
Ground capacitance: 22 pF/ft (72.2 pF/m)

***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 Shield, Multiconductor, PVC, PVC Plenum Rated



UL CL2P
UL CMP
CSA CMP FT6

Operating Temperature

- -5°C to +75°C

Conductor Color Coding

- Chart D2 (page 531)

Materials

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

Availability

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

24 AWG (0.22 mm²)

Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.008 (0.020 mm)
24 AWG (0.22 mm²) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58401	2	0.120	3.05	0.015	0.39
57003	3	0.120	3.05	0.015	0.39
57004	4	0.131	3.33	0.015	0.39
57006	6	0.154	3.91	0.015	0.39
57008	8	0.167	4.24	0.015	0.39
57010	10	0.194	4.93	0.015	0.39
57015	15	0.217	5.51	0.015	0.39
58110/25	25	0.262	6.65	0.015	0.39

22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.008 (0.020 mm)
24 AWG (0.22 mm²) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58411	2	0.126	3.20	0.015	0.39
58113	3	0.133	3.38	0.015	0.39
58114	4	0.145	3.68	0.015	0.39
58116	6	0.172	4.37	0.015	0.39
58117	7	0.172	4.37	0.015	0.39
58118	8	0.187	4.75	0.015	0.39
58119	9	0.201	5.11	0.015	0.39
58120	10	0.218	5.54	0.015	0.39
58120/12	12	0.225	5.72	0.015	0.39
58120/15	15	0.245	6.22	0.015	0.39
58120/25	25	0.314	7.98	0.017	0.43

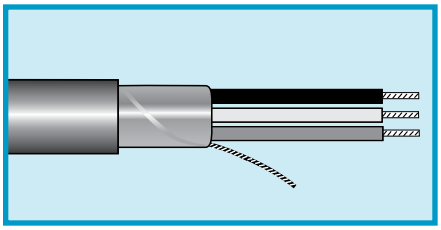
20 AWG (0.35 mm²)

Stranding: 7/0.0121 (7 x 0.31 mm)
Insulation thickness: 0.008 (0.020 mm)
22 AWG (0.35 mm²) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58421	2	0.138	3.51	0.015	0.39
58124	4	0.160	4.06	0.015	0.39
58126	6	0.191	4.85	0.015	0.39

Communication and Control

300 V Foil Shield, Multiconductor, PVC, PVC Plenum Rated



UL CL2P
UL CMP
CSA CMP FT6

Operating Temperature

- -5°C to +75°C

Conductor Color Coding

- Chart D2 (page 531)

Materials

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

Availability

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

18 AWG (0.82 mm²)

Stranding: 7/0.0152 (7 x 0.39 mm)
Insulation thickness: 0.009 (0.023 mm)
22 AWG (0.35 mm²) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58431	2	0.162	4.11	0.015	0.39
58133	3	0.172	4.37	0.015	0.39
58134	4	0.189	4.80	0.015	0.39
58136	6	0.227	5.77	0.015	0.39

16 AWG (1.31 mm²)

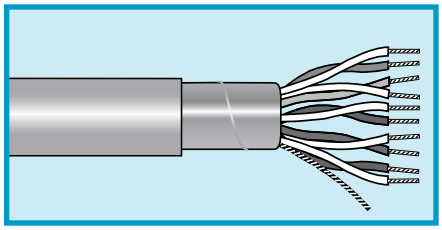
Stranding: 7/0.0192 (7 x 0.49 mm)
Insulation thickness: 0.009 (0.023 mm)
18 AWG (0.82 mm²) drain wire

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58142	2	0.186	4.72	0.015	0.39
58144	4	0.218	5.54	0.015	0.39

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Communication and Control

300/150 V Foil Shield, Multipair, PVC, PVC Plenum Rated



UL CL2P
UL CMP
CSA CMP FT6

Operating Temperature

- -5°C to +75°C

Conductor Color Coding

- Chart A1 (page 528)

Materials

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

Availability

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

24 AWG (0.22 mm²)

Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.008 (0.020 mm)
24 AWG (0.22 mm²) drain wire

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
57602	2	0.165	4.19	0.015	0.39
57603	3	0.175	4.45	0.015	0.39
57604	4	0.193	4.90	0.015	0.39
57605	5	0.212	5.38	0.015	0.39
57606	6	0.231	5.87	0.015	0.39

22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.008 (0.020 mm)
24 AWG (0.22 mm²) drain wire

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58412	2	0.185	4.70	0.015	0.39
58413	3	0.197	5.00	0.015	0.39
58414	4	0.217	5.51	0.015	0.39
58415	5	0.239	6.07	0.015	0.39
58416	6	0.261	6.63	0.015	0.39
57628	8	0.285	7.24	0.015	0.39
58419	9	0.311	7.90	0.016	0.41
58420/19	19	0.418	10.62	0.018	0.46

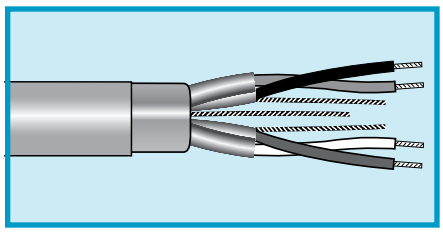
20 AWG (0.35 mm²)

Stranding: 7/0.0121 (7 x 0.31 mm)
Insulation thickness: 0.008 (0.020 mm)
22 AWG (0.35 mm²) drain wire

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
57632	2	0.205	5.21	0.015	0.39
57634	4	0.240	6.10	0.015	0.39
57636	6	0.291	7.39	0.015	0.39

Communication and Control

150 V Foil Shield, Multipair, FEP, PVDF
Plenum Rated, Low- and Mid-Capacitance



UL CL2P
UL CMP
CSA CMP FT6

Operating Temperature

- -25°C to +125°C

Conductor Color Coding

- Chart A1 (page 528)

Materials

- Stranded tinned copper conductors
- FEP insulation
- Aluminum/polyester foil shield, 25% overlap min.
  Foil facing inward
  Stranded tinned copper drain wire, 24 AWG (0.22 mm²), 7/32 (7 x 0.20 mm)
- Slate PVDF jacket

Availability

500 ft (152 m)
1000 ft (305 m)*
*May contain multiple lengths

Individually Shielded Pairs

24 AWG (0.22 mm²)

Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.007 (0.18 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58602	2	0.164	4.17	0.009	0.23
58603	3	0.175	4.45	0.009	0.23
58604	4	0.194	4.93	0.009	0.23

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

Overall Shield

24 AWG (0.22 mm²)

Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.007 (0.18 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58802	2	0.154	3.91	0.011	0.28
58803	3	0.163	4.14	0.011	0.28
58804	4	0.180	4.57	0.011	0.28
58806	6	0.217	5.51	0.011	0.28
58809	9	0.256	6.50	0.011	0.28
58812	12.5	0.294	7.47	0.011	0.28

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

Overall Shield

24 AWG (0.22 mm²)

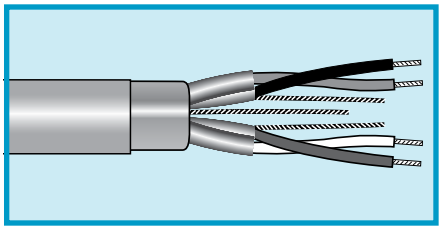
Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.012 (0.30 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58902	2	0.186	4.72	0.011	0.28
58903	3	0.199	5.05	0.011	0.28
58904	4	0.219	5.56	0.011	0.28
58906	6	0.266	6.76	0.011	0.28
58909	9	0.315	8.00	0.011	0.28
58912	12.5	0.367	9.32	0.011	0.28

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

Communication and Control

150 V Foil Shield, Multipair, FEP, PVDF
Plenum Rated, Low- and Mid-Capacitance



UL CL2P
UL CMP
CSA CMP FT6

Operating Temperature

- -55°C to +125°C

Conductor Color Coding

- Chart A1 (page 528)

Materials

- Stranded tinned copper conductors
- FEP insulation
- Aluminum/polyester foil shield, 25% overlap min.
  Foil facing inward
  Stranded tinned copper drain wire, 24 AWG (0.22 mm²), 7/32 (7 x 0.20 mm)
- Slate PVDF jacket

Availability

500 ft (152 m)
1000 ft (305 m)*
*May contain multiple lengths

Overall Foil Shield, Individually Shielded Pairs

22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.007 (0.18 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58612	2	0.189	4.80	0.009	0.23
58613	3	0.202	5.13	0.009	0.23
58616	6	0.272	6.91	0.009	0.23

Mutual capacitance: 29 pF/ft (95.1 pF/m)
Ground capacitance: 51 pF/ft (167.3 pF/m)

Individually Shielded Pairs, Overall Shield

18 AWG (0.82 mm²)

Stranding: 7/0.0152 (7 x 0.39 mm)
Insulation thickness: 0.007 (0.18 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58632	2	0.247	6.27	0.010	0.25
58633	3	0.264	6.71	0.012	0.30

Mutual capacitance: 35 pF/ft (114.8 pF/m)
Ground capacitance: 63 pF/ft (206.7 pF/m)

Individually Shielded Pairs

16 AWG (0.35 mm²)

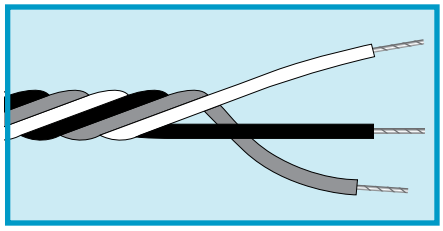
Stranding: 7/0.0192 (7 x 0.49 mm)
Insulation thickness: 0.007 (0.18 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
58642	2	0.289	7.34	0.012	0.30
58643	3	0.309	7.85	0.012	0.30

Mutual capacitance: 39 pF/ft (128 pF/m)
Ground capacitance: 69 pF/ft (226.4 pF/m)

Communication and Control

200 V Unshielded and Shielded, Multiconductor PVC, PVC Hi-Fi and Stereo Cable



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)

32 AWG (0.03 mm²)

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 mm²)

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

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)

28 AWG (0.09 mm²)

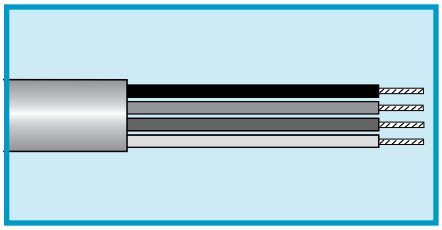
Stranding: 7/36 (7 x 0.13 mm)
Insulation thickness: 0.010 (0.25 mm)

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

CA PROP 65 RoHS Compliant

Communication and Control

150 V Unshielded Multiconductor PP, PVC Silver Satin Oval Telephone Cable



Temperature Rating

- -20°C to +60°C

Conductor Color Coding

- See table

Materials

- Stranded bare copper conductors
- Polypropylene insulation
- Silver PVC jacket

Availability

328 ft (100 m), box
1000 ft (305 m), box

26 AWG (0.14 mm²)

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

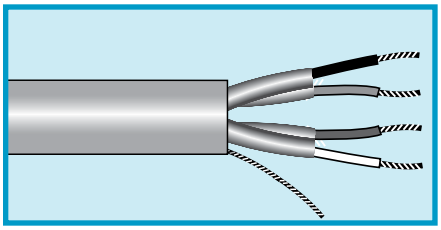
Conductor Color Coding

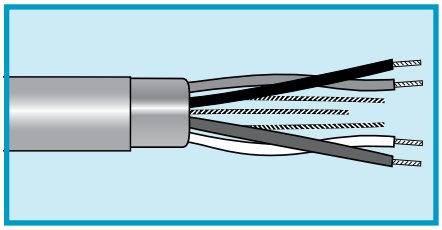
Conductor No.	1604	1606	1608
1	Black	White	Slate
2	Red	Black	Orange
3	Green	Red	Black
4	Yellow	Green	Red
5		Yellow	Green
6		Blue	Yellow
7			Blue
8			Brown

CA PROP 65 RoHS Compliant

Communication and Control

300 V Individually Foil Shielded Pairs or Overall Foil Shielded, Multipair, FPP, PVC





UL AWM 2490, 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 (page 529)

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 (0.23 mm²), 7/32 (7 x 0.20 mm)
- Slate PVC jacket (unless otherwise noted)

Availability

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

Individually Foil Shielded Pairs

24 AWG (0.23 mm²)

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	
6073C	3	0.374	9.50	0.048	1.22	2493
6076C	6	0.483	12.27	0.048	1.22	2493
6079C	9	0.597	15.16	0.065	1.65	2493
6079/11C	11	0.643	16.33	0.065	1.65	2493
6079/12C	12	0.663	16.84	0.065	1.65	2493
6079/15C	15	0.719	18.26	0.065	1.65	2493
6079/27C	27	0.962	24.43	0.087	2.21	2490

Characteristic impedance: 115 ohms
Mutual capacitance: 12 pF/ft (41 pF/m)

Overall Foil Shield

22 AWG (0.32 mm²)

Stranding: Solid
Insulation thickness: 0.023 (0.58)

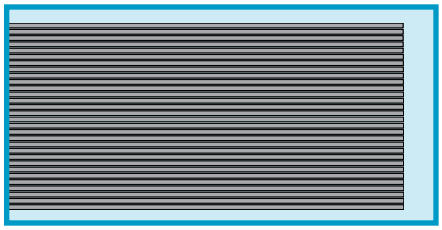
Part No.	Pairs	Nominal Diameter		Jacket Thickness		AWM
		Inch	mm	Inch	mm	
6072C*	2	0.42	9.50	0.035	0.89	2668

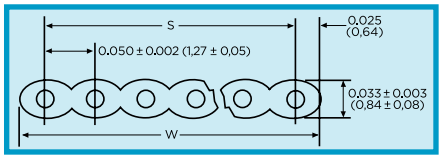
Characteristic impedance: 150 ohms
Mutual capacitance: 8.8 pF/ft (28.9 pF/m)

*Black jacket.

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)

May contain multiple lengths

28 AWG (0.09 mm²)

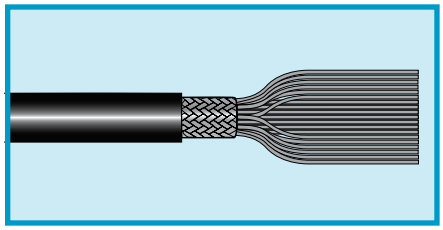
Stranding: 7/36 (7 x 0.13 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.		Conductors	Width (W)		Span (S)	
Slate (AWM 2651)	Color Coded (AWM 20932)		Inch	mm	Inch	mm
3580/9	**3583/9**	9	0.45	11.43	0.40	10.16
3580/10	**3583/10**	10	0.50	12.70	0.45	11.43
3580/14	**3583/14**	14	0.70	17.78	0.65	16.51
3580/15	**3583/15**	15	0.75	19.05	0.70	17.78
3580/16	**3583/16**	16	0.80	20.32	0.75	19.05
3580/20	**3583/20**	20	1.00	25.40	0.95	24.13
3580/24	**3583/24**	24	1.20	30.48	1.15	29.21
3580/25	**3583/25**	25	1.25	31.75	1.20	30.48
3580/26	**3583/26**	26	1.30	33.02	1.25	31.75
3580/34	**3583/34**	34	1.70	43.18	1.65	41.91
3580/37	**3583/37**	37	1.85	46.99	1.80	45.72
3580/40	**3583/40**	40	2.00	50.80	1.95	49.53
3580/50	**3583/50**	50	2.50	63.50	2.45	62.23
3580/60	**3583/60**	60	3.00	76.20	2.95	74.93
3580/64	**3583/64**	64	3.20	81.28	3.15	80.01

RoHS Compliant

Communication and Control

300 V Foil + Braid Shield, Round to Flat Flat Cable, 0.050 (1.27 mm) Centerline



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, 0.030 (0.08 mm) 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)
May contain multiple lengths

28 AWG (0.09 mm²)

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

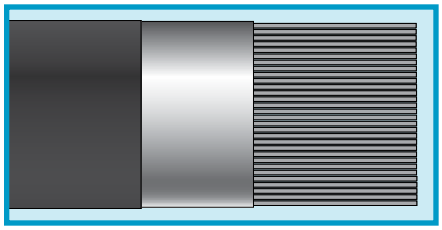
Part No.	Conductors	Nominal Diameter		Nominal Width	
		Inch	mm	Inch	mm
3585/25	25	0.34	8.64	1.20	30.48
3585/26	26	0.35	8.89	1.65	41.91
3585/40	40	0.40	10.20	1.95	49.53
3585/50	50	0.46	11.70	2.45	62.23

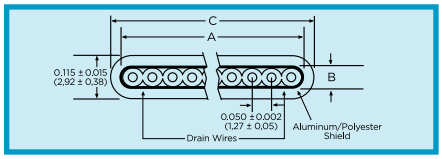
RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Communication and Control

150 V, Jacketed, Foil Shield, Flat Cable, 0.050 (1.27 mm) Centerline





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 mm²) 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

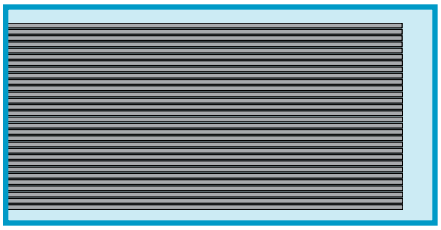
100 ft (30.5 m)
May contain multiple lengths

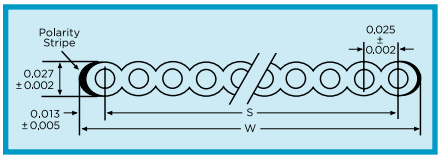
28 AWG (0.09 mm²)					
Stranding: 7/36 (7 x 0.13 mm) Insulation thickness: 0.010 (0.25 mm)					
Part No.	Conductors	Nom. Core Width (A)		Nom. Jacket Width (C)	
		Inch	mm	Inch	mm
3590/10	10	0.50	12.70	0.57	14.48
3590/14	14	0.70	17.78	0.77	19.56
3590/16	16	0.80	20.32	0.87	22.10
3590/26	26	1.30	33.02	1.37	34.80

UL LISTED RoHS Compliant

Communication and Control

150 V Unshielded, Flat Cable, 0.025 (0.64 mm) Centerline





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)
May contain multiple lengths

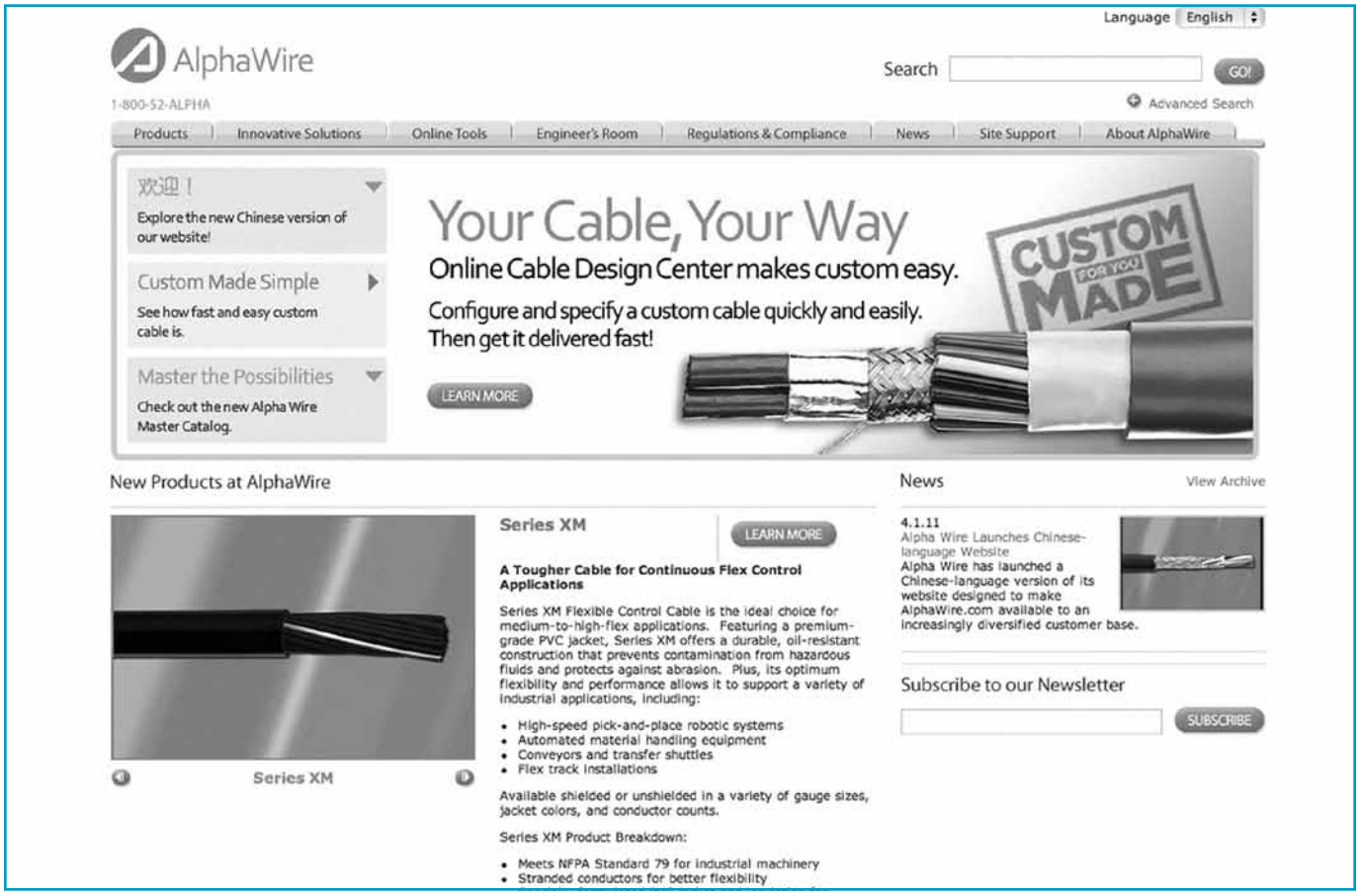
30 AWG (0.05 mm²)

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

RoHS Compliant

Make AlphaWire.com your destination for all your cabling needs!



Easy to use, full of information, and designed to make the selection of wire, cable, tubing, and wire management fast and easy—the Alpha Wire website is the only source you need.

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- **View complete product listing**
- **Download specs**
- **Read white papers written by our industry experts**
- **Request a sample (or two!)**
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- **Look around our "Engineer's Room"**
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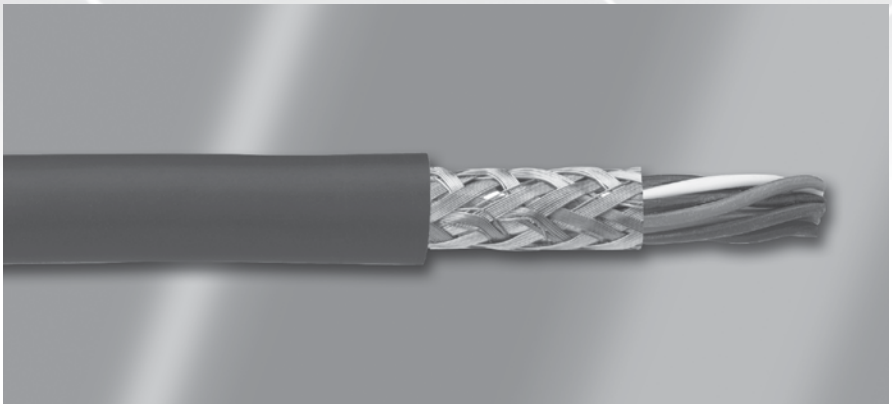
{ CONFESSION }

We've taken a shine to working down on the farm

(Our Solar Solution Set is a 24-hour per day workhorse)



For reliable, high-performance solar farms, Alpha Wire's Solar Solution Set helps engineers and installers create reliable, durable solar systems. Our solar cables and photovoltaic wire are designed for the harsh environments of solar energy applications—the hot and cold of climate extremes, ozone and UV radiation, moisture, oil, and direct burial. Our specially formulated PVC jackets provide years of reliable service by withstanding the potential environments without failing or degrading.

Regardless of your panel-to-grid needs, we have the product to satisfy it. With wire and cable in a range of gauges and conductor counts, Alpha has the solar solution. Alpha also has the accessories, from flexible conduit to heat-shrink tubing, to help you manage the system for faster installation, easier maintenance, and reliable operation.

Proven Performance, Superior Support

Alpha Wire's solar cables and photovoltaic wire are proven throughout the industry. Better still, we offer the fastest delivery so you can order what you need from our large in-stock inventory today and receive it tomorrow. To find the ideal solar cable and wire for your application, and to download our new Solar Power brochure, visit **www.alphawire.com**.

A Full Range for Power and Control

Solar Power Solution Set

- Photovoltaic wire
- Multiconductor solar cable
- Series M and Series P control cables
- Solid bus bar wires
- FIT® heat-shrink tubing
- Slit-loom and PVC flex tubing

Typical Applications

- Panel monitoring and control
- Panel to junction box
- Panel to collector
- Collector to inverter
- Grounding
- Motor supply

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