

# Medical Devices Wire and Cable Portfolio



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Bring order to wire harnesses and cable routing with a simple, reliable, easy to fabricate system	

# A Powerful Prescription for Healthier Performance



Selecting the right cable and wire solutions when designing the latest medical devices is paramount to ensuring that your products continue to earn a reputation for quality, reliability, and performance. Our wire, cable, tubing, and accessories allow you to create the critical interconnections for signals and power—with the performance you need and the reliability you require.







We understand the medical device market and have developed new products to address the issues important to medical device manufacturers:

- Traceability of manufacturing to meet FDA requirements
- ISO 9001 and ISO 13485 certified to meet the highest quality needs
- Validation-low minimums ideal for R&D and prototyping
- USP Class VI material and ISO 10993 Compliant materials available
- Sterilization-compatible materials available
- REACH, RoHS and WEEE compliant
- Phthalate free PVC options available

### Alpha Wire offers the best service in the industry

- Broad inventory in stock
- Small put-ups available
- Extensive distributor network
- Small custom prototyping
- Extensive custom cable design and manufacturing capabilities

### Our products ensure your devices are easy to use

- Ultra-flexibility
- Miniaturized, small diameter
- Tangle free
- Kink resistant
- Lighter

### Typical Medical Device Applications

#### Diagnostics

- CT scanners
- X-ray devices
- MRI scanners
- Ultrasound equipment

#### Motorized equipment

- Hospital beds
- Dental chairs
- Dental drills
- Wheelchairs

#### Patient monitoring

- Electroencephalographic (EEG) equipment
- Electrocardiographic (EKG) devices
- Pulse oximeters
- Endoscopes
- Laparoscopes

#### Surgical and life support

- Medical robots
- Centrifuges
- Anesthesia apparatus
- Respiratory equipment
- Ophthalmological instruments
- Dialysis apparatus
- Lasik instruments

### Reliability to ensure a longer product life cycle

- Long flex life
- Low noise
- High pull strength
- Low elongation/ high tensile strength
- Ultra-fine wire constructions



## Product Features

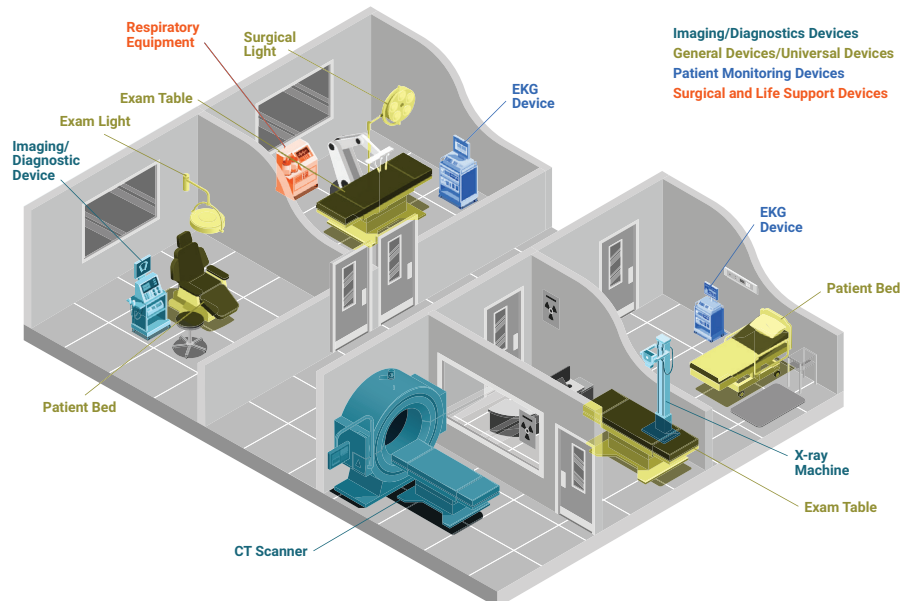
Product Family	Small Gauges Available	Size and Weight Savings	Long Flex Life	Chemical Resistance	Abrasion Resistance	EMI Shielding	RoHS and REACH Certified
EcoCable®	●	●			●	●	●
EcoFlex®	●	●	●		●	●	●
EcoCable® Mini	●	●			●	●	●
Xtra-Guard® 1	●					●	●
Xtra-Guard® 5				●	●	●	●
Xtra-Guard® Flex	●		●		●	●	●
Micro Coaxial Cable	●	●				●	●
EcoWire®	●	●			●		●
Silicone Wire				●	●		●
FIT® Tubing			●	●	●		●

## Medical Sterilization and Biocompatibility Guidance

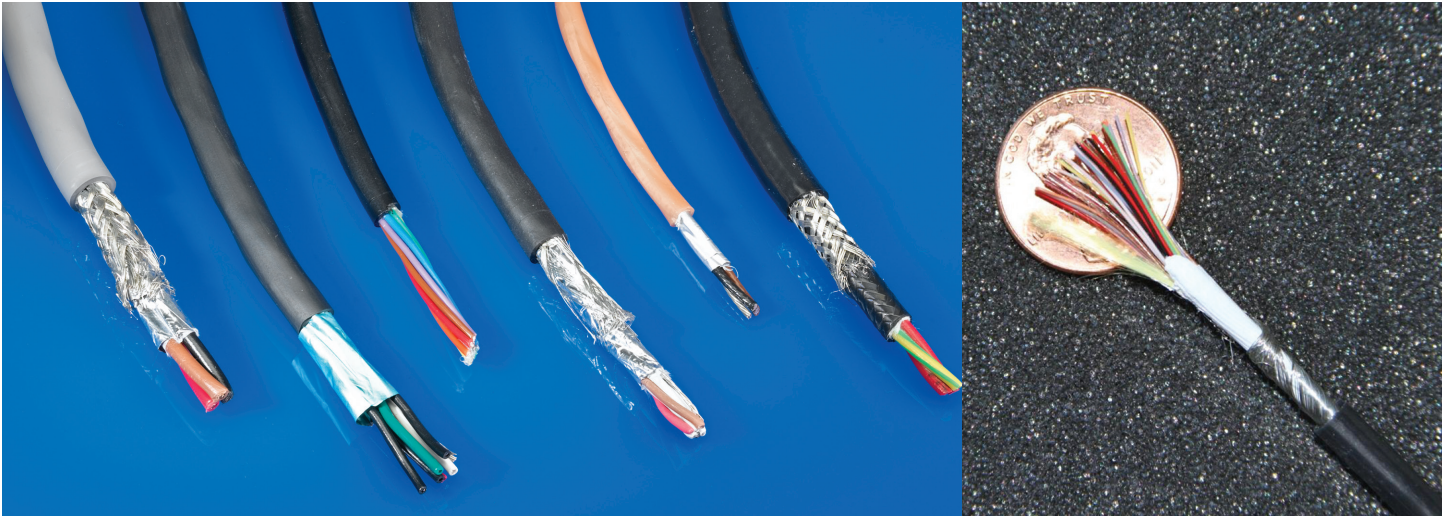
	Sterilization Suitability (Moderate Exposure Cycles)				
	Electron Beam	Gamma	Ethylene Oxide	STERRAD®	ISO 10993-5 Cytotoxicity
Xtra-Guard 1: High-Performance Premium-Grade PVC Cable	●	●	●	●	●
Xtra-Guard 2: Oil- and Abrasion-Resistant Cable	●	●	●	●	●
Xtra-Guard 3: Water-Resistant Direct Burial Cable	●	●	●	●	●
Xtra-Guard 4: Advanced Temperature and Chemical Performance			●	●	●
Xtra-Guard 5: Maximum Temperature and Chemical Performance			●	●	●
Xtra-Guard Flex 65000 Series: Light-to-Moderate Flex Applications	●	●	●	●	●
Xtra-Guard Flex 86000 Series: Up to 6 Million Flex Life Cycles	●	●	●	●	●
Xtra-Guard Industrial Ethernet: Cat 5e Industrial Ethernet Cable	●*	●*	●	●	●
EcoCable: 600 V Control Cable			●	●	●
EcoFlex: Rated for Over 1 Million Flex Cycles	●	●	●	●	●
EcoCable Mini: Smaller, Lighter 300 V Cable	●	●	●	●	●
Silicone Hook-Up Wire (39xxxx): Excellent Radiation, Corona, and Ozone Resistance			●	●	●
PVC Hook-Up Wire (30xx): Abrasion- and Flame-Resistant Wire	●	●	●	●	●

\*XGIE with PP insulation only

Contact Alpha Wire engineering for extended cycle and/or custom medical applications



# Alpha™ Custom Wire and Cable Capabilities



**Expertise in Miniaturization** custom cables can help you meet needs for microminiaturization and higher performance by providing smaller hybrid and composite cables with ultra-high flexibility, sterilization compatibility, biocompatibility, low noise, low elongation, and high tensile strength.

## Surgically Ready

We offer a range of medical-grade Class VI, ISO 10993 Compliant and FDA-approved materials for minimally invasive surgical instruments used in endoscopic, laparoscopic, orthopedic, cardiac, and similar applications.

## Sterilization

We offer cables compatible with a range of common sterilization techniques.

- Electron beam
- Ethylene oxide (EtO)
- Gamma
- STERRAD® hydrogen peroxide
- Autoclave

## The Alpha Custom Cable Advantage

- Low minimums for prototype development
- Fast turnarounds for R&D
- FDA traceability
- Years of experience allow us to tackle even the most complex custom requirements

## Custom Engineered to Your Specifications and Designs

- Multiconductor cables
- Multipair cables
- Microminiature cables
- Coaxial cables
- Micro coaxial cables
- Hybrid cables
- Composite cables
- Power cables
- Flat, ribbon, zip cables
- Retractable coil cords

## Conductor Materials

*Conductors: 46 AWG to 8 AWG (solid and stranded)*

### Copper

- Bare copper
- Tinned copper
- Silver-plated copper
- Nickel-plated copper
- Copper alloys

### Specialty

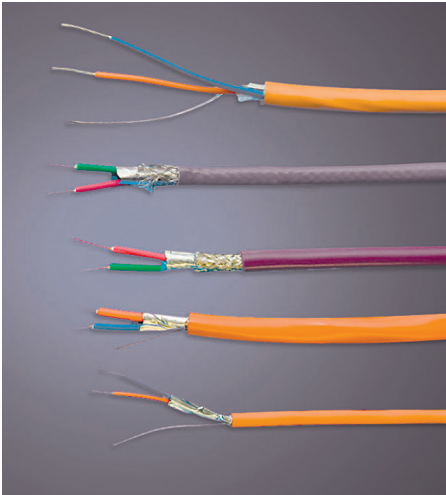
- Magnet wire
- Tinsel wire
- Thermocouple wire

### Fibers and Yarns

- Carbon fiber (3K)
- Aramid fiber
- Stainless steel yarn

### Precious Metals and Alloys

- Silver, platinum, gold
- Other exotic materials



### Insulating and Jacketing Compounds

#### Thermoplastics

- PVC, SR-PVC
- PP
- PE
- PUR
- Nylon
- TPE
- TPV
- Polyester
- mPPE

#### Thermosets

- XLPE

#### Fluoropolymers

- FEP
- PFA
- ETFE
- PVDF

#### Silicones — Thermosets

- Silicone
- Flame-retardant silicone
- High-voltage silicone

### Shielding

**Application:** Overall and individual conductors/pairs

**Types:** Foil, braid, spiral, Supra-Shield® foil + braid

### Flexing

**Flex types:** Rolling, bending, torsional, continuous

**Flex cycles:** Up to 20 million

### Ratings

**Temperature:** -80° to +450° C

**Electrical:** 30, 150, 300, 600, 1000V

### Approvals

UL, CSA, CE, IEC, ISO  
USP Class VI, ISO 10933  
RoHS, REACH

### Mechanical

Resistance to abrasion, oils, sunlight, chemicals, sterilization, and UV.

### Environmental

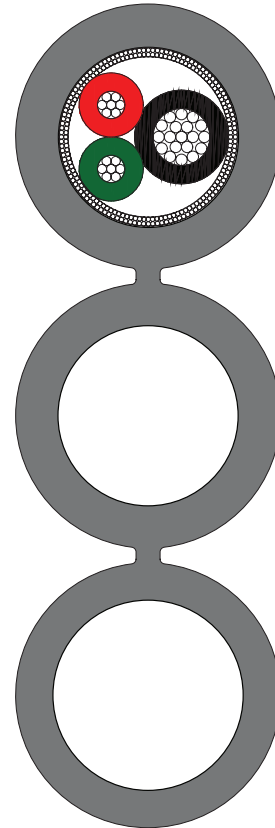
Low outgassing/minimal environmental footprint

### Packaging

Reeled in small or large put ups, custom printing, custom jacket colors, low minimum order

### Lumens

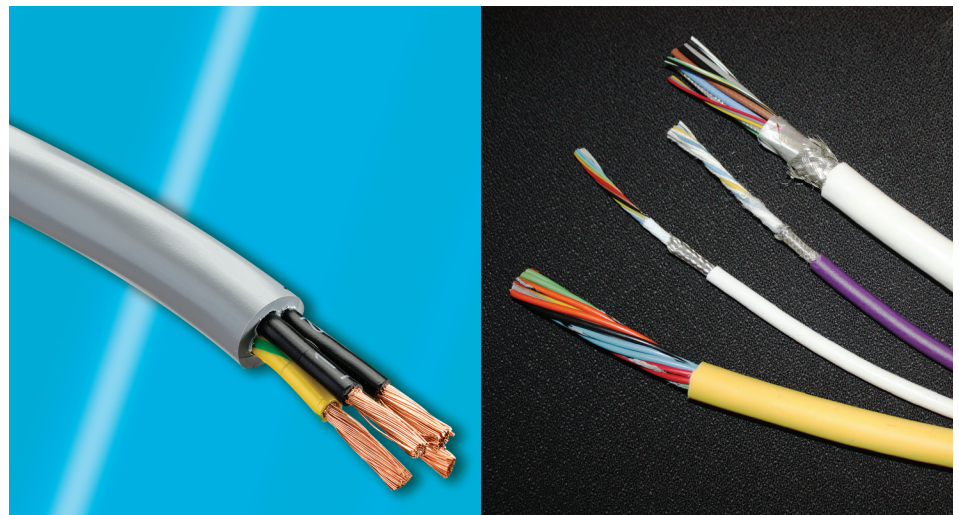
We can build cables with integrated lumens



*Cable with Integrated Lumens*

**Get started today by visiting our website to request a quote on your custom cable.**

[www.alphawire.com/customquote](http://www.alphawire.com/customquote)





A 600 V control cable that's up to 47% smaller and 65% lighter than PVC. More than 150 standard EcoCable constructions are available to meet your performance needs.

- Up to 47% smaller and 65% lighter than PVC
- Exceptional EMI protection with Supra-Shield® foil + braid
- 87% lower outgassing
- 28 – 14 AWG
- Contains no halogens, phthalates, or heavy metals

**Conductors:** Stranded or solid tinned copper

**Insulation:** mPPE

**Jacket:** mPPE

**Shielding:** Unshielded, foil shield, Supra-Shield foil + braid

**Voltage:** 600 V

**Bend Radius:** 6x

**Temperature Range:** -50°C to +105°C

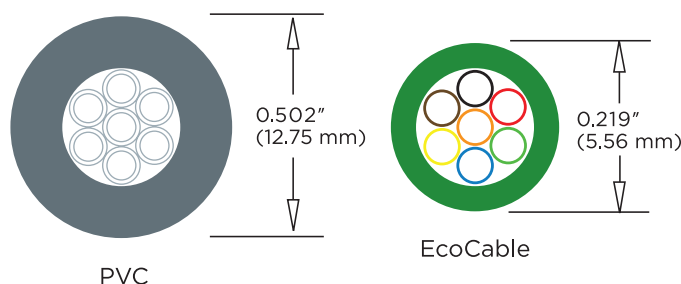
**Availability:** 100', 1000' (30.5 m, 305 m) or bulk lengths



## Approvals

- UL AWM 21915 (600 V, 105°C)
- CE
- CSA AWM I/II A/B FT1
- IEC 60332-2 FT2
- RoHS
- REACH
- WEEE
- Suitable for use in NFPA 79 applications
- ISO 10993-5

## 22 AWG (0.35 mm<sup>2</sup>) 7-Conductor Unshielded Cable



### Unshielded

#### 28 AWG (0.089 mm<sup>2</sup>)

Stranding: 7/36 (0.127 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77052</b>	2	0.138	3.51
<b>77053</b>	3	0.144	3.66
<b>77054</b>	4	0.153	3.89
<b>77055</b>	6	0.174	4.42

#### 24 AWG (0.28 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77001</b>	2	0.156	3.96
<b>77002</b>	4	0.175	4.44
<b>77003</b>	5	0.188	4.78
<b>77004</b>	7	0.201	5.11
<b>77005</b>	9	0.229	5.82
<b>77006</b>	19	0.288	7.32

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

Stranding: 7/34 (0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77047</b>	2	0.146	3.71
<b>77048</b>	3	0.152	3.86
<b>77049</b>	4	0.162	4.11
<b>77050</b>	6	0.186	4.72
<b>77051</b>	8	0.198	5.03

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

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77007</b>	2	0.168	4.27
<b>77008</b>	4	0.189	4.80
<b>77009</b>	5	0.204	5.18
<b>77010</b>	7	0.219	5.56
<b>77011</b>	9	0.251	6.38
<b>77012</b>	19	0.318	8.08

## Unshielded (continued)

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

Stranding: 7/28 (7 x 0.32 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77056	2	0.184	4.67
77013	3	0.193	4.90
77014	4	0.209	5.31
77015	9	0.280	7.11
77016	12	0.309	7.85
77017	15	0.336	8.53
77018	19	0.358	9.09
77019	25	0.416	10.57

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

Stranding: 16/30 (16 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77020	2	0.202	5.13
77021	3	0.213	5.41
77022	4	0.230	5.84
77023	5	0.250	6.35
77024	7	0.271	6.88
77025	9	0.313	7.95
77026	12	0.346	8.79
77027	15	0.377	9.58
77028	19	0.404	10.26
77029	25	0.470	11.94

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

Stranding: 19/0.0117 (19 x 0.297 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77030	4	0.259	6.58
77031	5	0.283	7.19
77032	7	0.307	7.80
77033	9	0.357	9.07
77034	12	0.396	10.06
77035	15	0.433	11.00
77036	19	0.464	11.79
77037	25	0.542	13.77

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

Stranding: 41/30 (41 x 0.25 mm)  
 Insulation thickness: 0.011 (0.28 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77038	2	0.260	6.60
77039	3	0.275	6.98
77040	4	0.301	7.65
77041	5	0.329	8.36
77042	7	0.358	9.09
77043	9	0.419	10.64
77044	12	0.467	11.86
77045	15	0.511	12.98
77046	25	0.644	16.36

## Foil Shield

### 28 AWG (0.089 mm<sup>2</sup>)

Stranding: 7/36 (0.13 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77152	2	0.142	3.61
77153	3	0.148	3.76
77154	4	0.157	3.99
77155	6	0.178	4.52

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

Stranding: 7/34 (0.16 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77147	2	0.150	3.81
77148	3	0.156	3.96
77149	4	0.166	4.22
77150	6	0.190	4.83
77151	8	0.202	5.13

## Foil Shield (continued)

### 24 AWG (0.28 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77102	2	0.160	4.06
77103	3	0.167	4.24
77104	4	0.179	4.55
77105	5	0.192	4.88
77106	7	0.205	5.21
77107	9	0.233	5.92
77101	12	0.255	6.48

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

Stranding: 7/30 (7 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77109	2	0.172	4.37
77110	3	0.180	4.57
77111	4	0.193	4.90
77112	5	0.208	5.28
77113	7	0.223	5.66
77114	9	0.255	6.48
77108	12	0.280	7.11

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

Stranding: 7/28 (7 x 0.32 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77116	3	0.197	5.00
77117	4	0.213	5.41
77118	5	0.230	5.84
77119	7	0.247	6.27
77120	9	0.284	7.21
77115	12	0.313	7.95

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

Stranding: 16/30 (16 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77124	2	0.206	5.23
77126	3	0.217	5.51
77127	4	0.234	5.94
77128	5	0.254	6.45
77129	7	0.275	6.98
77130	9	0.317	8.05
77121	12	0.350	8.89
77122	15	0.381	9.68
77123	19	0.408	10.36
77125	25	0.474	12.04

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

Stranding: 19/0.0117 (19 x 0.297 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77133	2	0.230	5.84
77134	3	0.242	6.15
77135	4	0.263	6.68
77136	5	0.287	7.29
77137	7	0.311	7.90
77138	9	0.361	9.17
77131	12	0.400	10.16
77132	15	0.437	11.10

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

Stranding: 41/30 (41 x 0.25 mm)  
 Insulation thickness: 0.011 (0.28 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
77141	2	0.264	6.71
77142	3	0.279	7.09
77143	4	0.305	7.75
77144	5	0.333	8.46
77145	7	0.362	9.19
77146	9	0.423	10.74
77139	12	0.471	11.96
77140	15	0.515	13.08



## Supra-Shield® Foil + Braid

### 28 AWG (0.089 mm<sup>2</sup>)

Stranding: 7/36 (0.13 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77252</b>	2	0.166	4.22
<b>77253</b>	3	0.172	4.37
<b>77254</b>	4	0.181	4.60
<b>77255</b>	6	0.202	5.13

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

Stranding: 7/34 (0.16 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77247</b>	2	0.174	4.42
<b>77248</b>	3	0.180	4.57
<b>77249</b>	4	0.190	4.83
<b>77250</b>	6	0.214	5.44
<b>77251</b>	8	0.226	5.74

### 24 AWG (0.28 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77201</b>	4	0.203	5.16
<b>77202</b>	7	0.229	5.82
<b>77203</b>	12	0.279	7.09

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

Stranding: 7/30 (7 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77204</b>	4	0.217	5.51
<b>77205</b>	7	0.247	6.27
<b>77206</b>	12	0.304	7.72

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

Stranding: 7/28 (7 x 0.32 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77207</b>	4	0.237	6.02
<b>77208</b>	5	0.254	6.45
<b>77209</b>	7	0.271	6.88
<b>77210</b>	9	0.308	7.82
<b>77211</b>	12	0.337	8.56
<b>77212</b>	19	0.386	9.80

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

Stranding: 16/30 (16 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77213</b>	2	0.230	5.84
<b>77214</b>	3	0.241	6.12
<b>77215</b>	4	0.258	6.55
<b>77216</b>	5	0.278	7.06
<b>77217</b>	7	0.299	7.59
<b>77218</b>	9	0.341	8.66
<b>77219</b>	12	0.374	9.50
<b>77220</b>	15	0.405	10.29
<b>77221</b>	19	0.432	10.97

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

Stranding: 19/0.0117 (19 x 0.297 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77222</b>	2	0.254	6.45
<b>77223</b>	3	0.266	6.76
<b>77224</b>	4	0.287	7.29
<b>77225</b>	5	0.311	7.90
<b>77226</b>	7	0.335	8.51
<b>77227</b>	9	0.385	9.78
<b>77228</b>	12	0.424	10.77
<b>77229</b>	15	0.461	11.71
<b>77230</b>	19	0.492	12.50

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

Stranding: 41/30 (41 x 0.25 mm)  
 Insulation thickness: 0.011 (0.28 mm)  
 Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>77231</b>	2	0.288	7.32
<b>77232</b>	3	0.303	7.70
<b>77233</b>	4	0.329	8.36
<b>77234</b>	7	0.386	9.80
<b>77235</b>	9	0.447	11.35
<b>77236</b>	12	0.495	12.57
<b>77237</b>	15	0.539	13.69
<b>77238</b>	25	0.678	17.22

# EcoFlex® Cable

Rated for over 1 million flex life cycles, EcoFlex is a fully compact cable that's up to 32% smaller and 55% lighter than PVC.

- Up to 32% smaller and 55% lighter than PVC
- Long flex life for machines with constant flexibility
- 91% lower outgassing
- 28 – 10 AWG
- Contains no halogens, PVC, phthalates, or heavy metals
- Exceptional EMI performance with Supra-Shield® foil + braid

**Conductors:** Stranded tinned copper

**Insulation:** mPPE

**Jacket:** mPPE

**Shielding:** Unshielded, foil shield, Supra-Shield foil + braid

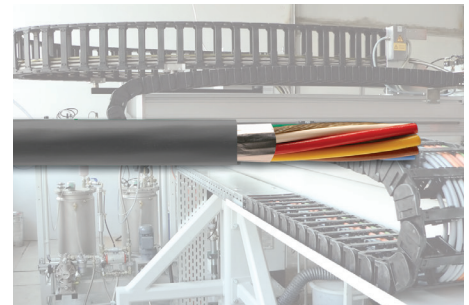
**Voltage:** 600 V

**Bend Radius:**

Unshielded: 5x Static, 5x Flexing  
Shielded: 6x Static, 8x Flexing

**Temperature Range:** -40°C to +105°C

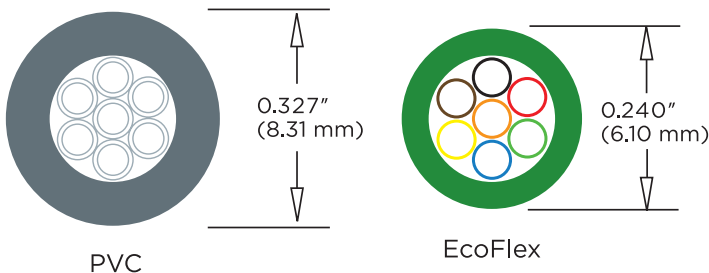
**Availability:** 100', 1000' (30.5 m, 305 m)  
Bulk, cut to length



## Approvals

- UL AWM 21819 (600 V, 105°C)
- UL AWM 21492 (300 V, 80°C)
- CE
- UL VW-1
- CSA AWM I/II A/B FT1
- IEC 60332-2 Flame Behavior
- RoHS
- REACH
- WEEE
- Suitable for use in NFPA 79 applications
- ISO 10993-5

## 20 AWG (0.51 mm<sup>2</sup>) 7-Conductor Unshielded Cable



## Unshielded

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

Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79061	2	0.142	3.61
79062	3	0.147	3.73

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

Stranding: 7/34 (7 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79056	2	0.150	3.81
79057	3	0.156	3.96
79058	4	0.166	4.22
79059	6	0.189	4.80
79060	8	0.216	5.49

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

Stranding: 19/36 (19 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79050	2	0.162	4.11
79051	3	0.169	4.29
79052	4	0.181	4.60
79053	6	0.207	5.26
79054	8	0.238	6.05
79055	10	0.257	6.53

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

Stranding: 19/34 (19 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79044	2	0.176	4.47
79045	3	0.184	4.67
79046	4	0.198	5.03
79047	6	0.228	5.79
79048	8	0.264	6.71
79049	10	0.286	7.26

# EcoFlex Cable

## Unshielded (continued)

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

Stranding: 10/30 (10 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79001	2	0.184	4.67
79002	3	0.193	4.90
79003	4	0.207	5.26
79004	5	0.224	5.69
79005	7	0.240	6.10
79006	9	0.296	7.52
79007	12	0.303	7.70
79008	18	0.349	8.86

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

Stranding: 16/30 (16 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79010	2	0.208	5.28
79011	3	0.219	5.56
79012	4	0.236	5.99
79013	5	0.256	6.50
79014	7	0.277	7.04
79015	9	0.344	8.74
79016	12	0.353	8.97
79017	18	0.411	10.44

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

Stranding: 26/30 (26 x 0.25 mm)  
 Insulation thickness: 0.011 (0.28 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79019	2	0.236	5.99
79020	3	0.249	6.32
79021	4	0.270	6.86
79022	5	0.294	7.47
79023	7	0.319	8.10
79024	9	0.400	10.16
79025	12	0.411	10.44
79026	18	0.481	12.22

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

Stranding: 41/30 (41 x 0.25 mm)  
 Insulation thickness: 0.011 (0.28 mm)  
 Jacket thickness: 0.035 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79028	2	0.266	6.76
79029	3	0.281	7.14
79030	4	0.307	7.80
79031	5	0.335	8.51
79032	7	0.364	9.25
79033	9	0.459	11.66
79034	12	0.473	12.01
79035	18	0.556	14.12

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

Stranding: 65/30 (65 x 0.25 mm)  
 Insulation thickness: 0.012 (0.30 mm)  
 Jacket thickness: 0.035 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79037	3	0.326	8.28
79038	4	0.358	9.09
79039	5	0.392	9.96
79040	7	0.428	10.87

### 10 AWG (5.32 mm<sup>2</sup>)

Stranding: 105/30 (105 x 0.25 mm)  
 Insulation thickness: 0.012 (0.30 mm)  
 Jacket thickness: 0.035 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79041	3	0.380	9.65
79042	4	0.423	10.74
79043	5	0.465	11.81



# EcoFlex Cable

## Braid Shield

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

Stranding: 10/30 (10 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79101	2	0.210	5.33
79102	3	0.219	5.56
79103	4	0.233	5.92
79104	5	0.250	6.35
79105	7	0.266	6.76
79106	9	0.321	8.15
79107	12	0.329	8.36
79108	18	0.376	9.55

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

Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79109	2	0.236	5.99
79110	3	0.247	6.27
79111	4	0.264	6.71
79112	5	0.284	7.21
79113	7	0.305	7.75
79114	9	0.372	9.45
79115	12	0.381	9.68

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

Stranding: 26/30 (26 x 0.25 mm)  
Insulation thickness: 0.011 (0.28 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79116	2	0.262	6.65
79117	3	0.275	6.98
79118	4	0.296	7.52
79119	5	0.320	8.13
79120	7	0.345	8.76

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

Stranding: 41/30 (41 x 0.25 mm)  
Insulation thickness: 0.011 (0.28 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79121	2	0.294	7.47
79122	3	0.309	7.85
79123	4	0.335	8.51
79124	5	0.363	9.22
79125	7	0.392	9.96

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

Stranding: 65/30 (65 x 0.25 mm)  
Insulation thickness: 0.012 (0.30 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79126	3	0.354	8.99
79127	4	0.386	9.80

## Supra-Shield® Foil + Braid

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

Stranding: 7/36 (7 x 0.13 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79261	2	0.174	4.42
79262	3	0.179	4.55

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

Stranding: 7/34 (7 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79256	2	0.182	4.62
79257	3	0.188	4.78
79258	4	0.198	5.03
79259	6	0.221	5.61
79260	8	0.248	6.30

# EcoFlex Cable

## Supra-Shield® Foil + Braid (continued)

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

Stranding: 19/36 (19 x 0.13 mm)  
 Insulation thickness: 0.011 (0.25 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79250	2	0.194	4.93
79251	3	0.201	5.11
79252	4	0.213	5.41
79253	6	0.239	6.07
79254	8	0.270	6.86
79255	10	0.289	7.34

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

Stranding: 19/34 (19 x 0.16 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79244	2	0.208	5.28
79245	3	0.216	5.49
79246	4	0.230	5.84
79247	6	0.260	6.60
79248	8	0.296	7.52
79249	10	0.318	8.08

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

Stranding: 10/30 (10 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79201	2	0.216	5.49
79202	3	0.225	5.72
79203	4	0.239	6.07
79204	5	0.256	6.50
79205	7	0.272	6.91
79206	9	0.328	8.33
79207	12	0.335	8.51
79208	18	0.382	9.70

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

Stranding: 16/30 (16 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79210	2	0.242	6.15
79211	3	0.253	6.43
79212	4	0.270	6.86
79213	5	0.290	7.37
79214	7	0.311	7.90
79215	9	0.378	9.60
79216	12	0.387	9.83
79217	18	0.445	11.30

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

Stranding: 26/30 (26 x 0.25 mm)  
 Insulation thickness: 0.011 (0.28 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79218	2	0.268	6.81
79219	3	0.281	7.14
79220	4	0.302	7.67
79221	5	0.326	8.28
79222	7	0.351	8.92
79223	9	0.432	10.97
79224	12	0.443	11.25

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

Stranding: 41/30 (41 x 0.25 mm)  
 Insulation thickness: 0.011 (0.28 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79225	2	0.300	7.62
79226	3	0.315	8.00
79227	4	0.341	8.66
79228	5	0.369	9.37
79229	7	0.398	10.11
79230	9	0.493	12.52
79231	12	0.507	12.88

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

Stranding: 65/30 (65 x 0.25 mm)  
 Insulation thickness: 0.012 (0.30 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79232	3	0.360	9.14
79233	4	0.391	9.93
79234	5	0.426	10.82
79235	7	0.462	11.73

### 10 AWG (5.32 mm<sup>2</sup>)

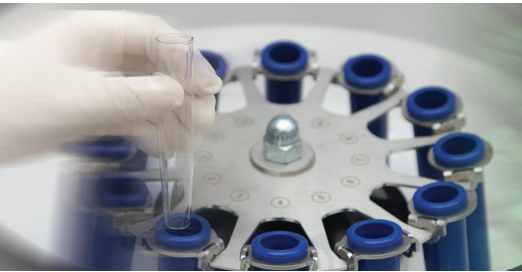
Stranding: 105/30 (105 x 0.25 mm)  
 Insulation thickness: 0.012 (0.30 mm)  
 Jacket thickness: 0.035 (0.89 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
79236	3	0.419	10.64
79237	4	0.457	11.61

# EcoCable® Mini

**Small Just Got Mini.** EcoCable Mini cable was developed in response to our customers' need for a smaller, lighter 300 V cable.

- Up to 32% smaller than PVC
- Up to 44% lighter than PVC
- 92% lower outgassing than PVC
- Contains no halogens, phthalates, or heavy metals



**Conductors:** Tinned copper

**Insulation:** mPPE

**Jacket:** mPPE

**Shielding:** Foil or foil + braid

**Voltage:** 300 V

**Temperature Range:** -40°C to +80°C

### Configurations

- Multiconductor or multipair
- Unshielded
- Overall foil shielded
- Individually shielded pairs + overall foil shield
- Supra-Shield® Foil + Braid
- Custom and composite configurations available

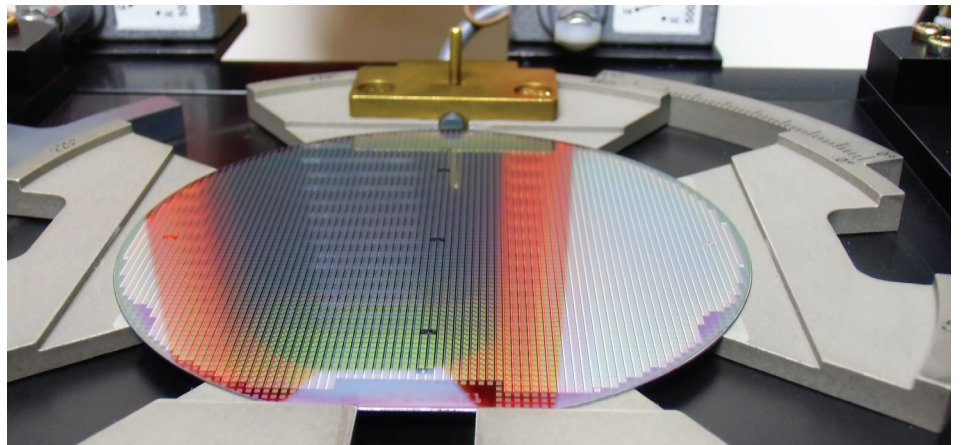
**Availability:** 100 ft (30.5 m)  
1000 ft (305 m)  
Bulk



### Approvals

- UL AWM 21460
- UL VW-1
- CSA I A/B FT1
- CE
- RoHS
- REACH
- WEEE
- Suitable for use in NFPA 79 applications
- ISO 10993-5

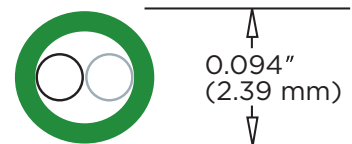
Order free samples at  
[www.alphawire.com/en/Products/Wire/EcoGen](http://www.alphawire.com/en/Products/Wire/EcoGen)  
or call 1-800-52-ALPHA



## 28 AWG (0.0925 mm<sup>2</sup>) 2-Conductor Unshielded Cable



PVC



EcoCable Mini

# EcoCable Mini

## Unshielded Multiconductor

### 28 AWG (0.0925 mm<sup>2</sup>)

Stranding: 19/40 (19 x 0.079 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78002	2	0.094	2.39
78003	3	0.099	2.51
78004	4	0.107	2.72
78006	6	0.124	3.15
78008	8	0.134	3.40

### 26 AWG (0.154 mm<sup>2</sup>)

Stranding: 19/38 (19 x 0.102 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78012	2	0.102	2.59
78013	3	0.107	2.72
78014	4	0.116	2.95
78016	6	0.136	3.45
78018	8	0.147	3.73
78020	10	0.170	4.32
78021	15	0.190	4.83

### 24 AWG (0.241 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.127 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78022	2	0.112	2.84
78023	3	0.118	3.00
78024	4	0.128	3.25
78026	6	0.152	3.86
78028	8	0.164	4.17
78030	10	0.190	4.83
78031	15	0.213	5.41
78403	20	0.238	6.05
78433	25	0.268	6.81

Stranding: 19/34 (19 x 0.16 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78032	2	0.126	3.20
78033	3	0.133	3.38
78034	4	0.145	3.68
78036	6	0.173	4.39
78038	8	0.187	4.75
78040	10	0.218	5.54
78041	15	0.245	6.22
78404	20	0.275	6.98
78434	25	0.310	7.87

### 22 AWG (0.382 mm<sup>2</sup>)

### 20 AWG (0.616 mm<sup>2</sup>)

Stranding: 19/32 (19 x 0.203 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78042	2	0.142	3.61
78043	3	0.150	3.81
78044	4	0.165	4.19
78046	6	0.197	5.00
78048	8	0.214	5.44
78050	10	0.250	6.35
78055	15	0.282	7.16
78405	20	0.317	8.05
78435	25	0.358	9.09

# EcoCable Mini

## Unshielded Pairs

### 28 AWG (0.0925 mm<sup>2</sup>)

Stranding: 19/40 (19 x 0.079 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78052	2	0.132	3.35
78053	3	0.140	3.56
78054	4	0.153	3.89
78005	5	0.167	4.24
78056	6	0.182	4.62
78058	8	0.198	5.03
78009	9	0.213	5.41

### 26 AWG (0.154 mm<sup>2</sup>)

Stranding: 19/38 (19 x 0.102 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78062	2	0.146	3.71
78063	3	0.154	3.91
78064	4	0.169	4.29
78015	5	0.185	4.70
78066	6	0.202	5.13
78068	8	0.219	5.56
78019	9	0.237	6.02

### 24 AWG (0.241 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.127 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78072	2	0.162	4.11
78073	3	0.172	4.37
78074	4	0.189	4.80
78025	5	0.207	5.26
78076	6	0.227	5.77
78078	8	0.247	6.27
78029	9	0.267	6.78
78408	20	0.369	9.37
78438	25	0.418	10.62

### 22 AWG (0.382 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78082	2	0.185	4.70
78083	3	0.197	5.00
78084	4	0.217	5.51
78035	5	0.239	6.07
78086	6	0.261	6.63
78088	8	0.285	7.24
78039	9	0.309	7.85
78409	20	0.429	10.90
78439	25	0.487	12.37

### 20 AWG (0.616 mm<sup>2</sup>)

Stranding: 19/32 (19 x 0.203 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78092	2	0.211	5.36
78093	3	0.225	5.72
78094	4	0.248	6.30
78045	5	0.274	6.96
78096	6	0.301	7.65
78098	8	0.328	8.33
78049	9	0.356	9.04
78410	20	0.498	12.65
78440	25	0.565	14.35

## More Choice!

EcoCable Mini cable is available with up to 25 conductors and a variety of shielding options. Custom and composite configurations are also available. Consult Alpha Wire for the latest product specifications.

## Sample the Performance

Samples of EcoCable Mini cable are available today! Request yours at [www.alphawire.com/en/Products/Wire/EcoGen](http://www.alphawire.com/en/Products/Wire/EcoGen) or call 1-800-52 ALPHA



# EcoCable Mini

## Foil Shielded Multiconductor

### 28 AWG (0.0925 mm<sup>2</sup>)

Stranding: 19/40 (19 x 0.079 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>78102</b>	2	0.098	2.49
<b>78103</b>	3	0.103	2.62
<b>78104</b>	4	0.111	2.82
<b>78106</b>	6	0.128	3.25
<b>78108</b>	8	0.138	3.51

### 26 AWG (0.154 mm<sup>2</sup>)

Stranding: 19/38 (19 x 0.102 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>78112</b>	2	0.106	2.69
<b>78113</b>	3	0.111	2.82
<b>78114</b>	4	0.12	3.05
<b>78116</b>	6	0.14	3.56
<b>78118</b>	8	0.151	3.84
<b>78120</b>	10	0.174	4.42
<b>78121</b>	15	0.194	4.93

### 24 AWG (0.241 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.127 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>78122</b>	2	0.116	2.95
<b>78123</b>	3	0.122	3.10
<b>78124</b>	4	0.132	3.35
<b>78126</b>	6	0.156	3.96
<b>78128</b>	8	0.168	4.27
<b>78130</b>	10	0.194	4.93
<b>78131</b>	15	0.217	5.51
<b>78413</b>	20	0.242	6.15
<b>78443</b>	25	0.272	6.91

### 22 AWG (0.382 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>78132</b>	2	0.130	3.30
<b>78133</b>	3	0.137	3.48
<b>78134</b>	4	0.149	3.78
<b>78136</b>	6	0.177	4.50
<b>78138</b>	8	0.191	4.85
<b>78140</b>	10	0.222	5.64
<b>78141</b>	15	0.249	6.32
<b>78414</b>	20	0.279	7.09
<b>78444</b>	25	0.314	7.98

### 20 AWG (0.616 mm<sup>2</sup>)

Stranding: 19/32 (19 x 0.203 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
<b>78142</b>	2	0.146	3.71
<b>78143</b>	3	0.154	3.91
<b>78144</b>	4	0.169	4.29
<b>78146</b>	6	0.201	5.11
<b>78148</b>	8	0.218	5.54
<b>78150</b>	10	0.254	6.45
<b>78155</b>	15	0.286	7.26
<b>78415</b>	20	0.321	8.15
<b>78445</b>	25	0.362	9.19

# EcoCable Mini

## Foil Shielded Pairs

### 28 AWG (0.0925 mm<sup>2</sup>)

Stranding: 19/40 (19 x 0.079 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78152	2	0.136	3.45
78153	3	0.144	3.66
78154	4	0.157	3.99
78105	5	0.171	4.34
78156	6	0.186	4.72
78158	8	0.202	5.13
78109	9	0.217	5.51

### 26 AWG (0.154 mm<sup>2</sup>)

Stranding: 19/38 (19 x 0.102 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78162	2	0.150	3.81
78163	3	0.158	4.01
78164	4	0.173	4.39
78115	5	0.189	4.80
78166	6	0.206	5.23
78168	8	0.223	5.66
78119	9	0.241	6.12

### 24 AWG (0.241 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.127 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78172	2	0.166	4.22
78173	3	0.176	4.47
78174	4	0.193	4.90
78125	5	0.211	5.36
78176	6	0.231	5.87
78178	8	0.251	6.38
78129	9	0.271	6.88
78418	20	0.421	10.69
78448	25	0.478	12.14

### 22 AWG (0.382 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78182	2	0.189	4.80
78183	3	0.201	5.11
78184	4	0.221	5.61
78135	5	0.243	6.17
78186	6	0.265	6.73
78188	8	0.289	7.34
78139	9	0.313	7.95
78419	20	0.486	12.34
78449	25	0.551	14.00

### 20 AWG (0.616 mm<sup>2</sup>)

Stranding: 19/32 (19 x 0.203 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78192	2	0.215	5.46
78193	3	0.229	5.82
78194	4	0.252	6.40
78145	5	0.278	7.06
78196	6	0.305	7.75
78198	8	0.332	8.43
78149	9	0.360	9.14
78420	20	0.559	14.20
78450	25	0.635	16.13

## More Choice!

EcoCable Mini cable is available with up to 25 conductors and a variety of shielding options. Custom and composite configurations are also available. Consult Alpha Wire for the latest product specifications.

## Sample the Performance

Samples of EcoCable Mini cable are available today! Request yours at [www.alphawire.com/en/Products/Wire/EcoGen](http://www.alphawire.com/en/Products/Wire/EcoGen) or call 1-800-52 ALPHA

# EcoCable Mini

## Individually Foil Shielded Pairs + Overall Foil Shield

### 28 AWG (0.0925 mm<sup>2</sup>)

Stranding: 19/40 (19 x 0.079 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78202	2	0.153	3.89
78213	3	0.162	4.11
78204	4	0.177	4.50
78205	5	0.194	4.93
78206	6	0.211	5.36
78208	8	0.229	5.82
78209	9	0.247	6.27

### 26 AWG (0.154 mm<sup>2</sup>)

Stranding: 19/38 (19 x 0.102 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78212	2	0.167	4.24
78223	3	0.177	4.50
78214	4	0.194	4.93
78215	5	0.213	5.41
78216	6	0.232	5.89
78218	8	0.252	6.40
78219	9	0.273	6.93

### 24 AWG (0.241 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.127 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78222	2	0.185	4.70
78233	3	0.196	4.98
78224	4	0.215	5.46
78225	5	0.237	6.02
78226	6	0.259	6.58
78228	8	0.282	7.16
78229	9	0.305	7.75

### 22 AWG (0.382 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78232	2	0.209	5.31
78243	3	0.222	5.64
78234	4	0.245	6.22
78235	5	0.270	6.86
78236	6	0.296	7.52
78238	8	0.322	8.18
78239	9	0.349	8.86

### 20 AWG (0.616 mm<sup>2</sup>)

Stranding: 19/32 (19 x 0.203 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78242	2	0.237	6.02
78253	3	0.253	6.43
78244	4	0.279	7.09
78245	5	0.308	7.82
78246	6	0.338	8.59
78248	8	0.369	9.37
78249	9	0.400	10.16

# EcoCable Mini

## Supra-Shield® Foil + Braid Multiconductor

### 28 AWG (0.0925 mm<sup>2</sup>)

Stranding: 19/40 (19 x 0.079 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78302	2	0.125	3.18
78303	3	0.130	3.30
78304	4	0.138	3.51
78306	6	0.155	3.94
78308	8	0.165	4.19

### 26 AWG (0.154 mm<sup>2</sup>)

Stranding: 19/38 (19 x 0.102 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78312	2	0.133	3.38
78313	3	0.138	3.51
78314	4	0.147	3.73
78316	6	0.167	4.24
78318	8	0.178	4.52
78320	10	0.201	5.11
78321	15	0.221	5.61

### 24 AWG (0.241 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.127 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78322	2	0.143	3.63
78323	3	0.149	3.78
78324	4	0.159	4.04
78326	6	0.183	4.65
78328	8	0.195	4.95
78330	10	0.221	5.61
78331	15	0.244	6.20
78423	20	0.269	6.83
78453	25	0.299	7.59

### 22 AWG (0.382 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78332	2	0.157	3.99
78333	3	0.164	4.17
78334	4	0.176	4.47
78336	6	0.204	5.18
78338	8	0.218	5.54
78340	10	0.249	6.32
78341	15	0.276	7.01
78424	20	0.306	7.77
78454	25	0.341	8.66

### 20 AWG (0.616 mm<sup>2</sup>)

Stranding: 19/32 (19 x 0.203 mm)  
Insulation thickness: 0.007 (0.18 mm)  
Jacket thickness: 0.015 (0.38 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
78342	2	0.173	4.39
78343	3	0.181	4.60
78344	4	0.196	4.98
78346	6	0.228	5.79
78348	8	0.245	6.22
78350	10	0.281	7.14
78355	15	0.313	7.95
78425	20	0.348	8.84
78455	25	0.389	9.88

### More Choice!

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### Sample the Performance

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## Supra-Shield® Foil + Braid Pairs

### 28 AWG (0.0925 mm<sup>2</sup>)

Stranding: 19/40 (19 x 0.079 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78352	2	0.163	4.14
78353	3	0.171	4.34
78354	4	0.184	4.67
78305	5	0.198	5.03
78356	6	0.213	5.41
78358	8	0.229	5.82
78309	9	0.244	6.20

### 26 AWG (0.154 mm<sup>2</sup>)

Stranding: 19/38 (19 x 0.102 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78362	2	0.177	4.50
78363	3	0.185	4.70
78364	4	0.200	5.08
78315	5	0.216	5.49
78366	6	0.233	5.92
78368	8	0.250	6.35
78319	9	0.268	6.81

### 24 AWG (0.241 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.127 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78372	2	0.193	4.90
78373	3	0.203	5.16
78374	4	0.220	5.59
78325	5	0.238	6.05
78376	6	0.258	6.55
78378	8	0.278	7.06
78329	9	0.298	7.57
78428	20	0.400	10.16
78458	25	0.449	11.40

### 22 AWG (0.382 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78382	2	0.216	5.49
78383	3	0.228	5.79
78384	4	0.248	6.30
78335	5	0.270	6.86
78386	6	0.292	7.42
78388	8	0.316	8.03
78339	9	0.340	8.64

### 20 AWG (0.616 mm<sup>2</sup>)

Stranding: 19/32 (19 x 0.203 mm)  
 Insulation thickness: 0.007 (0.18 mm)  
 Jacket thickness: 0.015 (0.38 mm)

Part Number	Pairs	Nominal Diameter	
		Inch	mm
78392	2	0.242	6.15
78393	3	0.256	6.50
78394	4	0.279	7.09
78345	5	0.305	7.75
78396	6	0.332	8.43
78398	8	0.359	9.12
78349	9	0.387	9.83



# Xtra-Guard® 1 Cable

Xtra-Guard 1 cable is a high-performance cable for general-purpose applications. It features a premium-grade PVC insulation and jacket, high maximum operating temperature, and exceptional EMI protection with Supra-Shield® foil + braid shielding.

- Available in over 575 standard constructions
- High maximum temperature requires less cooling in machine
- Ease of routing in small spaces
- 28 – 14 AWG

**Conductors:** Stranded tinned copper

**Insulation:** Premium PVC

**Jacket:** Premium PVC

**Shielding:** Unshielded, foil shield, Supra-Shield foil + braid

**Voltage:** 300 V, 600 V

## Temperature Range:

-35°C to +105°C (with SR-PVC insulation)

-30°C to +105°C (with PVC insulation)

**Availability:** 100', 500', 1000' (30.5 m, 152 m, 305 m);

Bulk, cut to length

## Approvals

- UL VW-1
- UL 1685
- UL AWM 2343
- UL AWM 2464
- UL AWM 2501
- UL AWM 2517
- UL AWM 20811
- RoHS
- UL CM
- UL MTW
- CSA CMG
- CSA FT4
- CSA TEW
- CSA AWM I/II A/B
- CE
- ISO 10993-5



**Jacket Colors:** Slate, Beige, White, Red, Blue, Black, Green, Yellow, Orange, Custom

## 300 V Unshielded, Multiconductor

### 28 AWG (0.09 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5920	2	0.138	3.51	0.032	0.81
5921	3	0.144	3.66	0.032	0.81
5922	4	0.153	3.89	0.032	0.81
5923	6	0.174	4.42	0.032	0.81
5924	7	0.174	4.42	0.032	0.81
5925	8	0.185	4.70	0.032	0.81

### 26 AWG (0.14 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5666	2	0.146	3.71	0.032	0.81
5667	3	0.152	3.86	0.032	0.81
5668	4	0.162	4.11	0.032	0.81
5669	6	0.186	4.72	0.032	0.81
5670	7	0.186	4.72	0.032	0.81
5671	8	0.198	5.03	0.032	0.81
5672	10	0.224	5.69	0.032	0.81
5673	15	0.248	6.30	0.032	0.81

# Xtra-Guard 1

## 300 V Unshielded, Multiconductor (continued)

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5012C	2	0.156	3.96	0.032	0.81
5013C	3	0.163	4.14	0.032	0.81
5014C	4	0.175	4.45	0.032	0.81
5016C	6	0.201	5.11	0.032	0.81
5018C	8	0.215	5.46	0.032	0.81
5020C	10	0.244	6.20	0.032	0.81
5020/15C	15	0.271	6.88	0.032	0.81
5020/20C	20	0.300	7.62	0.032	0.81
5020/25C	25	0.332	8.43	0.032	0.81
5020/30C	30	0.350	8.89	0.032	0.81
5020/40C	40	0.390	9.91	0.032	0.81
5020/50C	50	0.429	10.90	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5052C	2	0.208	5.28	0.032	0.81
5053C	3	0.219	5.56	0.032	0.81
5054C	4	0.238	6.05	0.032	0.81
5056C	6	0.280	7.11	0.032	0.81
5058C	8	0.302	7.67	0.032	0.81
5060C	10	0.348	8.84	0.032	0.81
5060/15C	15	0.391	9.93	0.032	0.81
5060/20C	20	0.437	11.10	0.032	0.81
5060/25C	25	0.488	12.40	0.032	0.81
5060/30C	30	0.517	13.13	0.032	0.81
5060/40C	40	0.622	15.80	0.053	1.35
5060/50C	50	0.684	17.37	0.053	1.35

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5072/1C*	2	0.250	6.35	0.032	0.81
5072C	2	0.250	6.35	0.032	0.81
5073/1C*	3	0.264	6.71	0.032	0.81
5073C	3	0.264	6.71	0.032	0.81
5074C	4	0.288	7.32	0.032	0.81
5076C	6	0.343	8.71	0.032	0.81
5078C	8	0.372	9.45	0.032	0.81
5080C	10	0.432	10.97	0.032	0.81
5080/15C	15	0.488	12.40	0.032	0.81
5080/20C	20	0.547	13.89	0.053	0.81
5080/25C	25	0.656	16.66	0.053	0.81
5080/30C	30	0.694	17.63	0.053	0.81
5080/40C	40	0.775	19.69	0.083	2.11
5080/50C	50	0.917	23.29	0.083	2.11

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

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5002C	2	0.168	4.27	0.032	0.81
5003C	3	0.176	4.47	0.032	0.81
5004C	4	0.189	4.80	0.032	0.81
5006C	6	0.219	5.56	0.032	0.81
5008C	8	0.235	5.97	0.032	0.81
5010C	10	0.268	6.81	0.032	0.81
5010/15C	15	0.299	7.59	0.032	0.81
5010/20C	20	0.331	8.41	0.032	0.81
5010/25C	25	0.368	9.35	0.032	0.81
5010/30C	30	0.389	9.88	0.032	0.81
5010/40C	40	0.434	11.02	0.032	0.81
5010/50C	50	0.478	12.14	0.032	0.81
5010/60C	60	0.518	13.16	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5062/1C*	2	0.226	5.74	0.032	0.81
5062C	2	0.226	5.74	0.032	0.81
5063/1C*	3	0.238	6.05	0.032	0.81
5063C	3	0.238	6.05	0.032	0.81
5064C	4	0.259	6.58	0.032	0.81
5066C	6	0.307	7.80	0.032	0.81
5068C	8	0.332	8.43	0.032	0.81
5070C	10	0.384	9.75	0.032	0.81
5070/15C	15	0.433	11.00	0.032	0.81
5070/20C	20	0.484	12.29	0.032	0.81
5070/25C	25	0.542	13.77	0.032	0.81
5070/30C	30	0.617	15.67	0.053	1.35
5070/40C	40	0.688	17.48	0.053	1.35
5070/50C	50	0.758	19.25	0.053	1.35
5070/60C	60	0.881	22.38	0.083	2.11

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

# Xtra-Guard 1

## 300 V Unshielded, Multiconductor AWM 2343

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5201C	7	0.263	6.68	0.063	1.60
5202C	12	0.313	7.95	0.063	1.60
5203C	15	0.333	8.46	0.063	1.60
5204C	19	0.350	8.89	0.063	1.60
5206C	37	0.438	11.13	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5220/2C	2	0.246	6.25	0.063	1.60
5220C	5	0.288	7.32	0.063	1.60
5221C	7	0.305	7.75	0.063	1.60
5222C	12	0.371	9.42	0.063	1.60
5223C	15	0.398	10.11	0.063	1.60
5224C	19	0.420	10.67	0.063	1.60
5224/25C	25	0.478	12.14	0.063	1.60
5225C	27	0.487	12.37	0.063	1.60
5226C	37	0.536	13.61	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5413	3	0.350	8.89	0.063	1.60
5414	4	0.377	9.58	0.063	1.60
5419	9	0.503	12.78	0.063	1.60
5419/12	12	0.554	14.07	0.063	1.60
5419/15	15	0.601	15.27	0.063	1.60
5419/19	19	0.641	16.28	0.063	1.60
5419/25	25	0.742	18.85	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5434	4	0.428	10.87	0.063	1.60
5435	5	0.464	11.79	0.063	1.60
5437	7	0.502	12.75	0.063	1.60
5439	9	0.579	14.71	0.063	1.60
5439/12	12	0.641	16.28	0.063	1.60
5439/15	15	0.698	17.73	0.063	1.60
5439/19	19	0.746	18.95	0.083	2.11
5439/25	25	0.908	23.06	0.083	2.11

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5210/2C	2	0.230	5.84	0.063	1.60
5211C	7	0.281	7.14	0.063	1.60
5212C	12	0.338	8.59	0.063	1.60
5213C	15	0.361	9.17	0.063	1.60
5214C	19	0.380	9.65	0.063	1.60
5214/25C	25	0.430	10.92	0.063	1.60
5215C	27	0.438	11.13	0.063	1.60
5216C	37	0.480	12.19	0.063	1.60

## 600 V Unshielded, Multiconductor

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5402	2	0.318	8.08	0.063	1.60
5404	4	0.358	9.09	0.063	1.60
5405	5	0.385	9.78	0.063	1.60
5409	9	0.473	12.01	0.063	1.60
5409/19	19	0.601	15.27	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5422	2	0.352	8.94	0.063	1.60
5423	3	0.369	9.37	0.063	1.60
5424	4	0.399	10.13	0.063	1.60
5425	5	0.432	10.97	0.063	1.60
5427	7	0.466	11.84	0.063	1.60
5429	9	0.535	13.59	0.063	1.60
5429/15	15	0.643	16.33	0.063	1.60
5429/19	19	0.686	17.42	0.063	1.60
5429/25	25	0.796	20.22	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5442	2	0.406	10.31	0.063	1.60
5443	3	0.428	10.87	0.063	1.60
5444	4	0.464	11.79	0.063	1.60
5445	5	0.505	12.83	0.063	1.60
5447	7	0.547	13.89	0.063	1.60
5449	9	0.634	16.10	0.063	1.60
5449/12	12	0.703	17.86	0.063	1.60
5449/15	15	0.767	19.48	0.063	1.60
5449/25	25	0.998	25.35	0.083	2.11

# Xtra-Guard 1

## 300 V Foil Shielded, Multiconductor

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5926	2	0.142	3.61	0.032	0.81
5927	3	0.148	3.76	0.032	0.81
5928	4	0.157	3.99	0.032	0.81
5929	6	0.178	4.52	0.032	0.81
5930	7	0.178	4.52	0.032	0.81
5931	8	0.189	4.80	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5674	2	0.150	3.81	0.032	0.81
5675	3	0.156	3.96	0.032	0.81
5676	4	0.166	4.22	0.032	0.81
5677	6	0.190	4.83	0.032	0.81
5678	7	0.190	4.83	0.032	0.81
5679	8	0.202	5.13	0.032	0.81
5680	10	0.228	5.79	0.032	0.81
5681	15	0.252	6.40	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5092C	2	0.160	4.06	0.032	0.81
5093C	3	0.167	4.24	0.032	0.81
5094C	4	0.179	4.55	0.032	0.81
5096C	6	0.205	5.21	0.032	0.81
5098C	8	0.219	5.56	0.032	0.81
5100C	10	0.248	6.30	0.032	0.81
5100/15C	15	0.275	6.99	0.032	0.81
5100/20C	20	0.304	7.72	0.032	0.81
5100/25C	25	0.336	8.53	0.032	0.81
5100/30C	30	0.354	8.99	0.032	0.81
5100/40C	40	0.394	10.01	0.032	0.81
5100/50C	50	0.433	11.00	0.032	0.81
5100/60C	60	0.468	11.89	0.032	0.81
5100/70C	70	0.505	12.83	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5092C	2	0.160	4.06	0.032	0.81
5093C	3	0.167	4.24	0.032	0.81
5094C	4	0.179	4.55	0.032	0.81
5096C	6	0.205	5.21	0.032	0.81
5098C	8	0.219	5.56	0.032	0.81
5100C	10	0.248	6.30	0.032	0.81
5100/15C	15	0.275	6.99	0.032	0.81
5100/20C	20	0.304	7.72	0.032	0.81
5100/25C	25	0.336	8.53	0.032	0.81
5100/30C	30	0.354	8.99	0.032	0.81
5100/40C	40	0.394	10.01	0.032	0.81
5100/50C	50	0.433	11.00	0.032	0.81
5100/60C	60	0.468	11.89	0.032	0.81
5100/70C	70	0.505	12.83	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5462C	2	0.212	5.38	0.032	0.81
5463C	3	0.223	5.66	0.032	0.81
5464C	4	0.242	6.15	0.032	0.81
5466C	6	0.284	7.21	0.032	0.81
5468C	8	0.306	7.77	0.032	0.81
5470C	10	0.352	8.94	0.032	0.81
5470/15C	15	0.395	10.03	0.032	0.81
5470/20C	20	0.441	11.20	0.032	0.81
5470/25C	25	0.492	12.50	0.032	0.81
5470/30C	30	0.521	13.23	0.032	0.81
5470/40C	40	0.626	15.90	0.053	1.35
5470/50C	50	0.688	17.48	0.053	1.35

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5382C	2	0.230	5.84	0.032	0.81
5382/1C*	2	0.230	5.84	0.032	0.81
5383C	3	0.242	6.15	0.032	0.81
5383/1C*	3	0.242	6.15	0.032	0.81
5384C	4	0.263	6.68	0.032	0.81
5386C	6	0.311	7.90	0.032	0.81
5388C	8	0.336	8.53	0.032	0.81
5390C	10	0.388	9.86	0.032	0.81
5390/15C	15	0.437	11.10	0.032	0.81
5390/20C	20	0.488	12.40	0.032	0.81
5390/25C	25	0.588	14.94	0.053	1.35
5390/30C	30	0.621	15.77	0.053	1.35
5390/40C	40	0.692	17.58	0.053	1.35
5390/50C	50	0.762	19.35	0.053	1.35
5390/60C	60	0.885	22.48	0.083	2.11

# Xtra-Guard 1

## 300 V Foil Shielded, Multiconductor (continued)

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5362C	2	0.254	6.45	0.032	0.81
5362/1C*	2	0.254	6.45	0.032	0.81
5363C	3	0.268	6.81	0.032	0.81
5363/1C*	3	0.268	6.81	0.032	0.81
5364C	4	0.292	7.42	0.032	0.81
5366C	6	0.347	8.81	0.032	0.81
5368C	8	0.376	9.55	0.032	0.81
5370C	10	0.436	11.07	0.032	0.81
5370/15C	15	0.492	12.50	0.032	0.81
5370/20C	20	0.593	15.06	0.053	1.35
5370/25C	25	0.660	16.76	0.053	1.35
5370/30C	30	0.698	17.73	0.053	1.35
5370/40C	40	0.779	19.79	0.083	2.11

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5580/2C	2	0.234	5.94	0.063	1.60
5580C	5	0.270	6.86	0.063	1.60
5581C	7	0.285	7.24	0.063	1.60
5582C	12	0.342	8.69	0.063	1.60
5583C	15	0.365	9.27	0.063	1.60
5584C	19	0.384	9.75	0.063	1.60
5586C	37	0.484	12.29	0.063	1.60

## 600 V Foil Shielded, Multiconductor

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5410/2	2	0.322	8.18	0.063	1.60
5410/3	3	0.337	8.56	0.063	1.60
5410/4	4	0.362	9.19	0.063	1.60
5410/5	5	0.389	9.88	0.063	1.60
5410/9	9	0.477	12.12	0.063	1.60
5410/12	12	0.525	13.34	0.063	1.60

## 300 V Foil Shielded, Multiconductor AWM 2343

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5599/3C	3	0.229	5.82	0.063	1.60
5599/5C	5	0.254	6.45	0.063	1.60
5599/7C	7	0.267	6.78	0.063	1.60
5599/12C	12	0.317	8.05	0.063	1.60
5599/15C	15	0.337	8.56	0.063	1.60
5599/19C	19	0.354	8.99	0.063	1.60
5599/27C	27	0.405	10.29	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5560/2C	2	0.250	6.35	0.063	1.60
5560C	5	0.292	7.42	0.063	1.60
5561C	7	0.309	7.85	0.063	1.60
5562C	12	0.375	9.53	0.063	1.60
5563C	15	0.402	10.21	0.063	1.60
5564C	19	0.424	10.77	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5420/3	3	0.354	8.99	0.063	1.60
5420/4	4	0.381	9.68	0.063	1.60
5420/5	5	0.411	10.44	0.063	1.60
5420/7	7	0.442	11.23	0.063	1.60
5420/9	9	0.507	12.88	0.063	1.60
5420/12	12	0.558	14.17	0.063	1.60



# Xtra-Guard 1

## 600 V Foil Shielded, Multiconductor (continued)

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5430/2	2	0.356	9.04	0.063	1.60
5430/3	3	0.373	9.47	0.063	1.60
5430/4	4	0.403	10.24	0.063	1.60
5430/5	5	0.436	11.07	0.063	1.60
5430/7	7	0.470	11.94	0.063	1.60
5430/9	9	0.539	13.69	0.063	1.60
5430/12	12	0.595	15.11	0.063	1.60
5430/15	15	0.647	16.43	0.063	1.60
5430/19	19	0.690	17.53	0.063	1.60
5430/25	25	0.800	20.32	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5440/2	2	0.380	9.65	0.063	1.60
5440/3	3	0.399	10.13	0.063	1.60
5440/4	4	0.432	10.97	0.063	1.60
5440/5	5	0.468	11.89	0.063	1.60
5440/7	7	0.506	12.85	0.063	1.60
5440/9	9	0.583	14.81	0.063	1.60
5440/12	12	0.645	16.38	0.063	1.60
5440/15	15	0.702	17.83	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5450/2	2	0.410	10.41	0.063	1.60
5450/3	3	0.432	10.97	0.063	1.60
5450/4	4	0.468	11.89	0.063	1.60
5450/5	5	0.509	12.93	0.063	1.60
5450/7	7	0.551	14.00	0.063	1.60
5450/12	12	0.707	17.96	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5932	2	0.166	4.22	0.032	0.81
5933	3	0.172	4.37	0.032	0.81
5934	4	0.181	4.60	0.032	0.81
5935	6	0.202	5.13	0.032	0.81
5936	7	0.202	5.13	0.032	0.81
5937	8	0.213	5.41	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5682	2	0.174	4.42	0.032	0.81
5683	3	0.180	4.57	0.032	0.81
5684	4	0.190	4.83	0.032	0.81
5685	6	0.214	5.44	0.032	0.81
5686	7	0.214	5.44	0.032	0.81
5687	8	0.226	5.74	0.032	0.81
5688	10	0.252	6.40	0.032	0.81
5689	15	0.276	7.01	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5112C	2	0.184	4.67	0.032	0.81
5113C	3	0.191	4.85	0.032	0.81
5114C	4	0.203	5.16	0.032	0.81
5116C	6	0.229	5.82	0.032	0.81
5118C	8	0.243	6.17	0.032	0.81
5120C	10	0.272	6.91	0.032	0.81
5120/15C	15	0.299	7.59	0.032	0.81
5120/20C	20	0.328	8.33	0.032	0.81
5120/25C	25	0.360	9.14	0.032	0.81
5120/30C	30	0.378	9.60	0.032	0.81
5120/40C	40	0.418	10.62	0.032	0.81
5120/50C	50	0.457	11.61	0.032	0.81

# Xtra-Guard 1

## 300 V Supra-Shield® Foil + Braid, Multiconductor (continued)

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5102C	2	0.196	4.98	0.032	0.81
5103C	3	0.204	5.18	0.032	0.81
5104C	4	0.217	5.51	0.032	0.81
5106C	6	0.247	6.27	0.032	0.81
5108C	8	0.263	6.68	0.032	0.81
5110C	10	0.296	7.52	0.032	0.81
5110/15C	15	0.327	8.31	0.032	0.81
5110/20C	20	0.359	9.12	0.032	0.81
5110/25C	25	0.396	10.06	0.032	0.81
5110/30C	30	0.417	10.59	0.032	0.81
5110/40C	40	0.462	11.73	0.032	0.81
5110/50C	50	0.506	12.85	0.032	0.81
5110/60C	60	0.588	14.94	0.032	0.81
5110/70C	70	0.630	16.00	0.032	0.81
5110/80C	80	0.665	16.89	0.032	0.81

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5152C	2	0.236	5.99	0.032	0.81
5153C	3	0.247	6.27	0.032	0.81
5154C	4	0.266	6.76	0.032	0.81
5156C	6	0.308	7.82	0.032	0.81
5158C	8	0.330	8.38	0.032	0.81
5160C	10	0.376	9.55	0.032	0.81
5160/15C	15	0.419	10.64	0.032	0.81
5160/20C	20	0.465	11.81	0.032	0.81
5160/25C	25	0.516	13.11	0.032	0.81
5160/30C	30	0.545	13.84	0.032	0.81
5160/40C	40	0.656	16.66	0.053	1.35
5160/50C	50	0.718	18.24	0.053	1.35
5160/60C	60	0.774	19.66	0.053	1.35

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5162/1C*	2	0.254	6.45	0.032	0.81
5162C	2	0.254	6.45	0.032	0.81
5163/1C*	3	0.266	6.76	0.032	0.81
5163C	3	0.266	6.76	0.032	0.81
5164C	4	0.287	7.29	0.032	0.81
5166C	6	0.335	8.51	0.032	0.81
5168C	8	0.360	9.14	0.032	0.81
5170C	10	0.412	10.46	0.032	0.81
5170/15C	15	0.461	11.71	0.032	0.81
5170/20C	20	0.512	13.00	0.032	0.81
5170/25C	25	0.612	15.54	0.053	1.35
5170/30C	30	0.651	16.54	0.053	1.35
5170/40C	40	0.722	18.34	0.053	1.35

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

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5172/1C*	2	0.278	7.06	0.032	0.81
5172C	2	0.278	7.06	0.032	0.81
5173/1C*	3	0.292	7.42	0.032	0.81
5173C	3	0.292	7.42	0.032	0.81
5174C	4	0.316	8.03	0.032	0.81
5176C	6	0.371	9.42	0.032	0.81
5178C	8	0.400	10.16	0.032	0.81
5180C	10	0.460	11.68	0.032	0.81
5180/15C	15	0.516	13.11	0.032	0.81
5180/20C	20	0.617	15.67	0.053	1.35
5180/25C	25	0.690	17.53	0.053	1.35

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

## 300 V Supra-Shield® Foil + Braid, Multiconductor AWM 2343

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5300C	5	0.278	7.06	0.063	1.60
5301C	7	0.291	7.39	0.063	1.60
5302C	12	0.341	8.66	0.063	1.60
5303C	15	0.361	9.17	0.063	1.60
5304C	19	0.378	9.60	0.063	1.60
5305C	27	0.429	10.90	0.063	1.60
5306C	37	0.466	11.84	0.063	1.60
5307C	48	0.517	13.13	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5310C	5	0.294	7.47	0.063	1.60
5311C	7	0.309	7.85	0.063	1.60
5312C	12	0.366	9.30	0.063	1.60
5313C	15	0.389	9.88	0.063	1.60
5314C	19	0.408	10.36	0.063	1.60
5316C	37	0.508	12.90	0.063	1.60
5318C	60	0.608	15.44	0.063	1.60

# Xtra-Guard 1

## 300 V Supra-Shield® Foil + Braid, Multiconductor AWM 2343 (continued)

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5320/4C	4	0.299	7.59	0.063	1.60
5320C	5	0.316	8.03	0.063	1.60
5321C	7	0.333	8.46	0.063	1.60
5322C	12	0.399	10.13	0.063	1.60
5323C	15	0.426	10.82	0.063	1.60
5324C	19	0.448	11.38	0.063	1.60
5325C	27	0.515	13.08	0.063	1.60
5326C	37	0.564	14.33	0.063	1.60

## 600 V Supra-Shield® Foil + Braid, Multiconductor

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5504	4	0.386	9.80	0.063	1.60
5599/5C	7	0.442	11.23	0.063	1.60
5509/12	12	0.549	13.94	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5522	2	0.380	9.65	0.063	1.60
5523	3	0.397	10.08	0.063	1.60
5524	4	0.427	10.85	0.063	1.60
5525	5	0.460	11.68	0.063	1.60
5527	7	0.494	12.55	0.063	1.60
5529	9	0.563	14.30	0.063	1.60
5529/12	12	0.619	15.72	0.063	1.60
5529/15	15	0.677	17.20	0.063	1.60
5529/19	19	0.760	19.30	0.083	2.11

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5542	2	0.434	11.02	0.063	1.60
5543	3	0.456	11.58	0.063	1.60
5544	4	0.492	12.50	0.063	1.60
5547	7	0.575	14.61	0.063	1.60
5549	9	0.668	16.97	0.063	1.60
5549/12	12	0.777	19.74	0.083	2.11
5549/15	15	0.841	21.36	0.083	2.11

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5514	4	0.405	10.29	0.063	1.60
5517	7	0.466	11.84	0.063	1.60
5519	9	0.531	13.49	0.063	1.60
5519/12	12	0.582	14.78	0.063	1.60
5519/19	19	0.675	17.15	0.063	1.60

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5532	2	0.404	10.26	0.063	1.60
5533	3	0.423	10.74	0.063	1.60
5534	4	0.456	11.58	0.063	1.60
5535	5	0.492	12.50	0.063	1.60
5537	7	0.530	13.46	0.063	1.60
5539	9	0.607	15.42	0.063	1.60
5539/12	12	0.675	17.15	0.063	1.60
5539/15	15	0.772	19.61	0.063	1.60
5539/19	19	0.820	20.83	0.083	2.11

# Xtra-Guard 1

## 300 V Unshielded, Multipair

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

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

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

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

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

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

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

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

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

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

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

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

## 300 V Foil Shield, Multipair

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

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

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

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

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

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

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

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

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

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## 300 V Foil Shield, Multipair AWM 2464

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## 300 V Supra-Shield® Foil + Braid, Multipair

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

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

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

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

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

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



# Xtra-Guard 1

## 300 V Supra-Shield® Foil + Braid, Multipair (continued)

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

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

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

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

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

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

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

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

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

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

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

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

## 300 V Supra-Shield® Foil + Braid, Multipair AWM2343

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

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

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

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

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

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

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

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

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

# Xtra-Guard® Industrial Ethernet Cable

## Rugged Connectivity That Goes Beyond Factory Tough

Alpha Wire's Xtra-Guard® Industrial Ethernet cables give you rugged connectivity for your industrial networking needs.

**Conductors:** Solid or stranded bare copper

**Insulation:** Polypropylene

**Jacket:** Thermoplastic elastomer

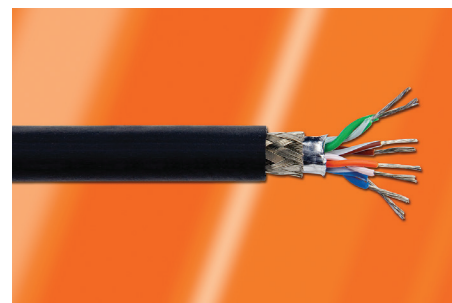
**Shielding:** Unshielded, foil shield, or Supra-Shield® foil + braid

## Temperature Range:

- -50°C to +105°C
- +75°C UL Riser Rating

## Approvals

- Meets ANSI/TIA-568-C.2 Cat 5E, 6A, 7 requirements
- Supports data rates up to Gigabit Ethernet
- UL Type CMR
- Passes UL 1666 Riser and CSA FT-4 flame test
- Suitable for use in NFPA 79 applications
- ISO 10993-5



## Resistance

- Sunlight resistant
- Resistant to hazardous fluids
- Extra tough, abrasion-resistant TPE jacket is flexible and routable

## Availability:

Available in 500' and 1000' lengths

Item no	Num Elem	JktWall		OD		Cable Type	Ins Matl	Shld Type	Jkt Matl	Temp	Voltage	Trade Name	Flex C-Track	Flex-Torsion	Category
		In	mm	In	mm										
76030	4	0.032	0.81	0.25	6.35	PAIR	HDPE	UNSHIELDED	TPE	-40C to 80C	600	XGIE	10M Cycles	3M Cycles	5e
76031	4	0.035	0.89	0.3	7.62	PAIR	HDPE	FOIL/BRAID	TPE	-40C to 80C	600	XGIE	10M Cycles	3M Cycles	5e
76032	4	0.035	0.89	0.322	8.18	PAIR	HDPE	FOIL/BRAID	TPE	-40C to 80C	600	XGIE	10M Cycles	3M Cycles	6A
76033	4	0.035	0.89	0.29	7.37	PAIR	HDPE	FOIL/BRAID	TPE	-40C to 80C	600	XGIE	10M Cycles	3M Cycles	6A
75030	2	0.032	0.81	0.24	6.10	PAIR	HDPE	UNSHIELDED	TPE	-40C to 80C	600	XGIE	10M Cycles	3M Cycles	5e
75031	2	0.032	0.81	0.26	6.60	PAIR	HDPE	FOIL/BRAID	TPE	-40C to 80C	600	XGIE	10M Cycles	3M Cycles	5e
75032	2	0.04	1.02	0.31	7.87	PAIR	HDPE	FOIL/BRAID	TPE	-40C to 80C	600	XGIE	10M Cycles	3M Cycles	5e
75033	2	0.04	1.02	0.31	7.87	PAIR	HDPE	FOIL/BRAID	TPE	-40C to 80C	600	XGIE	10M Cycles	3M Cycles	5e
75034	2	0.04	1.02	0.31	7.87	PAIR	HDPE	FOIL/BRAID	TPE	-40C to 80C	600	XGIE	10M Cycles	3M Cycles	5e

# Xtra-Guard® 5 Cable

Xtra-Guard 5 cable is an extreme-performance cable featuring FEP insulation and jacketing for reliable performance in temperatures from -80°C to +200°C. It's also chemical resistant to withstand the most hazardous environments.

- Recognized by the FDA for food and medical-grade applications\*
- Superior oil, solvent, and chemical resistance
- Exceptional EMI protection with Supra-Shield® foil + braid shielding
- 24 – 16 AWG

**Conductors:** Tinned copper

**Insulation:** FEP

**Jacket:** FEP

**Shielding:** Unshielded, foil shield, Supra-Shield foil + braid

**Voltage:** 300 V, 600 V (custom)

**Temperature Range:** -80°C to +200°C

**Availability:** Made to order; 1000' (305 m) minimum

## Approvals

- CE
- CSA CMP
- CSA FT6
- UL AWM 20229
- UL CMP
- RoHS
- ISO 10993-5



**Jacket Colors:** Slate, Beige, White, Red, Blue, Black, Green, Yellow, Orange, Custom

# Xtra-Guard 5

## 300 V Foil Shield, Multiconductor

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55092	2	0.154	3.91	0.027	0.69
55093	3	0.161	4.09	0.027	0.69
55094	4	0.172	4.37	0.027	0.69
55096	6	0.199	5.05	0.027	0.69
55099	9	0.226	5.74	0.027	0.69
55100/12	12	0.249	6.32	0.027	0.69

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55462	2	0.182	4.62	0.027	0.69
55463	3	0.191	4.85	0.027	0.69
55464	4	0.206	5.23	0.027	0.69
55466	6	0.241	6.12	0.027	0.69
55469	9	0.277	7.04	0.027	0.69
55470/12	12	0.307	7.80	0.027	0.69

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

Stranding: 19/0.0117 (19 x 0.29 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55362	2	0.224	5.69	0.027	0.69
55363	3	0.236	5.99	0.027	0.69
55364	4	0.257	6.53	0.027	0.69
55366	6	0.304	7.72	0.027	0.69
55369	9	0.353	8.97	0.027	0.69
55370/12	12	0.394	10.01	0.027	0.69

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55102	2	0.188	4.78	0.027	0.69
55103	3	0.196	4.98	0.027	0.69
55104	4	0.209	5.31	0.027	0.69
55106	6	0.239	6.07	0.027	0.69
55109	9	0.270	6.86	0.027	0.69
55110/12	12	0.296	7.52	0.027	0.69

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55192	2	0.166	4.22	0.027	0.69
55193	3	0.174	4.42	0.027	0.69
55194	4	0.187	4.75	0.027	0.69
55196	6	0.217	5.51	0.027	0.69
55199	9	0.248	6.30	0.027	0.69
55199/12	12	0.274	6.96	0.027	0.69

### 18 AWG (0.90 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55382	2	0.202	5.13	0.027	0.69
55383	3	0.213	5.41	0.027	0.69
55384	4	0.231	5.87	0.027	0.69
55386	6	0.271	6.88	0.027	0.69
55389	9	0.313	7.95	0.027	0.69
55390/12	12	0.349	8.86	0.027	0.69

## 300 V Supra-Shield® Foil + Braid, Multiconductor

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55112	2	0.176	4.47	0.027	0.69
55113	3	0.183	4.65	0.027	0.69
55114	4	0.194	4.93	0.027	0.69
55116	6	0.221	5.61	0.027	0.69
55119	9	0.248	6.30	0.027	0.69
55120/12	12	0.271	6.88	0.027	0.69

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

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55152	2	0.204	5.18	0.027	0.69
55153	3	0.213	5.41	0.027	0.69
55154	4	0.228	5.79	0.027	0.69
55156	6	0.263	6.68	0.027	0.69
55159	9	0.299	7.59	0.027	0.69
55160/12	12	0.329	8.36	0.027	0.69

# Xtra-Guard 5

## 300 V Supra-Shield® Foil + Braid, Multiconductor (continued)

### 18 AWG (0.90 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55162	2	0.224	5.69	0.027	0.69
55163	3	0.235	5.97	0.027	0.69
55164	4	0.253	6.43	0.027	0.69
55166	6	0.293	7.44	0.027	0.69
55169	9	0.335	8.51	0.027	0.69
55170/12	12	0.371	9.42	0.027	0.69

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

Stranding: 19/0.0117 (19 x 0.29 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55172	2	0.246	6.25	0.027	0.69
55173	3	0.258	6.55	0.027	0.69
55174	4	0.279	7.09	0.027	0.69
55176	6	0.326	8.28	0.027	0.69
55179	9	0.375	9.53	0.027	0.69
55180/12	12	0.416	10.57	0.027	0.69

## 300 V Unshielded, Multipair

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

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55021	1	0.160	4.06	0.027	0.69
55022	2	0.224	5.69	0.027	0.69
55023	3	0.237	6.02	0.027	0.69
55026	6	0.307	7.80	0.027	0.69
55029	9	0.358	9.09	0.027	0.69
55029/12	12	0.401	10.19	0.027	0.69

## 300 V Foil Shield, Multipair

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

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55491	1	0.154	3.91	0.027	0.69
55492	2	0.210	5.33	0.027	0.69
55493	3	0.222	5.64	0.027	0.69
55496	6	0.284	7.21	0.027	0.69
55499	9	0.329	8.36	0.027	0.69
55499/11	11	0.355	9.02	0.027	0.69

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

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55481	1	0.166	4.22	0.027	0.69
55482	2	0.230	5.84	0.027	0.69
55483	3	0.243	6.17	0.027	0.69
55486	6	0.313	7.95	0.027	0.69
55489	9	0.364	9.25	0.027	0.69
55489/12	12	0.407	10.34	0.027	0.69

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

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55481	1	0.166	4.22	0.027	0.69
55482	2	0.230	5.84	0.027	0.69
55483	3	0.243	6.17	0.027	0.69
55486	6	0.313	7.95	0.027	0.69
55489	9	0.364	9.25	0.027	0.69
55489/12	12	0.407	10.34	0.027	0.69

### 18 AWG (0.90 mm<sup>2</sup>)

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55371	1	0.202	5.13	0.027	0.69
55372	2	0.289	7.34	0.027	0.69
55373	3	0.306	7.77	0.027	0.69
55376	6	0.402	10.21	0.027	0.69
55379	9	0.472	11.99	0.027	0.69

# Xtra-Guard 5

## 300 V Supra-Shield® Foil + Braid, Multipair

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

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55271	1	0.176	4.47	0.027	0.69
55272	2	0.232	5.89	0.027	0.69
55273	3	0.244	6.20	0.027	0.69
55276	6	0.306	7.77	0.027	0.69
55279	9	0.351	8.92	0.027	0.69
55279/12	12	0.388	9.86	0.027	0.69

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

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55121	1	0.188	4.78	0.027	0.69
55122	2	0.252	6.40	0.027	0.69
55123	3	0.265	6.73	0.027	0.69
55126	6	0.335	8.51	0.027	0.69
55129	9	0.386	9.80	0.027	0.69
55129/12	12	0.429	10.90	0.027	0.69

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

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55291	1	0.204	5.18	0.027	0.69
55292	2	0.278	7.06	0.027	0.69
55293	3	0.293	7.44	0.027	0.69
55296	6	0.375	9.53	0.027	0.69
55299	9	0.434	11.02	0.027	0.69
55299/12	12	0.483	12.27	0.027	0.69

### 18 AWG (0.90 mm<sup>2</sup>)

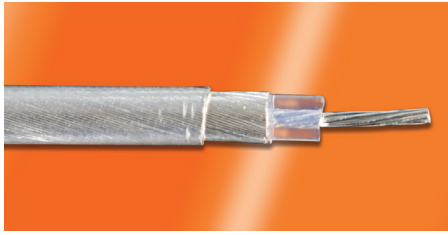
Stranding: 7/26 (7 x 0.40 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55131	1	0.224	5.69	0.027	0.69
55132	2	0.311	7.90	0.027	0.69
55133	3	0.328	8.33	0.027	0.69
55136	6	0.424	10.77	0.027	0.69
55139	9	0.504	12.80	0.032	0.81



# Micro Coaxial Cable

## 50 Ω Cable as Small as 50 AWG



Alpha's micro coaxial cable is a great space-saving solution that makes routing easier in applications such as medical probes, endoscopy systems, oximetry systems, industrial inspection, and more.

With a temperature range up to +200°C, our micro coax cables use high-strength silver-plated or tinned copper alloys in a reduced-diameter package. The PFA dielectric and jacket provide stable properties for outstanding signal integrity, low capacitance, and consistent controlled impedance.

### Operating Temperature

- 70°C to +200°C (Silver-plated copper alloy)
- 70°C to +150°C (Tinned copper alloy)

### Characteristic Impedance

- 50 Ω

### Voltage Rating

- 30 Vrms

### Bend Radius

- 10x cable diameter

### Materials

- Silver-plated or tinned copper alloy center conductor
- Silver-plated non magnetic copper
- PFA & FEP dielectric
- PFA & FEP jacket
- clear
- black
- brown
- red
- orange
- yellow
- green
- blue
- violet
- slate
- white

### Shielding

- Silver-plated or tinned copper alloy shield, 90% coverage minimum, braid or spiral

### Availability

- 100 m (328 ft) spools

### Custom Configurations

- Composites
- Bundles



Part No.	Wire Size (AWG)		Stranding		Jacket Diameter		DCR, Max. (Ω/1000 ft @20°C)	Ground Cap, Nom. (@ 1 kHz)		Attenuation, Max. (@ 10 MHz)	
	AWG	mm <sup>2</sup>	AWG	mm	Inch	mm		pF/Ft	pF/m	(dB/100 Ft)	(dB/m)
<i>Silver-Plated Copper Conductors Silver-Plated Copper Braid Shield, 90% Coverage</i>								-70°C to +200°C VP: 69% Impedance: 50 Ω ±2 Ω UL AWM 1745			
9432	32	0.034	7/40	7/079	0.044	1.12	168.6	29.9	98.1	4.1	0.13
9434	34	0.022	7/42	7/064	0.039	0.99	271.9	29.9	110.2	5.5	0.18
<i>Tinned Copper Alloy Conductor Tinned Copper Spiral Shield, 90% Coverage</i>								-70°C to +150°C VP: 70% Impedance: 50 Ω ±5 Ω			
9436	36	0.014	7/44	7/051	0.021	0.53	478.2	33.6	110.2	7.6	0.25
9438	38	0.0088	7/46	7/040	0.018	0.46	1005.8	33.6	110.2	11.6	0.38
9440	40	0.0055	7/48	7/031	0.014	0.36	1424	33.6	110.2	13.7	0.45
<i>Silver Copper Alloy Conductor Tinned Copper Spiral Shield, 90% Coverage</i>								-70°C to +150°C VP: 70% Impedance: 50 Ω ±5 Ω			
9442	42	0.0035	7/50	7/025	0.012	0.30	2286	33.6	110.2	21.3	0.70
9444	44	0.0022	7/52	7/020	0.010	0.25	3352.8	33.6	110.2	30.5	1.00
<i>Silver Copper Alloy Conductor Silver Copper Alloy Spiral Shield, 90% Coverage</i>								-70°C to +200°C VP: 70% Impedance: 50 Ω ±5 Ω			
9446	46	0.0014	7/54	7/016	0.008	0.20	4724.4	35.1	115.2	42.7	1.40
9448	48	0.0008	7/56	7/012	0.007	0.18	7010.4	36.6	120.1	61	2.00
9450	50	0.0005	7/58	7/010	0.006	0.15	11430	38.1	125.0	85.3	2.80
Part No.	Wire Size (AWG)	Stranding		Jacket Diameter		DCR, Max. (Ω/1000 ft @20°C)	Ground Cap, Nom. (@ 1 kHz)		Attenuation, Max. (@ 10 MHz)		
9849	26	7/34		0.100		38.7	28		8.6		
9851	30	7/38		0.070		241	29.3		14.1		

We now also provide non-magnetic coaxial cable options 9849 and 9851, which provide better signal transmission with minimal distortion while handling higher frequencies

# EcoWire® Hook-Up Wire

Smaller, lighter, tougher, and EcoWire is an ideal thin-wall replacement for PVC-insulated wire.

- Up to 45% smaller diameter and 40% lighter than PVC hook up wire
- Superior wear and abrasion resistance
- 28–10 AWG

**Conductors:** Stranded, solid tinned copper

**Insulation:** mPPE

**Voltage:** 600 V

**Temperature Range:** -40°C to +105°C

**Availability:** 100' lengths, 5000' spools, 25,000' drums (30.5 m, 1525 m, 7620 m)

## Approvals

- CSA AWM I A/B FT1
- UL AWM Style 11028
- IEC 60332-2 Flame Behavior
- RoHS
- REACH
- VW-1
- ISO 10993-5
- CE

**Colors:** White, Black, Red, Green, Yellow, Blue, Brown, Orange, Slate, Violet, Yellow/Green, Dark Blue

Custom color/stripe combinations available upon request



Part No.	Conductor Size		Stranding		Insulation Thickness		Wire Diameter	
	AWG	mm <sup>2</sup>	AWG	mm	Inch	mm	Inch	mm
<b>6710</b>	28	0.08	7/36	7 x 0.12	0.010	0.25	0.034	0.86
<b>6711</b>	26	0.13	7/34	7 x 0.16	0.010	0.25	0.038	0.97
<b>6712</b>	24	0.20	7/32	7 x 0.20	0.010	0.25	0.043	1.09
<b>6713</b>	22	0.32	7/30	7 x 0.25	0.010	0.25	0.049	1.24
<b>6714</b>	20	0.52	10/30	10 x 0.25	0.010	0.25	0.055	1.40
<b>6715</b>	18	0.82	16/30	16 x 0.25	0.010	0.25	0.067	1.70
<b>6715S</b>	18	0.82	Solid	Solid	0.010	0.25	0.059	1.50
<b>6716</b>	16	1.30	26/30	26 x 0.25	0.011	0.28	0.081	2.06
<b>6717</b>	14	2.08	41/30	41 x 0.25	0.011	0.28	0.096	2.44
<b>6717S</b>	14	2.08	Solid	Solid	0.011	0.28	0.086	2.18
<b>6718</b>	12	3.30	65/30	65 x 0.25	0.012	0.30	0.117	2.97
<b>6719</b>	10	5.26	105/30	105 x 0.25	0.012	0.30	0.142	3.66

# EcoWire Metric specifications

**Conductors:** Stranded or solid tinned copper

**Insulation:** Modified polyphenylene ether

**Voltage:** 600 volts

**Temperature Range:** -40°C to +105°C

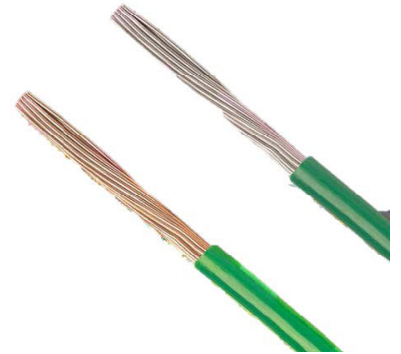
**Availability:** 100 ft (30.5 m), 1000 ft (305 m), 5000 ft (1525 m), and 25,000 ft (7625 m) lengths

14 AWG and smaller is also available in 5000 ft Reel and 25,000 ft Drum

## Approvals

- CSA AWM I A/B FT1
- UL AWM 11028
- UL VW-1
- C(RU)
- CE
- IEC 60332-2
- RoHS compliant
- Reach compliant

**Colors:** White, Black, Red, Green, Yellow, Blue, Brown, Orange, Slate, Violet, Yellow/Green, Dark Blue



Part No.	Voltage	Size	Stranding	Insulation Thick-ness	Nominal Diameter	Insulation Material
		mm <sup>2</sup>	mm	mm	mm	
67025	28	0.07	32/10	0.31	0.65	MPPE
67050	26	0.14	28/16	0.31	0.97	MPPE
67075	24	0.22	42/16	0.31	1.20	MPPE
67010	22	0.35	56/16	0.31	1.38	MPPE
67015	20	0.51	84/16	0.31	1.69	MPPE
67250	18	0.81	140/16	0.31	2.18	MPPE

# EcoWire® Plus 300 V

## Fluid-Resistant mPPE Hook-Up Wire

EcoWire Plus offers all the benefits of EcoWire, plus higher temperature range and additional fluid resistance for demanding factory applications.

Compared to PVC wire, EcoWire's mPPE insulation allows wire that is:

- Up to 45% smaller in diameter
- Up to 40% lighter
- Zero halogen, with no heavy metal pigments

**Conductors:** Stranded or solid tinned copper

**Insulation:** mPPE

**Temperature Range:**

-40°C to +105°C (EcoWire)

-40°C to +110°C (EcoWire Plus)

### Approvals

- IEC 60332-2 Flame Behavior
- RoHS Compliant
- REACH Compliant
- Zero Halogen
- CE Compliant
- Suitable for ISO 6722

**Availability:** 100 ft (30.5 m), 1000 ft (305 m), 5000 ft (1525 m), and 25,000 ft (7625 m) drum



Part No.	Conductor Size			Stranding		Insulation Thickness		Wire Diameter	
	AWG	mm <sup>2</sup>	ISO mm Equiv.	AWG	mm	Inch	mm	Inch	mm
6820	28	0.09	—	7/36	7 x 0.12	0.008	0.20	0.031	0.79
6821	26	0.14	0.13	7/34	7 x 0.16	0.008	0.20	0.035	0.89
6822	24	0.23	0.22	7/32	7 x 0.20	0.008	0.20	0.040	1.02
6823	22	0.35	0.35	7/30	7 x 0.25	0.008	0.20	0.046	1.17
6824	20	0.56	0.5	7/28	7 x 0.32	0.008	0.20	0.054	1.37
6825	18	0.81	0.75	19/0.0092	19 x 0.23	0.008	0.20	0.062	1.57
6826	17	0.96	1	19/30	19 x 0.25	0.008	0.20	0.066	1.68
6827	16	1.23	—	19/29	19 x 0.29	0.010	0.24	0.077	1.96
6828	15	1.53	1.5	19/28	19 x 0.32	0.010	0.24	0.083	2.11
6829	14	1.94	2	19/27	19 x 0.36	0.012	0.30	0.095	2.41
6830	12	3.08	3	19/25	19 x 0.46	0.015	0.38	0.120	3.05
6831	10	4.92	5	19/23	19 x 0.57	0.017	0.43	0.147	3.73

White, Black, Red, Green, Yellow, Blue, Brown, Orange, Green/Yellow

# Silicone Rubber Wire



With high temperature ratings, extreme flexibility, and high-voltage versions, Alpha's silicone hook-up wire is suited to medical robotics, diagnostic equipment requiring high voltages, and devices such as autoclaves where chemical resistance is required.

**Conductors:** Stranded tinned copper

**Insulation:** Silicone rubber  
**Temperature Range:** -40°C to +150°C or +200°C

**Availability:** 100 ft (30.5 m)  
 500 ft (152 m)  
 1000 ft (305 m)

## Approvals

- UL AWM 3212, 3213, 3214 (600 V)
- CSA AWM I A/B FT2 (600 V)
- UL AWM 3239 (High Voltage)
- REACH
- RoHS
- ISO 10993-5

## 600 V, 150°C, UL AWM 3212, 3213, 3214

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		UL AWM
	AWG	mm <sup>2</sup>	AWG	mm	Inch	mm	Inch	mm	
392207	22	0.35	7/30	7 x 0.25	0.047	1.19	0.124	3.15	3212
392010	20	0.51	10/30	10 x 0.25	0.047	1.19	0.131	3.33	3212
391816	18	0.81	16/30	16 x 0.25	0.047	1.19	0.141	3.58	3212
391626	16	1.32	26/30	26 x 0.25	0.047	1.19	0.154	3.91	3212
391441	14	2.08	41/30	41 x 0.25	0.047	1.19	0.168	4.27	3212
391265	12	3.29	65/30	65 x 0.25	0.047	1.19	0.187	4.75	3212
391000	10	5.32	105/30	105 x 0.25	0.047	1.19	0.212	5.38	3212
398133	8	8.61	133/29	133 x 0.29	0.063	1.60	0.295	7.49	3213
396133	6	13.57	133/27	133 x 0.36	0.063	1.60	0.339	8.61	3213
394133	4	21.55	133/25	133 x 0.45	0.063	1.60	0.395	10.03	3213
392259	2	33.15	259/26	259 x 0.40	0.063	1.60	0.460	11.68	3213
391259	1	41.96	259/25	259 x 0.45	0.078	1.98	0.532	13.51	3214

Insulation Colors: White • Black

## High Voltage, 200°C, UL VW-1

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		Voltage
	AWG	mm <sup>2</sup>	AWG	mm	Inch	mm	Inch	mm	
39X2220	22	0.35	7/30	7 x 0.25	0.050	1.27	0.130	3.30	20 kV
39X2215	22	0.35	7/30	7 x 0.25	0.040	1.02	0.110	2.79	15 kV
39X2205	22	0.35	7/30	7 x 0.25	0.020	0.51	0.070	1.78	5 kV
39X2025	20	0.62	19/32	19 x 0.20	0.063	1.60	0.166	4.22	25 kV
39X2020	20	0.62	19/32	19 x 0.20	0.055	1.40	0.150	3.81	20 kV
39X2015	20	0.62	19/32	19 x 0.20	0.040	1.02	0.120	3.05	15 kV
39X1825	18	0.96	19/30	19 x 0.25	0.055	1.40	0.160	4.06	25 kV
39X1660	16	1.32	26/30	26 x 0.25	0.162	4.11	0.384	9.75	60 kV
39X1645	16	1.23	19/29	19 x 0.28	0.125	3.18	0.306	7.77	45 kV
39X1635	16	1.23	41/32	41 x 0.20	0.105	2.67	0.269	6.83	35 kV
39X1620	16	1.33	41/32	41 x 0.20	0.053	1.33	0.164	4.17	20 kV
39X1460	14	1.94	19/27	19 x 0.36	0.157	3.99	0.385	9.78	60 kV
39X1260	12	3.08	19/25	19 x 0.45	0.178	4.51	0.445	11.30	60 kV

Insulation Color: White

# Silicone Rubber Wire



## High Voltage, 150°C, AWM 3239

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		Voltage
	AWG	mm <sup>2</sup>	AWG	mm	Inch	mm	Inch	mm	
392297	22	0.35	7/30	7 x 0.25	0.097	2.46	0.224	5.69	40 kV
392275	22	0.35	7/30	7 x 0.25	0.075	1.90	0.180	4.57	30 kV
392262	22	0.35	7/30	7 x 0.25	0.062	1.57	0.154	3.91	25 kV
392250	22	0.35	7/30	7 x 0.25	0.050	1.27	0.131	3.33	20 kV
392245	22	0.35	7/30	7 x 0.25	0.045	1.14	0.120	3.05	15 kV
392240	22	0.35	7/30	7 x 0.25	0.040	1.02	0.11	2.79	10 kV
392097	20	0.51	10/30	10 x 0.25	0.097	2.46	0.231	5.87	40 kV
392075	20	0.51	10/30	10 x 0.25	0.075	1.90	0.187	4.75	30 kV
392062	20	0.51	10/30	10 x 0.25	0.062	1.57	0.161	4.09	25 kV
392050	20	0.51	10/30	10 x 0.25	0.050	1.27	0.137	3.48	20 kV
392045	20	0.51	10/30	10 x 0.25	0.045	1.14	0.127	3.23	15 kV
392040	20	0.51	10/30	10 x 0.25	0.040	1.02	0.117	2.97	10 kV
391897	18	0.81	16/30	16 x 0.25	0.097	2.46	0.241	6.12	40 kV
391875	18	0.81	16/30	16 x 0.25	0.075	1.90	0.197	5.00	30 kV
391862	18	0.81	16/30	16 x 0.25	0.062	1.57	0.171	4.34	25 kV
391850	18	0.81	16/30	16 x 0.25	0.050	1.27	0.147	3.73	20 kV
391845	18	0.81	16/30	16 x 0.25	0.045	1.14	0.137	3.48	15 kV
391840	18	0.81	16/30	16 x 0.25	0.040	1.02	0.127	3.23	10 kV
391699	16	1.32	26/30	26 x 0.25	0.150	3.81	0.360	9.14	50 kV
391697	16	1.32	26/30	26 x 0.25	0.097	2.46	0.254	6.45	40 kV
391675	16	1.32	26/30	26 x 0.25	0.075	1.90	0.210	5.33	30 kV
391662	16	1.32	26/30	26 x 0.25	0.062	1.57	0.184	4.67	25 kV
391650	16	1.32	26/30	26 x 0.25	0.050	1.27	0.160	4.06	20 kV
391645	16	1.32	26/30	26 x 0.25	0.045	1.14	0.150	3.81	15 kV
391640	16	1.32	26/30	26 x 0.25	0.040	1.02	0.140	3.56	10 kV
391499	14	2.08	41/30	41 x 0.25	0.150	3.81	0.374	9.50	50 kV
391497	14	2.08	41/30	41 x 0.25	0.097	2.46	0.268	6.81	40 kV
391475	14	2.08	41/30	41 x 0.25	0.075	1.90	0.224	5.69	30 kV
391462	14	2.08	41/30	41 x 0.25	0.062	1.57	0.198	5.03	25 kV
391450	14	2.08	41/30	41 x 0.25	0.050	1.27	0.174	4.42	20 kV
391445	14	2.08	41/30	41 x 0.25	0.045	1.14	0.164	4.17	15 kV
391440	14	2.08	41/30	41 x 0.25	0.040	1.02	0.154	3.91	10 kV
391297	12	3.29	65/30	65 x 0.25	0.097	2.46	0.287	7.29	40 kV
391275	12	3.29	65/30	65 x 0.25	0.075	1.90	0.243	6.17	30 kV
391262	12	3.29	65/30	65 x 0.25	0.062	1.57	0.217	5.51	25 kV
391250	12	3.29	65/30	65 x 0.25	0.050	1.27	0.193	4.90	20 kV
391245	12	3.29	65/30	65 x 0.25	0.045	1.14	0.183	4.65	15 kV
391099	10	5.32	105/30	105 x 0.25	0.150	3.81	0.418	10.62	50 kV
391097	10	5.32	105/30	105 x 0.25	0.097	2.46	0.312	7.92	40 kV
391045	10	5.32	105/30	105 x 0.25	0.045	1.14	0.208	5.28	15 kV
391040	10	5.32	105/30	105 x 0.25	0.040	1.02	0.198	5.03	10 kV
390897	8	8.61	133/29	133 x 0.28	0.097	2.46	0.363	9.22	40 kV
390862*	8	8.61	133/29	133 x 0.28	0.062	1.57	0.293	7.44	25 kV
390845	8	8.61	133/29	133 x 0.28	0.045	1.14	0.259	6.58	15 kV
390662*	6	13.57	133/27	133 x 0.36	0.062	1.57	0.337	8.56	25 kV
390645	6	13.57	133/27	133 x 0.36	0.045	1.14	0.303	7.70	15 kV
390462*	4	21.55	133/25	133 x 0.45	0.062	1.57	0.393	9.98	25 kV
390262*	2	34.45	259/26	259 x 0.40	0.062	1.57	0.463	11.76	25 kV

\*Not UL Recognized.

Insulation Colors: White • Black • Red



# FIT® Heat-Shrink Tubing

Alpha Wire offers a broad range of FIT heat-shrink tubing and sleeving products with excellent physical characteristics, used as a reliable way to protect and seal terminations, provide strain relief, and provide additional mechanical ruggedness.

- Chemical, heat and abrasion resistance
- Choice of standard colors
- Can seal terminations or provide strain relief
- Standard and dual-wall polyolefin tubing
- Special purpose
- Irradiated or crosslinked materials
- Unlined and adhesive lined

**Temperature Range:** -75°C to +360°C

**Shrink Ratio:** 2:1 to 6:1

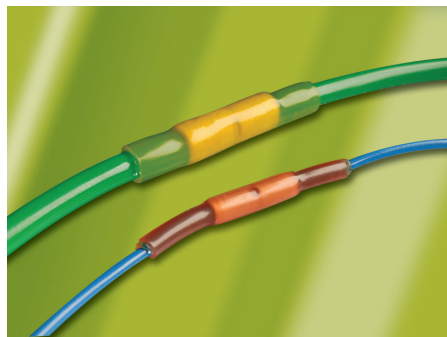
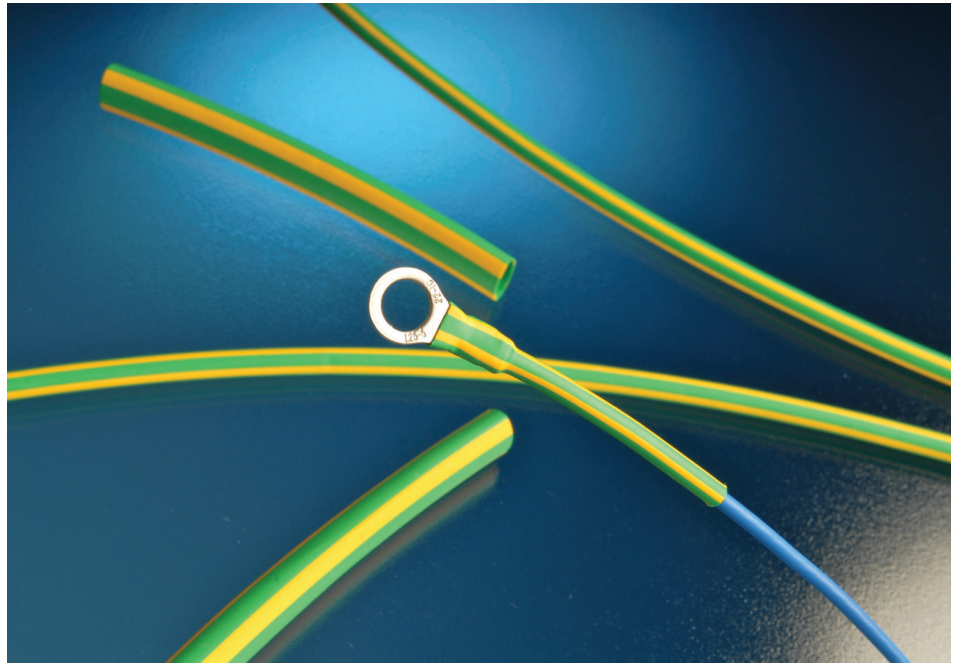
**Availability:** 25', 100', 500', 1000', Kits  
– Assorted (7.6 m, 30.5 m, 152 m, 305 m)

Packs of 4' sticks

## Approvals

- REACH
- RoHS

**Colors:** Clear, Brown, Blue, Black, Green, Green/Yellow, Natural, Red, Slate, Transparent Blue, White, Yellow



# FIT Heat-Shrink Tubing

## Heat-Shrink Tubing

Material	Purpose	UL VW-1	Resistance			Flexibility	Operating Temperature	Shrink Ratio	FIT Family
			Chemical	Heat	Abrasion				
<b>Single-Wall Irradiated Polyolefin for General-Purpose Use</b>									
Thin-wall irradiated polyolefin	LSZH: reduced smoke generation and gas emission Low outgassing	●		●		●	-55 to 105°C	2:1	<b>FIT-221L</b>
Irradiated polyolefin	Variety of shrink-ratios	●		●			-55 to 135°C	2:1	<b>FIT-221</b>
							-55 to 135°C	4:1	<b>FIT-421</b>
Flame-retardant irradiated polyolefin	Low shrink temp	●		●			-55 to 135°C	2:1	<b>FIT-221V</b>
							-55 to 135°C	3:1	<b>FIT-321V</b>
Irradiated polyolefin	600 V ground lead identification	●		●			-55 to 135°C	2:1	<b>FIT-260</b>
<b>Dual-Wall Polyolefin for Additional Sealing</b>									
Surface irradiated, dual extruded	Meltable inner wall, no adhesive		●		●		-55 to 125°C	2.5:1	<b>FIT-300</b>
Bonding, thermoplastic adhesive lined	Bonds to most materials; high voltage (2 kV at 90°C continuous)		●	●	●		-55 to 110°C	3:1	<b>FIT-700</b>
Bonding, adhesive lined	Water and corrosion protection		●	●	●		-55 to 125°C	3:1	<b>FIT-321</b>
							-55 to 90°C	5.6:1	<b>FIT-621</b>
							-55 to 125°C	2:1	<b>FIT-750</b>
<b>Special-Application Tubing</b>									
Irradiated PVC	Low shrink temp; 30% stronger than standard polyolefin	●					-20 to 105°C	2:1	<b>FIT-105</b>
Irradiated PVDF	High shrink temp; 3x tensile strength of standard polyolefin	●	●	●	●		-55 to 150°C	2:1	<b>FIT-350</b>
FEP	High shrink temp; thin wall thickness		●				-75 to 200°C	1.2:1	<b>FIT-400</b>
PTFE	High shrink temp; thin wall thickness		●				-75 to 260°C	1.5:1	<b>FIT-500</b>
Chlorinated polyolefin	Oil resistant	●		●	●		-75 to 121°C	2:1	<b>FIT-600</b>
Flexible fluoroelastomer	High shrink temp		●			●	-40 to 200°C	2:1	<b>FIT-650</b>
Polyethylene/polyester	Resists harsh environments				●	●	-40 to 125°C	2:1	<b>FIT-FABRIC</b>
Irradiated silicone rubber	Pliable	●		●	●	●	-50 to 200°C	1.7:1	<b>FIT-FLEX</b>
Irradiated PVDF	Transparent after shrink; 2x tensile strength of standard polyolefin	●	●	●			-55 to 150°C	2:1	<b>FIT-CLEAR</b>

# FIT® Wire Management

## Better Wire Management Means Better Harnesses

Bringing order to wire harnesses and cable routing means a system that is more reliable, easier to fabricate, and simpler to maintain. Let Alpha Wire help you solve wire management problems. Need additional protection from abrasion? Our woven sleeves are tough and flexible. For additional resistance to chemicals, oils, and solvents, our flexible tubing offers exceptional performance and operates at temperatures as high as 260°C. Our braided shields are effective and easy to use for additional EMI protection or a ground connection.

FIT Wire Management Applications include:

- **Harnessing**
- **Routing**
- **Organizing**
- **Shielding**
- **Grounding**

### Sleeving

Alpha has a sleeving for your application with options that are great for flexible wire harnesses, heat protection, and defense against chemicals or abrasion.

### Tubing

Offering protection from flammability, high heat, abrasion, and chemicals, Alpha tubing has the size for your wire and cable routing needs.



### Braid

Alpha braid is an exceptional, low resistance way to create a point-to-point ground strap. In retrofit applications, braid is an ideal way to install additional shielding to your cable.

### Lacing Tape

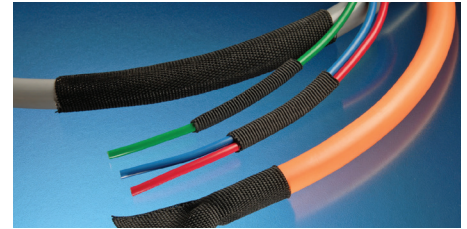
Lacing tape is a great, economical way to easily bundle wire and cable. Available in many different military grade finishes and colors.

### Tapes

Alpha Wire has two types of tapes for your wire management needs: EMI tape and self-adhering silicone tape.

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

Every application is critical and failure is not an option when the safety of equipment and patients is paramount. Specify Alpha wire, cable, tubing, and wire management products for precise medical applications, since the integrity of your system is only as robust as the products you use.



## Highly Customized Cable Are Standard

Alpha Wire goes one step further: manufacturing custom cables to meet unique applications—offering specific conductor counts, shielding options, jacket materials, and versatile product designs.

## Service and support, second-to-none

Selecting the correct cable for your critical application is essential to overall system reliability, performance, and safety. So we make it easy for you to select the right Alpha cable for your specific application. Our online resources include a wire and cable selection guide, technical information, full product catalog, and a distributor locator to make it easy to select and get the cable you need.

Can't find what you're looking for? Design the cable to your specification. It's easy, just visit [www.alphawire.com](http://www.alphawire.com)!

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