

Semiconductor Equipment Wire and Cable Portfolio



Helping Make Fabs More Productive



From wafer handling to inspection, Alpha Wire can help you make semiconductor equipment faster, more reliable, and easier to maintain. Whether refurbishing existing equipment or developing new equipment from design through production, Alpha Wire's extensive line of wire, cable, and accessories provide unrivaled performance and durability in the harshest environments. We also offer an extensive line-up of low outgassing products.

Durable Performance

Alpha's products provide superior electrical and mechanical performance, can reduce particulation, and improve system performance and yield.

Non-shedding, low outgassing, and chemically inert versions are specially designed for cleanroom use.

Our complementary FIT® heat-shrink tubing can be used to seal, protect, and strain-relieve connector terminations and other needs.

Find the Cable For Your Need

Consult with Alpha Wire's engineering team for assistance in developing the ideal wire and cable solution for your equipment needs.

The Performance You Need . . .

- Resistance to temperature extremes and harsh chemicals
- Low outgassing to eliminate contamination
- Shielding options for excellent EMI resistance
- Smaller, lighter cabling to save space and weight
- ISO 9001 compliant wire and cable to satisfy recyclability requirements

The Service You Deserve . . .

- Broad inventory in stock
- Same-day shipping
- Small put-ups and low minimum orders available
- Extensive distributor network
- Small custom prototyping
- Extensive custom cable design and manufacturing capabilities

The Reliability You Demand . . .

- Long flex life for motion control
- Low noise for signal integrity
- High pull strength for easy use
- Ultra-fine wire constructions for enhanced flexibility

Cables Designed for Reliability

EcoCable® and EcoCable Mini Cable

Low outgassing in a smaller, lighter PVC alternative

EcoFlex® Control Cable

Low outgassing in a lightweight, small-diameter cable for flex applications



Xtra-Guard® 1 PVC Cable

High mix of off-the-shelf constructions

Xtra-Guard 5 FEP Cable

Cleanroom ready low outgassing with maximum temperature and chemical performance

EcoWire® and EcoWire® Plus

Low outgassing in a smaller, lighter hook-up wire alternative

Hook-Up Wire

A full range of materials, and wire gauges to connect nearly everything to anything, including PTFE.

FIT® Heat-Shrink Tubing

The perfect FIT for fabs with low outgassing and chemical and solvent resistance

Applications

Front-End Processes

- Deposition equipment
- Etching equipment
- Wafer-handling equipment
- Cleanroom robotics and motion control

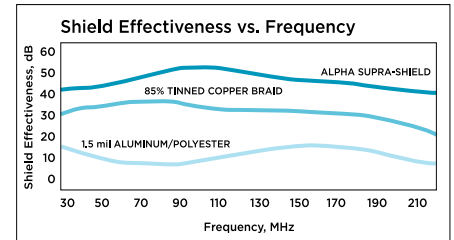
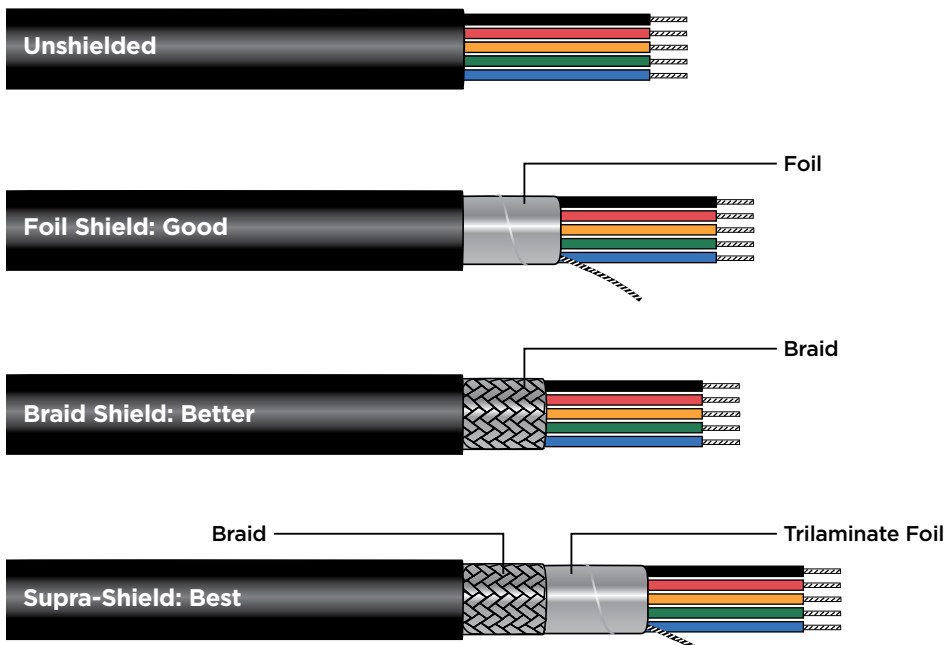
Back-End Processes

- Wafer dicing equipment
- Chip testing and packaging equipment
- Package reeling equipment
- Transfer equipment

Fab Support Equipment

- Gas delivery
- Environmental systems

Shielding Options to Maximize Signal Integrity



Alpha Wire offers cables in four shielding options to handle virtually any electrical environment.

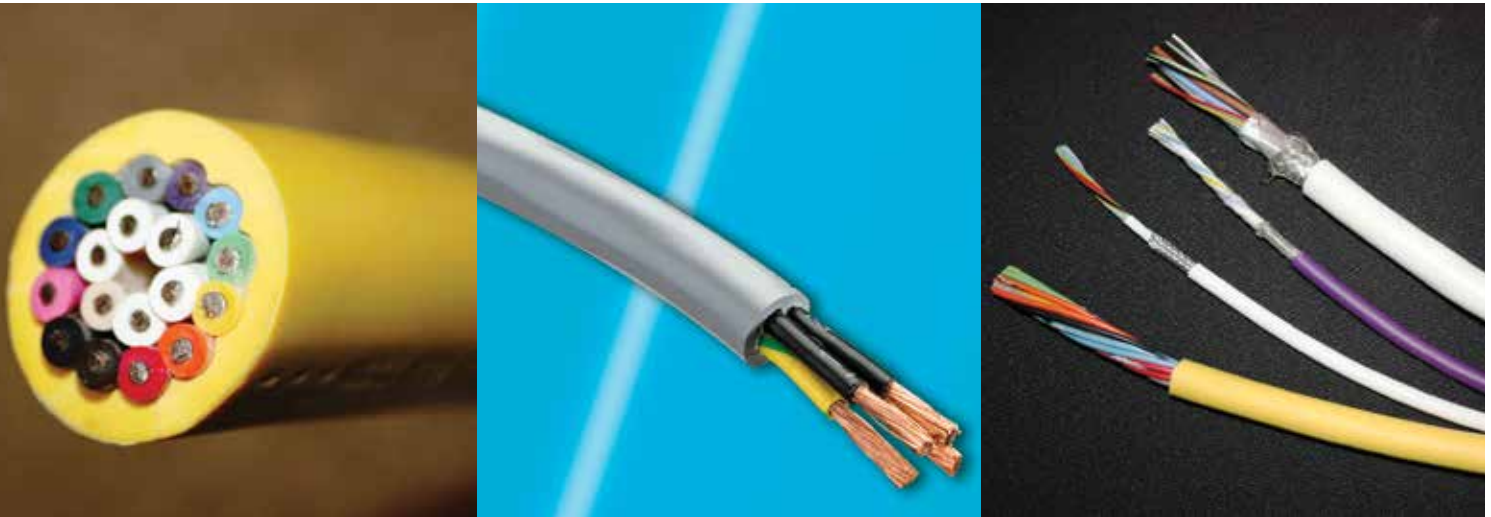
Unshielded: the smallest cable diameter for use in low-noise environments.

Foil shielded: an aluminum/polyester shield for moderate EMI needs.

Braid shielded: a braided copper shield, with 55% to 85% coverage, provides good protection against higher frequency EMI.

Supra-Shield® (premium foil + braid) shielded: our exclusive Supra-Shield cables combine a triple-layer aluminum/polyester/aluminum foil with a tinned copper braid shield having tight 70% coverage for exceptional EMI performance.

The Right Cable . . . Just the Way You Want It



Turn to Alpha Wire to get the precise Coast™ custom cable needed for your application. We can meet your needs for low outgassing, wide temperature ranges, and resistance to harsh chemicals—all with fast turns on prototypes and production.

More Choice in Cable Configurations

Custom Engineered to Your Specifications and Designs

- Multiconductor cables
- Multipair cables
- Microminiature cables
- Coaxial cables
- Microcoaxial cables
- Hybrid cables
- Composite cables
- Power cables
- Lead wires
- Flat, ribbon, zip cables
- Flat, round braids
- Retractable coil cords

Conductor Materials

Conductors: 50 AWG to 4/0 AWG

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 (.5K - 12K)
- Metalized carbon fiber
- 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
- TPR
- TPA
- mPPE

Thermosets

- XLPE

Fluoropolymers

- PTFE
- FEP
- PFA
- ETFE
- PVDF

Silicones — Thermosets

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

Rubbers

- Neoprene
- Thermoplastic vulcanite
- Melt-processible rubber

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

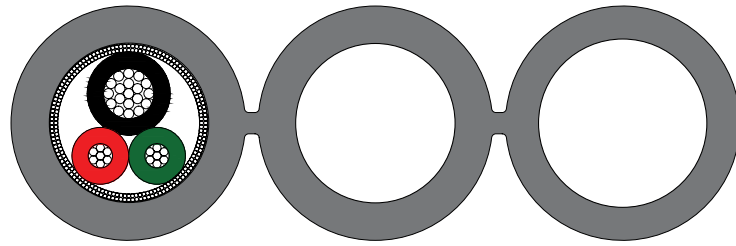
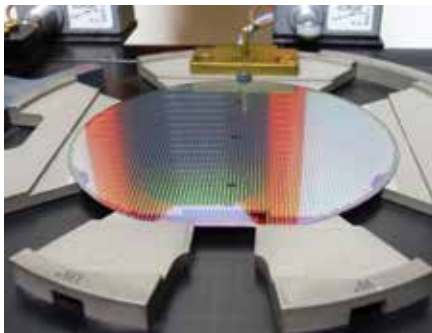
Electrical: 30, 150, 300, 600, 1000 V . . . up to 75 kV

Approvals

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

Mechanical/Environmental

- Abrasion resistance
- Oil resistance
- Chemical/solvent resistance
- Sunlight resistance
- Sterilizable
- Low outgassing



*Cable with
Integrated
Lumens*

Packaging

Reeled in small or large put ups, cut to length, custom printing, custom jacket colors, 100' minimum order

Other

Can design custom cables with lumens

Manufactured Products

Value-Added Capabilities

- Cable assembly with Tier 2 partners
- Coil cords
- Custom packaging
- Cut-to-length
- Dying
 - Non-chemical
 - PTFE materials
 - Connector end for assembly

- Marking
- Spooling (UL, CSA)
- Stripping
- Stripping
- Tinning
- Twisting

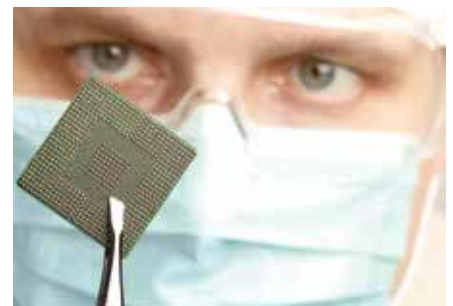
Intellectual Property (IP) Protection

The custom specifications provide IP protection, as each part number and specification are unique to each customer requirement. The custom specification requires customer approval with formal written consent as part of the PO acknowledgment process, and prevents any design changes or material substitutions without a new spec revision level and approval.

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

www.alphawire.com/customquote

Contact Alpha about other custom cable options.



EcoCable® 600 V Control Cable



A fully recyclable 600 V control cable that's up to 47% smaller and 65% lighter than PVC. More than 130 standard EcoCable constructions are available to meet your performance needs.

- Up to 87% lower outgassing than standard 600 V PVC cable
- Up to 47% smaller and 65% lighter than PVC
- Exceptional EMI protection with Supra-Shield®
- Fully recyclable
- 28 - 14 AWG
- Contains no PVC, halogens, heavy metals, or phthalates

Conductors: Stranded tinned copper

Insulation: mPPE

Jacket: mPPE, slate

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

Voltage: 600 V

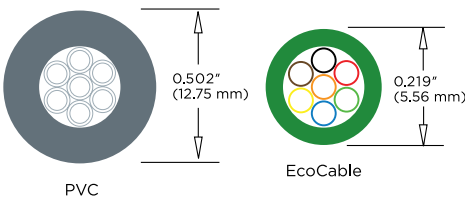
Bend Radius: 6x

Temperature Range: -50°C to +105°C

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



22 AWG (0.35 mm²) Cable



Approvals

- UL AWM 21915 (600 V, 105°C)
- UL VW-1
- CE
- CSA AWM I/II A/B FT2
- Suitable for use in NFPA 79 applications
- REACH
- RoHS

Unshielded

28 AWG (0.89 mm²)

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
77052	2	0.138	3.51
77053	3	0.144	3.66
77054	4	0.153	3.89
77055	6	0.174	4.42

26 AWG (0.14 mm²)

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
77047	2	0.146	3.71
77048	3	0.152	3.86
77049	4	0.162	4.11
77050	6	0.186	4.72
77051	8	0.198	5.03

24 AWG (0.28 mm²)

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
77001	2	0.156	3.96
77002	4	0.175	4.44
77003	5	0.188	4.78
77004	7	0.201	5.11
77005	9	0.229	5.82
77006	19	0.288	7.32

22 AWG (0.35 mm²)

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
77007	2	0.168	4.27
77008	4	0.189	4.80
77009	5	0.204	5.18
77010	7	0.219	5.56
77011	9	0.251	6.38
77012	19	0.318	8.08

Unshielded (continued)

20 AWG (0.56 mm²)

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
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 mm²)

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 mm²)

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 mm²)

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 (0.89 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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 (0.89 mm²)

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
77252	2	0.166	4.22
77253	3	0.172	4.37
77254	4	0.181	4.60
77255	6	0.202	5.13

24 AWG (0.28 mm²)

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
77201	4	0.203	5.16
77202	7	0.229	5.82
77203	12	0.279	7.09

20 AWG (0.56 mm²)

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
77207	4	0.237	6.02
77208	5	0.254	6.45
77209	7	0.271	6.88
77210	9	0.308	7.82
77211	12	0.337	8.56
77212	19	0.386	9.80

16 AWG (1.32 mm²)

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
77222	2	0.254	6.45
77223	3	0.266	6.76
77224	4	0.287	7.29
77225	5	0.311	7.90
77226	7	0.335	8.51
77227	9	0.385	9.78
77228	12	0.424	10.77
77229	15	0.461	11.71
77230	19	0.492	12.50

26 AWG (0.14 mm²)

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
77247	2	0.174	4.42
77248	3	0.180	4.57
77249	4	0.190	4.83
77250	6	0.214	5.44
77251	8	0.226	5.74

22 AWG (0.35 mm²)

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
77204	4	0.217	5.51
77205	7	0.247	6.27
77206	12	0.304	7.72

18 AWG (0.81 mm²)

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
77213	2	0.230	5.84
77214	3	0.241	6.12
77215	4	0.258	6.55
77216	5	0.278	7.06
77217	7	0.299	7.59
77218	9	0.341	8.66
77219	12	0.374	9.50
77220	15	0.405	10.29
77221	19	0.432	10.97

14 AWG (2.08 mm²)

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
77231	2	0.288	7.32
77232	3	0.303	7.70
77233	4	0.329	8.36
77234	7	0.386	9.80
77235	9	0.447	11.35
77236	12	0.495	12.57
77237	15	0.539	13.69
77238	25	0.678	17.22

EcoCable® Mini 300 V Cable



This 300 V cable is up to 32% smaller and 44% lighter than PVC cable. More than 200 standard configurations make it easy for you to design smaller, lighter devices.

- Up to 32% smaller and 44% lighter than PVC
- 92% lower outgassing than PVC
- 28 to 20 AWG
- Easier routing and installation
- Variety of shielding options
- 100% recyclable mPPE insulation and jacketing

Conductors: Stranded tinned copper

Insulation: mPPE

Jacket: mPPE, slate

Shielding: Unshielded, foil shield, individually foil shielded pairs + overall foil shield, Supra-Shield® Foil + Braid

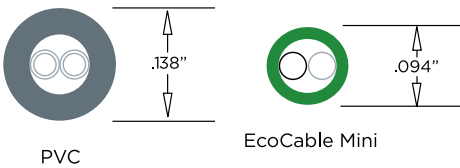
Voltage: 300 V

Temperature Range: -40°C to +80°C

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



28 AWG (0.382 mm²) Cable



Approvals

- UL AWM 21460 • CE
- CSA I A/B FT1 • RoHS
- REACH • WEEE
- Suitable for use in NFPA 79 applications
- Meets UL VW-1 Flame Rating

Unshielded Pairs

28 AWG (0.0925 mm²)

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 mm²)

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

Unshielded Pairs (continued)

24 AWG (0.241 mm²)

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

22 AWG (0.382 mm²)

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

20 AWG (0.616 mm²)

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

Foil Shielded, Multiconductor

28 AWG (0.0925 mm²)

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
78102	2	0.098	2.49
78103	3	0.103	2.62
78104	4	0.111	2.82
78106	6	0.128	3.25
78108	8	0.138	3.51

26 AWG (0.154 mm²)

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
78112	2	0.106	2.69
78113	3	0.111	2.82
78114	4	0.12	3.05
78116	6	0.14	3.56
78118	8	0.151	3.84
78120	10	0.174	4.42
78121	15	0.194	4.93

Foil Shielded, Multiconductor (continued)

24 AWG (0.241 mm²)

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
78122	2	0.116	2.95
78123	3	0.122	3.10
78124	4	0.132	3.35
78126	6	0.156	3.96
78128	8	0.168	4.27
78130	10	0.194	4.93
78131	15	0.217	5.51

22 AWG (0.382 mm²)

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
78132	2	0.13	3.30
78133	3	0.137	3.48
78134	4	0.149	3.78
78136	6	0.177	4.50
78138	8	0.191	4.85
78140	10	0.222	5.64
78141	15	0.249	6.32

20 AWG (0.616 mm²)

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
78142	2	0.146	3.71
78143	3	0.154	3.91
78144	4	0.169	4.29
78146	6	0.201	5.11
78148	8	0.218	5.54
78150	10	0.254	6.45
78155	15	0.286	7.26

Foil Shielded, Pairs

28 AWG (0.0925 mm²)

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 mm²)

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 mm²)

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

Foil Shielded, Pairs (continued)

22 AWG (0.382 mm²)

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

20 AWG (0.616 mm²)

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

Individually Foil Shielded Pairs + Overall Foil Shield

28 AWG (0.0925 mm²)

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	0.177	4.50
78204	4	0.194	4.93
78205	5	0.211	5.36
78206	6	0.229	5.82
78208	8	0.247	6.27
78209	9	0.153	3.89

26 AWG (0.154 mm²)

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	0.162	4.11
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 mm²)

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	0.177	4.50
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 mm²)

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	0.196	4.98
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 mm²)

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	0.222	5.64
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

Supra-Shield® Foil + Braid, Multiconductor

28 AWG (0.0925 mm²)

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	0.121	3.07
78303	3	0.126	3.20
78304	4	0.134	3.40
78306	6	0.151	3.84
78308	8	0.161	4.09

26 AWG (0.154 mm²)

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	0.129	3.28
78313	3	0.134	3.40
78314	4	0.143	3.63
78316	6	0.163	4.14
78318	8	0.174	4.42
78320	10	0.197	5.00
78320	15	0.217	5.51

24 AWG (0.241 mm²)

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	0.139	3.53
78323	3	0.145	3.68
78324	4	0.155	3.94
78326	6	0.179	4.55
78328	8	0.191	4.85
78330	10	0.217	5.51
78331	15	0.240	6.10

22 AWG (0.382 mm²)

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	0.153	3.89
78333	3	0.16	4.06
78334	4	0.172	4.37
78336	6	0.200	5.08
78338	8	0.214	5.44
78340	10	0.245	6.22
78341	15	0.272	6.91

20 AWG (0.616 mm²)

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	0.169	4.29
78343	3	0.177	4.50
78344	4	0.192	4.88
78346	6	0.224	5.69
78348	8	0.241	6.12
78350	10	0.277	7.04
78355	15	0.309	7.85

Supra-Shield® Foil + Braid, Pairs

28 AWG (0.0925 mm²)

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	0.159	4.04
78353	3	0.167	4.24
78354	4	0.180	4.57
78305	5	0.194	4.93
78356	6	0.209	5.31
78358	8	0.225	5.72
78309	9	0.240	6.10

26 AWG (0.154 mm²)

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	0.173	4.39
78363	3	0.181	4.60
78364	4	0.196	4.98
78315	5	0.212	5.38
78366	6	0.229	5.82
78368	8	0.246	6.25
78319	9	0.264	6.71

24 AWG (0.241 mm²)

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	0.189	4.80
78373	3	0.199	5.05
78374	4	0.216	5.49
78325	5	0.234	5.94
78376	6	0.254	6.45
78378	8	0.274	6.96
78329	9	0.294	7.47

22 AWG (0.382 mm²)

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	0.212	5.38
78383	3	0.224	5.69
78384	4	0.244	6.20
78335	5	0.266	6.76
78386	6	0.288	7.32
78388	8	0.312	7.92
78349	9	0.336	8.53

20 AWG (0.616 mm²)

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	0.238	6.05
78393	3	0.252	6.40
78394	4	0.275	6.99
78335	5	0.301	7.65
78396	6	0.328	8.33
78398	8	0.355	9.02
78339	9	0.383	9.73

EcoFlex® 600 V Control Cable



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

- Up to 32% smaller and 55% lighter than PVC
- 91% lower outgassing than PVC
- Long flex life for machines with constant flexibility
- Fully recyclable
- 28 - 10 AWG
- Contains no PVC, phthalates, halogens, or heavy metals
- Exceptional EMI performance with Supra-Shield®
- Rated for over 1 million flex life cycles

Conductors: Stranded tinned copper

Insulation: mPPE

Jacket: mPPE, slate

Shielding: Unshielded, foil shield, braid shield (85% coverage), 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
- Suitable for use in NFPA79 applications
- RoHS
- REACH

Unshielded

28 AWG (0.09 mm²)

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 mm²)

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 mm²)

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 mm²)

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

Unshielded (continued)

20 AWG (0.51 mm²)

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 mm²)

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 mm²)

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 mm²)

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
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 mm²)

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
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 mm²)

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
79041	3	0.38	9.65
79042	4	0.423	10.74
79043	5	0.465	11.81

Braid Shield

20 AWG (0.51 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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

Supra-Shield® Foil + Braid (continued)

24 AWG (0.24 mm²)

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	0.27	6.86
79255	10	0.289	7.34

22 AWG (0.38 mm²)

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	0.23	5.84
79247	6	0.26	6.60
79248	8	0.296	7.52
79249	10	0.318	8.08

20 AWG (0.51 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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

Xtra-Guard® 1 PVC Control 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
- Most constructions available for same-day shipping
- Put-ups as small as 100'

Conductors: Stranded tinned copper

Insulation: Premium PVC

Jacket: Premium PVC

Shielding: Unshielded, foil shield, Supra-Shield

Voltage: 300 V, 600 V

Temperature Range: -30°C to +105°C

Availability: 100', 500', 1000' (30.5 m, 152 m, 305 m); Bulk, cut to length

Approvals

- UL VW-1
- UL 1685
- UL AWM 2464
- UL AWM 2501
- UL AWM 1569
- UL AWM 2343
- UL AWM 21894
- UL AWM 21896
- RoHS
- UL 10002
- UL CM



Approvals (continued):

- UL MTW
- 60C Oil
- CSA CMG
- CSA FT4
- CSA TEW
- CSA AWM I/II A/B
- CE
- Sunlight resistant
- IEC 60332-1/2 Flame Behavior
- REACH

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 PVC Control Cable



300 V Unshielded, Multiconductor (continued)

24 AWG (0.23 mm²)

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

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

22 AWG (0.35 mm²)

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

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

20 AWG (0.56 mm²)

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

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

18 AWG (0.81 mm²)

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

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

16 AWG (1.23 mm²)

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

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

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

Xtra-Guard® 1 PVC Control Cable



300 V Unshielded, Multiconductor AWM 2343

24 AWG (0.23 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 mm²)

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

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

22 AWG (0.35 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 mm²)

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 mm²)

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

20 AWG (0.56 mm²)

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

Xtra-Guard® 1 PVC Control Cable



600 V Unshielded, Multiconductor (continued)

16 AWG (1.23 mm²)

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

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

14 AWG (2.08 mm²)

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

300 V Foil Shielded, 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
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 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
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 mm²)

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

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

22 AWG (0.35 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5192C	2	0.172	4.37	0.032	0.81
5193C	3	0.180	4.57	0.032	0.81
5194C	4	0.193	4.90	0.032	0.81
5196C	6	0.223	5.66	0.032	0.81
5198C	8	0.239	6.07	0.032	0.81
5199/10C	10	0.272	6.91	0.032	0.81
5199/15C	15	0.303	7.70	0.032	0.81
5199/20C	20	0.335	8.51	0.032	0.81
5199/25C	25	0.372	9.45	0.032	0.81
5199/30C	30	0.393	9.98	0.032	0.81
5199/40C	40	0.438	11.13	0.032	0.81
5199/50C	50	0.482	12.24	0.032	0.81
5199/60C	60	0.522	13.26	0.032	0.81
5199/70C	70	0.606	15.39	0.053	1.35

Xtra-Guard® 1 PVC Control Cable



300 V Foil Shielded, Multiconductor (continued)

20 AWG (0.56 mm²)

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

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

16 AWG (1.23 mm²)

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

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

18 AWG (0.81 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 PVC Control Cable



300 V Foil Shielded, Multiconductor AWM 2343

24 AWG (0.23 mm²)

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

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

22 AWG (0.35 mm²)

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

Part 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

20 AWG (0.56 mm²)

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

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

600 V Foil Shielded, Multiconductor

22 AWG (0.35 mm²)

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

20 AWG (0.56 mm²)

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

18 AWG (0.81 mm²)

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 mm²)

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

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

Xtra-Guard® 1 PVC Control Cable



600 V Foil Shielded, Multiconductor (continued)

14 AWG (2.08 mm²)

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

300 V Supra-Shield® Foil + Braid, 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
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

24 AWG (0.23 mm²)

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

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

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
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

22 AWG (0.35 mm²)

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

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

Xtra-Guard® 1 PVC Control Cable



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

20 AWG (0.56 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 PVC Control Cable



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

20 AWG (0.56 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 mm²)

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 mm²)

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 mm²)

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 mm²)

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 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 PVC Control Cable



300 V Unshielded, Multipair

24 AWG (0.23 mm²)

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

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

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

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

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

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

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

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

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

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

26 AWG (0.14 mm²)

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

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

24 AWG (0.23 mm²)

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

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

Xtra-Guard® 1 PVC Control Cable



300 V Foil Shield, Multipair AWM 2464

28 AWG (0.09 mm²)

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

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

26 AWG (0.14 mm²)

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

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

24 AWG (0.23 mm²)

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

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

22 AWG (0.35 mm²)

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

Part No.	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 mm²)

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

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

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

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

Xtra-Guard® 1 PVC Control Cable



300 V Supra-Shield® Foil + Braid, Multipair

28 AWG (0.09 mm²)

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

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

26 AWG (0.14 mm²)

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

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

24 AWG (0.23 mm²)

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

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

22 AWG (0.35 mm²)

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

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

20 AWG (0.56 mm²)

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

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

18 AWG (0.81 mm²)

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

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

Xtra-Guard® 1 PVC Control Cable



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

24 AWG (0.23 mm²)

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

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

22 AWG (0.35 mm²)

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

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

20 AWG (0.56 mm²)

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

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

Xtra-Guard® 5 Performance 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.

- Superior oil, solvent, and chemical resistance
- Exceptional EMI protection with Supra-Shield® Foil + Braid
- 24 - 16 AWG

Conductors: Tinned copper

Insulation: FEP

Jacket: FEP

Shielding: Unshielded, foil shield, Supra-Shield

Voltage: 300 V

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



Approvals (continued):

- RoHS
- REACH

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

300 V Unshielded, Multiconductor

24 AWG (0.23 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55012	2	0.148	3.76	0.027	0.69
55013	3	0.155	3.94	0.027	0.69
55014	4	0.166	4.22	0.027	0.69
55016	6	0.193	4.90	0.027	0.69
55019	9	0.220	5.59	0.027	0.69
55020/12	12	0.243	6.17	0.027	0.69

22 AWG (0.35 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55002	2	0.160	4.06	0.027	0.69
55003	3	0.168	4.27	0.027	0.69
55004	4	0.181	4.60	0.027	0.69
55006	6	0.211	5.36	0.027	0.69
55009	9	0.242	6.15	0.027	0.69
55010/12	12	0.268	6.81	0.027	0.69

20 AWG (0.56 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55052	2	0.176	4.47	0.027	0.69
55053	3	0.185	4.70	0.027	0.69
55054	4	0.200	5.08	0.027	0.69
55056	6	0.235	5.97	0.027	0.69
55059	9	0.271	6.88	0.027	0.69
55060/12	12	0.301	7.65	0.027	0.69

18 AWG (0.90 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55062	2	0.196	4.98	0.027	0.69
55063	3	0.207	5.26	0.027	0.69
55064	4	0.225	5.72	0.027	0.69
55066	6	0.265	6.73	0.027	0.69
55069	9	0.307	7.80	0.027	0.69
55070/12	12	0.343	8.71	0.027	0.69

16 AWG (1.23 mm²)

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
55072	2	0.218	5.54	0.027	0.69
55073	3	0.230	5.84	0.027	0.69
55074	4	0.251	6.38	0.027	0.69
55076	6	0.298	7.57	0.027	0.69
55079	9	0.347	8.81	0.027	0.69
55080/12	12	0.388	9.86	0.027	0.69

Xtra-Guard® 5 Performance Cable



300 V Foil Shield, Multiconductor

24 AWG (0.23 mm²)

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

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

22 AWG (0.35 mm²)

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

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

20 AWG (0.56 mm²)

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

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

18 AWG (0.90 mm²)

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

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

16 AWG (1.23 mm²)

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

Xtra-Guard® 5 Performance Cable



300 V Supra-Shield® Foil + Braid, Multiconductor

24 AWG (0.23 mm²)

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

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

22 AWG (0.35 mm²)

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

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

20 AWG (0.56 mm²)

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

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

18 AWG (0.90 mm²)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
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 mm²)

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 mm²)

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

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

Xtra-Guard® 5 Performance Cable



300 V Foil Shield, Multipair

24 AWG (0.23 mm²)

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

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

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

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

20 AWG (0.56 mm²)

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

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
55451	1	0.182	4.62	0.027	0.69
55452	2	0.256	6.50	0.027	0.69
55453	3	0.271	6.88	0.027	0.69
55455	5	0.324	8.23	0.027	0.69
55456	6	0.353	8.97	0.027	0.69
55459	9	0.412	10.46	0.027	0.69
55459/12	12	0.461	11.71	0.027	0.69

18 AWG (0.90 mm²)

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

300 V Supra-Shield® Foil + Braid, Multipair

24 AWG (0.23 mm²)

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

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

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

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

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

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

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

Hook-Up Wire



The broad range of hook-up wire from Alpha Wire means you will find the wire exactly suited to your application.

- Stranded and solid copper conductors, bare or tinned
- Color-coded insulation for easy circuit identification
- -40°C to +105°C temperature range
- Good abrasion resistance
- Excellent flame resistance

- UL, CSA compliance
- Convenient put-ups as short as 100 feet
- Excellent uniformity for easy handling, stripping, and termination

EcoWire® 600 V mPPE Wire



Innovative EcoWire combines increased performance with a minimized environmental impact. EcoWire's modified polyphenylene ether (mPPE) insulation is inherently lighter, tougher, and more durable than PVC.

The result is UL AWM wire that is up to 45% smaller in diameter and 40% lighter than PVC-based counterparts. Plus, the non-halogenated insulation contains no heavy metal pigments, allowing it to help manufacturers meet Waste Electrical and Electronic Equipment (WEEE) requirements.

UL AWM 11028 VW-1
CSA AWM I A/B FT1
RoHS
REACH
Halogen Free
CE

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

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

- -40°C to +105°C
- Stranded or solid tinned copper conductors
- Modified polyphenylene ether insulation

Availability

100 ft (30.5 m)
 1000 ft (305 m)
 5000 ft (1524 m)
 25,000 ft (7620 m) drum

250 V, PTFE Wire



MIL-DTL-16878/6 (Type ET) UL VW-1 NEMA HP3

- -60°C to +200°C
- Stranded or solid silver-plated copper conductor
- PTFE insulation

Availability

100 ft (30.5 m)

1000 ft (305 m)**

**May contain multiple lengths

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		NEMA HP3 Type	Colors
	AWG	mm ²	AWG	mm	Inch	mm	Inch	mm		
33201	32	0.03	Solid	1 x 0.20	0.006	0.15	0.019	0.48	—	Z2
2840/7*	32	0.03	7/40	7 x 0.08	0.006	0.15	0.022	0.56	ETXBAB	Z1
2841/7*	30	0.06	7/38	7 x 0.10	0.006	0.15	0.024	0.61	ETXBBB	Z1
2841/1*	30	0.05	Solid	1 x 0.25	0.006	0.15	0.022	0.56	ETXBBA	Z1
2842/7*	28	0.09	7/36	7 x 0.12	0.006	0.15	0.027	0.69	ETXBCB	Z1
2842/19*	28	0.09	19/40	19 x 0.08	0.006	0.15	0.027	0.69	ETXBCE	Z1
2842/1*	28	0.08	Solid	1 x 0.32	0.006	0.15	0.025	0.64	ETXBCA	Z1
2843/7*	26	0.14	7/34	7 x 0.16	0.006	0.15	0.031	0.79	ETXBDB	Z1
2843/19*	26	0.15	19/38	19 x 0.10	0.006	0.15	0.031	0.79	ETXBDE	Z1
2843/1*	26	0.13	Solid	1 x 0.40	0.006	0.15	0.028	0.71	ETXBDA	Z1
2844/7*	24	0.23	7/32	7 x 0.20	0.006	0.15	0.036	0.91	ETXBEB	Z1
2844/19*	24	0.24	19/36	19 x 0.13	0.006	0.15	0.036	0.91	ETXBEE	Z1
2845/7	22	0.35	7/30	7 x 0.25	0.006	0.15	0.042	1.07	ETXBFB	Z1
2845/19	22	0.38	19/34	19 x 0.16	0.005	0.13	0.042	1.07	ETXBFE	Z1

*Not VW-1

Z1 Insulation Colors: 1 White • 2 Black • 3 Red • 4 Green • 5 Yellow • 6 Blue • 7 Brown • 8 Orange • 9 Slate • 10 Violet

Z2 Insulation Colors: 0 Black • 1 Brown • 2 Red • 3 Orange • 4 Yellow • 5 Green • 6 Blue • 7 Violet • 8 Slate • 9 White

*These wires also available in 500 ft (152 m) put-ups.

600 V, PTFE Wire

MIL-DTL-16878/4 (Type E) (600 V) UL AWM 1213* NEMA HP3

*Voltage rating not specified.

- -60°C to +200°C (MIL)
- -60°C to +105°C (UL)
- Stranded or solid silver-plated copper conductor
- PTFE insulation

Availability

100 ft (30.5 m)

1000 ft (305 m)**

**May contain multiple lengths

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		NEMA HP3 Type
	AWG	mm ²	AWG	mm	Inch	mm	Inch	mm	
5851	30	0.06	7/38	7 x 0.10	0.010	0.25	0.032	0.81	EXBBB
5852	28	0.09	7/36	7 x 0.13	0.010	0.25	0.035	0.89	EXBCB
5853	26	0.14	7/34	7 x 0.16	0.010	0.25	0.039	0.99	EXBDB
5853/19	26	0.15	19/38	19 x 0.10	0.010	0.25	0.039	0.99	EXBDE
2853/1	26	0.13	Solid	1 x 0.40	0.010	0.25	0.036	0.91	EXBDA
5854	24	0.24	19/36	19 x 0.13	0.010	0.25	0.044	1.12	EXBEE
5854/7	24	0.23	7/32	7 x 0.20	0.010	0.25	0.044	1.12	EXBEB
2854/1	24	0.20	Solid	1 x 0.51	0.010	0.25	0.040	1.02	EXBEA
5855	22	0.38	19/34	19 x 0.16	0.010	0.25	0.050	1.27	EXBFE
5855/7	22	0.35	7/30	7 x 0.25	0.010	0.25	0.050	1.27	EXBFB
2855/1	22	0.32	Solid	1 x 0.64	0.010	0.25	0.045	1.14	EXBFA
5856	20	0.62	19/32	19 x 0.20	0.010	0.25	0.058	1.47	EXBGE
5856/7	20	0.56	7/28	7 x 0.32	0.010	0.25	0.058	1.47	EXBGB
2856/1***	20	0.52	Solid	1 x 0.81	0.010	0.25	0.052	1.32	EXBGA
5857	18	0.96	19/30	19 x 0.25	0.010	0.25	0.069	1.75	EXBHE
2857/1***	18	0.82	Solid	1 x 1.02	0.011	0.27	0.061	1.55	EXBHA
5858	16	1.23	19/29	19 x 0.29	0.012	0.30	0.080	2.03	EXBJE
5859†	14	1.94	19/27	19 x 0.36	0.012	0.30	0.095	2.41	EXBKE
5859/12†	12	3.08	19/25	19 x 0.45	0.012	0.30	0.114	2.90	EXBLE
5859/10†	10	4.74	37/26	37 x 0.40	0.012	0.30	0.134	3.40	EXBMG

***White, black, red only.

†Colors 1-5 only, not UL AWM 1213.

Insulation Colors: White • Black • Red • Green • Yellow • Blue • Brown • Orange • Slate • Violet

1000/300 V, PTFE Wire



**MIL-DTL-16878/5 (TYPE EE)
(1000V)
UL AWM 1180 (300V)
NEMA HP3**

- -60°C to +200°C
- Stranded or solid silver-plated copper conductor
- PTFE insulation

Availability

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

**May contain multiple lengths

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		NEMA HP3 Type
	AWG	mm ²	AWG	mm	Inch	mm	Inch	mm	
5874	24	0.24	19/36	19 x 0.13	0.015	0.37	0.054	1.37	EEXBEE
5875	22	0.38	19/34	19 x 0.16	0.014	0.36	0.060	1.52	EEXBFE
5876	20	0.62	19/32	19 x 0.20	0.014	0.36	0.068	1.73	EEXBGE
5877	18	0.96	19/30	19 x 0.25	0.015	0.37	0.079	2.01	EEXBHE
5878	16	1.23	19/29	19 x 0.29	0.016	0.41	0.089	2.26	EEXBJE
5879	14	1.94	19/27	19 x 0.36	0.017	0.43	0.106	2.69	EEXBKE
5879/10	10	4.74	37/26	37 x 0.40	0.017	0.43	0.145	3.68	EEXBMG
5879/12	12	3.08	19/25	19 x 0.45	0.017	0.43	0.125	3.18	EEXBLE
5879/8*	8	8.61	133/29	133 x 0.29	0.020	0.51	0.209	5.31	EEXBNL

*Not UL AWM 1180.

Insulation Colors: White • Black • Red • Green • Yellow • Blue • Brown • Orange • Slate • Violet
Parts 5878, 5879, 5879/8, 5879/10, 5879/12: white only.

600 V, ETFE or PTFE Wire



**SAE AS22759/11
(MIL-DTL-22759/11)
SAE AS22759/16
(MIL-DTL-22759/16)**

- -55°C to +200°C (PTFE)
- -55°C to +150°C (ETFE)
- Stranded silver-plated copper conductors (SAE AS22759/11)
- Stranded tinned copper conductor (SAE AS22759/16)
- ETFE or PTFE insulation

Availability

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

*May contain multiple lengths

PTFE, SAE AS22759/11, -55°C to +200°C, Silver-Plated Copper Conductors

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter	
	AWG	mm ²	AWG	mm	Inch	mm	Inch	mm
AT261938	26	0.15	19/38	19 x 0.10	0.010	0.25	0.038	0.97
AT241936	24	0.24	19/36	19 x 0.13	0.009	0.23	0.043	1.09
AT221934	22	0.38	19/34	19 x 0.16	0.009	0.23	0.049	1.24
AT201932	20	0.62	19/32	19 x 0.20	0.011	0.28	0.058	1.47
AT181930	18	0.96	19/30	19 x 0.25	0.010	0.25	0.068	1.73
AT161929	16	1.23	19/29	19 x 0.29	0.010	0.25	0.075	1.90
AT141927	14	1.94	19/27	19 x 0.36	0.011	0.27	0.090	2.29
AT121925	12	3.08	19/25	19 x 0.45	0.013	0.32	0.111	2.82

ETFE, SAE AS22759/16, -55°C to +150°C, Tinned Copper Conductors

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter	
	AWG	mm ²	AWG	mm	Inch	mm	Inch	mm
AZ241936	24	0.24	19/36	19 x 0.13	0.011	0.27	0.045	1.14
AZ221934	22	0.38	19/34	19 x 0.16	0.011	0.28	0.052	1.32
AZ201932	20	0.62	19/32	19 x 0.20	0.011	0.28	0.060	1.52
AZ181930	18	0.96	19/30	19 x 0.25	0.012	0.29	0.071	1.80
AZ161929	16	1.23	19/29	19 x 0.29	0.013	0.33	0.079	2.01
AZ141927	14	1.94	19/27	19 x 0.36	0.013	0.33	0.093	2.36
AZ123728	12	2.97	37/28	37 x 0.32	0.014	0.34	0.114	2.90

Insulation Colors: White • Black • Red • Green • Yellow • Blue • Brown • Orange • Slate • Violet



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, organize, identify, repair, and seal terminations, provide strain relief, and provide additional mechanical ruggedness.

- **Chemical, heat and abrasion resistance**
- **Choice of standard or custom colors**
- **Can seal terminations or provide strain relief**
- **Standard and dual-wall polyolefin tubing**
- **Special purpose**
- **Irradiated or cross-linked materials**
- **Unlined and adhesive lined**
- **-75°C to +360°C temperature range**
- **2:1 to 6:1 shrink ratios**
- **25', 100', 500', 1000' (7.6 m, 30.5 m, 152 m, 305 m) lengths**



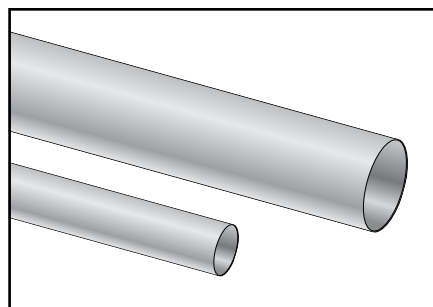
Low Outgassing FIT® Heat-Shrink Tubing

Material	Purpose	UL VW-1	Resistance			Flexibility	Operating Temperature	Shrink Ratio	FIT Family
			Chemical	Heat	Abrasion				
Single-Wall Irradiated Polyolefin for General-Purpose Use									
Thin-wall irradiated polyolefin	LSZH: reduced smoke generation and gas emission	✓		✓		✓	-55 to +105°C	2:1	FIT-221L
Irradiated polyolefin	Variety of shrink-ratios	✓		✓			-55 to +135°C	2:1	FIT-221
Special-Application Tubing									
Irradiated PVDF	High shrink temp; 3x tensile strength of standard polyolefin	✓	✓	✓	✓		-55 to +150°C	2:1	FIT-350
FEP	High shrink temp; thin wall thickness		✓				-75 to +200°C	1.2:1	FIT-400
PTFE	High shrink temp; thin wall thickness		✓				-75 to +260°C	1.5:1	FIT-500
Chlorinated polyolefin	Oil resistant	✓		✓	✓		-75 to +121°C	2:1	FIT-600
Flexible fluoroelastomer	High shrink temp		✓			✓	-40 to +200°C	2:1	FIT-650

Flexible PTFE Tubing

TFT-200 Thin-Wall Tubing TFT-250 Standard-Wall Tubing

To improve the reliability of cable harnesses, PTFE tubing provides heat-, chemical-, and abrasion-resistant wire protection under the most adverse conditions. With low outgassing, exceptional abrasion resistance, and excellent dielectric properties, it maintains flexibility over its entire temperature range from -75°C to +260°C.



**ASTM D 3295-81a Type I Class B
(TFT-200)**

**ASTM D 3295-81a Type I Class C
(TFT-250)**

AMS 3655 (TFT-200)

MIL-I-22129 (TFT-250)

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.

Fiberglass Sleeving

FIT Braided Fiberglass Sleeving			
Material	Feature	Characteristics	FIT Family
Acrylic coated	Chemical resistant	-30°C to +155°C	AF-155
PVC coated	General purpose	-20°C to +130°C High temperature, abrasion, and oil resistance Resists fraying, bending, and knotting	PIF-130
Silicone coated	Extreme abrasion resistance	-70°C to +200°C Highly flexible routing Extreme abrasion resistance Superior electrical properties	PIF-200
Uncoated	Extreme temperatures	-60°C to +648°C Extreme flexibility Extreme heat environments	PIF-240

Tubing

FIT General-Purpose Tubing			
Material	Feature	Characteristics	FIT Family
PVC	Multipurpose	-20°C to +105°C Flexible wire protection for harnesses and ground straps 37 sizes from .0022" to 2.5"	PVC-105
PVC tubing Nylon connectors	Flexible, liquid tight	-18°C to +50°C Maximum flexibility Usable in extremely tight quarters	FNT SLC/RLC
PTFE	Thin wall Standard wall	-75°C to +260°C Excellent heat and chemical resistance Flexible wire protection for harnesses and ground straps Resistance to heat, oil, and abrasion	TFT-200 TFT-250
PE, Nylon, PTFE, PVC	Spiral wrap	Wide range of materials, temperature ranges, and mechanical properties	SW
PE tubing PP fittings	Convoluted slit loom	-40°C to +93°C Abrasion and fluid resistant Light weight Easy, flexible cable breakouts	Type 492

Woven Sleeving

FIT Expandable Woven Sleeving			
Material	Feature	Characteristics	FIT Family
Polyester	General purpose	-75°C to +125°C Good abrasion and cut-through resistance Flame resistant (110) and flame retardant (120) versions	GRP-110 GRP-120
PET	Non-fraying	-75°C to +125°C Good abrasion and cut-through resistance Flame resistant (110) and flame retardant (120) versions	GRP-110NF GRP-120NF
PET	Wrappable	-70°C to +125°C Bends tightly without distorting or opening Easy to install NF = flame retardant	GRP-130 GRP-130NF
Nylon polyamide	Advanced protection	-45°C to +150°C Extreme abrasion resistance without losing flexibility or durability Resists fuels, solvents, salt water, chemicals, and UV rays Expandable to 150%	GRP-160
PPS	Advanced chemical resistance	-70°C to +200°C Resists acids, bases, solvents, and fuels Extremely lightweight	GRP-170
Nylon	Maximum protection	-60°C to +150°C Superior abrasion resistance Smooth inner wall to prevent internal abrasion damage Resists fuels, solvents, salt water, chemicals, and UV rays	GRP-180
PTFE	Extreme protection	-70°C to +280°C Cut and abrasion resistant Resists virtually all chemicals and UV rays Thermally stable Low outgassing	GRP-200
PET	Wrappable with hook and loop closure	-75°C to +125°C Unlimited breakouts Abrasion and cut-through resistance Oil and solvent resistance	ZIP-GRP
FIT Non-Expandable Woven Sleeving			
Material	Feature	Characteristics	FIT Family
PET	Heavy duty	-70°C to +125°C	XS-100HD
Nylon	General purpose	-45°C to +120°C Tightly woven Excellent abrasion resistance and durability	XS-200N
Nylon	Maximum protection	-45°C to +120°C Excellent abrasion resistance Tightly woven Deflects high-pressure hose ruptures Resists fuels, chemicals, UV, rot, and vermin Smooth inner wall to prevent internal abrasion damage	XS-300

**The cables you trust.
The service you deserve.**

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

Custom cable is 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**!

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AlphaWire

Cables you trust. Service you deserve.