



High Temperature and Specialty Transit Wire and Cable

CABLE USA

MANUFACTURERS OF
HIGH TEMPERATURE CUSTOM
ENGINEERED CABLES



A GLOBAL LEADER IN
CUSTOM ENGINEERED
TRANSIT CABLE AND WIRE

Cable USA is a global leader in the design and manufacture of custom engineered transit cable and wire for the harsh environment found in transit control rooms and operational control centers, wayside cases and trackside signal equipment and systems. Our products are superior in their ability to withstand extreme heat, moisture and are highly resistant to mechanical and physical abuse.

Our transit cable and wire is Qualified to 940801 Transit Specifications and meets AAR Signal Manual Parts 10.3.14 and 10.3.24. We offer a broad array of single and multi-conductor designs and will custom engineer cable solutions to meet even the most unique design parameters.

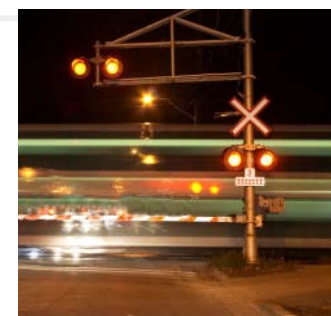
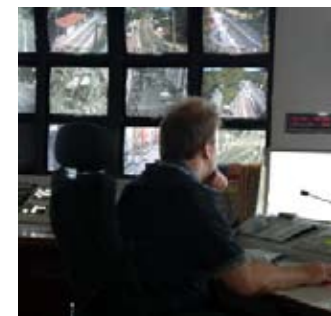
Cable USA's transit cable products are specifically designed for use in high-temperature, harsh environment conditions. Our transit cable and wire is uniquely engineered to withstand the effects of acids, alkalis, chemicals, oils and physical or mechanical abuse. All conductors are Tin-Plated, annealed copper per ASTM B-33 and B-3 for improved terminations, corrosion resistance and high-temperature resistance and are rated up to 1000 volts.

CAPABILITIES:

- ▲ Construction: single conductor to 100+ conductors, instrumentation & power sizes, shielded and unshielded.
- ▲ Conductors: Tin Plated Copper, Silver Plated Copper, Nickel Plated Copper and other alloys.
- ▲ Insulations: ETFE, PFA, FEP and others.
- ▲ Cabling: multiple conductors, pairs, triads, as well as composite combinations.
- ▲ Shields: Tin Plated Copper, Nickel Plated Copper, Silver Plated Copper, Alloys, and Foil.
- ▲ Jackets: Polyurethane, ETFE, FEP, Glass Braids, Stainless Steel Armor and others.
- ▲ Temperature Ranges: -100°C to 150°C. Other constructions to 450°C available.

The insulations are ETFE that has been proven to resist attack by chemicals and solvents which can cause rapid deterioration of other rubber, plastic and other insulating materials. In addition to its chemical resistance, ETFE has excellent mechanical strength, stiffness and abrasion resistance. ETFE has a broad continuous use temperature range of -150°F/-100°C to 300°F/150°C. Wire and cable insulated with ETFE is designed for 300°F/150°C service and has a 40-year service life at 115°C continuous operating temperature.

Cable USA transit cable products are available in twisted pairs and multi-conductor jacketed cables. An optional tin-plated copper braid shield for pairs or overall is also available. Transit cables are available with optional Galvanized Steel or Stainless Steel Braid



CABLES DESIGNED FOR LONG LIFE IN TRANSIT ENVIRONMENTS

STRANDED WIRES RATED 0-600V

Cable USA P/N	Conductor Size (AWG)	Stranding	Nominal Insulation Thickness		Nominal Wire O.D.		Nominal Weight		*Ampacity
			(mills)	(mm)	(mills)	(mm)	(lbs/m feet)	(kg/km)	
82240101	24	19/36	15	.381	53.6	1.361	2.8	4.17	1.5
82220101	22	19/34	15	.381	59.6	1.514	3.9	5.81	4
82220107	22	7/30	15	.381	59.8	1.514	3.9	5.81	4
82200101	20	19/32	15	.381	67.8	1.722	5.6	8.34	6.5
82180101	18	19/30	15	.381	76.7	1.948	7.9	11.32	19
82160101	16	19/29	15	.381	83.0	2.108	9.7	14.45	24
82140101	14	19/27	15	.381	96.2	2.443	14.6	21.75	34
82120101	12	37/28	15	.381	117.2	2.974	21.7	32.33	43
82100101	10	37/26	17	.432	144	3.658	33.7	50.21	55
82090101	9	37/.019	17	.432	163	4.140	47.1	70.18	61
82080101	8	19x7/29	17	.432	196	4.978	59.3	88.36	76
82060101	6	19x7/27	20	.508	243	6.172	93.4	139.66	96
82040101	4	19x7/25	24	.610	305	7.747	146	217.54	143
82020101	2	19x35/30	26	.660	383	9.728	226	336.74	160
82010101	1	19x43/30	28	.711	416	10.566	271	403.79	186
821x0101	1/0	19x55/30	30	.762	478	12.141	358	533.42	215
822x0101	2/0	19x70/30	39	.991	542	13.767	457	680.93	251
823x0101	3/0	19x45/30	50	1.27	631	16.027	598	891.01	288
824x0101	4/0	37/57/30	50	1.27	698	11.729	737	1098.12	332
82500101	500MCM	7x19x38x30	50	1.27	1088	27.635	1770	2637.28	580

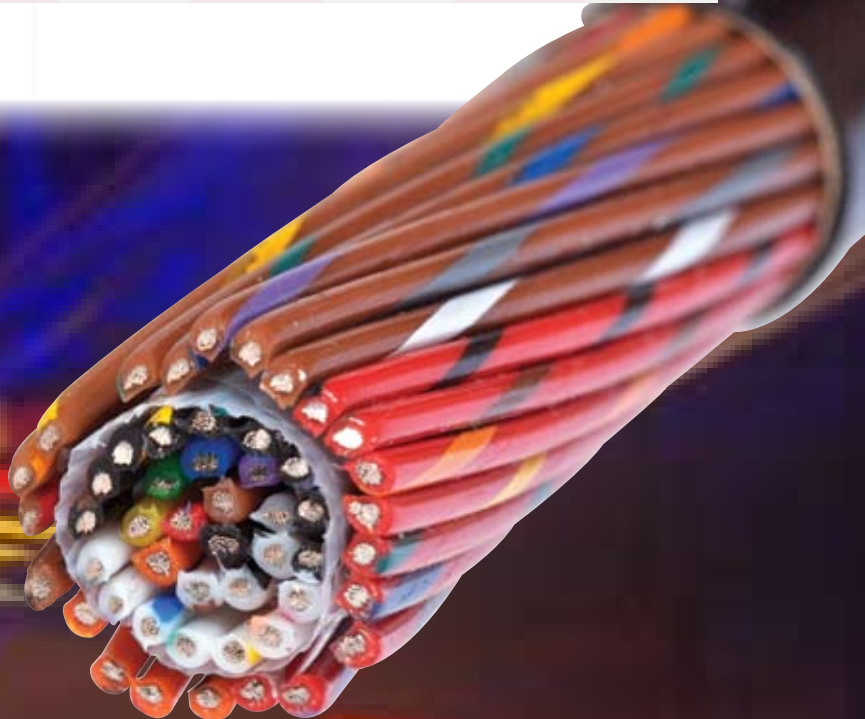
STRANDED WIRES RATED 0-1000V

Cable USA P/N	Conductor Size (AWG)	Stranding	Nominal Insulation Thickness		Nominal Wire O.D.		Nominal Weight		*Ampacity
			(mills)	(mm)	(mills)	(mm)	(lbs/m feet)	(kg/km)	
82180102	18	19/30	15	.457	82.7	2.101	8.5	12.67	19
82160102	16	19/29	15	.457	89.0	2.261	10.3	15.35	24
82140102	14	19/27	15	.457	102.2	2.596	15.3	22.80	34
82120102	12	37/28	15	.457	123.2	3.129	22.5	33.53	43
82100102	10	37/26	17	.508	150	3.810	34.7	51.70	55
82090102	9	37/.019	17	.508	169	4.293	48.3	71.97	61
82080102	8	19x7/29	17	.559	206	5.232	61.5	91.63	76
82060102	6	19x7/27	20	.559	247	6.274	93.7	139.61	96
82040102	4	19x7/25	24	.610	305	7.747	146	217.54	143
82020102	2	19x35/30	26	.660	383	9.728	226	336.74	160
82010102	1	19x43/30	28	.711	416	10.566	271	403.79	186
821x0102	1/0	19x55/30	30	.762	478	12.141	358	533.42	215
822x0102	2/0	19x70/30	39	.991	542	13.767	457	680.93	251
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*Ampacity rating per definition in section 4.0 of specification 940801.

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FACILITY HISTORY

Business Established: 1984
 Present Building Constructed: 1987
 First Expansion: 1989
 Second Expansion: 1994
 Third Expansion: 2008

FACILITY SIZE

Land Area: 3.37 Acres
 Total Size of Facility: 66,000 Square Feet
 Office Space: 6,000 Square Feet
 Factory / Production: 57,000 Square Feet
 Distribution / Warehouse: 3,000 Square Feet

PRIMARY PROCESSES

Cable USA is an integrated facility which houses all engineering, manufacturing, quality control and administrative operations under one roof.

PRODUCT TYPES AND PROCESSES

- ▲ Thermoplastic Fluoropolymer Extrusion – Specializing in FEP, ETFE, and PFA
- ▲ Textile Braiding
- ▲ Stainless Steel Braiding
- ▲ Short-Run / Specialty Cables
- ▲ Miniature Multi-Conductor Cables
- ▲ Extreme-Temperature Applications
- ▲ Composite Cable Design
- ▲ Coiled / Retractable Wire and Cable

MATERIALS USED

- | | |
|-----------------------|----------------------|
| ▲ FEP | ▲ E-CTFE |
| ▲ ETFE | ▲ Polyethylene |
| ▲ PFA | ▲ Polypropylene |
| ▲ Polyurethane | ▲ PVC |
| ▲ Silicone Rubber | ▲ PVDF |
| ▲ Polyester Elastomer | ▲ And many others... |

EXTRUSION CAPABILITIES

- ▲ (9) Hot-Melt Extrusion Lines
- ▲ (2) Silicone (HAV) Extrusion Lines



CONDUCTORS AND ADDITIONAL MATERIALS

- ▲ All types & platings of copper conductors
- ▲ Copper-alloy high performance conductors
- ▲ Thermocouple alloys
- ▲ PTFE tape
- ▲ Mica tape
- ▲ Ceramic tape
- ▲ Fiberglass tape
- ▲ Fluoropolymer tape (sintered, un-sintered, conductive, colored)
- ▲ Shielding Braids (copper, NPC, alloy)
- ▲ Armoring Braids (SS302, 304, 316)
- ▲ Textile Braids (glass, K-fiber)

PRODUCT SIZE RANGE

Minimum

- ▲ #32 AWG / .002 wall thermoplastic
- ▲ #24 AWG / .015 wall silicone

Maximum

- ▲ 1100 MCM
- ▲ 3.000" O.D. (braided jacket)
- ▲ 2.000" O.D. (high-temperature jacket)
- ▲ 1.750" O.D. silicone rubber

Maximum Reel Size: 84.00"

SOME OF OUR SPECIALTY CABLE TYPES

- ▲ High-Temperature Wire & Cables
- ▲ Coil Cords
- ▲ Very Large Cables
- ▲ Flat Festoon Cables
- ▲ Vented Cables
- ▲ Pump Cables
- ▲ Custom Products per Customer Specifications

SYNERGIZING TECHNOLOGY

Cable USA has the unique ability to provide a comprehensive family of high-temperature wire and cable products to address the specialized needs of industry. With over 50-years of combined experience in solutions for the Wire and Cable industry, our World Class team of polymer scientists and engineers are uniquely qualified to develop solutions to new technology challenges.



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A member of The Marmon Group of companies