

Dekoron[®]

The Instrumentation Cable Experts

Wire & Cable, Inc.

Dekoron Wire and Cable is a leader in the design, manufacture, and marketing of multi-pair instrumentation, control, and thermocouple extension cables; including metric sizes that are qualified to IEC and British standards.

For more information about any of the products in the Dekoron line, please call your local representative or contact the Customer Service Department at 903-572-0657.

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- ☐ RELIABILITY
- ☐ SAFETY
- ☐ DESIGN

PRODUCT INFO:

- ☐ INSTRUMENT
- ☐ CRITICAL CIRCUIT
- ☐ CONTROL
- ☐ SCADA
- ☐ FIELDBUS
- ☐ ARMORED
- ☐ DIRECT BURIAL

COMPANY: _____
ADDRESS: _____

COMMENTS: _____

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300 Volt

Thermoplastic – PVC, TPE

Thermoset – XLPE

600 Volt

Thermoplastic – PVC/Nylon, Polyethylene, PVC

Thermoset – XLPE

Thermocouple Extension Cables

300 Volt

Thermoplastic – PVC

Thermoset – XLPE

600 Volt

Thermoplastic – PVC

Thermoset – XLPE

Control Cables

600 Volt

Thermoplastic – PVC/Nylon, Polyethylene

Thermoset – XLPE

Armored Cables

Instrumentation Cables

300 Volt

Thermoplastic – PVC, Polyethylene

Thermoset – XLPE

600 Volt

Thermoplastic – PVC/Nylon

Thermocouple Extension Cables

300 Volt

Thermoplastic – PVC

Control Cables

600 Volt

Thermoplastic – PVC/Nylon, Polyethylene, PVC

Dekabon Barrier Cables

Instrumentation Cables

300 Volt

Thermoplastic – PVC, Polyethylene

Thermoset – XLPE

600 Volt

Thermoplastic – PVC/Nylon

Thermocouple Extension Cables

300 Volt

Thermoplastic – PVC

Control Cables

600 Volt

Thermoplastic – PVC/Nylon, Polyethylene, PVC

Fire Resistant Cables

Instrumentation Cables

300 Volt

600 Volt

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600 Volt

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Dekoron Wire and Cable Capabilities Overview

Research, Product Development and Application Engineering

Research, product development and application engineering are fundamental to the Dekoron tradition of servicing our customers with reliable, innovative products and technical support. Product and reliability engineering are an inherent part of our product development process. Our research and product development staff is complemented by our modern and diversified research facilities. Polymer engineering and chemistry allow us to provide the ultimate in value engineered polymers for a wide variety of industrial and commercial product applications.

Custom compounding capabilities allow us to develop and manufacture products for the specific applications in markets such as:

- Chemical processing
- Food processing
- Offshore
- Oil exploration and production
- Power generation
- Pulp and paper
- Refining and petrochemical
- Waste water treatment
- Light Rail

Innovations include cables capable of providing extended operation while exposed to fire and cables exhibiting low smoke and zero halogen characteristics.

Cable Components

Cables with up to 100 conductors or conductor groups and continuous lengths of 10,000 feet (3,000 meters) are possible. All conductor groups can be shielded against electromagnetic interference by the use of proper shields and drains. Dekoron is capable of applying electromagnetic interference shields of aluminum-polyester (Mylar®) tape or copper-polyester (Mylar) tape.

Armor Options



Dekabon Armor Cable

Dekoron also has the capability to apply bonded aluminum sheathing, Dekabon. Dekabon is hermetically sealed aluminum tape, bonded to a jacket that is capable of protecting the cable from moisture and chemicals. Paired with a drain wire, Dekabon acts as an electrostatic shield providing excellent lightning protection.



Interlock Armor

Dekoron can provide mechanical strength and protection with several armor types available. For good cut-through and crush resistance Dekoron can offer galvanized steel and aluminum interlocked armor. Interlock armor cable is ideal for open tray installations.



Served Wire Armor

Where good cut-through resistance is necessary but vertical drop installation is required, Dekoron can offer galvanized steel served wire armor. It has excellent longitudinal strength – ideal for long pulls.



Dual Armor

For additional protection, all cables can be combined with galvanized steel wire armor (SWA) and galvanized or aluminum interlocked armor. When combined with armor, Dekabon offers superior cable protection.

Cable Insulation Materials

Dekoron thermoplastic insulations include polyvinyl chloride (PVC), PVC with nylon, high density polyethylene (HDPE), thermoplastic elastomer (TPE). Dekoron thermoset insulations include crosslinked polyethylene (XLPE) and a crosslinked silicone alloy for circuit integrity applications.

Cable Jacket Options

Jacket options include polyvinyl chloride (PVC), high density polyethylene (HDPE), low density polyethylene (LDPE), chlorinated polyethylene (CPE), thermoplastic elastomer (TPE), flame retardant zero halogen elastomer (TPN), chlorosulfonated polyethylene (Hypalon®).

Cable Jacket Marking

Dekoron provides jacket marking designating Dekoron part number and cable type, voltage rating, conductor size and grouping, insulation and jacketing materials, location and year manufactured, lot number (for traceability), and sequential quantity in feet as the standard marking text. Dekoron can also provide customer specified jacket marking, including sequential metric marking.

Conductor sizes, insulations, jackets and armors can be mixed and matched to custom design a cable for specific properties and needs. Cables with two different armor layers are routinely made to obtain the optimum moisture, chemical and physical damage resistance.

Conductor Data

Solid Copper Conductors						20°C Direct Current Resistance			
AWG / Size	CMA	Nominal Diameter		Approximate Weight		Bare		Tinned	
		mils	mm	lb/Mft	kg/km	ohms/Mft	ohms/km	ohms/Mft	ohms/km
20 / 0.52 mm ²	1,020	32.0	0.81	3.10	4.61	10.10	33.20	10.50	34.60
18 / 0.82 mm ²	1,620	40.3	1.02	4.92	7.32	6.39	21.00	6.64	21.80
16 / 1.31 mm ²	2,580	50.8	1.29	7.81	11.60	4.02	13.20	4.18	13.70
14 / 2.08 mm ²	4,110	64.1	1.63	12.40	18.50	2.52	8.28	2.63	8.61
12 / 3.31 mm ²	6,530	80.8	2.05	19.80	29.40	1.59	5.21	1.65	5.42
10 / 5.26 mm ²	10,380	101.9	2.59	31.43	46.77	0.99	3.28	1.04	3.41

Metric									
0.50 mm ²	987	31.4	0.79	2.98	4.43	10.50	34.50	10.90	35.80
0.75 mm ²	1,480	38.5	0.98	4.49	6.68	7.00	23.00	7.28	23.90
1.00 mm ²	1,974	44.4	1.13	5.97	8.88	5.26	17.30	5.47	17.90
1.50 mm ²	2,960	54.4	1.38	8.96	13.33	3.50	11.50	3.64	11.90
2.50 mm ²	4,934	70.2	1.78	14.92	22.20	2.10	6.89	2.19	7.19
4.00 mm ²	7,894	88.8	2.25	23.87	35.52	1.32	4.33	1.37	4.49

Concentric 7-Strand Class B Copper Conductors								20°C Direct Current Resistance			
AWG / Size	CMA	Nominal Strand O.D.		Approximate O.D.		Approximate Weight		Bare		Tinned	
		mils	mm	in	mm	lb/Mft	kg/km	ohms/Mft	ohms/km	ohms/Mft	ohms/km
20 / 0.52 mm ²	1,020	12.1	0.31	0.036	0.91	3.15	4.71	10.30	33.90	10.70	36.00
18 / 0.82 mm ²	1,620	15.2	0.39	0.046	1.17	5.01	7.46	6.54	21.40	6.92	22.70
16 / 1.31 mm ²	2,580	19.2	0.49	0.058	1.47	7.97	11.86	4.10	13.40	4.35	14.30
14 / 2.08 mm ²	4,110	24.2	0.62	0.073	1.85	12.68	18.88	2.58	8.45	2.68	8.78
12 / 3.31 mm ²	6,530	30.5	0.78	0.092	2.34	20.16	30.00	1.63	5.32	1.69	5.53
10 / 5.26 mm ²	10,380	38.5	0.98	0.116	2.95	32.06	47.71	1.02	3.34	1.06	3.48

Metric											
0.50 mm ²	987	11.9	0.30	0.036	0.91	3.06	4.55	10.70	35.10	11.30	37.10
0.75 mm ²	1,480	14.5	0.37	0.044	1.12	4.54	6.76	7.19	23.60	7.63	25.00
1.00 mm ²	1,974	16.8	0.43	0.050	1.27	6.10	9.08	5.35	17.60	5.69	18.70
1.50 mm ²	2,960	20.6	0.52	0.062	1.57	9.17	13.64	3.56	11.70	3.70	12.10
2.50 mm ²	4,934	26.5	0.67	0.080	2.03	15.18	22.59	2.15	7.05	2.24	7.35
4.00 mm ²	7,894	33.6	0.85	0.101	2.57	24.40	36.31	1.34	4.40	1.39	4.56

Solid Thermocouple Extension Wire					
AWG / Size	CMA	Nominal Diameter		Approximate Weight	
		mils	mm	lb/Mft	kg/km
20 / 0.52 mm ²	1,020	32.0	0.81	3.10	4.61
18 / 0.82 mm ²	1,620	40.3	1.02	4.92	7.32
16 / 1.31 mm ²	2,580	50.8	1.29	7.81	11.60

Thermocouple Extension/ Compensating Wire Types				
ANSI Type	Alloy Identification		Temperature Range °C	Limits of Error
	Positive Wire	Negative Wire		
EX	Chromel	Constantan®	0 to +200	+/- 1.7°C
JX	Iron	Constantan	0 to +200	+/- 2.2°C
KX	Chromel	Alumel®	0 to +200	+/- 2.2°C
SX	Copper	Copper-Alloy II	0 to +200	+/- 5.0°C
TX	Copper	Constantan	-60 to +100	+/- 1.0°C

Property Comparison of Dekoron Insulation Materials

Property	Thermoplastics			Thermosets	
	HDPE	PVC	TPE	XLPE	Silicone Alloy
Temperature rating, °C	75	105	105	90	90
Tensile, psi	2,800	2,500	1,800	1,500	1,100
Tensile, MPa	19.3	17.2	12.4	12.4	7.6
Ultimate elongation, %	400	200	300	150	100
Oxygen index, %	18	27	24.5	23	22
Brittleness temperature, °C	-75	-10	-40	-50	-20
Halogen content, %	0	34	18	10	0
Nominal dielectric constant	2.3	4.5	2.5	2.5	2.9
Insulation resistance constant at 15.6°C	50,000	3,000	20,000	20,000	10,000
Properties After Air Aging					
Aging temperature, °C	100	136	136	121	121
Aging period, days	2	7	7	7	7
Retained tensile, %	75	75	75	70	100
Retained elongation, %	75	65	65	70	65
Moisture Absorption Testing, EM-60					
Test temperature, °C	–	75	75	75	75
SIC after 24 hrs.	–	10	4	4	4
Increase in capacitance, % (1 to 14 days)	–	10	4	4	4
Increase in capacitance, % (7 to 14 days)	–	5	2	2	2
Stability factor after 14 days	–	n/a	1	1	1
Alternate stability factor	–	n/a	0.5	0.5	0.5
Heat Distortion/Deformation					
Temperature, °C	–	121	150	150	–
Time (minutes)	–	60	10	10	–
Maximum distortion/deformation, %	–	0	30	30	–
Cold Bend					
	Pass	Pass	Pass	Pass	Pass
Time (hours)	4	72	72	4	72
Temperature, °C	-65	-20	-65	-65	-20
Minimum installation temperature, °C	-30	-10	-30	-10	-10
Flammability					
Singles – vertical and horizontal	Fail	Pass	Pass	Pass	Pass
Cable tray – IEEE 383 fire test	Fail	Pass	Pass	Pass	Pass

Material Thickness Conversion Chart

<i>mils</i>	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
<i>in</i>	0.01	0.015	0.02	0.025	0.03	0.035	0.04	0.045	0.05	0.055	0.06	0.065	0.07	0.075	0.08
<i>mm</i>	0.25	0.38	0.51	0.63	0.76	0.89	1.02	1.14	1.27	1.40	1.52	1.65	1.78	1.90	2.03

Property Comparison of Dekoron Jacket Materials

Property	Thermoplastics						Thermosets
	HDPE	LPDE	PVC	CPE	TPE	TPN	Hypalon (CSPE)
Temperature rating, °C	75	75	90	90	105	75	90
Tensile, psi	4,000	—	2,000	1,400	1,800	1,500	1,800
Tensile, MPa	27.6	—	13.8	9.6	12.4	10.3	12.4
Ultimate elongation, %	600	—	200	150	300	100	300
Oxygen index, %	18	18	27.5	30	24.5	35	34
Brittleness temperature, °C	-70	-70	-22	-15	-40	-20	-25
Halogen content, %	0	0	30	18	18	0	15
Properties After Air Aging							
Aging temperature, °C	100	100	121	121	136	100	100
Aging period, days	2	2	7	7	7	7	7
Retained tensile, %	75	75	70	85	75	85	85
Retained elongation, %	75	75	45	50	60	70	65
Properties After Oil Aging							
Aging temperature, °C	—	—	70	100	121	—	121
Aging period, hours	—	—	4	18	18	—	18
Retained tensile, %	—	—	80	60	60	—	60
Retained elongation, %	—	—	60	80	60	—	60
Heat Distortion/Deformation							
Temperature, °C	—	—	121	121	150	121	150
Time (minutes)	—	—	60	60	10	60	10
Maximum distortion/deformation, %	—	—	50	20	15	50	15
Cold Bend							
Time (hours)	Pass	—	Pass	—	Pass	Pass	Pass
Temperature, °C	4	—	72	72	72	72	24
Minimum installation temperature, °C	-65	—	-20	-35	-65	-20	-25
Flammability							
Cable tray – IEEE 383 fire test	Fail	Fail	Pass	Pass	Pass	Pass	Pass

Registered Trademarks

A number of trademarks that have been registered with the U.S. Patent and Trademark Office, by companies not related to Dekoron, appear throughout this Dekoron Wire and Cable catalog. The proper ownership of such registered trademarks has been duly acknowledged by the Dekoron Company.

Trademark	Owner
Alumel	Hoskins Manufacturing Co.
Chromel	Hoskins Manufacturing Co.
Constantan	Hoskins Manufacturing Co.
CSA	Canadian Standards Association
Hypalon	DuPont Dow Elastomers
Mylar	E.I. DuPont de Nemours & Co.
NEC	National Fire Protection Association
UL	Underwriters Laboratories, Inc.

Chemical Resistance Data for Insulation and Jacket Materials*

Chemical	PVC	PE	NYLON	TPE	CPE	XLPE	HYPALON
Acetic Acid	E	E	F	G	E	F	G
Hydrochloric Acid	G	E	P	G	E	G	G
Sodium Hydroxide	E	E	G	G	E	E	E
Sodium Chloride	G	G	G	G	G	G	E
Aniline	P	F	F	P	P	P	P
Ethanol	F	G	G	G	G	F	G
Methanol	P	E	G	G	E	G	G
Acetaldehyde	P	F	G	G	G	F	F
ASTM No. 2 Oil	F	P	E	G	E	F	E
Lubricating Oils	G	F	G	P	G	G	G
Methyl Chloride	P	F	F	P	P	G	P
Carbon Tetrachloride	F	P	G	P	G	G	P
Acetone	P	F	E	P	G	P	F
MEK	P	F	G	F	F	F	P
Toluene	P	F	G	F	G	F	P
Gasoline	F	P	E	P	G	F	F
Benzene	P	F	G	P	P	P	F
Kerosene	G	G	E	P	F	G	F
Naphtha	F	F	G	P	F	F	P
Diethyl Phthalate	P	F	E	G	F	G	P
Water Permeation	G	E	P	G	G	G	G

Chart Codes

E – Excellent G – Good F – Fair P – Poor

* This laboratory data can only serve as a guide. The severity of chemical attack on any material is influenced "by a number of variables, including temperature, concentration, duration, and area under attack." Good practice dictates that a material sample must be tested under closely simulated service conditions. No warrantee is expressed or implied.

Associations and Standards

Organizations Involved in Specifications for Dekoron Wire and Cable

ANSI – American National Standards Institute	IEEE – Institute of Electrical and Electronic Engineers
ASTM – American Society for Testing Materials	ISO – International Standards Organization
BSI – British Standards Institution	NEC – National Electric Code
CSA® – Canadian Standards Association	NEMA – National Electrical Manufacturers Association
ICEA – Insulated Cable Engineers Association	NFPA – National Fire Protection Association
IEC – International Electrotechnical Commission	UL® – Underwriters Laboratories, Inc.

Individual standards in general use by Dekoron are listed below.

American National Standards Institute (ANSI)

ANSI is the American national organization for drafting standards to be used as a guide for the manufacturer, consumer and general public. ANSI standards imply a consensus of those substantially concerned with the standards' scope and provisions. ANSI is the official USA member of the International Standards Organization (ISO).

MC 96.1 – Temperature Measurement Thermocouples

American Society for Testing Materials (ASTM)

ASTM is one of the largest voluntary standards development systems in the world. ASTM is a non-profit organization which provides a forum for producers, users, ultimate consumers and those having a general interest (government representatives and academia) to meet on common ground and write standards for materials, products, systems and services.

- B3** – Soft or Annealed Copper Wire
- B8** – Concentric-Lay Stranded Copper Conductors
- B33** – Tinned Soft or Annealed Copper Wire
- D412** – Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Elastomers – Tension
- D746** – Test Method for Brittleness Temperature of Plastics and Elastomers by Impact
- D792** – Test Method for Specific Gravity and Density of Plastics by Displacement
- D1505** – Test Method for Density of Plastics
- D2863** – Test Method for Measuring the Minimum O₂ Concentration to Support Candle-Like Combustion of Plastics

British Standards Institution (BSI)

British Standards Institution is the independent national body for the preparation of British standards. It is the UK member of the International Standards Organization (ISO) and the UK sponsor of the British National Committee of the International Electrotechnical Commission (IEC).

- BS 5308** – Instrumentation Cables Intended for Intrinsically Safe Systems
- BS 6346** – PVC Insulated Cables for Electricity Supply
- BS 6387** – Performance Requirements for Cables Required to Maintain Circuit Integrity Under Fire Conditions

Canadian Standards Association (CSA)

CSA is the Canadian organization for testing and certification. CSA is a test agency which tests devices, materials and components for safety and quality and is recognized worldwide.

- CSA 131** – Teck 90
- CSA 239** – Control and Instrumentation Cable

Insulated Cable Engineers Association (ICEA)

ICEA is the wire and cable manufacturer's organization which writes standards that are adopted in the public interest and are designed to eliminate misunderstandings between the manufacturer and the end user. They are also to assist end users in selecting and obtaining the proper product for their particular needs.

- S-19-81** – Rubber Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy*
- S-61-402** – Thermoplastic Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy*
- S-66-524** – Crosslinked Thermosetting Polyethylene Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy*
- S-68-516** – EPR Insulated Wire and Cable for Transmission and Distribution of Electrical Energy*
- S-73-532** – Standard for Control Cable
- S-82-552** – Instrumentation Cable and Thermocouple Wire

* Withdrawn Standards

Associations and Standards

International Electrotechnical Commission (IEC)

The IEC is the authoritative worldwide body responsible for developing consensus global standards in the electrotechnical field. The IEC has served the world's industry by developing international standards to promote quality, safety, performance, reproducibility and environmental compatibility of materials, products and systems. IEC standards are widely adopted as the basis of national or regional electrotechnical standards.

- 227 – PVC Insulated Cables of Rated Voltages Up To and Including 450/750 V
- 228 – Conductors of Insulated Cables
- 331 – Fire Resisting Characteristics of Electric Cables
- 332 (1-3) – Flame Retardant Characteristics of Electric Cables (Tests on Electric Cables Under Fire Conditions)
- 502 – Extruded Solid Electric Insulated Power Cables for Rated Voltages from 1 kV up to 30 kV
- 548-3 – Thermocouples Extension and Compensating Cables – Tolerances and Identification System

Institute of Electrical and Electronic Engineers (IEEE)

IEEE is a professional electrical engineering society. IEEE provides a means for professional engineers to remain current on developments in their field and provides standards for the development of materials and equipment in the electrical industry.

- 383 – IEEE Standard for Type Test of Class 1E Electric Cables, Field Splices and Connections for Nuclear Power Generating Stations
- 1202 – IEEE Standard for Flame Testing of Cables for use in Cable Trays.

National Electrical Code (NEC)/National Fire Protection Association (NFPA)

The National Electric Code (NFPA 70) is an accepted guide to the safe installation of electrical wiring and equipment. The National Fire Protection Association (NFPA) is the committee sponsoring its development, which includes all parties of interest having technical competence in the field, working together with the sole objective of safeguarding the public in its use of electricity. The NEC is purely advisory as far as the NFPA is concerned but is widely used as the basis of law and for legal regulatory purposes.

National Electrical Manufacturers Association (NEMA)

NEMA is the wire and cable manufacturer's organization which writes standards that are adopted in the public interest and are designed to eliminate misunderstandings between the manufacturer and the end user. Also, they assist end users in selecting and obtaining the proper product for their particular needs.

- | | |
|-----------------------------|------------------------------|
| WC3 – Same as ICEA S-19-81 | WC7 – Same as ICEA S-66-524 |
| WC5 – Same as ICEA S-61-402 | WC55 – Same as ICEA S-82-552 |
| WC6 – Same as ICEA S-68-516 | WC57 – Same as ICEA S-73-532 |

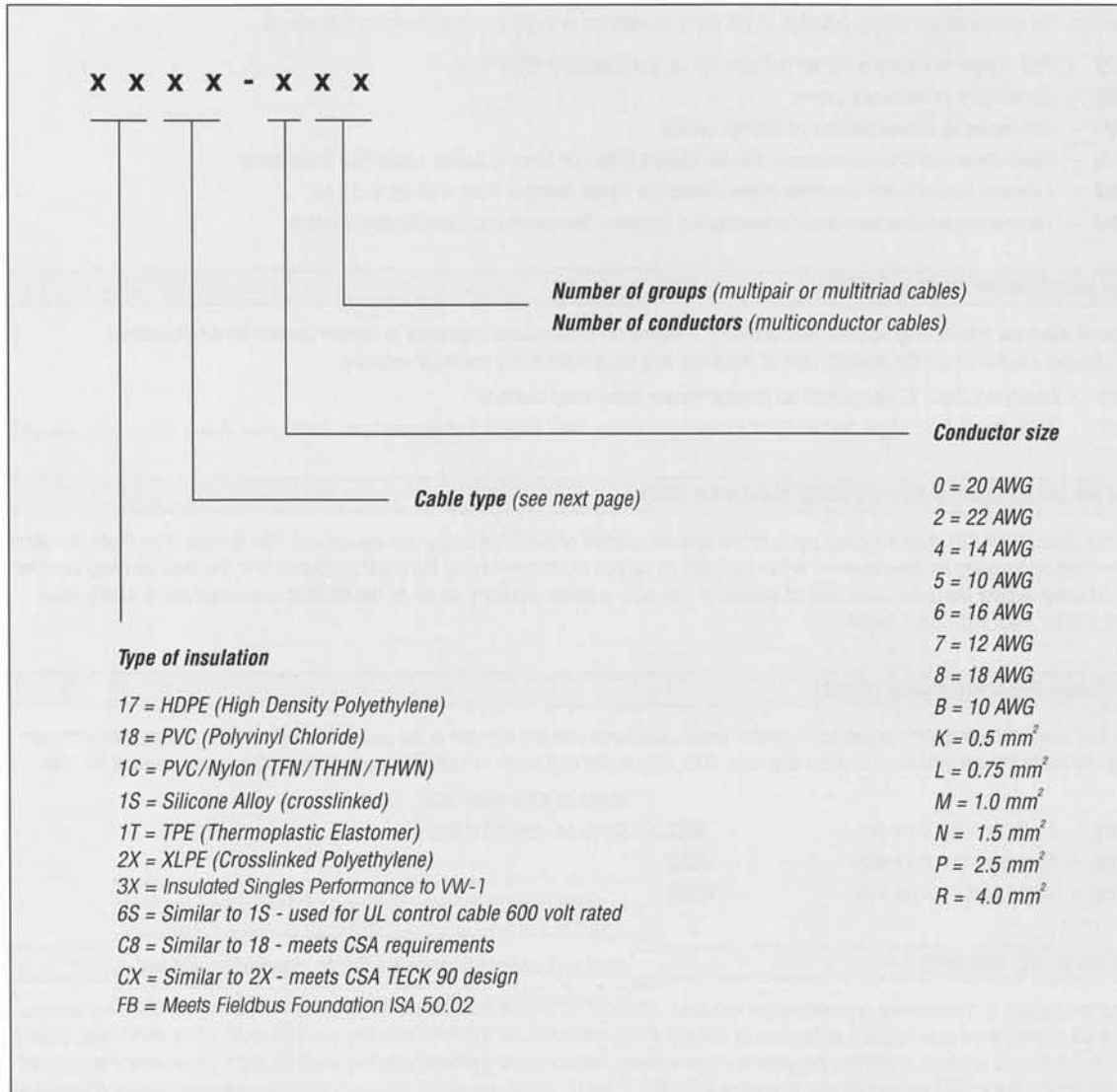
Underwriters Laboratories (UL) Standards

Underwriters Laboratories Inc. is a non-profit organization to establish, maintain and operate laboratories for the examination and testing of devices, systems and materials to determine their relation to hazards to life and property. UL is also responsible for defining and publishing standards, classifications and specifications for materials, devices, products, equipment, constructions, methods and systems affecting such hazards. UL is widely recognized by manufacturers, consumers, inspection authorities and regulatory officials. To be UL listed, a product must successfully complete a series of mechanical, electrical and thermal characteristics tests which simulate all reasonable, foreseeable hazards. A UL listing is assigned solely for the specific application for which it was tested and is not valid for other applications.

- | | |
|---|---|
| UL Standard 13 – Power Limited Circuit Cables | UL Standard 1424 – Cables for Power-Limited Fire-Protective Signaling Circuits |
| UL Standard 44 – Rubber Insulated Wire and Cable | UL Standard 1569 – Metal Clad Cables |
| UL Standard 83 – Thermoplastic Insulated Wire and Cable | UL Standard 1581 – Reference Standard for Electrical Wires, Cables and Flexible Cords |
| UL Standard 2250 – Instrumentation Tray Cable | |

Dekoron Cable Identification

Dekoron wire and cable part numbers identify the complete cable construction. Insulation type, configuration, wire size and number of components (pairs/triads/conductors) are identified first. The remainder of the part number (not shown here) further details options in voltage rating (insulation thickness), shielding, color coding, jacket materials or special features.



Thermocouple Extension Wire**00 Single pair unshielded**

- 01 with served wire armor
- 04 with Dekabon layer
- 06 with interlocked armor

02 Single pair shielded

- 03 with served wire armor
- 05 with Dekabon layer
- 09 with interlocked armor

20 Multiple pairs – overall shielded

- 25 with served wire armor
- 27 with Dekabon layer
- 21 with interlocked armor

24 Multiple pairs – each pair shielded and overall shielded

- 22 with served wire armor
- 28 with Dekabon layer
- 26 with interlocked armor

Multiple Conductor Cable**35 Multiple conductors – jacketed cable (all insulations except 1C)**

- 36 with served wire armor
- 38 with Dekabon layer
- 37 with interlocked armor

99 Multiple conductors – jacketed cable (insulation Type 1C)

- 97 with served wire armor
- 98 with Dekabon layer
- 96 with interlocked armor

Special Cable Designs**90 Customized designs or special components in cable****Instrumentation Cable****50 Single pair unshielded**

- 51 with served wire armor
- 54 with Dekabon layer
- 56 with interlocked armor

52 Single pair shielded

- 53 with served wire armor
- 55 with Dekabon layer
- 59 with interlocked armor

60 Single triad unshielded

- 61 with served wire armor
- 64 with Dekabon layer
- 66 with interlocked armor

62 Single triad shielded

- 63 with served wire armor
- 65 with Dekabon layer
- 69 with interlocked armor

70 Multiple pairs – overall shielded

- 75 with served wire armor
- 77 with Dekabon layer
- 71 with interlocked armor

74 Multiple pairs – each pair shielded and overall shielded

- 72 with served wire armor
- 78 with Dekabon layer
- 76 with interlocked armor

80 Multiple triads – overall shielded only

- 85 with served wire armor
- 87 with Dekabon layer
- 81 with interlocked armor

84 Multiple triads – each triad shielded and overall shielded

- 82 with served wire armor
- 88 with Dekabon layer
- 86 with interlocked armor

Conductor Identification and Color Coding

Thermocouple extension and compensating cables are color coded for alloy identification in accordance with recognized standards or customized codes. Dekoron standard is per ANSI MC 96.1 "Standard for Temperature Measurement Thermocouple." Refer to color chart in the back of this catalog for alloy identification, color code and cross-reference to other color standards (IEC and BS).

Conductors in instrumentation cables (pairs/triads/quads) and multiconductor cables are identified by color coding, group numbering or a combination method.

Dekoron standard for conductor color coding is per ICEA/NEMA methods.

Method 1 Base colors with tracer colors in accordance with Table K-1/E-1 or K-2/E-2.

Color combinations are repeated in regular sequence as necessary.

Method 2 A neutral background or base color is used on all conductors, with color tracers per table.

Method 3 A single-color insulation is used on all conductors, with printed conductor numbers and color designations in accordance with Table K-1 or K-2. Color combinations should be repeated in regular sequence as necessary.

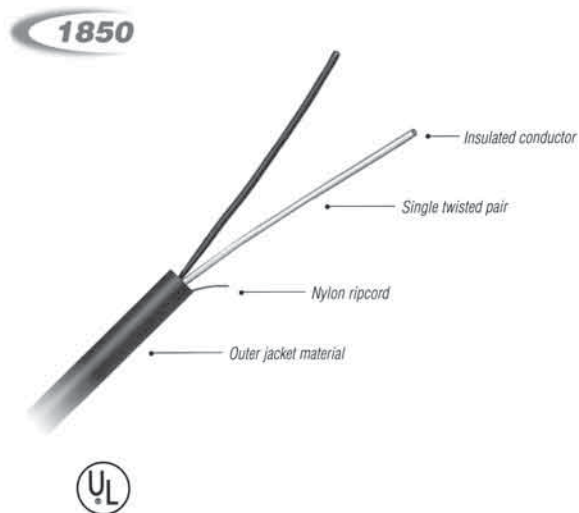
For example, using Table K-2 for conductors 1 to 3, inclusive: **1 - Black 2 - Red 3 - Blue**

Method 4 A single-color insulation is used on all conductors, with each conductor numbered in sequence by surface printing, beginning with the number 1.

TABLE K-1/E-1		
Number	Base Color	Tracer Color
1	Black	—
2	White	—
3	Red	—
4	Green	—
5	Orange	—
6	Blue	—
7	White	Black
8	Red	Black
9	Green	Black
10	Orange	Black
11	Blue	Black
12	Black	White
13	Red	White
14	Green	White
15	Blue	White
16	Black	Red
17	White	Red
18	Orange	Red
19	Blue	Red
20	Red	Green
21	Orange	Green

TABLE K-2/E2		
Number	Base Color	Tracer Color
1	Black	—
2	Red	—
3	Blue	—
4	Orange	—
5	Yellow	—
6	Brown	—
7	Red	Black
8	Blue	Black
9	Orange	Black
10	Yellow	Black
11	Brown	Black
12	Black	Red
13	Blue	Red
14	Orange	Red
15	Yellow	Red
16	Brown	Red
17	Black	Blue
18	Red	Blue
19	Orange	Blue
20	Yellow	Blue
21	Brown	Blue
22	Black	Orange
23	Red	Orange
24	Blue	Orange
25	Yellow	Orange
26	Brown	Orange
27	Black	Yellow
28	Red	Yellow
29	Blue	Yellow
30	Orange	Yellow
31	Brown	Yellow
32	Black	Brown
33	Red	Brown
34	Blue	Brown
35	Orange	Brown
36	Yellow	Brown

300 Volt Thermoplastic PVC (Single Pair)

**Description**

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) for 20-16 AWG
20 mils (0.5 mm) for 14 AWG and larger, 105°C FR-PVC
- Number of conductors per group 2
- Color code Black and white
- Shield (Type 1852) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC

Application

- Signal transmission
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

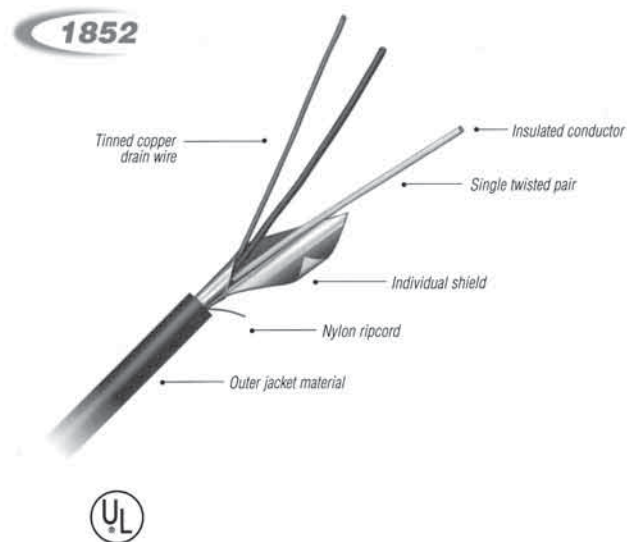
Cable Type

- 1850 – Single pair unshielded
- 1852 – Single pair shielded

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

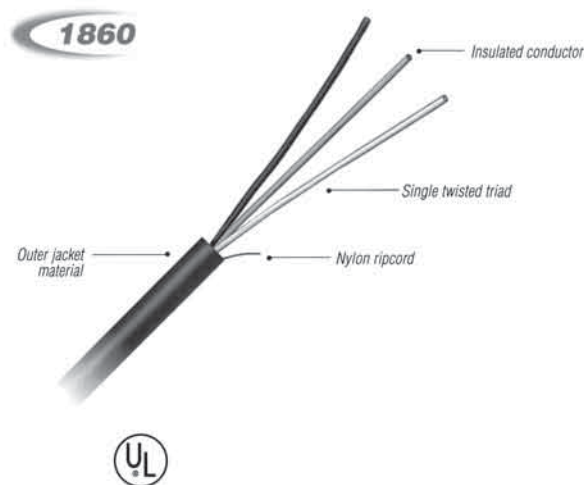


Electrical Properties	Units		Conductor Size									
			20 AWG / 0.5 mm ²		18 AWG / 0.8 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	6.7	21.9	4.2	13.7	3.6	11.9	2.2	7.2
Mutual Capacitance												
Type 1850	pF/ft	pF/m	31	100	33	110	36	119	37	122	40	130
Type 1852	pF/ft	pF/m	49	160	56	184	64	210	67	218	76	251
L/R Ratio	μH/Ω	μH/Ω	9	9	13	13	20	20	22	22	35	35
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.58	0.17	0.54	0.16	0.53	0.15	0.5

Product Dimensions

Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²							
1850-0860R	1	0.231	5.9	0.026	0.039	35	0.89
1852-0860R	1	0.236	6.0	0.030	0.044	35	0.89
Conductor Size: 18 AWG / 0.82 mm ²							
1850-8860R	1	0.250	6.4	0.033	0.049	35	0.89
1852-8860R	1	0.255	6.5	0.037	0.055	35	0.89
Conductor Size: 16 AWG / 1.3 mm ²							
1850-6860R	1	0.274	7.0	0.042	0.062	35	0.89
1852-6860R	1	0.278	7.1	0.046	0.069	35	0.89
Conductor Size: 1.5 mm ²							
1850-N860R	1	0.282	7.2	0.045	0.068	35	0.89
1852-N860R	1	0.286	7.3	0.051	0.077	35	0.89
Conductor Size: 2.5 mm ²							
1850-P8A0R	1	0.328	8.3	0.065	0.097	40	1.02
1852-P8A0R	1	0.332	8.4	0.073	0.109	40	1.02

300 Volt Thermoplastic PVC (Single Triad)

**Description**

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) for 20 - 16 AWG
20 mils (0.5 mm) for 14 AWG and larger, 105°C FR-PVC
- Number of conductors per group 3
- Color code Black, white and red
- Shield (Type 1862) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC

Application

- Signal transmission
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

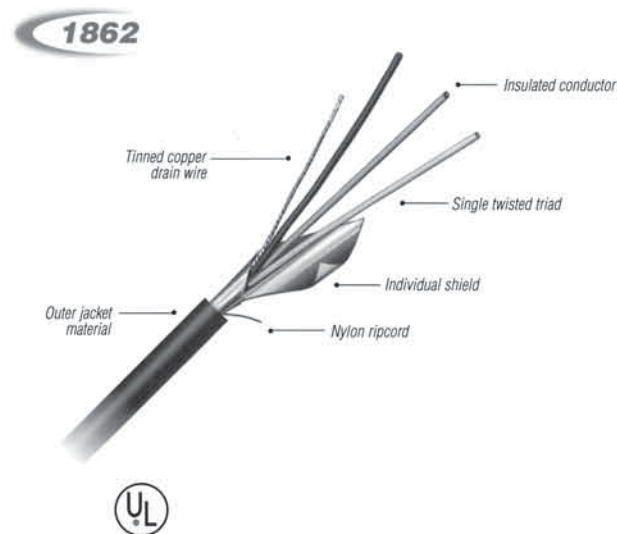
Cable Type

- 1860 – Single triad unshielded
- 1862 – Single triad shielded

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

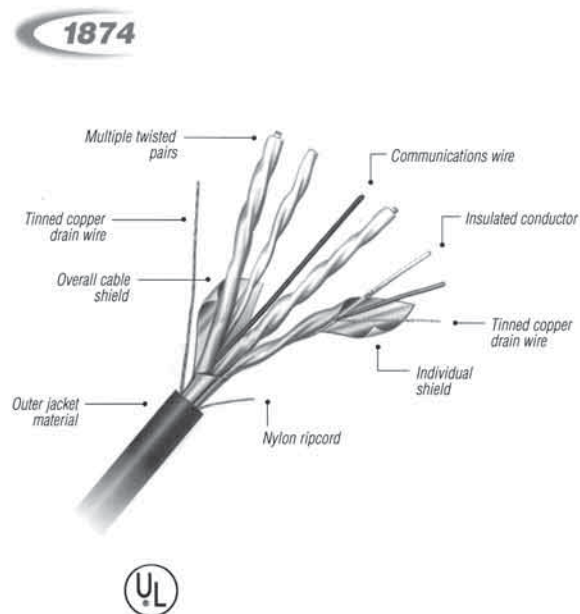
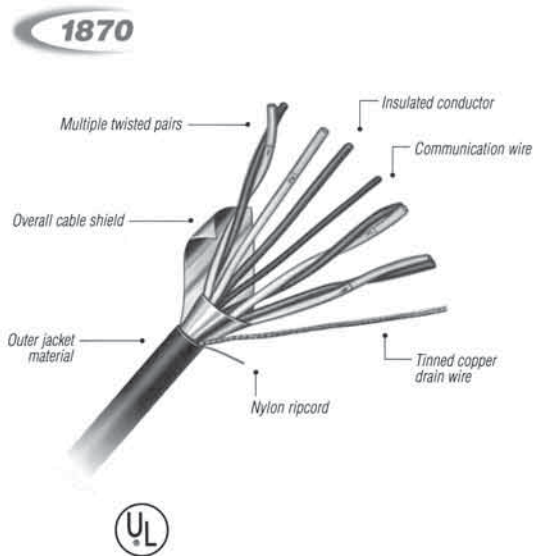


Electrical Properties	Units		Conductor Size									
			20 AWG/0.5 mm ²		18 AWG/0.8 mm ²		16 AWG/1.3 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	6.7	21.9	4.2	13.7	3.6	11.9	2.2	7.2
Mutual Capacitance												
Type 1860	pF/ft	pF/m	31	100	33	110	36	119	37	122	40	130
Type 1862	pF/ft	pF/m	49	160	56	184	64	210	67	218	76	251
L/R Ratio	μH/Ω	μH/Ω	9	9	13	13	20	20	22	22	35	35
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.58	0.17	0.54	0.16	0.53	0.15	0.5

Product Dimensions

Part Number	Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²							
1860-0860R	1	0.242	6.2	0.033	0.048	35	0.89
1862-0860R	1	0.253	6.4	0.036	0.054	35	0.89
Conductor Size: 18 AWG / 0.82 mm ²							
1860-8860R	1	0.262	6.7	0.041	0.061	35	0.89
1862-8860R	1	0.275	7.0	0.046	0.069	35	0.89
Conductor Size: 16 AWG / 1.3 mm ²							
1860-6860R	1	0.288	7.3	0.054	0.080	35	0.89
1862-6860R	1	0.302	7.7	0.062	0.093	35	0.89
Conductor Size: 1.5 mm ²							
1860-N860R	1	0.307	7.8	0.062	0.092	40	1.02
1862-N860R	1	0.321	8.2	0.069	0.103	40	1.02
Conductor Size: 2.5 mm ²							
1860-P8A0R	1	0.346	8.8	0.086	0.129	40	1.02
1862-P8A0R	1	0.361	9.2	0.095	0.142	40	1.02

300 Volt Thermoplastic PVC (Multiple Pair)



Description

- Conductor. 7-strand bare copper, Class B
- Primary insulation. . . . 15 mils (0.4 mm) for 20 - 16 AWG
20 mils (0.5 mm) for 14 AWG and larger, 105°C FR-PVC
- Number of conductors per group 2
- Color code Black and white
- Group identification . . Each pair numbered
- Pair shield (Type 1874) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1870/1874) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC
- Communications wire. 22 AWG copper, color-coded orange

Application

- Signal transmission
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1870 – Multiple pair overall shield
- 1874 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size									
			20 AWG / 0.5 mm ²		18 AWG / 0.8 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	6.7	21.9	4.2	13.7	3.6	11.9	2.2	7.2
Mutual Capacitance												
Type 1870	pF/ft	pF/m	31	100	33	110	36	119	37	122	40	130
Type 1874	pF/ft	pF/m	49	160	56	184	64	210	67	218	76	251
L/R Ratio	μH/Ω	μH/Ω	9	9	13	13	20	20	22	22	35	35
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.58	0.17	0.54	0.16	0.53	0.15	0.5

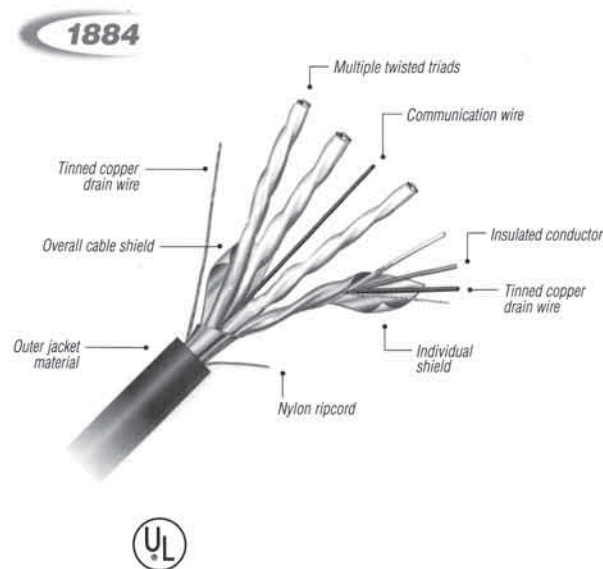
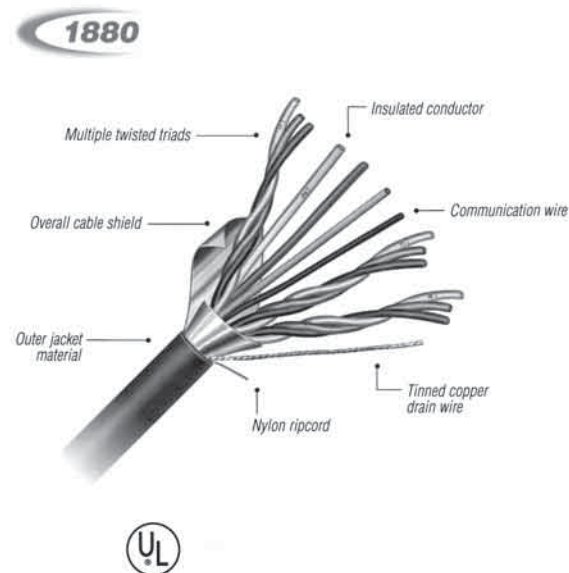
Product Dimensions

		Nominal O.D.		Weight		Jacket Thickness	
Part Number	Pairs	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²							
1870-00280	2	0.336	8.5	0.052	0.078	40	1.02
1870-00480	4	0.396	10.1	0.078	0.117	40	1.02
1870-00880	8	0.523	13.3	0.143	0.213	50	1.27
1870-01280	12	0.606	15.4	0.195	0.290	50	1.27
1870-01680	16	0.689	17.5	0.268	0.400	60	1.52
1870-02480	24	0.813	20.6	0.356	0.530	60	1.52
1870-03680	36	0.951	24.2	0.513	0.765	70	1.78
1870-05080	50	1.098	27.9	0.698	1.041	70	1.78
1874-00280	2	0.364	9.2	0.061	0.090	40	1.02
1874-00480	4	0.457	11.6	0.110	0.164	50	1.27
1874-00880	8	0.575	14.6	0.182	0.272	50	1.27
1874-01280	12	0.708	18.0	0.267	0.398	60	1.52
1874-01680	16	0.759	19.3	0.327	0.488	60	1.52
1874-02480	24	0.972	24.7	0.492	0.733	70	1.78
1874-03680	36	1.105	28.1	0.685	1.020	70	1.78
1874-05080	50	1.257	31.9	0.874	1.303	70	1.78
Conductor Size: 18 AWG / 0.82 mm ²							
1870-80280	2	0.367	9.3	0.064	0.096	40	1.02
1870-80480	4	0.466	11.8	0.113	0.169	50	1.27
1870-80880	8	0.576	14.6	0.187	0.278	50	1.27
1870-81280	12	0.691	17.5	0.271	0.403	60	1.52
1870-81680	16	0.767	19.5	0.352	0.525	60	1.52
1870-82480	24	0.904	23.0	0.479	0.713	60	1.52
1870-83680	36	1.058	26.9	0.695	1.035	70	1.78
1870-85080	50	1.232	31.3	0.950	1.417	70	1.78
1874-80280	2	0.398	10.1	0.076	0.113	40	1.02
1874-80480	4	0.499	12.7	0.134	0.199	50	1.27
1874-80880	8	0.633	16.1	0.226	0.337	50	1.27
1874-81280	12	0.781	19.8	0.332	0.495	60	1.52
1874-81680	16	0.847	21.5	0.437	0.652	60	1.52
1874-82480	24	1.078	27.4	0.619	0.922	70	1.78
1874-83680	36	1.228	31.2	0.869	1.294	70	1.78
1874-85080	50	1.433	36.4	1.233	1.839	80	2.03
Conductor Size: 16 AWG / 1.3 mm ²							
1870-60280	2	0.437	11.1	0.094	0.141	50	1.27
1870-60480	4	0.516	13.1	0.148	0.220	50	1.27
1870-60880	8	0.663	16.8	0.264	0.393	60	1.52
1870-61280	12	0.772	19.6	0.367	0.546	60	1.52
1870-61680	16	0.954	24.2	0.500	0.746	70	1.78
1870-62480	24	1.038	26.4	0.683	1.015	70	1.78
1870-63680	36	1.192	30.3	0.970	1.444	70	1.78
1870-65080	50	1.536	39.0	1.352	2.016	80	2.03
1874-60280	2	0.472	12.0	0.107	0.160	50	1.27
1874-60480	4	0.553	14.0	0.178	0.264	50	1.27
1874-60880	8	0.727	18.5	0.323	0.480	60	1.52
1874-61280	12	0.873	22.2	0.456	0.679	60	1.52
1874-61680	16	0.972	24.7	0.608	0.907	70	1.78
1874-62480	24	1.211	30.3	0.860	1.281	70	1.78
1874-63680	36	1.404	35.7	1.250	1.862	80	2.03
1874-65080	50	1.621	41.2	1.691	2.522	80	2.03

Product Dimensions

Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 1.5 mm ²							
1870-N0280	2	0.451	11.5	0.102	0.151	50	1.27
1870-N0480	4	0.533	13.5	0.161	0.240	50	1.27
1870-N0880	8	0.686	17.4	0.289	0.431	60	1.52
1870-N1280	12	0.800	20.3	0.404	0.602	60	1.52
1874-N0280	2	0.486	12.3	0.117	0.175	50	1.27
1874-N0480	4	0.571	14.5	0.189	0.281	50	1.27
1874-N0880	8	0.751	19.1	0.344	0.513	60	1.52
1874-N1280	12	0.904	23.0	0.487	0.726	60	1.52
Conductor Size: 2.5 mm ²							
1870-P0280	2	0.511	13.0	0.137	0.204	50	1.27
1870-P04A0	4	0.609	15.5	0.226	0.337	50	1.27
1870-P08A0	8	0.787	20.0	0.415	0.618	60	1.52
1870-P12A0	12	0.942	23.9	0.606	0.902	70	1.78
1874-P0280	2	0.551	14.0	0.157	0.234	50	1.27
1874-P04A0	4	0.671	17.0	0.275	0.409	60	1.52
1874-P08A0	8	0.861	21.9	0.486	0.724	60	1.52
1874-P12A0	12	1.063	27.0	0.717	1.067	70	1.78

300 Volt Thermoplastic PVC (Multiple Triad)

**Description**

- Conductor 7-strand bare copper, Class B
- Primary insulation. . . . 15 mils (0.4 mm) for 20 - 16 AWG
20 mils (0.5 mm) for 14 AWG and larger, 105°C FR-PVC
- Number of conductors per group 3
- Color code Black, white and red
- Group identification . . Each triad numbered
- Triad shield (Type 1884) 100% coverage, an aluminum-polyester tape shield and 7-strand tinned copper drain wire
- Overall shield. (Type 1880/1884) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC
- Communications wire 22 AWG copper, color-coded orange

Application

- Signal transmission
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II Division 2 hazardous areas
- NEC Article 725/727
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1880 – Multiple triad overall shield
- 1884 – Multiple triad individual and overall shield

Cable Options

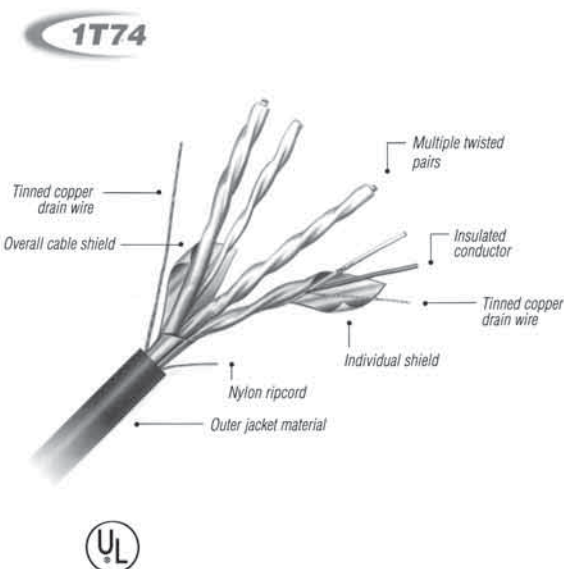
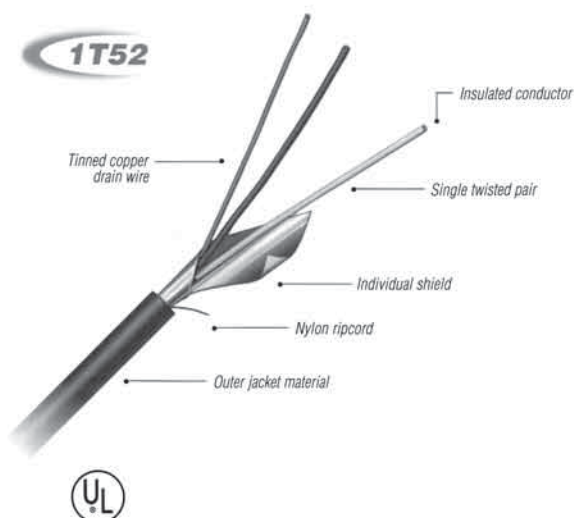
- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size									
			20 AWG / 0.5 mm ²		18 AWG / 0.8 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	6.7	21.9	4.2	13.7	3.6	11.9	2.2	7.2
Mutual Capacitance												
Type 1880	pF/ft	pF/m	31	100	33	110	36	119	37	122	40	130
Type 1884	pF/ft	pF/m	49	160	56	184	64	210	67	218	76	251
L/R Ratio	μH/Ω	μH/Ω	9	9	13	13	20	20	22	22	35	35
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.58	0.17	0.54	0.16	0.53	0.15	0.5

Product Dimensions

		Nominal O.D.		Weight		Jacket Thickness	
Part Number	Triads	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²							
1880-00480	4	0.470	11.9	0.116	0.173	50	1.27
1880-01280	12	0.732	18.6	0.283	0.422	60	1.52
1880-01680	16	0.808	20.5	0.355	0.529	60	1.52
1880-03680	36	1.145	29.1	0.729	1.085	70	1.78
1884-00480	4	0.497	12.6	0.136	0.202	50	1.27
1884-01280	12	0.777	19.7	0.338	0.504	60	1.52
1884-01680	16	0.859	21.8	0.428	0.637	60	1.52
1884-03680	36	1.221	31.0	0.887	1.321	70	1.78
Conductor Size: 18 AWG / 0.82 mm ²							
1880-80480	4	0.516	13.1	0.149	0.222	50	1.27
1880-81280	12	0.811	20.6	0.377	0.561	60	1.52
1880-81680	16	0.897	22.8	0.477	0.711	60	1.52
1880-83680	36	1.298	32.9	1.021	1.520	80	2.03
1884-80480	4	0.544	13.8	0.170	0.253	50	1.27
1884-81280	12	0.859	21.8	0.434	0.647	60	1.52
1884-81680	16	0.972	24.7	0.571	0.851	70	1.78
1884-83680	36	1.379	35.0	1.187	1.769	80	2.03
Conductor Size: 16 AWG / 1.3 mm ²							
1880-60480	4	0.574	14.6	0.199	0.296	50	1.27
1880-61280	12	0.930	23.6	0.535	0.797	70	1.78
1880-61680	16	1.030	26.2	0.682	1.016	70	1.78
1880-63680	36	1.466	37.2	1.431	2.131	80	2.03
1884-60480	4	0.605	15.4	0.229	0.341	50	1.27
1884-61280	12	0.983	25.0	0.621	0.925	70	1.78
1884-61680	16	1.089	27.7	0.794	1.183	70	1.78
1884-63680	36	1.554	39.5	1.678	2.499	80	2.03
Conductor Size: 1.5 mm ²							
1880-N0480	4	0.595	15.1	0.218	0.325	50	1.27
1880-N0880	8	0.783	19.9	0.401	0.598	60	1.52
1880-N1280	12	0.964	24.5	0.590	0.879	70	1.78
1880-N2480	24	1.333	33.9	1.115	1.660	80	2.03
1884-N0480	4	0.625	15.9	0.246	0.366	50	1.27
1884-N0880	8	0.825	21.0	0.455	0.678	60	1.52
1884-N1280	12	1.017	25.3	0.670	0.998	70	1.78
1884-N2480	24	1.410	35.8	1.270	1.890	80	2.03
Conductor Size: 2.5 mm ²							
1880-P04A0	4	0.701	17.8	0.325	0.485	60	1.52
1880-P08A0	8	0.902	22.9	0.585	0.871	70	1.78
1880-P12A0	12	1.113	28.3	0.864	1.287	70	1.78
1880-P24A0	24	1.549	39.3	1.652	2.461	80	2.03
1884-P04A0	4	0.786	18.7	0.361	0.537	60	1.52
1884-P08A0	8	0.964	24.6	0.671	0.999	70	1.78
1884-P12A0	12	1.173	29.8	0.965	1.437	70	1.78



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation . . . 15 mils (0.4 mm) TPE
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . Each pair/triad numbered
- Pair/triad shield (Type 1T52/1T62/1T74/1T84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield Type (1T70/1T74/1T80/1T84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPE

Application

- UL listed as PLTC/ITC
- Offers flexibility at low temperatures
- Excellent dielectric properties and long-term moisture resistance
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1T50 – Single pair unshielded
- 1T52 – Single pair shielded
- 1T60 – Single triad unshielded
- 1T62 – Single triad shielded
- 1T70 – Multiple pair overall shield
- 1T74 – Multiple pair individual and overall shield
- 1T80 – Multiple triad overall shield
- 1T84 – Multiple triad individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- FR-PVC jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

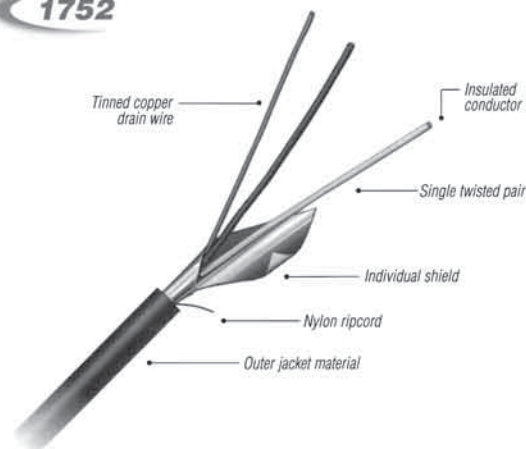
Electrical Properties	Units		Conductor Size			
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.2	13.7
Mutual Capacitance						
Type 1T50	pF/ft	pF/m	15	51	18	60
Type 1T74	pF/ft	pF/m	26	85	34	110
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54

Product Dimensions

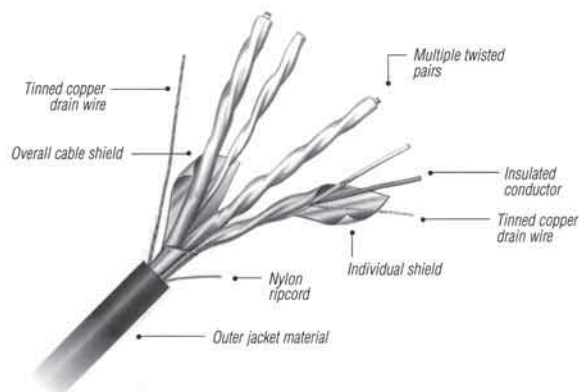
Part Number	Pairs/Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²							
1T50-0800R	1 PR	0.231	5.9	0.022	0.033	35	0.89
1T52-0800R	1 PR	0.236	6.0	0.027	0.040	35	0.89
1T60-0800R	1 TR	0.242	6.2	0.029	0.044	35	0.89
1T62-0800R	1 TR	0.253	6.4	0.033	0.049	35	0.89
1T70-00400	4 PR	0.396	10.1	0.068	0.101	40	1.02
1T70-00800	8 PR	0.523	13.3	0.124	0.184	50	1.27
1T70-01200	12 PR	0.606	15.4	0.170	0.253	50	1.27
1T70-02400	24 PR	0.813	20.6	0.313	0.467	60	1.52
1T74-00400	4 PR	0.457	11.6	0.096	0.143	50	1.27
1T74-00800	8 PR	0.575	14.6	0.161	0.240	50	1.27
1T74-01200	12 PR	0.708	18.0	0.237	0.353	60	1.52
1T74-02400	24 PR	0.972	24.7	0.440	0.656	70	1.78
1T80-00400	4 TR	0.470	12.0	0.100	0.149	50	1.27
1T80-00800	8 TR	0.594	15.1	0.169	0.251	50	1.27
1T80-01200	12 TR	0.732	18.6	0.248	0.369	60	1.52
1T84-00400	4 TR	0.497	12.6	0.119	0.177	50	1.27
1T84-00800	8 TR	0.630	16.0	0.205	0.305	50	1.27
1T84-01200	12 TR	0.777	19.7	0.301	0.449	60	1.52
Conductor Size: 16 AWG / 1.3 mm ²							
1T50-6800R	1 PR	0.274	7.0	0.036	0.054	35	0.89
1T52-6800R	1 PR	0.278	7.1	0.043	0.064	35	0.89
1T60-6800R	1 TR	0.288	7.3	0.050	0.074	35	0.89
1T62-6800R	1 TR	0.302	7.7	0.058	0.086	35	0.89
1T70-60400	4 PR	0.516	13.1	0.130	0.194	50	1.27
1T70-60800	8 PR	0.663	16.8	0.235	0.350	60	1.52
1T70-61200	12 PR	0.772	19.6	0.330	0.492	60	1.52
1T70-62400	24 PR	1.038	26.4	0.621	0.925	70	1.78
1T74-60400	4 PR	0.553	14.0	0.159	0.236	50	1.27
1T74-60800	8 PR	0.727	18.5	0.292	0.435	60	1.52
1T74-61200	12 PR	0.873	22.2	0.416	0.619	60	1.52
1T74-62400	24 PR	1.211	30.8	0.792	1.179	70	1.78
1T80-60400	4 TR	0.574	14.6	0.178	0.264	50	1.27
1T80-60800	8 TR	0.756	19.2	0.328	0.489	60	1.52
1T80-61200	12 TR	0.930	23.6	0.484	0.720	70	1.78
1T84-60400	4 TR	0.605	15.4	0.206	0.307	50	1.27
1T84-60800	8 TR	0.798	20.3	0.384	0.572	60	1.52
1T84-61200	12 TR	0.983	25.0	0.567	0.845	70	1.78

300 Volt Thermoplastic Polyethylene

1752



1774

**Description**

- Conductor 7-strand bare copper, Class B
- Primary insulation . . . 15 mils (0.4 mm) for 20 AWG
20 mils (0.5 mm) for 18 AWG
and larger, polyethylene
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . Each pair/triad numbered
- Pair/triad shield (Type 1752/1762/1774/1784) 100%
coverage, an aluminum-polyester tape
shield and a 7-strand tinned copper
drain wire
- Overall shield. (Type 1770/1774/1780/1784)
100% coverage, an aluminum-polyester
tape shield and a 7-strand tinned copper
drain wire
- Jacket Black FR-PVC

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Non-flame retardant (does not pass IEEE 383 or IEC 332)
- 300 volt rated insulation per ICEA

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1750 – Single pair unshielded
- 1752 – Single pair shielded
- 1760 – Single triad unshielded
- 1762 – Single triad shielded
- 1770 – Multiple pair overall shield
- 1774 – Multiple pair individual and overall shield
- 1780 – Multiple triad overall shield
- 1784 – Multiple triad individual and overall shield

Cable Options

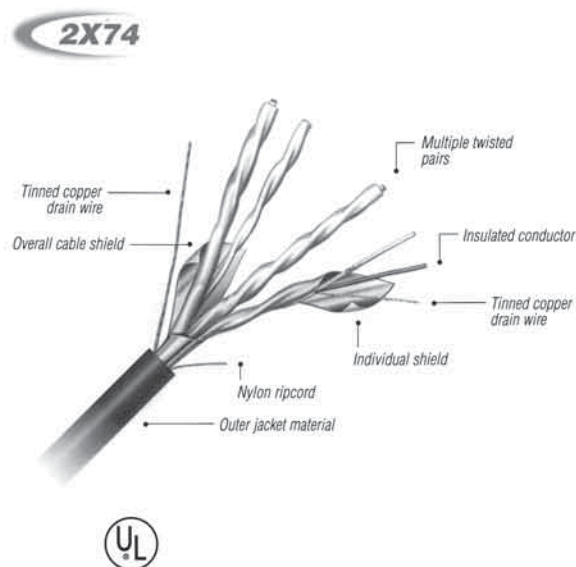
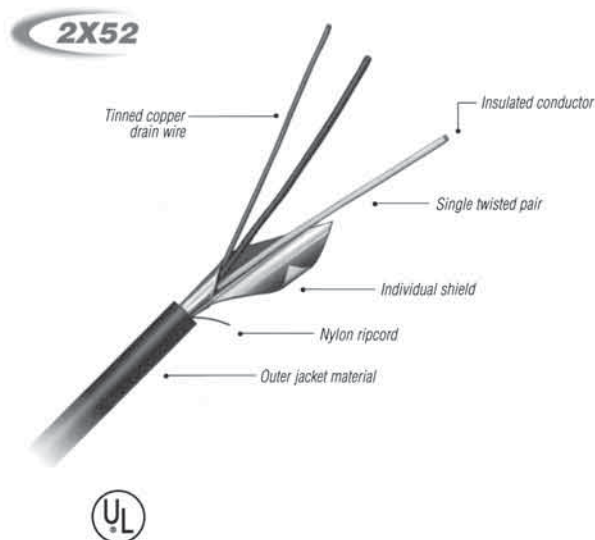
- Manufactured in accordance with ICEA. Also available to IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- LDPE or CPE jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size							
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.2	13.7	3.6	11.9	2.2	7.2
Mutual Capacitance										
Type 1750	pF/ft	pF/m	15	51	16	54	17	55	18	61
Type 1752	pF/ft	pF/m	15	51	16	54	17	55	18	61
Type 1760	pF/ft	pF/m	26	85	29	94	30	97	34	112
Type 1762	pF/ft	pF/m	26	85	29	94	30	97	34	112
Type 1770	pF/ft	pF/m	15	51	16	54	17	55	18	61
Type 1774	pF/ft	pF/m	26	85	29	94	30	97	34	112
Type 1780	pF/ft	pF/m	15	51	16	54	17	55	18	61
Type 1784	pF/ft	pF/m	26	85	29	94	30	97	34	112
L/R Ratio	μH/Ω	μH/Ω	9	9	21	21	24	24	37	37
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.59	0.18	0.58	0.16	0.54

Product Dimensions

Part Number	Pairs/Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1752-68F03	1 PR	0.341	8.7	0.060	0.090	45	1.14
1760-68F03	1 TR	0.354	9.0	0.067	0.100	45	1.14
1762-68F03	1 TR	0.370	9.4	0.075	0.112	45	1.14
1770-604F0	4 PR	0.698	17.7	0.240	0.353	60	1.52
1770-612F0	12 PR	1.129	28.7	0.620	0.923	80	2.03
1770-624F0	24 PR	1.541	39.1	1.116	1.662	80	2.03
1774-604F0	4 PR	0.733	18.6	0.283	0.422	60	1.52
1774-612F0	12 PR	1.188	30.2	0.745	1.110	80	2.03
1774-624F0	24 PR	1.627	41.3	1.360	2.026	80	2.03
Conductor Size: 1.5 mm ²							
1752-N8F03	1 PR	0.349	8.9	0.065	0.097	45	1.14
1760-N8F03	1 TR	0.363	9.2	0.072	0.108	45	1.14
1762-N8F03	1 TR	0.379	9.6	0.082	0.122	45	1.14
1770-N04F0	4 PR	0.685	17.4	0.211	0.314	60	1.52
1770-N12F0	12 PR	1.053	26.7	0.521	0.776	80	2.03
1770-N24F0	24 PR	1.394	35.4	0.918	1.367	80	2.03
1774-N04F0	4 PR	0.731	18.6	0.248	0.369	60	1.52
1774-N12F0	12 PR	1.186	30.1	0.637	0.948	80	2.03
1774-N24F0	24 PR	1.624	41.2	1.142	1.701	80	2.03
Conductor Size: 14 AWG/ 2.1 mm ²							
1752-48L03	1 PR	0.391	9.9	0.082	0.122	45	1.14
1760-48L03	1 TR	0.408	10.4	0.092	0.137	45	1.14
1762-48L03	1 TR	0.426	10.8	0.104	0.155	45	1.14
1770-404L0	4 PR	0.731	18.6	0.250	0.372	60	1.52
1770-412L0	12 PR	1.128	28.6	0.634	1.945	80	2.03
1770-424L0	24 PR	1.498	38.0	1.137	1.693	80	2.03
1774-404L0	4 PR	0.781	19.8	0.371	0.472	60	1.52
1774-412L0	12 PR	1.270	32.3	0.840	1.251	80	2.03
1774-424L0	24 PR	1.806	45.9	1.644	2.448	110	2.79
Conductor Size: 2.5 mm ²							
1752-P8L03	1 PR	0.405	10.3	0.091	0.135	45	1.14
1760-P8L03	1 TR	0.423	10.7	0.102	0.153	45	1.14
1762-P8L03	1 TR	0.442	11.2	0.116	0.172	45	1.14
1770-P04L0	4 PR	0.761	19.3	0.285	0.425	60	1.52
1770-P12L0	12 PR	1.176	29.9	0.721	1.074	80	2.03
1770-P24L0	24 PR	1.565	39.7	1.298	1.933	80	2.03
1774-P04L0	4 PR	0.812	20.6	0.338	0.503	60	1.52
1774-P12L0	12 PR	1.324	33.6	0.884	1.316	80	2.03
1774-P24L0	24 PR	1.884	47.9	1.723	2.566	110	2.79



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation . . . 15 mils (0.38 mm) XLPE
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . Each pair/triad numbered
- Pair/triad shield (Type 2X52/2X62/2X74/2X84)
100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. Type (2X70/2X74/2X80/2X84)
100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC

Application

- UL listed as PLTC/ITC
- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- NEC Article 725/727
- Flame retardant
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 2X50 – Single pair unshielded
- 2X52 – Single pair shielded
- 2X60 – Single triad unshielded
- 2X62 – Single triad shielded
- 2X70 – Multiple pair overall shield
- 2X74 – Multiple pair individual and overall shield
- 2X80 – Multiple triad overall shield
- 2X84 – Multiple triad individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, CSA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- CPE or Hypalon (CSPE) jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Note: Substituting 3x for 2x will upgrade Insulated Single Flame performance to VW-1

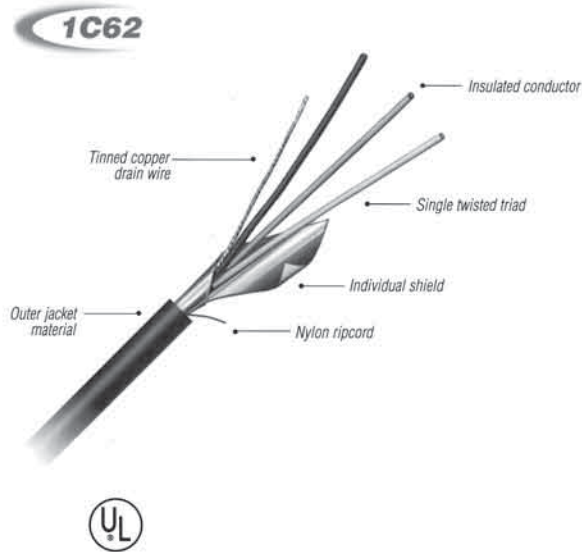
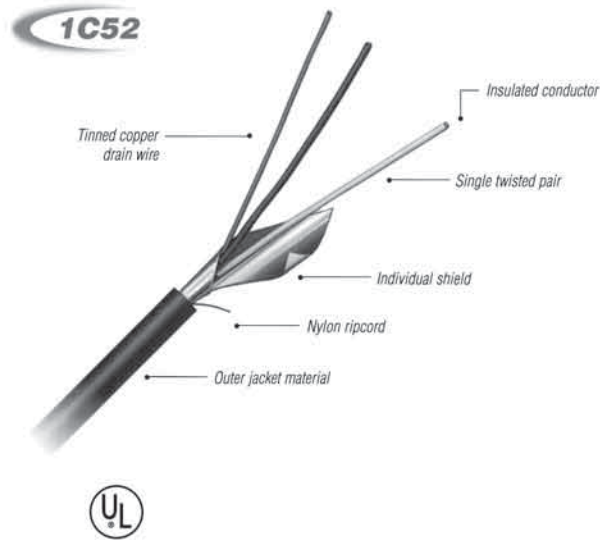
Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	11.1	36.4	4.4	14.5	3.8	12.4
Mutual Capacitance								
Type 2X50	pF/ft	pF/m	17	55	20	64	20	66
Type 2X52	pF/ft	pF/m	27	88	35	115	36	119
Type 2X60	pF/ft	pF/m	17	55	20	64	20	66
Type 2X62	pF/ft	pF/m	27	88	35	115	36	119
Type 2X70	pF/ft	pF/m	17	55	20	64	20	66
Type 2X74	pF/ft	pF/m	27	88	35	115	36	119
Type 2X80	pF/ft	pF/m	17	55	20	64	20	66
Type 2X84	pF/ft	pF/m	27	88	35	115	36	119
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

Part Number*	Pairs/Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²							
2X52-09510	1 PR	0.236	6.0	0.029	0.043	35	0.89
2X62-09510	1 TR	0.253	6.4	0.035	0.052	35	0.89
2X70-00450	4 PR	0.396	10.1	0.075	0.111	40	1.02
2X70-00850	8 PR	0.523	13.3	0.136	0.203	50	1.27
2X70-01250	12 PR	0.606	15.4	0.184	0.274	50	1.27
2X70-02450	24 PR	0.813	20.6	0.334	0.498	60	1.52
2X74-00450	4 PR	0.457	11.6	0.102	0.152	50	1.27
2X74-00850	8 PR	0.575	14.6	0.165	0.246	50	1.27
2X74-01250	12 PR	0.708	18.0	0.242	0.360	60	1.52
2X74-02450	24 PR	0.972	24.7	0.441	0.657	70	1.78
Conductor Size: 16 AWG / 1.3 mm ²							
2X52-69510	1 PR	0.278	7.1	0.047	0.070	35	0.89
2X62-69510	1TR	0.312	7.9	0.063	0.093	35	0.89
2X70-60450	4 PR	0.516	13.1	0.143	0.213	50	1.27
2X70-60850	8 PR	0.663	16.8	0.254	0.378	60	1.52
2X70-61250	12 PR	0.772	19.6	0.351	0.523	60	1.52
2X70-62450	24 PR	1.038	26.4	0.653	0.972	70	1.78
2X74-60450	4 PR	0.553	14	0.172	0.257	50	1.27
2X74-60850	8 PR	0.727	18.5	0.312	0.465	60	1.52
2X74-61250	12 PR	0.873	22.2	0.440	0.656	60	1.52
2X74-62450	24 PR	1.211	30.8	0.830	1.236	70	1.78
Conductor Size: 1.5 mm ²							
2X52-N9510	1 PR	0.286	7.3	0.050	0.075	35	0.89
2X62-N9510	1TR	0.321	8.2	0.067	0.099	40	1.02
2X70-N0450	4 PR	0.533	13.5	0.156	0.232	50	1.27
2X70-N0850	8 PR	0.686	17.4	0.278	0.415	60	1.52
2X70-N1250	12 PR	0.800	20.3	0.388	0.578	60	1.52
2X70-N2450	24 PR	1.076	27.3	0.724	1.078	70	1.78
2X74-N0450	4 PR	0.571	14.5	0.183	0.273	50	1.27
2X74-N0850	8 PR	0.751	19.1	0.333	0.497	60	1.52
2X74-N1250	12 PR	0.904	22.9	0.471	0.702	60	1.52
2X74-N2450	24 PR	1.255	31.9	0.890	1.325	70	1.78

* Part number may change and become 12 digits at time of order.

600 Volt Thermoplastic PVC/Nylon (Single Pair/Single Triad)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) PVC, 4 mils (0.1 mm) nylon
- Color code Black and white (pairs)
Black, red and white (triads)
- Pair/triad shield (Type 1C52, 1C62) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC

Application

- Offers resistance to a wide range of chemicals, including acids, alkalis, alcohol, petroleum and mineral oils
- UL listed as TC per NEC Article 336
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- 600 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1C50 – Single pair unshielded
- 1C52 – Single pair shielded
- 1C60 – Single triad unshielded
- 1C62 – Single triad shielded

Cable Options

- Manufactured in accordance with UL. Also available to CSA, ICEA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Pairs color-coded black and red
- Triads color-coded black, red and blue
- Tinned copper conductors

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

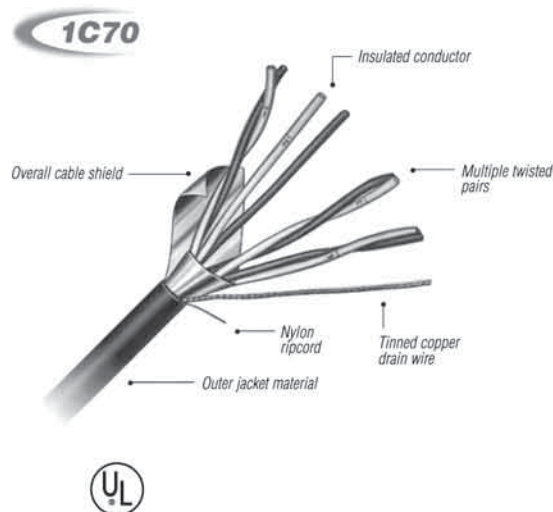
Electrical Properties	Units		Conductor Size					
			18 AWG / 0.8 mm ²		16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²	
Resistance (R)	Ω/Mft	Ω/km	6.7	21.9	4.2	13.7	2.6	8.6
Mutual Capacitance								
Type 1C50	pF/ft	pF/m	31	100	33	110	36	119
Type 1C52	pF/ft	pF/m	49	161	56	184	64	210
Type 1C60	pF/ft	pF/m	31	100	33	110	36	119
Type 1C62	pF/ft	pF/m	49	161	56	184	64	210
L/R Ratio	μH/Ω	μH/Ω	14	14	21	21	31	31
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.58	0.17	0.54

Product Dimensions

Part Number*	Pairs/Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 18 AWG / 0.82 mm ²							
1C50-87000	1 PR	0.286	7.3	0.041	0.061	45	1.14
1C52-87000	1 PR	0.293	7.4	0.046	0.069	45	1.14
1C60-87000	1 TR	0.303	7.7	0.051	0.076	45	1.14
1C62-87000	1 TR	0.316	8.0	0.057	0.084	45	1.14
Conductor Size: 16 AWG / 1.3 mm ²							
1C50-67000	1 PR	0.312	7.9	0.051	0.076	45	1.14
1C52-67000	1 PR	0.317	8.1	0.058	0.086	45	1.14
1C60-67000	1 TR	0.328	8.3	0.065	0.096	45	1.14
1C62-67000	1 TR	0.343	8.7	0.073	0.108	45	1.14
Conductor Size: 14 AWG / 2.1 mm ²							
1C50-47000	1 PR	0.342	8.7	0.065	0.097	45	1.14
1C52-47000	1 PR	0.347	8.8	0.072	0.108	45	1.14
1C60-47000	1 TR	0.361	9.2	0.085	0.127	45	1.14
1C62-47000	1 TR	0.376	9.6	0.093	0.139	45	1.14

* Add -230 to part number for black and red pairs or black, red and blue triads.

600 Volt Thermoplastic PVC/Nylon (Multiple Pair)



Description

- Conductor 7-strand bare copper Class B
- Primary insulation . . . 15 mils (0.4 mm) PVC, 4 mils (0.1 mm) nylon
- Color code Black and white pairs
- Group identification . . Each pair numbered
- Pair shield (Type 1C74) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield (Type 1C70/1C74) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC

Application

- Offers resistance to a wide range of chemicals, including acids, alkalies, alcohol, petroleum and mineral oils
- UL listed as TC
- NEC Article 336
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas

Bending Radius

- $6 \times d$ (d = overall diameter)

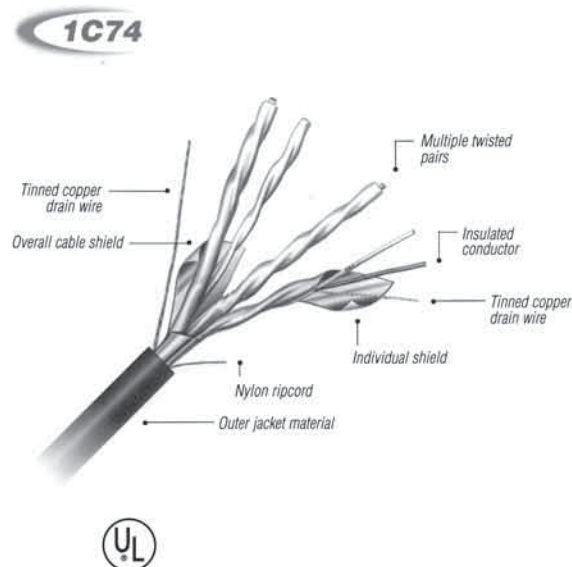
Cable Type

- 1C70 – Multiple pair overall shield
- 1C74 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, CSA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Pairs color-coded black and red
- Tinned copper conductors

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



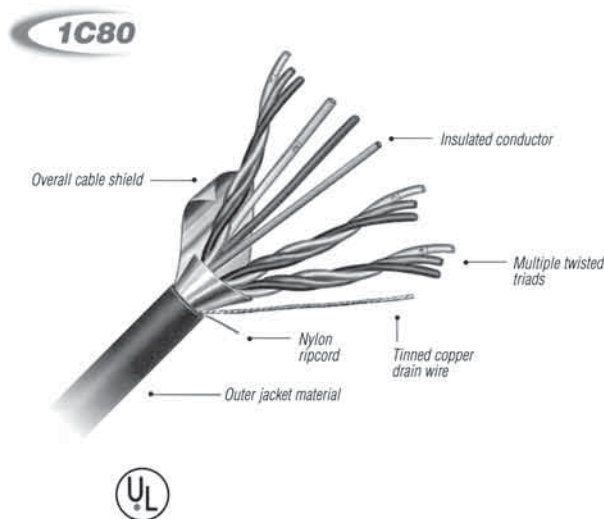
Electrical Properties	Units		Conductor Size			
			18 AWG / 0.8 mm ²		16 AWG / 1.3 mm ²	
Resistance (R)	Ω/Mft	Ω/km	6.7	21.9	4.2	13.7
Mutual Capacitance						
Type 1C70	pF/ft	pF/m	31	100	33	110
Type 1C74	pF/ft	pF/m	49	161	56	184
L/R Ratio	μH/Ω	μH/Ω	14	14	21	21
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.58

Product Dimensions

Part Number*	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 18 AWG / 0.82 mm ²							
1C70-80200	2	0.406	10.3	0.070	0.105	45	1.14
1C70-80400	4	0.485	12.3	0.118	0.175	45	1.14
1C70-80800	8	0.649	16.5	0.212	0.329	60	1.52
1C70-81200	12	0.755	19.2	0.302	0.450	60	1.52
1C70-82400	24	1.033	26.2	0.572	0.852	80	2.03
1C70-83600	36	1.183	30.0	0.796	1.186	80	2.03
1C74-80200	2	0.439	11.2	0.082	0.122	45	1.14
1C74-80400	4	0.521	13.2	0.146	0.218	45	1.14
1C74-80800	8	0.711	18.1	0.279	0.416	60	1.52
1C74-81200	12	0.853	21.7	0.391	0.582	60	1.52
1C74-82400	24	1.202	30.5	0.752	1.120	80	2.03
1C74-83600	36	1.370	34.8	1.053	1.569	80	2.03
Conductor Size: 16 AWG / 1.3 mm ²							
1C70-60200	2	0.446	11.3	0.089	0.133	45	1.14
1C70-60400	4	0.565	14.4	0.015	0.227	45	1.14
1C70-60800	8	0.751	19.1	0.283	0.424	60	1.52
1C70-61200	12	0.884	22.5	0.389	0.584	60	1.52
1C70-62400	24	1.212	30.8	0.742	1.112	80	2.03
1C70-63600	36	1.398	35.5	1.038	1.557	80	2.03
1C74-60200	2	0.483	12.3	0.105	0.157	45	1.14
1C74-60400	4	0.629	16.0	0.207	0.310	60	1.52
1C74-60800	8	0.811	20.6	0.349	0.522	60	1.52
1C74-61200	12	1.017	25.8	0.528	0.791	80	2.03
1C74-62400	24	1.390	35.3	0.944	1.416	80	2.03
1C74-63600	36	1.593	40.5	1.331	1.997	80	2.03

* Add -230 to part number for black and red pairs.

600 Volt Thermoplastic PVC/Nylon (Multiple Triad)

**Description**

- Conductor 7-strand bare copper, Class B
- Primary insulation. 15 mils (0.4 mm) PVC,
4 mils (0.1 mm) nylon
- Color code Black, red and white triads
- Group identification Each triad numbered
- Triad shield (Type 1C84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1C80/1C84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket. Black FR-PVC

Application

- Offers resistance to a wide range of chemicals, including acids, alkalies, alcohol, petroleum and mineral oils
- UL listed as TC
- NEC Article 336
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas

Bending Radius

- $6 \times d$ (d = overall diameter)

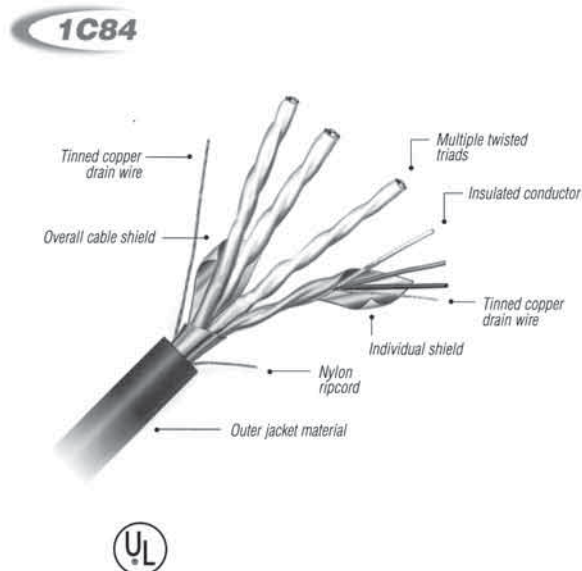
Cable Type

- 1C80 – Multiple triad overall shield
- 1C84 – Multiple triad individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, CSA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Triads color-coded black, red and blue
- Tinned copper conductors

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



Electrical Properties	Units		Conductor Size			
			18 AWG / 0.8 mm ²		16 AWG / 1.3 mm ²	
Resistance (R)	Ω/Mft	Ω/km	6.7	21.9	4.2	13.7
Mutual Capacitance						
Type 1C80	pF/ft	pF/m	31	100	33	110
Type 1C84	pF/ft	pF/m	49	161	56	184
L/R Ratio	μH/Ω	μH/Ω	14	14	21	21
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.58

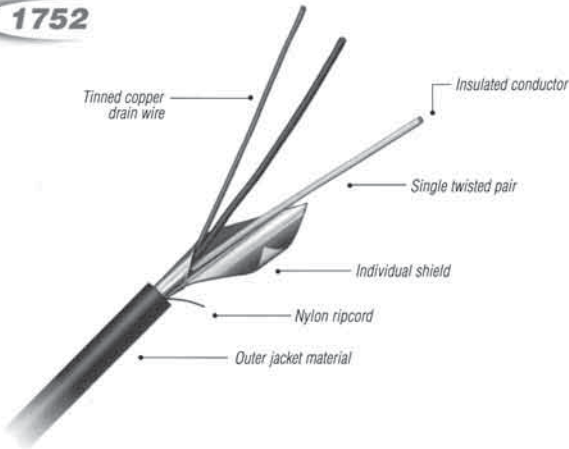
Product Dimensions

Part Number*	Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 18 AWG/ 0.8 mm ²							
1C80-80400	4	0.582	14.8	0.178	0.265	60	1.52
1C80-80800	8	0.739	18.8	0.299	0.446	60	1.52
1C80-81200	12	0.929	23.6	0.455	0.677	80	2.03
1C80-82400	24	1.253	31.8	0.809	1.205	80	2.03
1C80-83600	36	1.430	36.3	1.137	1.693	80	2.03
1C84-80400	4	0.612	15.5	0.207	0.309	60	1.52
1C84-80800	8	0.780	19.8	0.355	0.528	60	1.52
1C84-81200	12	0.980	24.9	0.538	0.802	80	2.03
1C84-82400	24	1.327	33.7	0.971	1.446	80	2.03
1C84-83600	36	1.516	38.5	1.375	2.048	80	2.03
Conductor Size: 16 AWG / 1.3 mm ²							
1C80-60400	4	0.640	16.3	0.233	0.348	60	1.52
1C80-60800	8	0.818	20.8	0.401	0.598	60	1.52
1C80-61200	12	1.029	26.1	0.607	0.904	80	2.03
1C80-62400	24	1.397	35.5	1.100	1.639	80	2.03
1C80-63600	36	1.598	40.6	1.563	2.327	80	2.03
1C84-60400	4	0.672	17.1	0.264	0.393	60	1.52
1C84-60800	8	0.902	22.9	0.473	0.734	80	2.03
1C84-61200	12	1.084	27.5	0.694	1.034	80	2.03
1C84-62400	24	1.477	37.5	1.269	1.890	80	2.03
1C84-63600	36	1.691	42.9	1.810	2.697	80	2.03

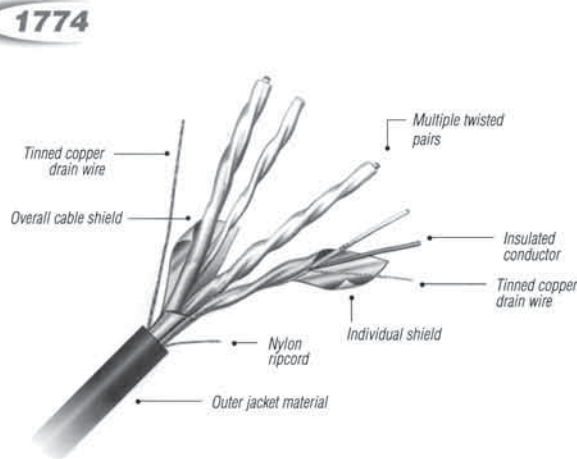
* Add -230 to part number for black, red and blue triads.

600 Volt Thermoplastic Polyethylene

1752



1774

**Description**

- Conductor 7-strand bare copper, Class B
- Primary insulation. 25 mils (0.6 mm) for 16 AWG
30 mils (0.8 mm) for 14 AWG,
polyethylene
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification Each pair/triad numbered
- Pair/triad shield (Type 1752/1762/1774/1784) 100%
coverage, an aluminum-polyester
tape shield and a 7-strand tinned
copper drain wire
- Overall shield. (Type 1770/1774/1780/1784) 100%
coverage, an aluminum-polyester
tape shield and a 7-strand tinned
copper drain wire
- Jacket Black FR-PVC

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Non-flame retardant (does not pass IEEE 383 or IEC 332)
- 600 volt rated insulation per ICEA

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1750 – Single pair unshielded
- 1752 – Single pair shielded
- 1760 – Single triad unshielded
- 1762 – Single triad shielded
- 1770 – Multiple pair overall shield
- 1774 – Multiple pair individual and overall shield
- 1780 – Multiple triad overall shield
- 1784 – Multiple triad individual and overall shield

Cable Options

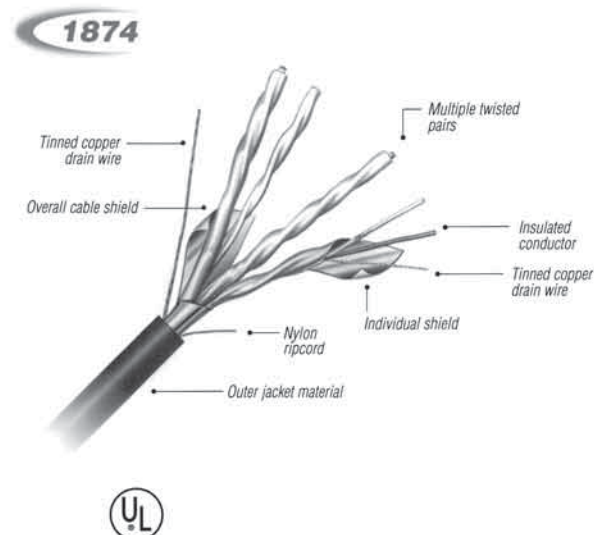
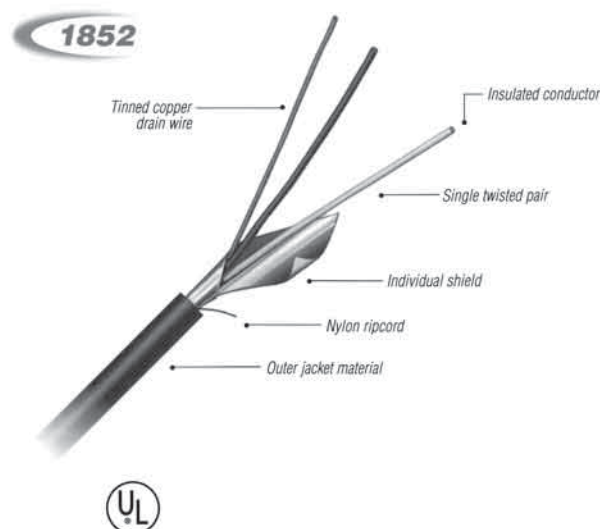
- Manufactured in accordance to ICEA. Also available to IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- LDPE or CPE jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		1.5 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	3.6	11.9	2.6	8.6	2.2	7.2
Mutual Capacitance										
Type 1750	pF/ft	pF/m	15	50	14	48	15	51	17	56
Type 1760	pF/ft	pF/m	15	50	14	48	15	51	17	56
Type 1752	pF/ft	pF/m	25	82	24	77	26	85	27	89
Type 1762	pF/ft	pF/m	25	82	24	77	26	85	27	89
Type 1770	pF/ft	pF/m	15	50	14	48	15	51	17	56
Type 1774	pF/ft	pF/m	25	82	24	77	26	85	27	89
Type 1780	pF/ft	pF/m	15	50	14	48	15	51	17	56
Type 1784	pF/ft	pF/m	25	82	24	77	26	85	27	89
L/R Ratio	μH/Ω	μH/Ω	23	23	27	27	36	36	42	42
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.20	0.65	0.19	0.62	0.18	0.60

Product Dimensions

Part Number	Pairs/Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1752-68F03	1 PR	0.341	8.7	0.060	0.090	45	1.14
1760-68F03	1 TR	0.354	9.0	0.067	0.100	45	1.14
1762-68F03	1 TR	0.370	9.4	0.075	0.112	45	1.14
1770-604F0	4 PR	0.698	17.7	0.240	0.353	60	1.52
1770-612F0	12 PR	1.129	28.7	0.620	0.923	80	2.03
1770-624F0	24 PR	1.541	39.1	1.116	1.662	80	2.03
1774-604F0	4 PR	0.733	18.6	0.283	0.422	60	1.52
1774-612F0	12 PR	1.188	30.2	0.745	1.110	80	2.03
1774-624F0	24 PR	1.627	41.3	1.360	2.026	80	2.03
Conductor Size: 1.5 mm ²							
1752-N8F03	1 PR	0.349	8.9	0.065	0.097	45	1.14
1760-N8F03	1 TR	0.363	9.2	0.072	0.108	45	1.14
1762-N8F03	1 TR	0.379	9.6	0.082	0.122	45	1.14
1770-N04F0	4 PR	0.685	17.4	0.211	0.314	60	1.52
1770-N12F0	12 PR	1.053	26.7	0.521	0.776	80	2.03
1770-N24F0	24 PR	1.394	35.4	0.918	1.367	80	2.03
1774-N04F0	4 PR	0.731	18.6	0.248	0.369	60	1.52
1774-N12F0	12 PR	1.186	30.1	0.637	0.948	80	2.03
1774-N24F0	24 PR	1.624	41.2	1.142	1.701	80	2.03
Conductor Size: 14 AWG/ 2.1 mm ²							
1752-48L03	1 PR	0.391	9.9	0.082	0.122	45	1.14
1760-48L03	1 TR	0.408	10.4	0.092	0.137	45	1.14
1762-48L03	1 TR	0.426	10.8	0.104	0.155	45	1.14
1770-404L0	4 PR	0.731	18.6	0.250	0.372	60	1.52
1770-412L0	12 PR	1.128	28.6	0.634	1.945	80	2.03
1770-424L0	24 PR	1.498	38.0	1.137	1.693	80	2.03
1774-404L0	4 PR	0.781	19.8	0.371	0.472	60	1.52
1774-412L0	12 PR	1.270	32.3	0.840	1.251	80	2.03
1774-424L0	24 PR	1.806	45.9	1.644	2.448	110	2.79
Conductor Size: 2.5 mm ²							
1752-P8L03	1 PR	0.405	10.3	0.091	0.135	45	1.14
1760-P8L03	1 TR	0.423	10.7	0.102	0.153	45	1.14
1762-P8L03	1 TR	0.442	11.2	0.116	0.172	45	1.14
1770-P04L0	4 PR	0.761	19.3	0.285	0.425	60	1.52
1770-P12L0	12 PR	1.176	29.9	0.721	1.074	80	2.03
1770-P24L0	24 PR	1.565	39.7	1.298	1.933	80	2.03
1774-P04L0	4 PR	0.812	20.6	0.338	0.503	60	1.52
1774-P12L0	12 PR	1.324	33.6	0.884	1.316	80	2.03
1774-P24L0	24 PR	1.884	47.9	1.723	2.566	110	2.79



Description

- Conductor 7-strand bare copper Class B
- Primary insulation. . . . 30 mils (0.8 mm) for 16 AWG
30 mils on all gauges
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . . Each pair/triad numbered
- Pair/triad shield (Type 1852/1862/1874/1884) 100%
coverage, an aluminum-polyester tape
shield and a 7-strand tinned copper
drain wire
- Overall shield. (Type 1870/1874/1880/1884) 100%
coverage, an aluminum-polyester
tape shield and a 7-strand tinned
copper drain wire
- Jacket Black FR-PVC

Application

- UL listed as TC
- Suitable for Class I, Division 2 and
Class II, Division 2 hazardous areas
- NEC Article 336
- 600 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1850 – Single pair unshielded
- 1852 – Single pair shielded
- 1860 – Single triad unshielded
- 1862 – Single triad shielded
- 1870 – Multiple pair overall shield
- 1874 – Multiple pair individual and overall shield
- 1880 – Multiple triad overall shield
- 1884 – Multiple pair individual and overall shield

Cable Options

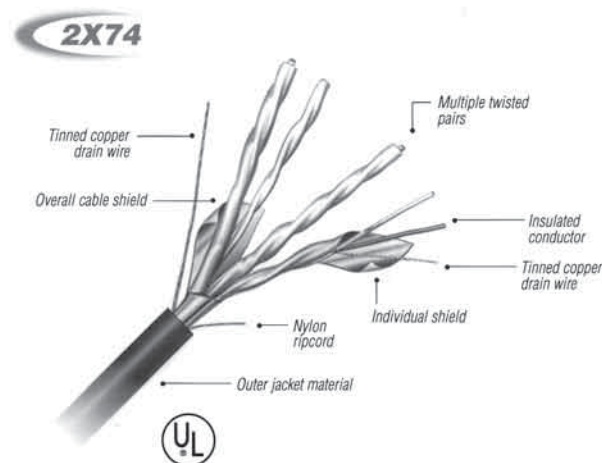
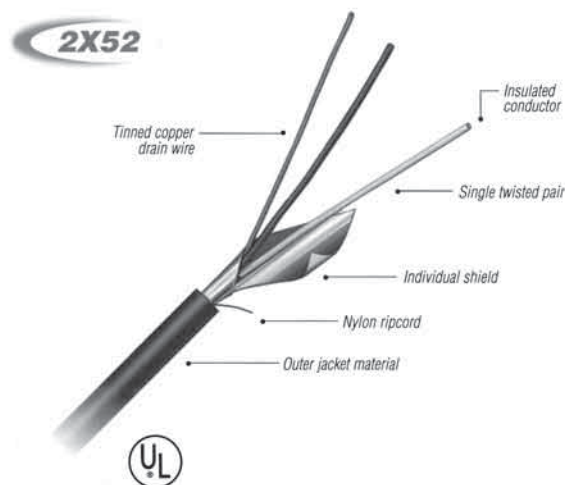
- Manufactured in accordance with UL. Also available to
ICEA, IEC, CSA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		1.5 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	3.6	11.9	2.7	8.6	2.2	7.2
Mutual Capacitance										
Type 1850	pF/ft	pF/m	28	93	29	95	31	102	32	106
Type 1860	pF/ft	pF/m	28	93	29	95	31	102	32	106
Type 1852	pF/ft	pF/m	43	142	45	147	49	161	52	170
Type 1862	pF/ft	pF/m	43	142	45	147	49	161	52	170
Type 1870	pF/ft	pF/m	28	93	29	95	31	102	32	106
Type 1874	pF/ft	pF/m	43	142	45	147	49	161	52	170
Type 1880	pF/ft	pF/m	28	93	29	95	31	102	32	106
Type 1884	pF/ft	pF/m	43	142	45	147	49	161	52	170
L/R Ratio	μH/Ω	μH/Ω	24	24	27	27	36	36	42	42
Inductance (L)	μH/ft	μH/m	0.2	0.66	0.19	0.64	0.18	0.62	0.18	0.60

Product Dimensions

		Nominal O.D.		Weight		Jacket Thickness	
Part Number	Pairs/Triads	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1850-68L03A	1 PR	0.356	9.0	0.061	0.090	45	1.14
1860-68L03A	1 TR	0.376	9.6	0.077	0.115	45	1.14
1852-68L03A	1 PR	0.361	9.2	0.071	0.105	45	1.14
1862-68L03A	1 TR	0.381	9.8	0.087	0.130	45	1.14
1870-602L0A	2 PR	0.522	13.3	0.116	0.173	45	1.14
1870-604L0A	4 PR	0.668	17.0	0.210	0.312	60	1.52
1870-612L0A	12 PR	1.026	26.1	0.523	0.778	80	2.03
1870-624L0A	24 PR	1.356	34.4	0.925	1.378	80	2.03
1874-602L0A	2 PR	0.605	15.4	0.162	0.242	60	1.52
1874-604L0A	4 PR	0.713	18.1	0.254	0.379	60	1.52
1874-612L0A	12 PR	1.155	29.3	0.661	0.984	80	2.03
1874-624L0A	24 PR	1.580	40.1	1.195	1.780	80	2.03
Conductor Size: 1.5 mm ²							
1850-N8L03A	1 PR	0.364	9.2	0.065	0.096	45	1.14
1860-N8L03A	1 TR	0.385	9.8	0.083	0.123	45	1.14
1852-N8L03A	1 PR	0.369	9.4	0.073	0.108	45	1.14
1862-N8L03A	1 TR	0.389	10.0	0.091	0.135	45	1.14
1870-N02L0A	2 PR	0.535	13.6	0.125	0.186	45	1.14
1870-N04L0A	4 PR	0.685	17.4	0.225	0.336	60	1.52
1870-N12L0A	12 PR	1.053	26.7	0.565	0.842	80	2.03
1870-N24L0A	24 PR	1.394	35.4	1.006	1.499	80	2.03
1874-N02L0A	2 PR	0.619	15.7	0.168	0.250	60	1.52
1874-N04L0A	4 PR	0.731	18.6	0.262	0.391	60	1.52
1874-N12L0A	12 PR	1.186	30.1	0.681	1.014	80	2.03
1874-N24L0A	24 PR	1.624	41.2	1.230	1.832	80	2.03
Conductor Size: 14 AWG / 2.1 mm ²							
1850-48L03A	1 PR	0.386	9.8	0.076	0.113	45	1.14
1860-48L03A	1 TR	0.408	10.4	0.098	0.146	45	1.14
1852-48L03A	1 PR	0.391	9.9	0.086	0.128	45	1.14
1870-402L0A	2 PR	0.612	15.5	0.163	0.243	60	1.52
1870-404L0A	4 PR	0.731	18.6	0.261	0.389	60	1.52
1870-412L0A	12 PR	1.128	28.6	0.678	1.010	80	2.03
1870-424L0A	24 PR	1.498	38.0	1.230	1.832	80	2.03
1874-402L0A2	2 PR	0.659	16.7	0.190	0.283	60	1.52
1874-404L0A	4 PR	0.781	19.8	0.308	0.459	60	1.52
1874-412L0A	12 PR	1.270	32.3	0.825	1.228	80	2.03
Conductor Size: 2.5 mm ²							
1850-P8L03A	1 PR	0.400	10.2	0.083	0.124	45	1.14
1860-P8L03A	1 TR	0.423	10.7	0.109	0.162	45	1.14
1852-P8L03A	1 PR	0.405	10.3	0.095	0.142	45	1.14
1870-P02L0A	2 PR	0.635	16.1	0.179	0.266	60	1.52
1870-P04L0A	4 PR	0.761	19.3	0.290	0.432	60	1.52
1870-P12L0A	12 PR	1.176	29.9	0.761	1.133	80	2.03
1870-P24L0A	24 PR	1.565	39.7	1.390	2.070	80	2.03
1874-P02L0A	2 PR	0.684	17.4	0.209	0.311	60	1.52
1874-P04L0A	4 PR	0.812	20.6	0.343	0.510	60	1.52
1874-P12L0A	12 PR	1.324	33.6	0.924	1.376	80	2.03



Note: Substituting 3x for 2x will upgrade Insulated Single Flame performance to VW-1

Description

- Conductor 7-strand bare copper, Class B
- Primary insulation . . . 30 mils (0.8 mm) XLPE
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . Each pair/triad numbered
- Pair/triad shield (Type 2X52/2X62/2X74/2X84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield (Type 2X70/2X74/2X80/2X84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC

Application

- UL listed TC
- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- NEC Article 336
- Flame retardant
- 600 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 2X50 – Single pair unshielded
- 2X52 – Single pair shielded
- 2X60 – Single triad unshielded
- 2X62 – Single triad shielded
- 2X70 – Multiple pair overall shield
- 2X74 – Multiple pair individual and overall shield
- 2X80 – Multiple triad overall shield
- 2X84 – Multiple triad individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, CSA, BS standards or customized configurations
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- CPE or Hypalon (CSPE) jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

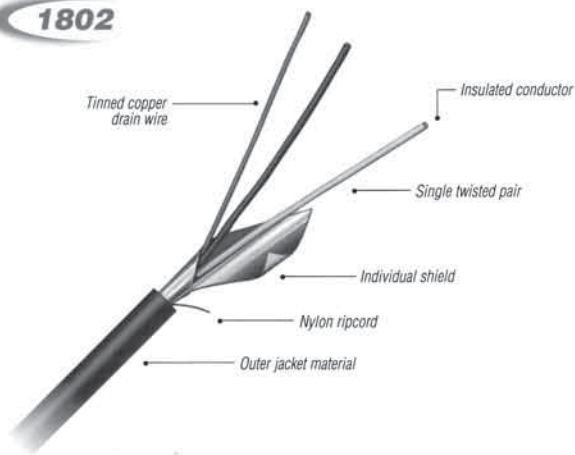
Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		1.5 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	3.8	12.4	2.7	8.8	2.3	7.5
Mutual Capacitance										
Type 2X50	pF/ft	pF/m	19	61	19	63	20	67	21	69
Type 2X52	pF/ft	pF/m	29	96	30	99	33	109	35	115
Type 2X60	pF/ft	pF/m	19	61	19	63	20	67	21	69
Type 2X62	pF/ft	pF/m	29	96	30	99	33	109	35	115
Type 2X70	pF/ft	pF/m	19	61	19	63	20	67	21	69
Type 2X74	pF/ft	pF/m	29	96	30	99	33	109	35	115
Type 2X80	pF/ft	pF/m	19	61	19	63	20	67	21	69
Type 2X84	pF/ft	pF/m	29	96	30	99	33	109	35	115
L/R Ratio	μH/Ω	μH/Ω	23	23	26	26	34	34	40	40
Inductance (L)	μH/ft	μH/m	0.2	0.66	0.2	0.64	0.18	0.61	0.18	0.60

Product Dimensions

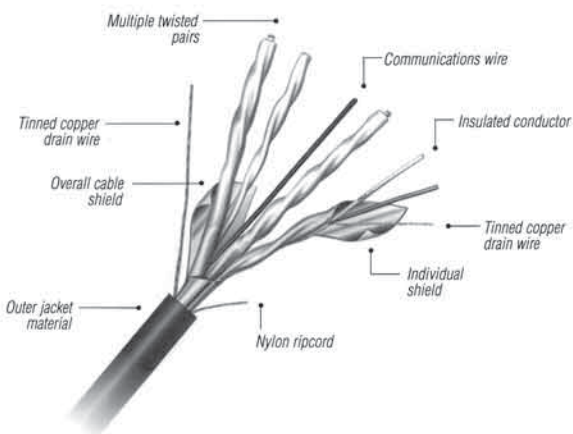
Part Number*	Pairs/Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
2X52-69610	1 PR	0.361	9.2	0.071	0.105	45	1.14
2X62-69610	1 TR	0.392	10.0	0.089	0.132	45	1.14
2X70-60460	4 PR	0.668	17.0	0.209	0.312	60	1.52
2X70-60860	8 PR	0.839	21.3	0.348	0.518	60	1.52
2X70-61260	12 PR	1.026	26.1	0.522	0.777	80	2.03
2X70-62460	24 PR	1.356	34.4	0.923	1.374	80	2.03
2X74-60460	4 PR	0.713	18.1	0.254	0.378	60	1.52
2X74-60860	8 PR	0.959	24.4	0.472	0.703	80	2.03
2X74-61260	12 PR	1.155	29.3	0.660	0.983	80	2.03
2X74-62460	24 PR	1.580	40.1	1.193	1.777	80	2.03
Conductor Size: 1.5 mm ²							
2X52-N9610	1 PR	0.369	9.4	0.073	0.108	45	1.14
2X62-N9610	1TR	0.401	10.2	0.092	0.137	45	1.14
2X70-N0460	4 PR	0.685	17.4	0.225	0.335	60	1.52
2X70-N0860	8 PR	0.902	22.9	0.411	0.612	80	2.03
2X70-N1260	12 PR	1.053	26.7	0.595	0.886	80	2.03
2X70-N2460	24 PR	1.394	35.4	1.006	1.499	80	2.03
2X74-N0460	4 PR	0.731	18.5	0.262	0.390	60	1.52
2X74-N0860	8 PR	0.983	24.9	0.487	0.725	80	2.03
2X74-N1260	12 PR	1.180	30.1	0.680	1.013	80	2.03
2X74-N2460	24 PR	1.624	41.2	1.230	1.832	110	2.79
Conductor Size: 14 AWG / 2.1 mm ²							
2X52-49610	1 PR	0.391	9.9	0.086	0.128	45	1.14
2X62-49610	1TR	0.426	10.8	0.110	0.164	45	1.14
2X70-40460	4 PR	0.731	18.6	0.266	0.396	60	1.52
2X70-40860	8 PR	0.963	24.5	0.492	0.733	80	2.03
2X70-41260	12 PR	1.128	28.6	0.683	1.017	80	2.03
2X70-42460	24 PR	1.498	38.0	1.235	1.840	80	2.03
2X74-40460	4 PR	0.781	19.8	0.333	0.496	60	1.52
2X74-40860	8 PR	1.051	26.7	0.627	0.934	80	2.03
2X74-41260	12 PR	1.270	32.3	0.889	1.324	80	2.03
2X74-42460	24 PR	1.806	45.9	1.742	2.595	110	2.79
Conductor Size: 2.5 mm ²							
2X52-P9610	1 PR	0.405	10.3	0.095	0.142	45	1.14
2X62-P9610	1TR	0.442	11.2	0.122	0.182	45	1.14
2X70-P0460	4 PR	0.761	19.3	0.302	0.450	60	1.52
2X70-P0860	8 PR	1.003	25.5	0.555	0.827	80	2.03
2X70-P1260	12 PR	1.176	29.8	0.772	1.150	80	2.03
2X70-P2460	24 PR	1.565	39.7	1.400	2.085	80	2.03
2X74-P0460	4 PR	0.812	20.6	0.355	0.529	60	1.52
2X74-P0860	8 PR	1.093	27.8	0.662	0.986	80	2.03
2X74-P1260	12 PR	1.323	33.6	0.935	1.393	80	2.03
2X74-P2460	24 PR	1.881	47.8	1.825	2.719	110	2.79

* Part number may change and become 12 digits at time of order.

1802



1824



Description

- Conductor Solid alloy wire
- Primary insulation. . . . 15 mils (0.4 mm) 105°C PVC
- Color code ANSI standard
- Pair shield (Type 1802/1824) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1820/1824) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket FR-PVC, ANSI color-coded
- Communication wire. (Type 1820/1824) 22-AWG copper, color-coded orange

Application

- UL listed as PLTC
- NEC Article 725
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1800 – Single pair unshielded
- 1802 – Single pair shielded
- 1820 – Multiple pair overall shield
- 1824 – Multiple pair individual and overall shield

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Also available in 18 AWG

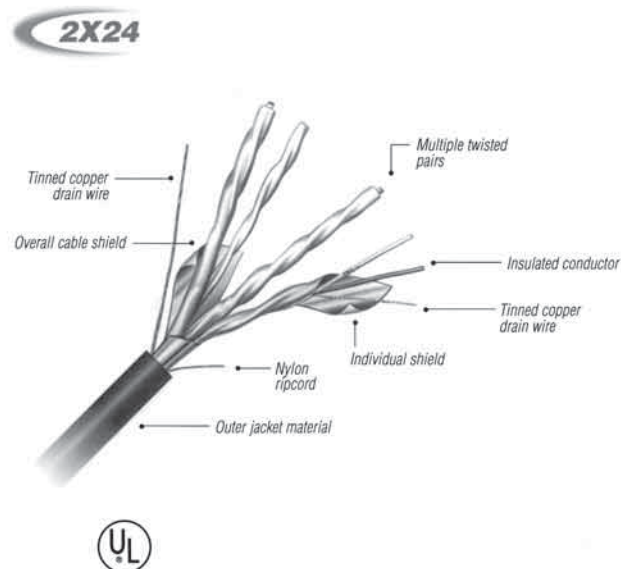
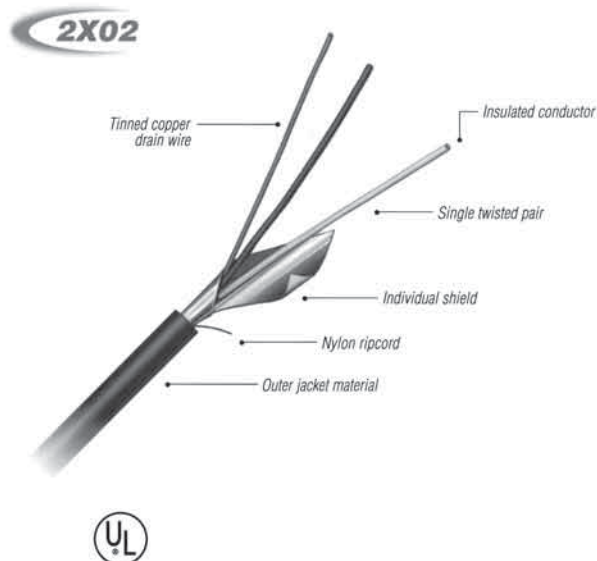
Electrical Properties	Units		Conductor Size			
			20 AWG / .5 mm ²		16 AWG / 1.3 mm ²	
Mutual Capacitance						
Type 1800	pF/ft	pF/m	31	100	36	119
Type 1802	pF/ft	pF/m	49	160	64	210
Type 1820	pF/ft	pF/m	31	100	36	119
Type 1824	pF/ft	pF/m	49	160	64	210
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54

Product Dimensions

Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²							
1800-0+60R	1 PR	0.231	5.9	0.026	0.039	35	0.89
1802-0+60R	1 PR	0.236	6.0	0.030	0.044	35	0.89
1820-004+0	4 PR	0.396	10.1	0.078	0.117	40	1.02
1820-008+0	8 PR	0.523	13.3	0.143	0.213	50	1.27
1820-012+0	12 PR	0.606	15.4	0.195	0.290	50	1.27
1820-024+0	24 PR	0.813	20.6	0.356	0.530	60	1.52
1820-036+0	36 PR	0.951	24.2	0.513	0.764	70	1.78
1824-004+0	4 PR	0.457	11.6	0.110	0.164	50	1.27
1824-008+0	8 PR	0.575	14.6	0.182	0.272	50	1.27
1824-012+0	12 PR	0.708	18.0	0.267	0.398	60	1.52
1824-024+0	24 PR	0.972	24.7	0.492	0.733	70	1.78
1824-036+0	36 PR	1.105	28.1	0.685	1.020	70	1.78
Conductor Size: 16 AWG / 1.3 mm ²							
1800-6+60R	1 PR	0.274	7.0	0.042	0.062	35	0.89
1802-6+60R	1 PR	0.278	7.1	0.046	0.069	35	0.89
1820-604+0	4 PR	0.516	13.1	0.148	0.220	50	1.27
1820-608+0	8 PR	0.663	16.8	0.264	0.393	60	1.52
1820-612+0	12 PR	0.772	19.6	0.367	0.546	60	1.52
1820-624+0	24 PR	1.038	26.4	0.683	1.018	70	1.78
1820-636+0	36 PR	1.192	30.3	0.970	1.444	70	1.78
1824-604+0	4 PR	0.553	14.0	0.178	0.264	50	1.27
1824-608+0	8 PR	0.727	18.5	0.323	0.480	60	1.52
1824-612+0	12 PR	0.873	22.2	0.456	0.679	60	1.52
1824-624+0	24 PR	1.211	30.8	0.860	1.281	70	1.78
1824-636+0	36 PR	1.404	35.7	1.250	1.862	80	2.03

Alloy Identification

Substitute for + in Part No.	ANSI Type	Alloy Identification		ANSI Color Code		Overall Jacket	Temperature Range °C	Limits of Error
		Positive Wire	Negative Wire	Positive Wire	Negative Wire			
1	EX	Chromel	Constantan	Purple	Red	Purple	0 to +200	+/-1.7°C
2	JX	Iron	Constantan	White	Red	Black	0 to +200	+/-2.2°C
3	KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200	+/-2.2°C
4	SX	Copper	Copper-Alloy II	Black	Red	Green	0 to +200	+/-5.0°C
5	TX	Copper	Constantan	Blue	Red	Blue	-60 to +100	+/-1.0°C



Description

- Conductor Solid alloy wire
- Primary insulation. . . 15 mils (0.5 mm) XLPE
- Color code ANSI standard
- Group identification . . Each pair numbered
- Pair shield (Type 2X02/2X24) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 2X20/2X24) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket FR-PVC, ANSI color coded

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Flame retardant
- UL listed as PLTC
- NEC Article 725

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 2X00 – Single pair unshielded
- 2X02 – Single pair shielded
- 2X20 – Multiple pair overall shield
- 2X24 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various AWG size conductors
- Special color coding of insulation and jacket materials
- CPE or Hypalon (CSPE) jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Note: Substituting 3x for 2x will upgrade Insulated Single Flame performance to VW-1

Also available in 18 AWG

Electrical Properties	Units		Conductor Size			
			20 AWG / 0.5 mm ²		16 AWG / 1.31 mm ²	
Mutual Capacitance						
Type 2X00	pF/ft	pF/m	16	51	18	60
Type 2X02	pF/ft	pF/m	24	79	31	103
Type 2X20	pF/ft	pF/m	16	51	18	60
Type 2X24	pF/ft	pF/m	24	79	31	103
Inductance (L)	μH/ft	μH/m	0.19	0.64	0.17	0.56

Product Dimensions

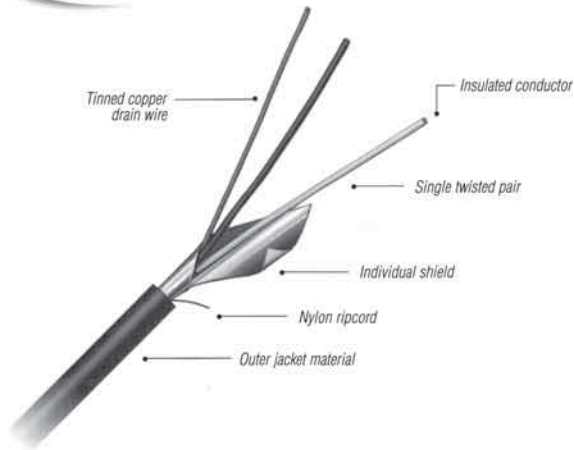
Part Number*	Pairs	Nominal Outer Diameter		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²							
2X00-0+510	1	0.222	5.6	0.024	0.030	35	0.89
2X02-0+510	1	0.227	5.8	0.029	0.043	35	0.89
2X20-004+0	4	0.377	9.6	0.072	0.017	40	1.02
2X20-008+0	8	0.498	12.6	0.130	0.194	50	1.27
2X20-012+0	12	0.576	14.6	0.176	0.262	50	1.27
2X20-024+0	24	0.771	19.6	0.320	0.476	60	1.52
2X24-004+0	4	0.436	11.1	0.102	0.153	50	1.27
2X24-008+0	8	0.547	13.9	0.168	0.251	50	1.27
2X24-012+0	12	0.673	17.1	0.246	0.367	60	1.52
2X24-024+0	24	0.902	22.9	0.435	0.648	60	1.52
Conductor Size: 16 AWG / 1.3 mm ²							
2X00-6+510	1	0.262	6.7	0.043	0.063	35	0.89
2X02-6+510	1	0.264	6.7	0.045	0.067	35	0.89
2X20-604+0	4	0.486	12.3	0.136	0.203	50	1.27
2X20-608+0	8	0.603	15.3	0.230	0.343	50	1.27
2X20-612+0	12	0.723	18.4	0.336	0.499	60	1.52
2X20-624+0	24	0.969	24.6	0.624	0.930	70	1.78
2X24-604+0	4	0.521	13.2	0.165	0.246	50	1.27
2X24-608+0	8	0.682	17.3	0.299	0.446	60	1.52
2X24-612+0	12	0.818	20.8	0.423	0.629	60	1.52
2X24-624+0	24	1.131	28.7	0.797	1.187	70	1.78

* Part number may change to 12 digits at time of order.

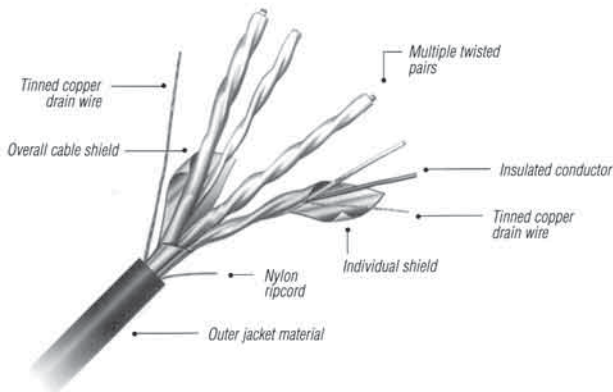
Alloy Identification

Substitute for + in Part No.	ANSI Type	Alloy Identification		ANSI Color Code		Overall Jacket	Temperature Range °C	Limits of Error
		Positive Wire	Negative Wire	Positive Wire	Negative Wire			
G	EX	Chromel	Constantan	Purple	Red	Purple	0 to +200	+/-1.7°C
H	JX	Iron	Constantan	White	Red	Black	0 to +200	+/-2.2°C
M	KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200	+/-2.2°C
J	SX	Copper	Copper-Alloy II	Black	Red	Green	0 to +200	+/-5.0°C
K	TX	Copper	Constantan	Blue	Red	Blue	-60 to +100	+/-1.0°C

1C02



1C24



Description

- Conductor Solid alloy wire
- Primary insulation. . . . 15 mils (0.4 mm) PVC,
4 mils (0.1 mm) nylon
- Color code ANSI standard
- Pair shield (Type 1C02/1C24) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1C20/1C24) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket FR-PVC, ANSI color-coded

Application

- UL listed as TC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- 600 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1C00 – Single pair unshielded
- 1C02 – Single pair shielded
- 1C20 – Multiple pair overall shield
- 1C24 – Multiple individual and overall shield

Other Options

- Manufactured in accordance with UL. Also available to ICEA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Also available in 18 AWG

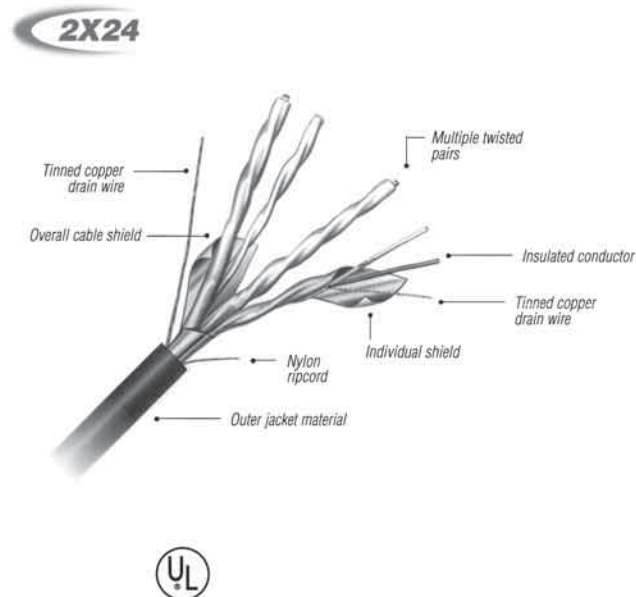
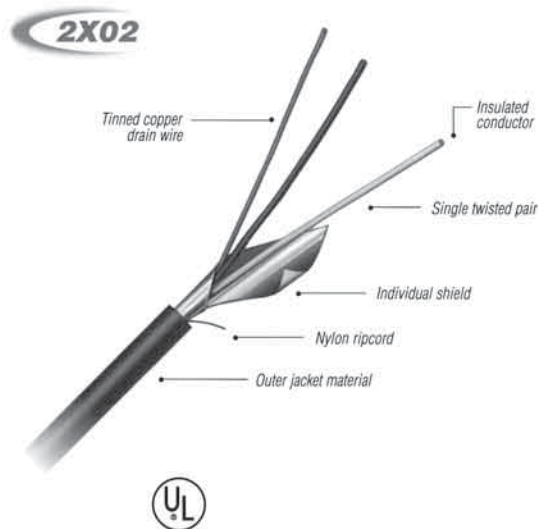
Electrical Properties	Units		Conductor Size	
			16 AWG / 1.3 mm ²	
Mutual Capacitance				
Type 1C00	pF/ft	pF/m	33	110
Type 1C02	pF/ft	pF/m	56	184
Type 1C20	pF/ft	pF/m	33	110
Type 1C24	pF/ft	pF/m	56	184
Inductance (L)	μH/ft	μH/m	0.18	0.58

Product Dimensions

Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1C00-6+610	1	0.312	7.9	0.051	0.076	45	1.14
1C02-6+610	1	0.317	8.1	0.058	0.086	45	1.14
1C20-604+0	4	0.485	12.3	0.118	0.175	45	1.14
1C20-608+0	8	0.649	16.5	0.221	0.329	60	1.52
1C20-612+0	12	0.755	19.2	0.302	0.450	60	1.52
1C20-624+0	24	1.033	26.2	0.572	0.852	80	2.03
1C24-604+0	4	0.521	13.2	0.146	0.218	45	1.14
1C24-608+0	8	0.711	18.1	0.279	0.416	60	1.52
1C24-612+0	12	0.853	21.7	0.391	0.582	60	1.52
1C24-624+0	24	1.202	30.5	0.752	1.120	80	2.03

Alloy Identification

Substitute for + in Part No.	ANSI Type	Alloy Identification		ANSI Color Code		Overall Jacket	Temperature Range °C	Limits of Error
		Positive Wire	Negative Wire	Positive Wire	Negative Wire			
1	EX	Chromel	Constantan	Purple	Red	Purple	0 to +200	+/-1.7°C
2	JX	Iron	Constantan	White	Red	Black	0 to +200	+/-2.2°C
3	KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200	+/-2.2°C
4	SX	Copper	Copper-Alloy II	Black	Red	Green	0 to +200	+/-5.0°C
5	TX	Copper	Constantan	Blue	Red	Blue	-60 to +100	+/-1.0°C



Description

- Conductor Solid alloy wire
- Primary insulation. . . . 30 mils (0.8 mm) XLPE
- Color code ANSI standard
- Group identification . . . Each pair numbered
- Pair shield (Type 2X02/2X24) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 2X20/2X24) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC, ANSI color-coded

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Flame retardant
- UL listed

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 2X00 – Single pair unshielded
- 2X02 – Single pair shielded
- 2X20 – Multiple pair overall shield
- 2X24 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- CPE or Hypalon (CSPE) jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Note: Substituting 3x for 2x will upgrade Insulated Single Flame performance to VW-1

Also available in 18 AWG

Electrical Properties	Units		Conductor Size	
			16 AWG / 1.3 mm ²	
Mutual Capacitance				
Type 1X00	pF/ft	pF/m	19	61
Type 1X02	pF/ft	pF/m	29	96
Type 1X20	pF/ft	pF/m	19	61
Type 1X24	pF/ft	pF/m	29	96
Inductance (L)	μH/ft	μH/m	0.2	0.66

Product Dimensions

Part Number*	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
2X00-6+610	1	0.356	9.0	0.061	0.091	45	1.14
2X02-6+610	1	0.361	9.2	0.071	0.105	45	1.14
2X20-604+0	4	0.668	17.0	0.209	0.312	60	1.52
2X20-608+0	8	0.839	21.3	0.348	0.518	60	1.52
2X20-612+0	12	1.026	26.1	0.522	0.777	80	2.03
2X20-624+0	24	1.356	34.4	0.923	1.374	80	2.03
2X24-604+0	4	0.713	18.1	0.254	0.378	60	1.52
2X24-608+0	8	0.959	24.4	0.472	0.703	80	2.03
2X24-612+0	12	1.155	29.3	0.660	0.983	80	2.03
2X24-624+0	24	1.580	40.1	1.193	1.777	80	2.03

* Part number may change to 12 digits at time of order.

Alloy Identification

Substitute for + in Part No.	ANSI Type	Alloy Identification		ANSI Color Code		Overall Jacket	Temperature Range °C	Limits of Error
		Positive Wire	Negative Wire	Positive Wire	Negative Wire			
B	EX	Chromel	Constantan	Purple	Red	Purple	0 to +200	+/-1.7°C
C	JX	Iron	Constantan	White	Red	Black	0 to +200	+/-2.2°C
D	KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200	+/-2.2°C
E	SX	Copper	Copper-Alloy II	Black	Red	Green	0 to +200	+/-5.0°C
F	TX	Copper	Constantan	Blue	Red	Blue	-60 to +100	+/-1.0°C

**Description**

- Conductor 7-strand bare copper, Class B
- Insulation 15 mils (0.4 mm) PVC,
4 mils (0.1 mm) nylon for 12 and 14 AWG,
20 mils (0.5 mm) PVC,
4 mils (0.1 mm) nylon for 10 AWG,
- Color code ICEA Method 4, black and numbered
- Cable shield
(optional) 100% coverage, an aluminum-polyester
tape shield and a 7-strand tinned copper
drain wire
- Outer jacket Black FR-PVC

Application

- Offers resistance to a wide range of chemicals, including acids, alkalis, alcohol, petroleum, and mineral oils
- UL listed as TC per NEC Article 340
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- 600 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1C99 – Multiple conductor cable

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, CSA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Tinned copper conductors

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size									
			14 AWG / 2.1 mm ²		12 AWG / 3.3 mm ²		10 AWG / 5.3 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	2.6	8.6	1.7	5.5	1.0	3.4	3.6	11.9	2.2	7.2
L/R Ratio	μH/Ω	μH/Ω	31	31	47	47	75	75	24	24	37	37
Inductance (L)	μH/ft	μH/m	0.17	0.54	0.16	0.52	0.16	0.51	0.17	0.57	0.16	0.53

Product Dimensions

Part Number*	Conductors	Nominal Outer Diameter		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 14 AWG / 2.1 mm ²							
1C99-4020L	2	0.340	8.6	0.073	0.109	45	1.14
1C99-4030L	3	0.364	9.2	0.092	0.137	45	1.14
1C99-4050L	5	0.426	10.8	0.132	0.196	45	1.14
1C99-4070L	7	0.461	11.7	0.169	0.251	45	1.14
1C99-4090L	9	0.531	13.5	0.209	0.312	45	1.14
1C99-4120L	12	0.634	16.1	0.290	0.431	60	1.52
1C99-4190L	19	0.731	18.6	0.420	0.625	60	1.52
Conductor Size: 12 AWG / 3.3 mm ²							
1C99-7020L	2	0.377	9.6	0.093	0.139	45	1.14
1C99-7030L	3	0.405	10.3	0.121	0.180	45	1.14
1C99-7050L	5	0.477	12.1	0.179	0.266	45	1.14
1C99-7070L	7	0.518	13.2	0.233	0.347	45	1.14
1C99-7090L	9	0.639	16.2	0.315	0.469	60	1.52
1C99-7120L	12	0.713	18.1	0.400	0.596	60	1.52
1C99-7190L	19	0.826	21.0	0.591	0.880	60	1.52
Conductor Size: 10 AWG / 5.5 mm ²							
1C99-5021L	2	0.443	11.2	0.129	0.192	45	1.14
1C99-5031L	3	0.478	12.1	0.172	0.257	45	1.14
1C99-5051L	5	0.609	15.5	0.283	0.422	60	1.52
1C99-5071L	7	0.660	16.8	0.369	0.550	60	1.52
1C99-5091L	9	0.762	19.3	0.463	0.689	60	1.52
1C99-5121L	12	0.855	21.7	0.594	0.885	60	1.52
1C99-5191L	19	1.036	26.3	0.928	1.383	80	2.03
Conductor Size: 1.5 mm ²							
1C99-N021L	2	0.318	8.1	0.063	0.094	45	1.14
1C99-N031L	3	0.340	8.6	0.079	0.117	45	1.14
1C99-N050L	5	0.396	10.1	0.110	0.164	45	1.14
1C99-N070L	7	0.428	10.9	0.138	0.206	45	1.14
1C99-N090L	9	0.491	12.5	0.171	0.254	45	1.14
1C99-N120L	12	0.588	14.9	0.236	0.352	60	1.52
1C99-N190L	19	0.676	17.2	0.338	0.503	60	1.52
Conductor Size: 2.5 mm ²							
1C99-P020L	2	0.353	9.0	0.087	0.130	45	1.14
1C99-P030L	3	0.379	9.6	0.109	0.163	45	1.14
1C99-P050L	5	0.445	11.3	0.155	0.231	45	1.14
1C99-P070L	7	0.482	12.2	0.198	0.295	45	1.14
1C99-P090L	9	0.596	15.1	0.267	0.397	60	1.52
1C99-P120L	12	0.663	16.8	0.335	0.499	60	1.52
1C99-P190L	19	0.766	19.5	0.485	0.723	60	1.52

* Add -2B0 for conductor color coding per ICEA Method 3, Table K-2.
Change ninth digit in part number to 0 for shielded cable.

600 Volt Thermoplastic Polyethylene

**Description**

- Conductor 7-strand bare copper, Class B
- Insulation 25 mils (0.6 mm) for 16 AWG
30 mils (0.8 mm) for 14 AWG
and larger, polyethylene
- Color code ICEA Method 4, black and numbered
- Cable shield
(optional) 100% coverage, an aluminum polyester
tape shield and a 7-strand tinned copper
drain wire
- Outer jacket Black FR-PVC

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Non-flame retardant (does not pass IEEE 383 or IEC 332)
- 600 volt rated insulation per ICEA

Bending Radius

- $6 \times d$ (d = overall diameter)

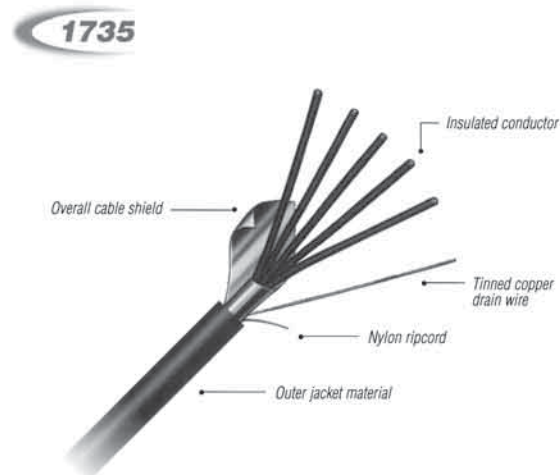
Cable Type

- 1735 – Multiple conductor cable

Cable Options

- Manufactured in accordance with ICEA. Also available to IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- LDPE or CPE jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

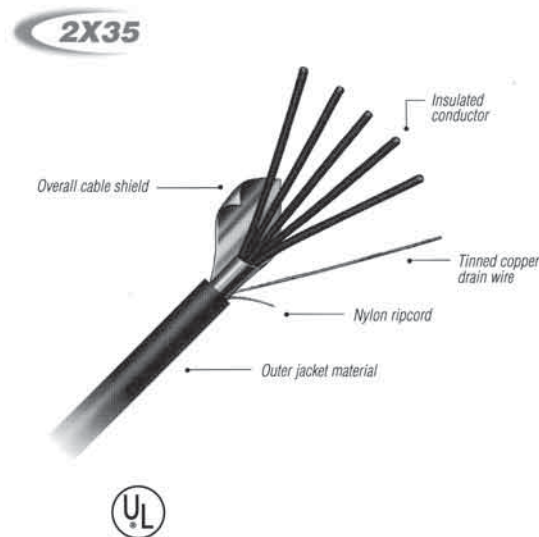


Electrical Properties	Units		Conductor Size									
			16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²		12 AWG / 3.3 mm ²		10 AWG / 5.3 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	2.6	8.6	1.7	5.5	1.0	3.4	2.2	7.2
L/R Ratio	μH/Ω	μH/Ω	23	23	36	36	53	53	80	80	42	42
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.19	0.62	0.18	0.58	0.18	0.58	0.18	0.61

Product Dimensions

Part Number*	Conductors	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1735-603FL	3	0.352	8.9	0.065	0.096	45	1.14
1735-605FL	5	0.413	10.5	0.093	0.139	45	1.14
1735-607FL	7	0.447	11.4	0.119	0.177	45	1.14
1735-609FL	9	0.515	13.1	0.148	0.221	45	1.14
1735-612FL	12	0.617	15.7	0.211	0.314	60	1.52
Conductor Size: 14 AWG / 2.1 mm ²							
1735-40300	3	0.411	10.4	0.099	0.147	45	1.14
1735-40500	5	0.475	12.3	0.141	0.210	45	1.14
1735-40700	7	0.527	13.4	0.180	0.269	45	1.14
1735-40900	9	0.650	16.5	0.248	0.370	60	1.52
1735-41200	12	0.726	18.4	0.311	0.463	60	1.52
Conductor Size: 12 AWG / 3.1 mm ²							
1735-70300	3	0.452	11.5	0.128	0.191	45	1.14
1735-70500	5	0.537	13.6	0.189	0.281	60	1.52
1735-70700	7	0.624	15.8	0.268	0.399	60	1.52
1735-70900	9	0.719	18.3	0.333	0.496	60	1.52
1735-71200	12	0.805	20.4	0.422	0.629	60	1.52
Conductor Size: 10 AWG / 5.3 mm ²							
1735-B0300	3	0.466	11.8	0.130	0.194	45	1.14
1735-B0500	5	0.642	16.3	0.284	0.423	60	1.52
1735-B0700	7	0.696	17.7	0.369	0.550	60	1.52
1735-B0900	9	0.806	20.5	0.462	0.688	60	1.52
1735-B1200	12	0.945	24.0	0.628	0.935	80	2.03
Conductor Size: 2.5 mm ²							
1735-P0300	3	0.427	10.8	0.116	0.173	45	1.14
1735-P0500	5	0.504	12.8	0.165	0.246	45	1.14
1735-P0700	7	0.588	14.9	0.232	0.345	60	1.52
1735-P0900	9	0.676	17.2	0.285	0.424	60	1.52
1735-P1200	12	0.755	19.1	0.356	0.531	60	1.52

* Add -2B0 for conductor color coding per ICEA Method 3, Table K-2.
Change ninth digit in part number to 0 for a shielded cable.

**Description**

- Conductor 7-strand bare copper, Class B
- Primary insulation. . . . 30 mils (0.8 mm) XLPE
- Color code ICEA Method 4, black and numbered
- Cable shield
(optional) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Flame retardant
- Ideal for a variety of applications in the chemical process industries, and utilities including fossil fuels and nuclear power generating stations
- 600 volt rated insulation per UL

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 2X35 – Multiple conductor cable

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors available
- Special color coding of insulation and jacket materials
- CPE or Hypalon (CSPE) jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Note: Substituting 3x for 2x will upgrade Insulated Single Flame performance to VW-1

Electrical Properties	Units		Conductor Size							
			14 AWG / 2.1 mm ²		12 AWG / 3.3 mm ²		10 AWG / 5.3 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	2.7	9.0	1.7	5.6	1.1	3.5	2.3	7.5
L/R Ratio	μH/Ω	μH/Ω	34	34	51	51	77	77	40	40
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.58	0.17	0.54	0.18	0.61

Product Dimensions

Part Number	Conductors	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 14 AWG / 2.1 mm ²							
2X35-40360	3	0.411	10.4	0.105	0.156	45	1.14
2X35-40560	5	0.485	12.3	0.151	0.225	45	1.14
2X35-40760	7	0.527	13.4	0.194	0.289	45	1.14
2X35-40960	9	0.650	16.5	0.265	0.395	60	1.52
2X35-41260	12	0.726	18.4	0.334	0.497	60	1.52
Conductor Size: 12 AWG / 3.3 mm ²							
2X35-70360	3	0.452	11.5	0.135	0.201	45	1.14
2X35-70560	5	0.537	13.6	0.200	0.298	45	1.14
2X35-70760	7	0.624	15.8	0.284	0.422	60	1.52
2X35-70960	9	0.719	18.3	0.353	0.526	60	1.52
2X35-71260	12	0.805	20.4	0.449	0.669	60	1.52
Conductor Size: 10 AWG / 5.3 mm ²							
2X35-B0360	3	0.504	12.8	0.181	0.269	45	1.14
2X35-B0560	5	0.642	16.3	0.298	0.443	60	1.52
2X35-B0760	7	0.696	17.7	0.388	0.578	60	1.52
2X35-B0960	9	0.806	20.5	0.486	0.724	60	1.52
2X35-B1260	12	0.945	24.0	0.660	0.983	80	2.03
Conductor Size: 2.5 mm ²							
2X35-P0360	3	0.427	10.8	0.123	0.183	45	1.14
2X35-P0560	5	0.504	12.8	0.175	0.261	45	1.14
2X35-P0760	7	0.588	14.9	0.246	0.366	60	1.52
2X35-P0960	9	0.676	17.2	0.303	0.451	60	1.52
2X35-P1260	12	0.755	19.2	0.381	0.567	60	1.52

300 Volt Thermoplastic PVC (Single Pair – Served Wire Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation. 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors per group 2
- Color code Black and white
- Shield (Type 1853) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor. Multiple strands of served galvanized steel wire (SWA)

Application

- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- Served wire armor offers cut-through resistance and is suitable for vertical drops
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

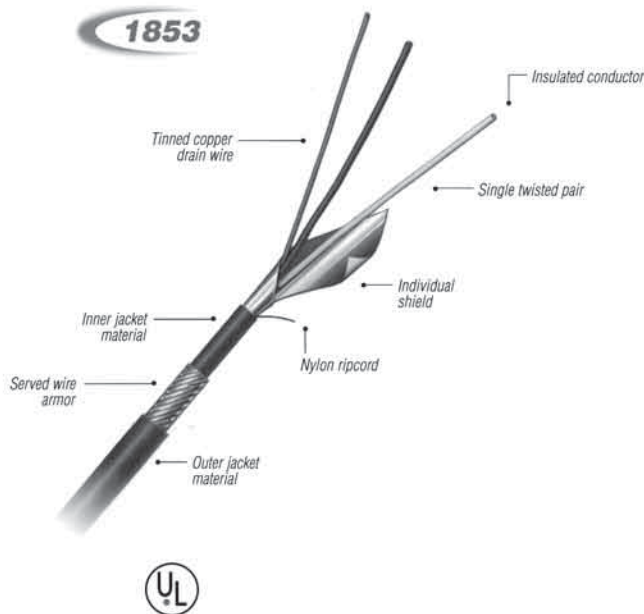
Cable Type

- 1851 – Single pair unshielded
- 1853 – Single pair shielded

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

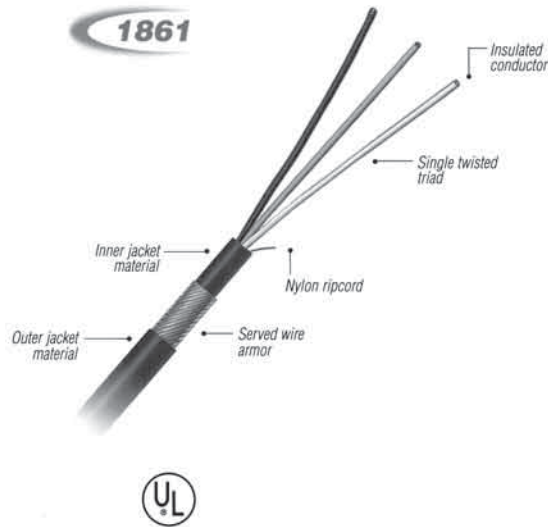


Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.1	13.7	3.6	11.9
Mutual Capacitance								
Type 1851	pF/ft	pF/m	31	100	36	119	37	122
Type 1853	pF/ft	pF/m	49	160	64	210	67	218
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

Part Number	Pairs	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²									
1851-086RR	1	0.231	5.9	0.347	8.8	0.095	0.142	35	0.89
1853-086RR	1	0.236	6.0	0.352	8.9	0.100	0.150	35	0.89
Conductor Size: 16 AWG / 1.3 mm ²									
1851-686RR	1	0.274	7.0	0.390	9.9	0.121	0.181	35	0.89
1853-686RR	1	0.278	7.1	0.394	10.0	0.130	0.195	35	0.89
Conductor Size: 1.5 mm ²									
1851-N86RR	1	0.282	7.2	0.398	10.1	0.126	0.189	35	0.89
1853-N86RR	1	0.286	7.3	0.402	10.2	0.135	0.203	35	0.89

300 Volt Thermoplastic PVC (Single Triad – Served Wire Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors
per group 3
- Color code Black, white and red
- Shield (Type 1863) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor Multiple strands of served galvanized steel wire (SWA)

Application

- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- Served wire armor offers cut-through resistance and is suitable for vertical drops
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

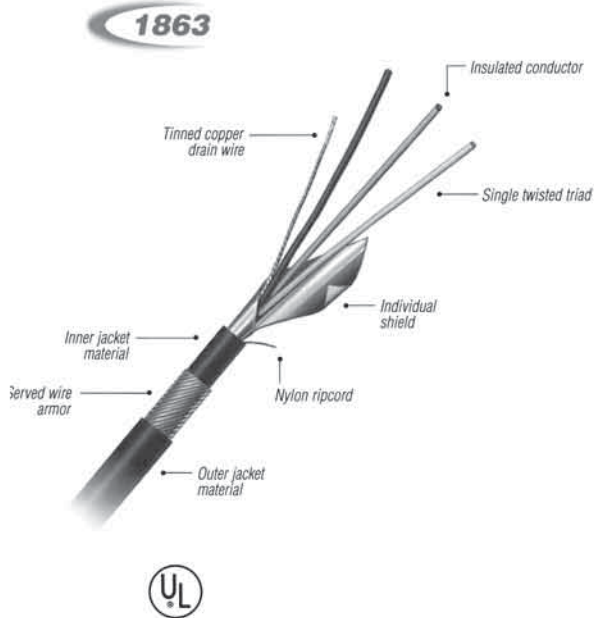
Cable Type

- 1861 – Single triad unshielded
- 1863 – Single triad shielded

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

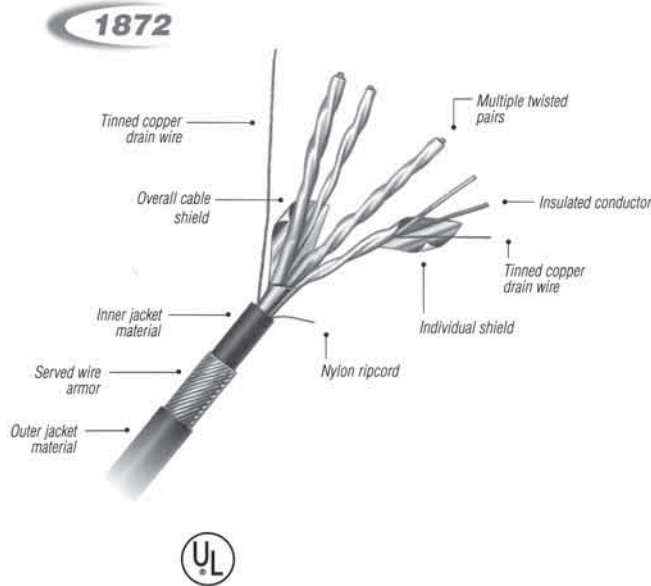


Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.1	13.7	3.6	11.9
Mutual Capacitance								
Type 1861	pF/ft	pF/m	31	100	36	119	37	122
Type 1863	pF/ft	pF/m	49	160	64	210	67	218
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

Part Number	Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²									
1861-086RR	1	0.242	6.2	0.358	9.1	0.100	0.149	35	0.89
1863-086RR	1	0.253	6.4	0.369	9.4	0.109	0.163	35	0.89
Conductor Size: 16 AWG / 1.3 mm ²									
1861-686RR	1	0.288	7.3	0.404	10.3	0.133	0.199	35	0.89
1863-686RR	1	0.312	7.9	0.428	10.9	0.147	0.220	35	0.89
Conductor Size: 1.5 mm ²									
1861-N86RR	1	0.307	7.8	0.423	10.7	0.139	0.207	35	0.89
1863-N86RR	1	0.321	8.2	0.437	11.1	0.162	0.243	35	0.89

300 Volt Thermoplastic PVC (Multiple Pair – Served Wire Armor)



Description

- Conductor. 7-strand bare copper, Class B
- Primary insulation. . . . 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors
per group 2
- Color code Black and white
- Pair shield (Type 1872) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1872/1875) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket. Black FR-PVC
- Armor. Multiple strands of served galvanized steel wire (SWA)

Application

- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- Served wire armor offers cut-through resistance and is suitable for vertical drops
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

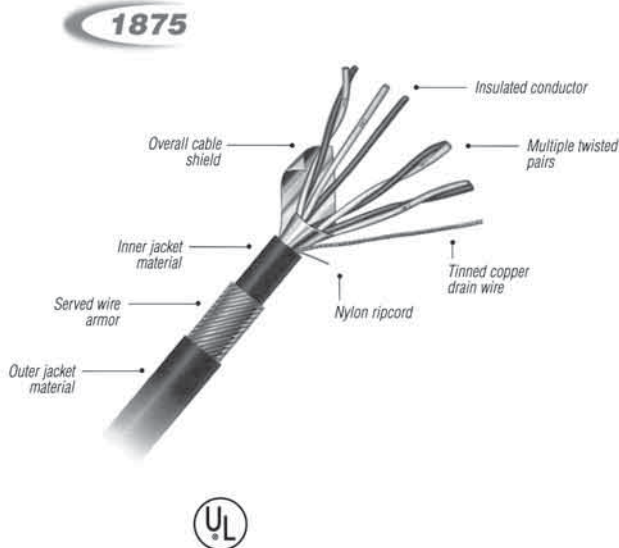
Cable Type

- 1872 – Multiple pair individual and overall shield
- 1875 – Multiple pair overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



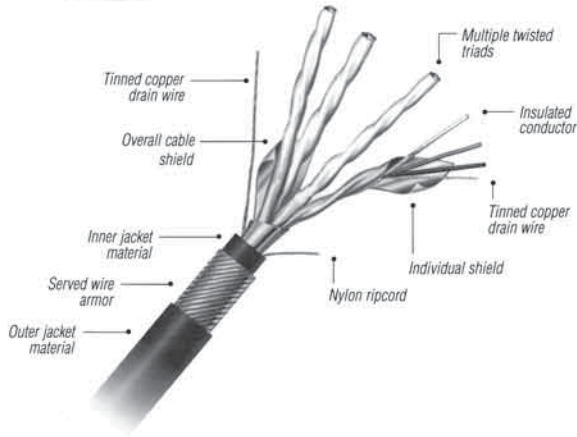
Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.1	13.7	3.6	11.9
Mutual Capacitance								
Type 1872	pF/ft	pF/m	49	160	64	210	67	218
Type 1875	pF/ft	pF/m	31	100	36	119	37	122
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

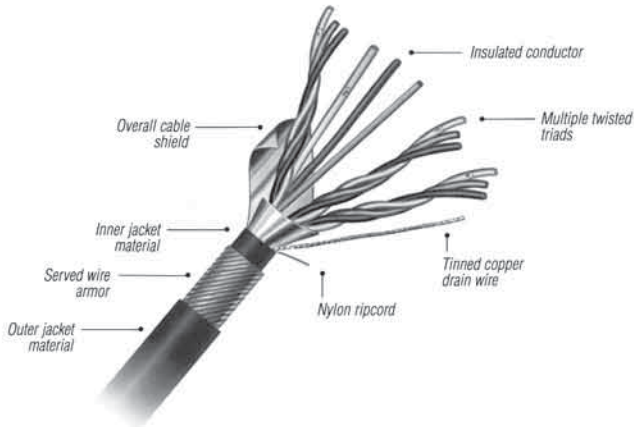
		Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
Part Number	Pairs	in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1872-00480	4	0.457	11.6	0.607	15.4	0.294	0.440	40	1.02
1872-00880	8	0.575	14.6	0.771	19.6	0.466	0.699	50	1.27
1872-01280	12	0.708	18.0	0.934	23.7	0.750	1.125	50	1.65
1872-01680	16	0.781	19.8	1.027	26.1	0.848	1.271	60	1.52
1872-02480	24	0.972	24.7	1.218	30.9	1.086	1.628	60	1.52
1872-03680	36	1.105	28.1	1.371	34.8	1.407	2.109	70	1.78
1875-00480	4	0.396	10.1	0.566	14.4	0.261	0.389	50	1.27
1875-00880	8	0.523	13.3	0.719	18.3	0.342	0.509	50	1.27
1875-01280	12	0.606	15.4	0.822	20.9	0.421	0.626	60	1.52
1875-01680	16	0.696	17.7	0.942	23.9	0.619	0.921	60	1.52
1875-02480	24	0.813	20.6	1.079	27.4	0.770	1.145	70	1.78
1875-03680	36	0.951	24.2	1.217	30.9	1.148	1.708	70	1.78
Conductor size: 16 AWG / 1.3 mm ²									
1872-60480	4	0.553	14.0	0.749	19.0	0.464	0.695	50	1.27
1872-60880	8	0.727	18.5	0.973	24.7	0.824	1.235	60	1.52
1872-61280	12	0.873	22.2	1.119	28.4	1.061	1.592	60	1.52
1872-61680	16	0.988	25.1	1.234	31.3	1.292	1.938	60	1.52
1872-62480	24	1.211	30.8	1.477	37.5	1.713	2.569	70	1.78
1872-63680	36	1.404	35.7	1.690	42.9	2.267	3.400	80	2.03
1875-60480	4	0.514	13.1	0.712	18.1	0.425	0.637	50	1.27
1875-60880	8	0.663	16.8	0.879	22.3	0.647	0.970	60	1.52
1875-61280	12	0.772	19.6	1.018	25.9	0.917	1.374	60	1.52
1875-61680	16	0.863	21.9	1.109	28.2	1.070	1.605	60	1.52
1875-62480	24	1.038	26.4	1.304	33.1	1.421	2.131	70	1.78
1875-63680	36	1.192	30.3	1.458	37.0	1.820	2.729	70	2.03
Conductor size: 1.5 mm ²									
1872-N0480	4	0.571	14.5	0.767	19.5	0.483	0.724	50	1.27
1872-N0880	8	0.751	19.1	0.997	25.3	0.862	1.293	60	1.52
1872-N1280	12	0.904	23.0	1.150	29.2	1.113	1.669	60	1.52
1872-N1680	16	1.023	26.0	1.289	32.7	1.357	2.035	70	1.78
1872-N2480	24	1.255	31.9	1.521	38.6	1.793	2.689	70	1.78
1872-N3680	36	1.456	37.0	1.742	44.2	2.399	3.598	80	2.03
1875-N0480	4	0.533	13.5	0.729	18.5	0.443	0.665	50	1.27
1875-N0880	8	0.686	17.4	0.932	23.7	0.765	1.147	60	1.52
1875-N1280	12	0.800	20.3	1.046	26.6	0.961	1.442	60	1.52
1875-N1680	16	0.894	22.7	1.160	29.5	1.126	1.689	70	1.78
1875-N2480	24	1.076	27.3	1.342	34.1	1.502	2.252	70	1.78
1875-N3680	36	1.237	31.4	1.503	38.2	1.936	2.903	70	1.78

300 Volt Thermoplastic PVC (Multiple Triad – Served Wire Armor)

1882



1885



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors per group 3
- Color code Black, white and red
- Group identification Each triad numbered
- Pair shield (Type 1882) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield (Type 1882/1885) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor Multiple strands of served galvanized steel wire (SWA)

Application

- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- Served wire armor offers cut-through resistance and is suitable for vertical drops
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1882 – Multiple triad individual and overall shield
- 1885 – Multiple triad overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.1	13.7	3.6	11.9
Mutual Capacitance								
Type 1882	pF/ft	pF/m	49	160	64	210	67	218
Type 1885	pF/ft	pF/m	31	100	36	119	37	122
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

Part Number	Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1882-00480	4	0.497	12.6	0.667	16.9	0.334	0.500	50	1.27
1882-01280	12	0.777	19.7	1.023	26.0	0.857	1.286	60	1.52
1882-01680	16	0.859	21.8	1.105	28.1	0.995	1.493	60	1.52
1885-00480	4	0.470	11.9	0.640	16.3	0.311	0.463	50	1.27
1885-01280	12	0.732	18.6	0.978	24.8	0.690	1.026	60	1.52
1885-01680	16	0.808	20.5	1.054	26.8	0.799	1.188	60	1.52
Conductor size: 16 AWG / 1.3 mm ²									
1882-60480	4	0.605	15.4	0.801	20.3	0.540	0.810	50	1.27
1882-61280	12	0.983	25.0	1.303	33.1	1.309	1.964	70	1.78
1882-61680	16	1.089	27.7	1.355	34.4	1.560	2.339	70	1.78
1885-60480	4	0.574	14.6	0.770	19.6	0.482	0.723	50	1.27
1885-61280	12	0.930	23.6	1.196	30.4	1.103	1.654	70	1.78
1885-61680	16	1.030	26.2	1.296	32.9	1.344	2.016	70	1.78
Conductor size: 1.5 mm ²									
1882-N0480	4	0.625	15.9	0.821	20.9	0.564	0.846	50	1.27
1882-N1280	12	1.017	25.8	1.283	32.6	1.374	2.060	70	1.78
1882-N1680	16	1.129	28.7	1.395	35.4	1.638	2.456	70	1.78
1885-N0480	4	0.594	15.1	0.790	20.1	0.504	0.755	50	1.27
1885-N1280	12	0.964	25.0	1.230	31.2	1.200	1.799	70	1.78
1885-N1680	16	1.068	27.1	1.334	33.9	1.414	2.120	70	1.78

300 Volt Thermoplastic PVC (Single Pair – Steel Interlocked Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation. 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors per group 2
- Color code Black and white
- Pair shield (Type 1859) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket .. Black FR-PVC
- Armor Flexible, interlocked galvanized steel armor

Application

- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- The interlocked armor provides mechanical protection as well as cut-through and crush resistance
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

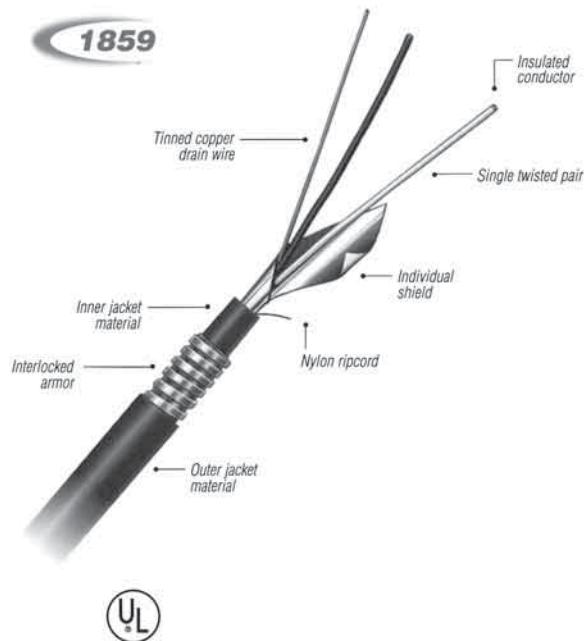
Cable Type

- 1856 – Single pair unshielded
- 1859 – Single pair shielded

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, CSA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.1	13.7	3.6	11.9
Mutual Capacitance								
Type 1856	pF/ft	pF/m	31	100	36	119	37	122
Type 1859	pF/ft	pF/m	49	160	64	210	67	218
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

Part Number	Pairs	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1856-086RR	1	0.231	5.9	0.471	12.0	0.095	0.142	35	0.89
1859-086RR	1	0.236	6.0	0.476	12.1	0.100	0.150	35	0.89
Conductor size: 16 AWG / 1.3 mm ²									
1856-686RR	1	0.274	7.0	0.514	13.1	0.121	0.181	35	0.89
1859-686RR	1	0.278	7.1	0.518	13.2	0.130	0.195	35	0.89
Conductor size: 1.5 mm ²									
1856-N86RR	1	0.282	7.2	0.522	13.3	0.126	0.189	35	0.89
1859-N86RR	1	0.286	7.2	0.526	13.4	0.135	0.203	35	0.89

300 Volt Thermoplastic PVC (Single Triad – Steel Interlocked Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors per group 3
- Color code Black, white and red
- Triad shield (Type 1869) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket.. Black FR-PVC
- Armor..... Flexible, interlocked galvanized steel armor

Application

- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- The interlocked armor provides mechanical protection as well as cut-through and crush resistance
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

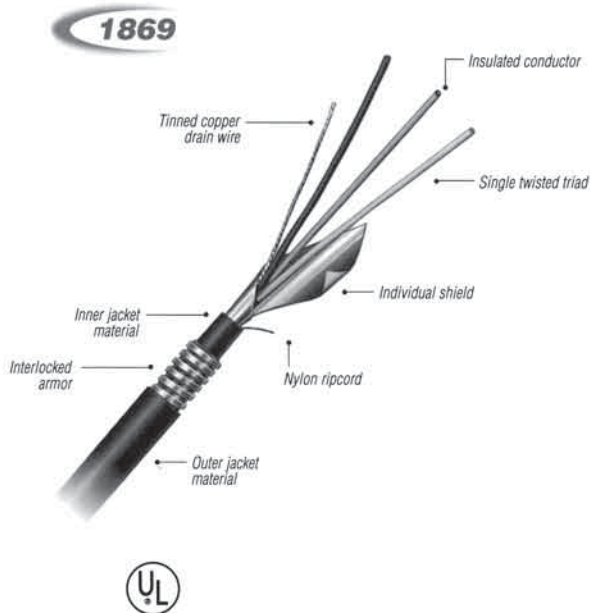
Cable Type

- 1866 – Single triad unshielded
- 1869 – Single triad shielded

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, CSA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

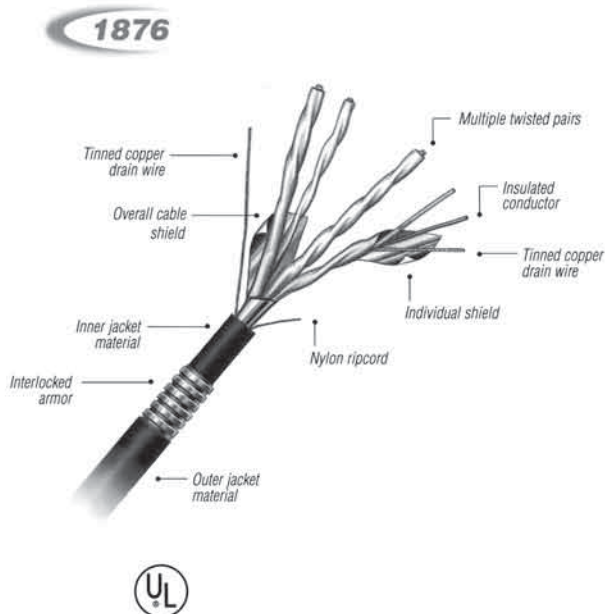
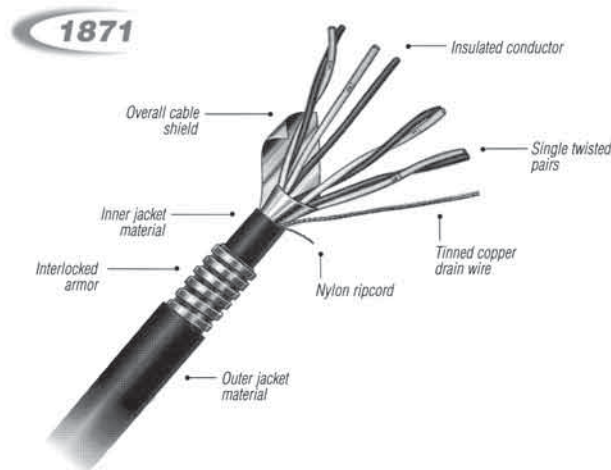


Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.1	13.7	3.6	11.9
Mutual Capacitance								
Type 1866	pF/ft	pF/m	31	100	36	119	37	122
Type 1869	pF/ft	pF/m	49	160	64	210	67	218
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

Part Number	Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1866-086RR	1	0.242	6.2	0.482	12.2	0.100	0.149	35	0.89
1869-086RR	1	0.253	6.4	0.493	12.5	0.109	0.163	35	0.89
Conductor size: 16 AWG / 1.3 mm ²									
1866-686RR	1	0.288	7.3	0.528	13.4	0.133	0.199	35	0.89
1869-686RR	1	0.312	7.9	0.552	14.0	0.147	0.220	35	0.89
Conductor size: 1.5 mm ²									
1866-N86RR	1	0.307	7.8	0.547	13.9	0.139	0.207	35	0.89
1869-N86RR	1	0.321	8.2	0.561	14.2	0.162	0.243	35	0.89

300 Volt Thermoplastic PVC (Multiple Pair – Steel Interlocked Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors per group 2
- Color code Black and white
- Group identification . . . Each pair numbered
- Pair shield (Type 1876) 100% coverage, an aluminum-polyester tape shield and a 7-strand, tinned copper drain wire
- Overall shield (Type 1871/1876) 100% coverage, an aluminum-polyester tape shield and a 7-strand, tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor Flexible, interlocked galvanized steel armor
- Communications wire 22 AWG copper, color-coded orange

Application

- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- The interlocked armor provides mechanical protection as well as cut-through and crush resistance
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1871 – Multiple pair overall shield
- 1876 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, CSA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design

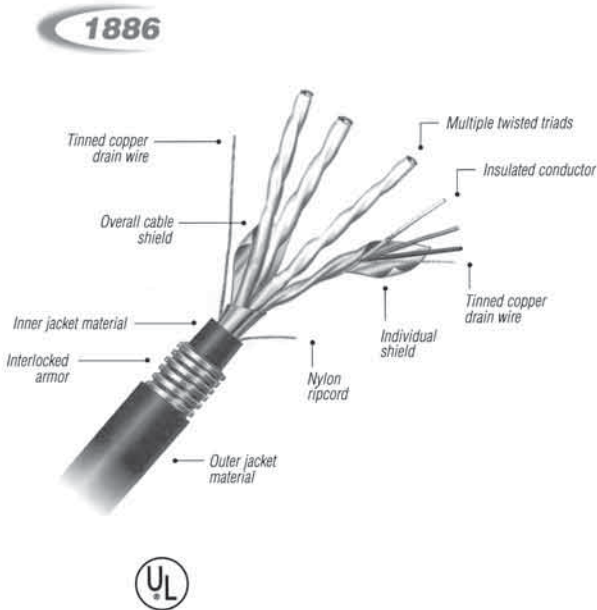
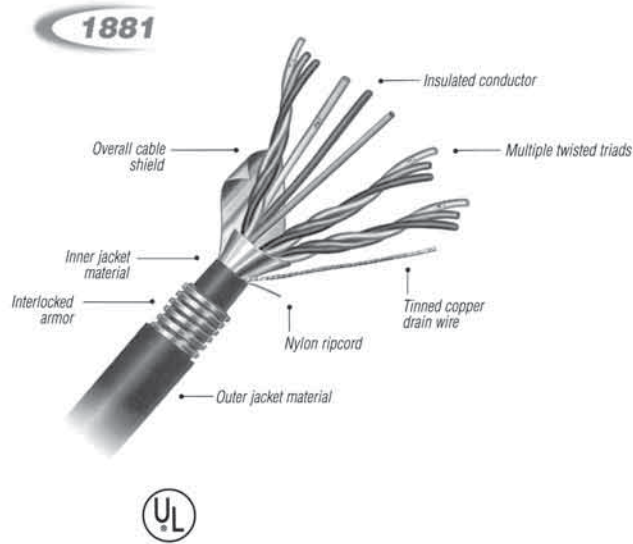
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.1	13.7	3.6	11.9
Mutual Capacitance								
Type 1871	pF/ft	pF/m	31	100	36	119	37	122
Type 1876	pF/ft	pF/m	49	160	64	210	67	218
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

		Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
Part Number	Pairs	in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1871-00480	4	0.396	10.1	0.646	16.4	0.280	0.420	40	1.02
1871-00880	8	0.523	13.3	0.793	20.1	0.402	0.602	50	1.27
1871-01280	12	0.606	15.4	0.876	22.3	0.484	0.726	50	1.27
1871-01680	16	0.696	17.7	0.986	25.0	0.624	0.936	60	1.52
1871-02480	24	0.813	20.6	1.103	28.0	0.772	1.158	60	1.52
1871-03680	36	0.951	24.2	1.261	32.0	1.019	1.528	70	1.78
1876-00480	4	0.457	11.6	0.727	18.5	0.304	0.452	50	1.27
1876-00880	8	0.575	14.6	0.845	21.5	0.404	0.601	50	1.27
1876-01280	12	0.708	18.0	0.998	25.3	0.563	0.838	60	1.52
1876-01680	16	0.781	19.8	1.071	27.2	0.646	0.961	60	1.52
1876-02480	24	0.972	24.7	1.282	32.6	0.856	1.273	70	1.78
1876-03680	36	1.105	28.1	1.415	35.9	1.106	1.645	70	1.78
Conductor size: 16 AWG / 1.3 mm ²									
1871-60480	4	0.516	13.1	0.786	20.0	0.400	0.600	50	1.27
1871-60880	8	0.663	16.8	0.953	24.2	0.617	0.925	60	1.52
1871-61280	12	0.772	19.6	1.062	27.0	0.771	1.156	60	1.52
1871-61680	16	0.863	21.9	1.153	29.3	0.906	1.358	60	1.52
1871-62480	24	1.038	26.4	1.348	34.2	1.232	1.848	70	1.78
1871-63680	36	1.192	30.3	1.502	38.2	1.596	2.394	70	1.78
1876-60480	4	0.553	14.0	0.823	20.9	0.446	0.668	50	1.27
1876-60880	8	0.727	18.5	1.017	25.8	0.703	1.054	60	1.52
1876-61280	12	0.873	22.2	1.163	29.5	0.897	1.345	60	1.52
1876-61680	16	0.988	25.1	1.278	32.5	1.117	1.675	60	1.52
1876-62480	24	1.211	30.8	1.521	38.6	1.481	2.221	70	1.78
1876-63680	36	1.404	35.7	1.734	44.0	2.009	3.012	80	2.03
Conductor size: 1.5 mm ²									
1871-N0480	4	0.533	13.5	0.803	20.4	0.418	0.626	50	1.27
1871-N0880	8	0.686	17.4	0.976	24.8	0.644	0.966	60	1.52
1871-N1280	12	0.800	20.3	1.090	27.7	0.807	1.210	60	1.52
1871-N1680	16	0.894	22.7	1.204	30.6	0.960	1.440	70	1.78
1871-N2480	24	1.076	27.3	1.386	35.2	1.304	1.955	70	1.78
1871-N3680	36	1.237	31.4	1.567	39.8	1.693	2.539	80	2.03
1876-N0480	4	0.571	14.5	0.841	21.4	0.464	0.696	50	1.27
1876-N0880	8	0.751	19.1	1.041	26.4	0.733	1.099	60	1.52
1876-N1280	12	0.904	23.0	1.194	30.3	0.939	1.408	60	1.52
1876-N1680	16	1.023	26.0	1.333	33.9	1.177	1.765	70	1.78
1876-N2480	24	1.255	31.9	1.565	39.8	1.569	2.354	70	1.78
1876-N3680	36	1.456	37.0	1.766	44.9	2.119	3.179	70	1.78

300 Volt Thermoplastic PVC (Multiple Triad – Steel Interlocked Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors per group 3
- Color code Black, white and red
- Group identification . . . Each triad numbered
- Triad shield (Type 1886) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield (Type 1881/1886) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor Flexible, interlocked galvanized steel armor
- Communications wire. 22 AWG copper, color-coded orange

Application

- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- The interlocked armor provides mechanical protection as well as cut-through and crush resistance
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1881 – Multiple triad overall shield
- 1886 – Multiple triad individual and overall shield

Cable Options

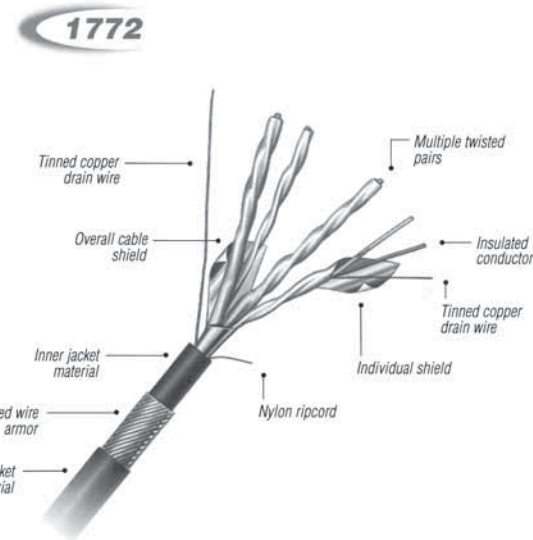
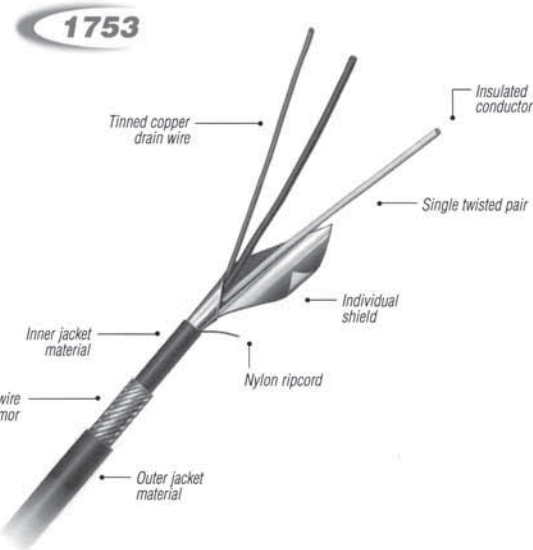
- Manufactured in accordance with UL. Also available to ICEA, IEC, CSA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.1	13.7	3.6	11.9
Mutual Capacitance								
Type 1881	pF/ft	pF/m	31	100	36	119	37	122
Type 1886	pF/ft	pF/m	49	160	64	210	67	218
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

Part Number	Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1881-00480	4	0.470	12.0	0.740	18.8	0.339	0.508	50	1.27
1881-01280	12	0.732	18.6	1.022	26.0	0.626	0.939	60	1.52
1881-01680	16	0.808	20.5	1.098	27.9	0.710	1.065	60	1.52
1886-00480	4	0.497	12.6	0.767	19.5	0.349	0.519	50	1.27
1886-01280	12	0.777	19.7	1.067	27.1	0.673	1.001	60	1.52
1886-01680	16	0.902	22.9	1.192	30.3	0.787	1.171	60	1.52
Conductor size: 16 AWG / 1.3 mm ²									
1881-60480	4	0.574	14.6	0.844	21.4	0.455	0.683	50	1.27
1881-61280	12	0.931	23.6	1.241	31.5	0.927	1.390	70	1.78
1881-61680	16	1.030	26.2	1.340	34.0	1.156	1.733	70	1.78
1886-60480	4	0.605	15.4	0.875	22.2	0.513	0.769	50	1.27
1886-61280	12	0.983	25.0	1.293	32.8	1.138	1.707	70	1.78
1886-61680	16	1.146	29.1	1.456	37.0	1.361	2.040	70	1.78
Conductor size: 1.5 mm ²									
1881-N0480	4	0.595	15.1	0.865	22.0	0.476	0.714	50	1.27
1881-N1280	12	0.964	24.5	1.274	32.4	1.029	1.542	70	1.78
1881-N1680	16	1.068	27.1	1.378	35.0	1.215	1.822	70	1.78
1886-N0480	4	0.625	15.9	0.895	22.7	0.536	0.804	50	1.27
1886-N1280	12	1.017	25.8	1.327	33.7	1.197	1.795	70	1.78
1886-N1680	16	1.187	30.1	1.497	38.0	1.432	2.148	70	1.78



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation. . . . 15 mils (0.4 mm) for 20 AWG, 20 mils (0.5 mm) for 18 AWG and larger, polyethylene
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . . Each pair/triad numbered
- Pair/triad shield (Type 1753/1763/1772/1782) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield (Type 1772/1775/1782/1785) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC
- Armor. Multiple strands of served galvanized steel wire (SWA)

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Non-flame retardant (does not pass IEEE 383 or IEC 332)
- 300 volt rated insulation per ICEA

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1751 – Single pair unshielded
- 1753 – Single pair shielded
- 1761 – Single triad unshielded
- 1763 – Single triad shielded
- 1772 – Multiple pair individual and overall shield
- 1775 – Multiple pair overall shield
- 1782 – Multiple triad individual and overall shield
- 1785 – Multiple triad overall shield

Cable Options

- Manufactured in accordance with ICEA. Also available to IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- LDPE or CPE jacket

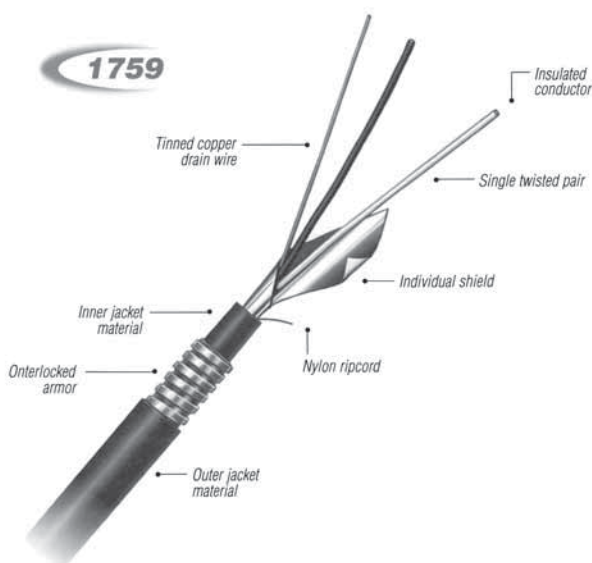
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.2	13.7	3.6	11.9
Mutual Capacitance								
Type 1751	pF/ft	pF/m	15	51	16	54	17	55
Type 1753	pF/ft	pF/m	26	85	29	94	30	97
Type 1761	pF/ft	pF/m	15	51	16	54	17	55
Type 1763	pF/ft	pF/m	26	85	29	94	30	97
Type 1772	pF/ft	pF/m	26	85	29	94	30	97
Type 1775	pF/ft	pF/m	15	51	16	54	17	55
Type 1782	pF/ft	pF/m	26	85	29	94	30	97
Type 1785	pF/ft	pF/m	15	51	16	54	17	55
L/R Ratio	μH/Ω	μH/Ω	9	9	21	21	24	24
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.59	0.18	0.58

Product Dimensions

		Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
Part Number	Pairs/Triads	in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1751-08632	1 PR	0.231	5.9	0.377	9.6	0.107	0.160	50	1.27
1753-08632	1 PR	0.236	6.0	0.382	9.7	0.113	0.168	50	1.27
1761-08632	1 TR	0.242	6.2	0.388	9.9	0.115	0.172	50	1.27
1763-08632	1 TR	0.253	6.4	0.399	10.1	0.121	0.180	50	1.27
1772-00480	4 PR	0.457	11.6	0.627	15.9	0.248	0.371	50	1.27
1772-01280	12 PR	0.708	18.0	0.964	24.5	0.675	1.011	65	1.65
1772-02480	24 PR	0.972	24.7	1.228	31.2	1.020	1.530	65	1.65
1775-00480	4 PR	0.396	10.1	0.566	14.4	0.225	0.336	50	1.27
1775-01280	12 PR	0.606	15.4	0.802	20.4	0.471	0.706	50	1.27
1775-02480	24 PR	0.813	20.6	1.069	27.1	0.821	1.231	65	1.65
Conductor size: 16 AWG / 1.3 mm ²									
1751-68A32	1 PR	0.306	7.8	0.452	11.5	0.129	0.193	50	1.27
1753-68A32	1 PR	0.311	7.9	0.457	11.6	0.138	0.206	50	1.27
1761-68A32	1 TR	0.323	8.2	0.469	11.9	0.141	0.210	50	1.27
1763-68A32	1 TR	0.337	8.6	0.507	12.8	0.190	0.284	50	1.27
1772-604A0	4 PR	0.604	15.3	0.800	20.3	0.474	0.711	50	1.27
1772-612A0	12 PR	0.981	24.9	1.237	31.4	1.084	1.626	65	1.65
1772-624A0	24 PR	1.358	34.5	1.614	41.0	1.688	2.532	65	1.65
1775-604A0	4 PR	0.564	14.3	0.760	19.3	0.399	0.599	50	1.27
1775-612A0	12 PR	0.850	21.6	1.106	28.1	0.901	1.351	65	1.65
1775-624A0	24 PR	1.146	29.1	1.402	35.6	1.404	2.105	65	1.65
Conductor size: 1.5 mm ²									
1751-N8A32	1 PR	0.314	8.0	0.460	11.7	0.133	0.200	50	1.27
1753-N8A32	1 PR	0.319	8.1	0.465	11.8	0.143	0.213	50	1.27
1761-N8A32	1 TR	0.331	8.4	0.501	12.7	0.186	0.278	50	1.27
1763-N8A32	1 TR	0.346	8.8	0.516	13.1	0.198	0.296	50	1.27
1772-N04A0	4 PR	0.622	15.8	0.818	20.8	0.493	0.739	50	1.27
1772-N12A0	12 PR	1.012	25.7	1.268	32.2	1.130	1.694	65	1.65
1772-N24A0	24 PR	1.402	35.6	1.688	42.9	1.770	2.207	80	2.03
1775-N04A0	4 PR	0.581	14.8	0.777	19.7	0.445	0.667	50	1.27
1775-N12A0	12 PR	0.877	22.3	1.133	28.8	0.985	1.477	65	1.65
1775-N24A0	24 PR	1.184	30.1	1.440	36.6	1.472	2.207	65	1.65

300 Volt Thermoplastic Polyethylene (Steel Interlocked Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation . . . 15 mils (0.4 mm) for 20 AWG, 20 mils (0.5 mm) for 18 AWG and larger, polyethylene
- Color code Black and white (pairs) Black, white and red (triads)
- Group identification . . . Each pair/triad numbered
- Pair/triad shield (Type 1759/1769/1776/1786) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1771/1776/1781/1786) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC
- Armor. Flexible, interlocked galvanized steel armor

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Non-flame retardant (does not pass IEEE 383 or IEC 332)
- 300 volt rated insulation per ICEA

Bending Radius

- $12 \times d$ (d = overall diameter)

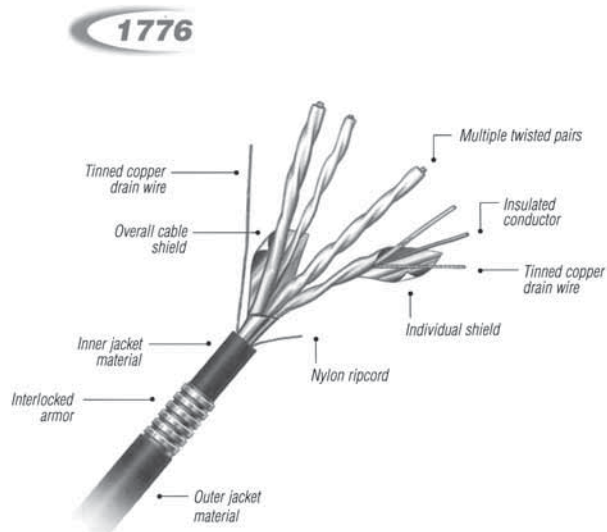
Cable Type

- 1756 – Single pair unshielded
- 1759 – Single pair shielded
- 1766 – Single triad unshielded
- 1769 – Single triad shielded
- 1771 – Multiple pair overall shield
- 1776 – Multiple pair individual and overall shield
- 1781 – Multiple triad overall shield
- 1786 – Multiple triad individual and overall shield

Cable Options

- Manufactured in accordance to ICEA. Also available to IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design
- LDPE or CPE jacket

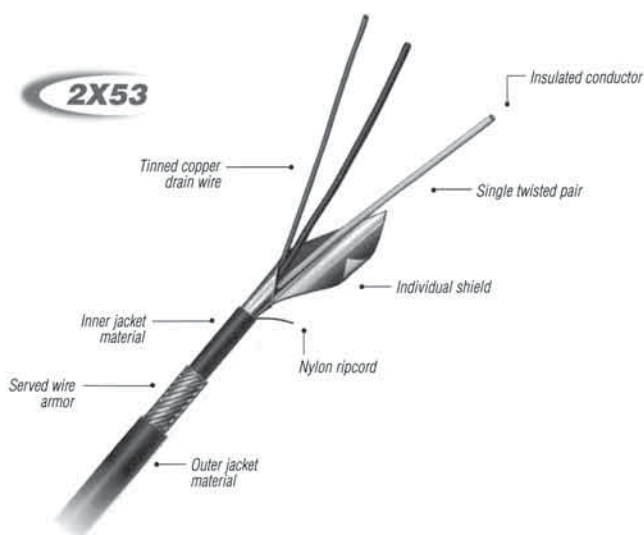
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.2	13.7	3.6	11.9
Mutual Capacitance								
Type 1756	pF/ft	pF/m	15	51	16	54	17	55
Type 1759	pF/ft	pF/m	26	85	29	94	30	97
Type 1766	pF/ft	pF/m	15	51	16	54	17	55
Type 1769	pF/ft	pF/m	26	85	29	94	30	97
Type 1771	pF/ft	pF/m	15	51	16	54	17	55
Type 1776	pF/ft	pF/m	26	85	29	94	30	97
Type 1781	pF/ft	pF/m	15	51	16	54	17	55
Type 1786	pF/ft	pF/m	26	85	29	94	30	97
L/R Ratio	μH/Ω	μH/Ω	9	9	21	21	24	24
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.18	0.59	0.18	0.58

Product Dimensions

Part Number	Pairs/Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1756-08632	1 PR	0.231	5.9	0.501	12.7	0.095	0.142	50	1.27
1759-08632	1 PR	0.236	6.0	0.506	12.9	0.100	0.150	50	1.27
1766-08632	1 TR	0.242	6.2	0.512	13.0	0.102	0.152	50	1.27
1769-08632	1 TR	0.253	6.4	0.523	13.3	0.109	0.163	50	1.27
1771-00480	4 PR	0.396	10.1	0.666	16.9	0.257	0.386	50	1.27
1771-01280	12 PR	0.606	15.4	0.876	22.3	0.435	0.653	50	1.27
1771-02480	24 PR	0.813	20.6	1.083	27.5	0.633	0.949	50	1.27
1776-00480	4 PR	0.457	11.6	0.727	18.5	0.279	0.418	50	1.27
1776-01280	12 PR	0.708	18.0	0.978	24.8	0.501	0.752	50	1.27
1776-02480	24 PR	0.972	24.7	1.242	31.5	0.796	1.194	50	1.27
Conductor size: 16 AWG / 1.3 mm ²									
1756-68A32	1 PR	0.306	7.8	0.576	14.6	0.121	0.181	50	1.27
1759-68A32	1 PR	0.311	7.9	0.581	14.8	0.130	0.195	50	1.27
1766-68A32	1 TR	0.323	8.2	0.593	15.1	0.133	0.199	50	1.27
1769-68A32	1 TR	0.337	8.6	0.607	15.4	0.147	0.220	50	1.27
1771-604A0	4 PR	0.564	14.3	0.834	21.2	0.366	0.549	50	1.27
1771-612A0	12 PR	0.852	21.6	1.120	28.4	0.695	1.042	50	1.27
1771-624A0	24 PR	1.146	29.1	1.416	36.0	1.123	1.684	50	1.27
1776-604A0	4 PR	0.604	15.3	0.874	22.2	0.439	0.657	50	1.27
1776-612A0	12 PR	0.981	24.9	1.251	31.8	0.856	1.284	50	1.27
1776-624A0	24 PR	1.358	34.5	1.628	41.4	1.413	2.119	50	1.27
Conductor size: 1.5 mm ²									
1756-N8A32	1 PR	0.314	8.0	0.584	14.8	0.126	0.189	50	1.27
1759-N8A32	1 PR	0.319	8.1	0.589	15.0	0.135	0.203	50	1.27
1766-N8A32	1 TR	0.331	8.4	0.601	15.3	0.139	0.207	50	1.27
1769-N8A32	1 TR	0.346	8.8	0.616	15.6	0.162	0.243	50	1.27
1771-N04A0	4 PR	0.581	14.8	0.851	21.6	0.410	0.614	50	1.27
1771-N12A0	12 PR	0.877	22.3	1.147	29.1	0.766	1.149	50	1.27
1771-N24A0	24 PR	1.184	30.1	1.454	36.9	1.191	1.786	50	1.27
1776-N04A0	4 PR	0.622	15.8	0.892	22.7	0.457	0.685	50	1.27
1776-N12A0	12 PR	1.012	25.7	1.282	32.6	0.897	1.346	50	1.27
1776-N24A0	24 PR	1.402	35.6	1.672	42.5	1.480	2.220	50	1.27



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.5 mm) XLPE
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . . Each pair/triad numbered
- Pair/triad shield (Type 2X53/2X63/2X72/2X82)
100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 2X72/2X75/2X85/2X82)
100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC
- Armor. Multiple strands of served galvanized steel wire

Application

- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- Good chemical and long-term moisture resistance
- NEC Article 725/727
- Flame retardant

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

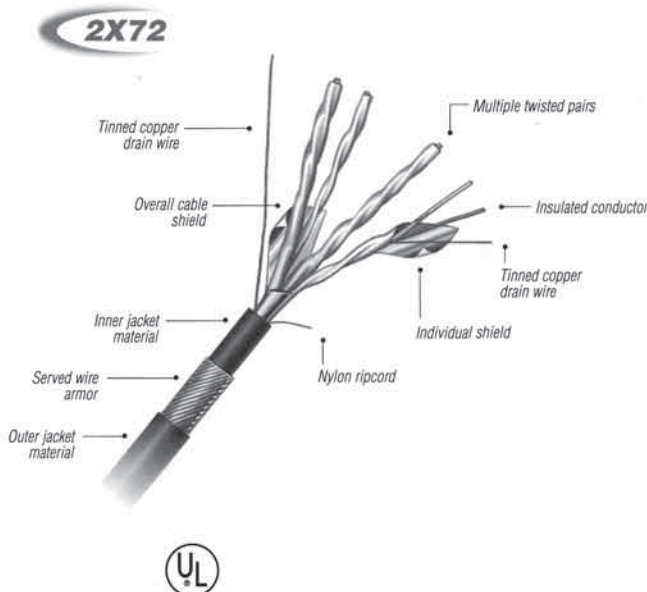
- 2X51 – Single pair unshielded
- 2X53 – Single pair shielded
- 2X61 – Single triad unshielded
- 2X63 – Single triad shielded
- 2X72 – Multiple pair individual and overall shield
- 2X75 – Multiple pair overall shield
- 2X82 – Multiple triad individual and overall shield
- 2X85 – Multiple triad overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, CSA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- CPE or Hypalon jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Note: Substituting 3x for 2x will upgrade Insulated Single Flame performance to VW-1



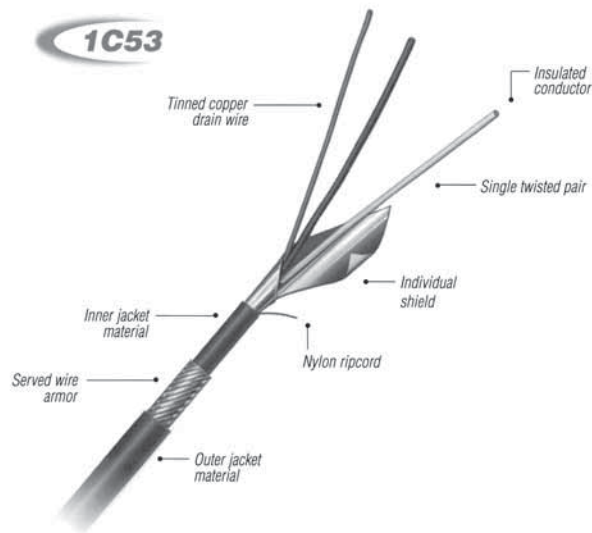
Electrical Properties	Units	Conductor Size					
		1.3mm ²	1.5mm ²	2.1mm ²	2.5mm ²		
Resistance (R)	Ω/km	13.7	3.6	11.9	8.6	2.2	7.2
Mutual Capacitance							
Type 1C53	pF/m	184	58	191	210	67	221
L/R Ratio	μH/Ω	21	24	24	31	35	35
Inductance (L)	μH/m	0.58	0.17	0.57	0.54	0.16	0.53

Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.2	13.7	3.6	11.9
Mutual Capacitance								
Type 2X51	pF/ft	pF/m	18	60	22	71	22	73
Type 2X53	pF/ft	pF/m	28	93	37	121	38	125
Type 2X61	pF/ft	pF/m	18	60	22	71	22	73
Type 2X63	pF/ft	pF/m	28	93	37	121	38	125
Type 2X75	pF/ft	pF/m	18	60	22	71	22	73
Type 2X72	pF/ft	pF/m	28	93	37	121	38	125
Type 2X85	pF/ft	pF/m	18	60	22	71	22	73
Type 2X82	pF/ft	pF/m	28	93	37	121	38	125
L/R Ratio	μH/Ω	μH/Ω	10	10	21	21	24	24
Inductance (L)	μH/ft	μH/m	0.21	0.67	0.18	0.59	0.18	0.58

Product Dimensions

Part Number	Number of Pairs/Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
2X53-09519	1 PR	0.258	6.6	0.374	9.5	0.100	0.149	35	0.89
2X63-09519	1 TR	0.279	7.1	0.395	10.0	0.109	0.162	35	0.89
2X75-00450	4 PR	0.474	12.0	0.644	16.4	0.261	0.389	50	1.27
2X75-00850	8 PR	0.587	14.9	0.783	19.9	0.342	0.509	50	1.27
2X75-01250	12 PR	0.704	17.9	0.950	24.1	0.421	0.627	60	1.52
2X75-02450	24 PR	0.942	23.9	1.208	30.7	1.145	1.706	70	1.78
2X72-00450	4 PR	0.508	12.9	0.704	17.9	0.294	0.438	50	1.27
2X72-00850	8 PR	0.665	16.9	0.881	22.4	0.466	0.694	60	1.52
2X72-01250	12 PR	0.796	20.2	1.042	26.5	0.750	1.117	60	1.52
2X72-02450	24 PR	1.099	27.9	1.365	34.7	1.086	1.618	70	1.78
Conductor size: 16 AWG / 1.3 mm ²									
2X53-69519	1 PR	0.311	7.9	0.437	11.1	0.130	0.194	40	1.02
2X63-69519	1 TR	0.337	8.6	0.487	12.4	0.220	0.328	40	1.02
2X75-60450	4 PR	0.564	14.3	0.760	19.3	0.425	0.633	50	1.27
2X75-60850	8 PR	0.727	18.5	0.973	24.7	0.647	0.964	60	1.52
2X75-61250	12 PR	0.850	21.6	1.096	27.8	0.917	1.366	60	1.52
2X75-62450	24 PR	1.146	29.1	1.412	35.9	1.421	2.117	70	1.78
2X72-60450	4 PR	0.604	15.3	0.800	20.3	0.464	0.691	50	1.27
2X72-60850	8 PR	0.796	20.2	1.042	26.5	0.824	1.227	60	1.52
2X72-61250	12 PR	0.981	24.9	1.247	31.7	1.061	1.580	70	1.78
2X72-62450	24 PR	1.358	34.5	1.644	41.8	1.713	2.552	80	2.03
Conductor size: 1.5 mm ²									
2X53-N9519	1 PR	0.319	8.1	0.465	11.8	0.203	0.302	50	1.27
2X63-N9519	1 TR	0.346	8.8	0.516	13.1	0.243	0.362	50	1.27
2X75-N0450	4 PR	0.581	14.8	0.777	19.7	0.443	0.660	50	1.27
2X75-N0850	8 PR	0.750	19.0	0.996	25.3	0.765	1.140	60	1.52
2X75-N1250	12 PR	0.877	22.3	1.123	28.5	0.961	1.431	60	1.52
2X75-N2450	24 PR	1.184	30.1	1.450	36.8	1.502	2.237	70	1.78
2X72-N0450	4 PR	0.622	15.8	0.818	20.8	0.483	0.719	50	1.27
2X72-N0850	8 PR	0.821	20.9	1.067	27.1	0.862	1.284	60	1.52
2X72-N1250	12 PR	1.012	25.7	1.278	32.5	1.113	1.658	70	1.78
2X72-N2450	24 PR	1.402	35.6	1.688	42.9	1.793	2.671	80	2.03

600 Volt Thermoplastic PVC/Nylon (Served Wire Armor)



Description

- Conductor. 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) FR-PVC, 4 mils (0.1 mm) nylon
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . . Each pair/triad numbered
- Pair/triad shield (Type 1C53/1C63/1C72/1C82)
100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1C72/1C75/1C82/1C85)
100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC
- Armor. Multiple strands of served galvanized steel wire (SWA)

Application

- Offers resistance to a wide range of chemicals, including acids, alkalis, alcohol, petroleum and mineral oils
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- 600 volt rated insulation

Bending Radius

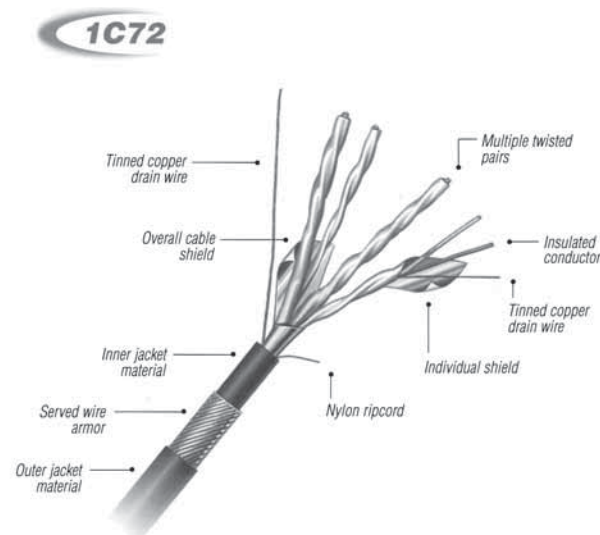
- $12 \times d$ (d = overall diameter)

Cable Type

- 1C51 – Single pair unshielded
- 1C53 – Single pair shielded
- 1C61 – Single triad unshielded
- 1C63 – Single triad shielded
- 1C72 – Multiple pair individual and overall shield
- 1C75 – Multiple pair overall shield
- 1C82 – Multiple triad individual and overall shield
- 1C85 – Multiple triad overall shield

Cable Options

- Manufactured in accordance with ICEA. Also available to other standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Pairs color-coded black and red
- Triads color-coded black, red and blue
- Tinned copper conductors

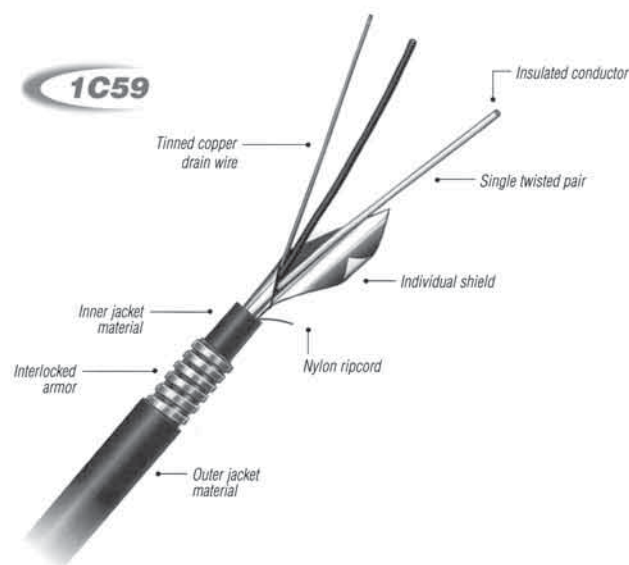


Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		1.5 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	3.6	11.9	2.6	8.6	2.2	7.2
Mutual Capacitance										
Type 1C51	pF/ft	pF/m	33	110	34	112	36	119	37	122
Type 1C53	pF/ft	pF/m	56	184	58	191	64	210	67	221
Type 1C61	pF/ft	pF/m	33	110	34	112	36	119	37	122
Type 1C63	pF/ft	pF/m	56	184	58	191	64	210	67	221
Type 1C72	pF/ft	pF/m	33	110	34	112	36	119	37	122
Type 1C75	pF/ft	pF/m	56	184	58	191	64	210	67	221
Type 1C82	pF/ft	pF/m	33	110	34	112	36	119	37	122
Type 1C85	pF/ft	pF/m	56	184	58	191	64	210	67	221
L/R Ratio	μH/Ω	μH/Ω	21	21	24	24	31	31	35	35
Inductance (L)	μH/ft	μH/m	0.18	0.58	0.17	0.57	0.17	0.54	0.16	0.53

Product Dimensions

		Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
Part Number	Pairs	in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 16 AWG / 1.3 mm ²									
1C72-60400	4	0.595	15.1	0.791	20.1	0.534	0.800	50	1.27
1C72-61200	12	0.966	24.5	1.222	31.0	1.202	1.803	65	1.65
1C72-62400	24	1.335	33.9	1.591	40.4	1.865	2.798	65	1.65
1C75-60400	4	0.556	14.1	0.752	19.1	0.446	0.668	50	1.27
1C75-61200	12	0.836	21.2	1.092	27.7	0.991	1.485	65	1.65
1C75-62400	24	1.127	28.6	1.383	35.1	1.533	2.299	65	1.65
Conductor size: 1.5 mm ²									
1C72-N0400	4	0.613	15.6	0.809	20.5	0.552	0.828	50	1.27
1C72-N1200	12	0.996	25.3	1.252	31.8	1.253	1.878	65	1.65
1C72-N2400	24	1.380	35.0	1.666	42.3	1.927	2.890	80	2.03
1C75-N0400	4	0.573	14.6	0.769	19.5	0.501	0.751	50	1.27
1C75-N1200	12	0.864	21.9	1.120	28.4	1.090	1.634	65	1.65
1C75-N2400	24	1.165	29.6	1.421	36.1	1.618	2.426	65	1.65
Conductor size: 14 AWG									
1C72-40400	4	0.682	17.3	0.938	23.8	0.757	1.135	65	1.65
1C72-41200	12	1.081	27.5	1.337	34.0	1.465	2.197	65	1.65
1C72-42400	24	1.502	38.1	1.788	45.4	2.372	3.557	80	2.03
1C75-40400	4	0.619	15.7	0.815	20.7	0.570	0.854	50	1.27
1C75-41200	12	0.958	24.3	1.214	30.8	1.251	1.876	65	1.65
1C75-42400	24	1.269	32.2	1.525	38.7	1.919	2.878	65	1.65
Conductor size: 2.5 mm ²									
1C72-P0400	4	0.713	18.1	0.969	24.6	0.814	1.221	65	1.65
1C72-P1200	12	1.135	28.8	1.391	35.3	1.566	2.348	65	1.65
1C72-P2400	24	1.580	40.1	1.866	47.4	2.568	3.851	80	2.03
1C75-P0400	4	0.668	17.0	0.894	22.7	0.732	1.098	65	1.65
1C75-P1200	12	1.006	25.5	1.262	32.1	1.341	2.011	65	1.65
1C75-P2400	24	1.356	34.4	1.612	40.9	2.067	3.100	65	1.65

600 Volt Thermoplastic PVC/Nylon (Steel Interlocked Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) FR-PVC
4 mils (0.1 mm) nylon
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . . Each pair/triad numbered
- Pair/triad shield (Type 1C59/1C69/1C76/1C86)
100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield (Type 1C71/1C76/1C81/1C86)
100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black FR-PVC
- Armor Flexible interlocked galvanized steel armor

Application

- Offers resistance to a wide range of chemicals, including acids, alkalis, alcohol, petroleum and mineral oils
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- 600 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

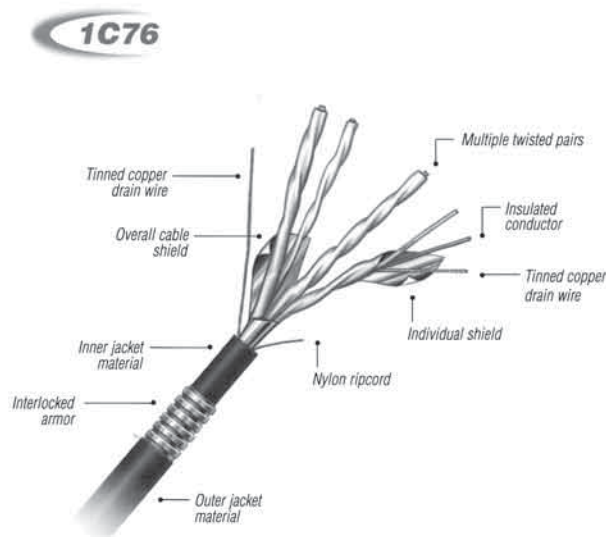
Cable Type

- 1C56 – Single pair unshielded
- 1C59 – Single pair shielded
- 1C66 – Single triad unshielded
- 1C69 – Single triad shielded
- 1C71 – Multiple pair overall shield
- 1C76 – Multiple pair individual and overall shield
- 1C81 – Multiple triad overall shield
- 1C86 – Multiple triad individual and overall shield

Cable Options

- Manufactured in accordance with ICEA. Also available to other standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design
- Pairs color-coded black and red
- Triads color-coded black, red and blue
- Tinned copper conductors

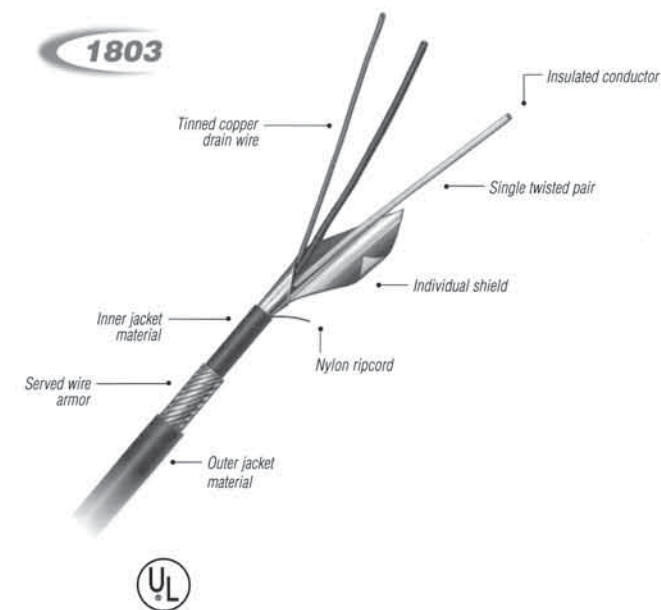
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



Electrical Properties	Units		Conductor Size			
			16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	2.6	8.6
Mutual Capacitance						
Type 1C56	pF/ft	pF/m	33	110	36	119
Type 1C59	pF/ft	pF/m	56	184	64	210
Type 1C66	pF/ft	pF/m	33	110	36	119
Type 1C69	pF/ft	pF/m	56	184	64	210
Type 1C71	pF/ft	pF/m	33	110	36	119
Type 1C76	pF/ft	pF/m	56	184	64	210
Type 1C81	pF/ft	pF/m	33	110	36	119
Type 1C86	pF/ft	pF/m	56	184	64	210
L/R Ratio	μH/Ω	μH/Ω	21	21	31	31
Inductance (L)	μH/ft	μH/m	0.18	0.58	0.16	0.54

Product Dimensions

Part Number	Number of Pairs/Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 16 AWG / 1.3 mm ²									
1C71-60400	4	0.536	13.6	0.806	20.5	0.427	0.640	50	1.27
1C71-61200	12	0.836	21.2	1.106	28.1	0.777	1.164	50	1.27
1C71-62400	24	1.147	29.1	1.417	36.0	1.248	1.872	50	1.27
1C76-60400	4	0.615	15.6	0.885	22.5	0.505	0.757	50	1.27
1C76-61200	12	0.986	25.0	1.256	31.9	0.967	1.450	50	1.27
1C76-62400	24	1.335	33.9	1.605	40.8	1.571	2.355	50	1.27
1C81-60400	4	0.640	16.3	0.910	23.1	0.524	0.785	50	1.27
1C81-61200	12	1.029	26.1	1.299	33.0	0.996	1.494	50	1.27
1C81-62400	24	1.397	35.5	1.667	42.3	1.610	2.414	50	1.27
1C86-60400	4	0.672	17.1	0.942	23.9	0.580	0.869	50	1.27
1C86-61200	12	1.084	27.5	1.354	34.4	1.155	1.732	50	1.27
1C86-62400	24	1.477	37.5	1.747	44.4	2.123	3.184	50	1.27
Conductor size: 14 AWG / 2.1 mm ²									
1C71-40400	4	0.639	16.2	0.909	23.1	0.539	0.809	50	1.27
1C71-41200	12	0.978	24.8	1.248	31.7	1.013	1.519	50	1.27
1C71-42400	24	1.289	32.7	1.559	39.6	1.640	2.459	50	1.27
1C76-40400	4	0.682	17.3	0.952	24.2	0.593	0.890	50	1.27
1C76-41200	12	1.101	28.0	1.371	34.8	1.202	1.803	50	1.27
1C76-42400	24	1.502	38.1	1.792	45.5	2.212	3.317	60	1.52
1C81-40400	4	0.713	18.1	0.983	25.0	0.619	0.928	50	1.27
1C81-41200	12	1.153	29.3	1.423	36.1	1.253	1.880	50	1.27
1C81-42400	24	1.577	40.1	1.867	47.4	2.313	3.470	60	1.52
1C86-40400	4	0.748	19.0	1.018	25.9	0.701	1.051	50	1.27
1C86-41200	12	1.214	30.8	1.484	37.7	1.467	2.201	50	1.27
1C86-42400	24	1.664	42.3	1.954	49.6	2.740	4.109	60	1.52



Description

- Conductor Solid alloy wire
- Primary insulation 15 mils (0.4 mm) 105°C FR-PVC
- Color code ANSI standard
- Pair shield (Type 1803/1822) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1825/1822) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket . . FR-PVC ANSI color-coded
- Communication wire. (Type 1822/1825) 22-AWG copper, color-coded orange
- Armor. Multiple strands of served galvanized steel wire (SWA)

Application

- UL listed as PLTC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- Good chemical and long-term moisture resistance
- NEC Article 725
- Served wire armor offers cut-through resistance and is suitable for vertical drops
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

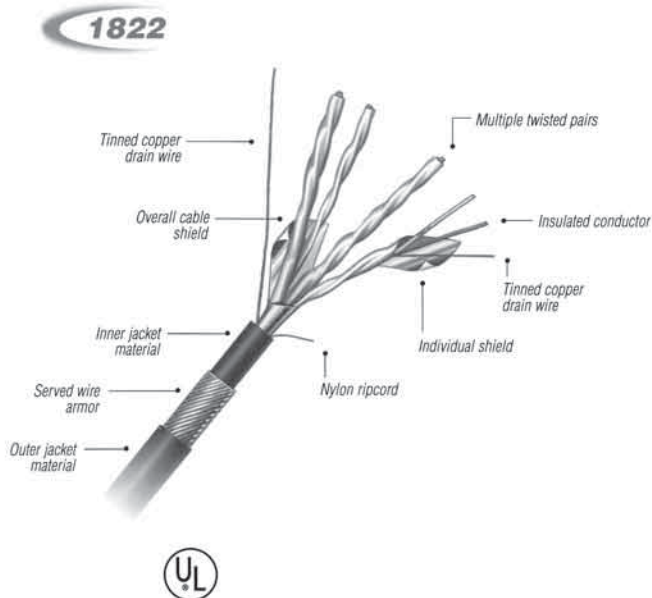
- 1801 – Single pair unshielded
- 1803 – Single pair shielded
- 1822 – Multiple pair individual and overall shield
- 1825 – Multiple pair overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Also available in 18 AWG



Electrical Properties	Units		Conductor Size			
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²	
Mutual Capacitance						
Type 1801	pF/ft.	pF/m	31	100	36	119
Type 1803	pF/ft.	pF/m	49	160	64	210
Type 1822	pF/ft.	pF/m	49	160	64	210
Type 1825	pF/ft.	pF/m	31	100	36	119
Inductance (L)	μH/ft.	μH/m	0.19	0.62	0.17	0.54

Product Dimensions

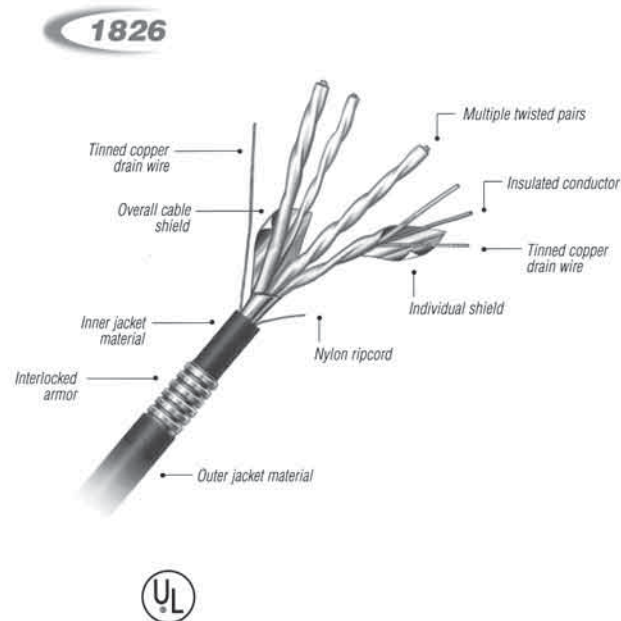
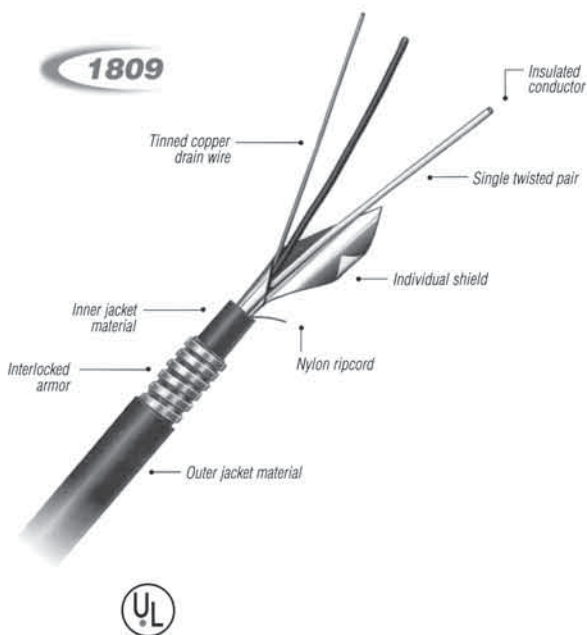
Part Number	Number of Pairs	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1801-0+6RR	1	0.231	5.9	0.347	8.8	0.091	0.136	35	0.89
1803-0+6RR	1	0.236	6.0	0.352	8.9	0.094	0.141	35	0.89
1822-004+0	4	0.457	11.6	0.607	15.4	0.250	0.374	40	1.02
1822-008+0	8	0.575	14.6	0.771	19.6	0.446	0.668	50	1.27
1822-012+0	12	0.708	18.0	0.934	23.7	0.558	0.836	50	1.27
1822-024+0	24	0.972	24.7	1.218	30.9	1.016	1.523	60	1.52
1822-036+0	36	1.105	28.1	1.371	34.8	1.312	1.968	70	1.78
1825-004+0	4	0.396	10.1	0.566	14.4	0.230	0.345	50	1.27
1825-008+0	8	0.523	13.3	0.719	18.3	0.338	0.507	50	1.27
1825-012+0	12	0.606	15.4	0.822	20.9	0.478	0.717	60	1.52
1825-024+0	24	0.813	20.6	1.079	27.4	0.870	1.305	70	1.78
1825-036+0	36	0.951	24.2	1.217	30.9	1.068	1.602	70	1.78
Conductor size: 16 AWG / 1.3 mm ²									
1801-6+6RR	1	0.274	7.0	0.390	9.9	0.120	0.180	35	0.89
1803-6+6RR	1	0.278	7.1	0.394	10.0	0.129	0.193	35	0.89
1822-604+0	4	0.553	14.0	0.749	19.0	0.459	0.688	50	1.27
1822-608+0	8	0.727	18.5	0.973	24.7	0.814	1.221	60	1.52
1822-612+0	12	0.873	22.2	1.119	28.4	1.047	1.571	60	1.52
1822-624+0	24	1.211	30.8	1.477	37.5	1.685	2.527	70	1.78
1822-636+0	36	1.404	35.7	1.670	42.4	2.225	3.336	70	1.78
1825-604+0	4	0.514	13.1	0.712	18.1	0.421	0.631	50	1.27
1825-608+0	8	0.663	16.8	0.879	22.3	0.580	0.870	60	1.52
1825-612+0	12	0.772	19.6	1.018	25.9	0.905	1.357	60	1.52
1825-624+0	24	1.038	26.4	1.304	33.1	1.397	2.095	70	1.78
1825-636+0	36	1.192	30.3	1.478	37.5	1.784	2.676	80	2.03

Alloy Identification

Substitute for + in Part No.	ANSI Type	Alloy Identification		ANSI Color Code		Overall Jacket	Temperature Range °C	Limits of Error
		Positive Wire	Negative Wire	Positive Wire	Negative Wire			
1	EX	Chromel	Constantan	Purple	Red	Purple	0 to +200°C	+1.7°C
2	JX	Iron	Constantan	White	Red	Black	0 to +200°C	+2.2°C
3	KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200°C	+2.2°C
4	SX	Copper	Copper-Alloy II	Black	Red	Green	0 to +200°C	+5.0°C
5	TX	Copper	Constantan	Blue	Red	Blue	-60 to +100°C	+1.0°C

Thermocouple Extension Cables

300 Volt Thermoplastic PVC (Steel Interlocked Armor)



Description

- Conductor Solid alloy wire
- Primary insulation 15 mils (0.4 mm) 105°C FR-PVC
- Color code ANSI standard
- Pair shield (Type 1809/1826) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield (Type 1821/1826) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket . . . FR-PVC, ANSI color-coded
- Communication wire (Type 1821/1826) 22 AWG copper, color-coded orange
- Armor Flexible, interlocked galvanized steel armor

Application

- UL listed as PLTC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- Good chemical and long-term moisture resistance
- NEC Article 725
- Served wire armor offers cut-through resistance and is suitable for vertical drops
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1806 – Single pair unshielded
- 1809 – Single pair shielded
- 1821 – Multiple pair overall shield
- 1826 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, CSA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design
- Tinned copper conductors

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Also available in 18 AWG

Electrical Properties	Units		Conductor Size			
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²	
Mutual Capacitance						
Type 1806	pF/ft.	pF/m	31	100	36	119
Type 1809	pF/ft.	pF/m	49	160	64	210
Type 1821	pF/ft.	pF/m	31	100	36	119
Type 1826	pF/ft.	pF/m	49	160	64	210
Inductance (L)	μH/ft.	μH/m	0.19	0.62	0.17	0.54

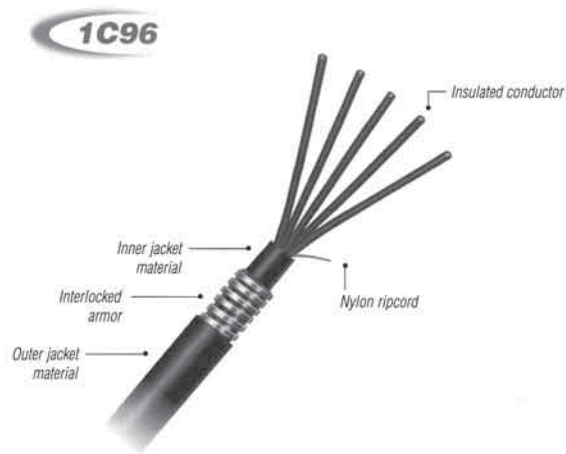
Product Dimensions

Part Number	Pairs	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
1821-004+0	4	0.396	10.1	0.646	16.4	0.267	0.400	40	1.02
1821-008+0	8	0.523	13.3	0.793	20.1	0.375	0.562	50	1.27
1821-012+0	12	0.606	15.4	0.876	22.3	0.451	0.676	50	1.27
1821-016+0	16	0.696	17.7	0.986	25.0	0.528	0.791	60	1.52
1821-024+0	24	0.813	20.6	1.103	28.0	0.724	1.086	60	1.52
1821-036+0	36	0.951	24.2	1.261	32.0	0.894	1.340	70	1.78
1826-004+0	4	0.457	11.6	0.727	18.5	0.289	0.433	50	1.27
1826-008+0	8	0.575	14.6	0.845	21.5	0.420	0.630	50	1.27
1826-012+0	12	0.708	18.0	0.998	25.3	0.521	0.781	60	1.52
1826-016+0	16	0.781	19.8	1.071	27.2	0.670	1.005	60	1.52
1826-024+0	24	0.972	24.7	1.282	32.6	0.859	1.288	70	1.78
1826-036+0	36	1.105	28.1	1.415	35.9	1.133	1.699	70	1.78
Conductor size: 16 AWG / 1.3 mm ²									
1821-604+0	4	0.517	13.1	0.787	20.0	0.396	0.594	50	1.27
1821-608+0	8	0.663	16.8	0.953	24.2	0.551	0.826	60	1.52
1821-612+0	12	0.772	19.6	1.062	27.0	0.759	1.138	60	1.52
1821-616+0	16	0.863	21.9	1.153	29.3	0.890	1.334	60	1.52
1821-624+0	24	1.038	26.4	1.348	34.2	1.209	1.813	70	1.78
1821-636+0	36	1.192	30.3	1.502	38.2	1.561	2.341	70	1.78
1826-604+0	4	0.553	14.0	0.823	20.9	0.441	0.661	50	1.27
1826-608+0	8	0.727	18.5	1.017	25.8	0.694	1.040	60	1.52
1826-612+0	12	0.873	22.3	1.163	29.5	0.883	1.324	60	1.52
1826-616+0	16	0.988	25.1	1.278	32.5	1.107	1.660	60	1.52
1826-624+0	24	1.211	30.8	1.521	38.6	1.461	2.192	70	1.78
1826-636+0	36	1.404	35.9	1.734	44.0	1.966	2.949	80	2.03

Alloy Identification

Substitute for + in Part No.	ANSI Type	Alloy Identification		ANSI Color Code		Overall Jacket	Temperature Range °C	Limits of Error
		Positive Wire	Negative Wire	Positive Wire	Negative Wire			
1	EX	Chromel	Constantan	Purple	Red	Purple	0 to +200°C	+1.7°C
2	JX	Iron	Constantan	White	Red	Black	0 to +200°C	+2.2°C
3	KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200°C	+2.2°C
4	SX	Copper	Copper-Alloy II	Black	Red	Green	0 to +200°C	+5.0°C
5	TX	Copper	Constantan	Blue	Red	Blue	-60 to +100°C	+1.0°C

600 Volt Thermoplastic PVC/Nylon (Steel Interlocked Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) FR-PVC,
4 mils (0.1 mm) nylon
- Color code ICEA Method 4, black and numbered
- Cable shield
(optional) 100% coverage, an aluminum-
polyester tape shield and a 7-strand
tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor Flexible, interlocked galvanized steel
armor

Application

- Offers resistance to a wide range of chemicals, including acids, alkalis, alcohol, petroleum and mineral oils
- 600 volt rated insulation

Bending Radius

- 12 x d (d = overall diameter)

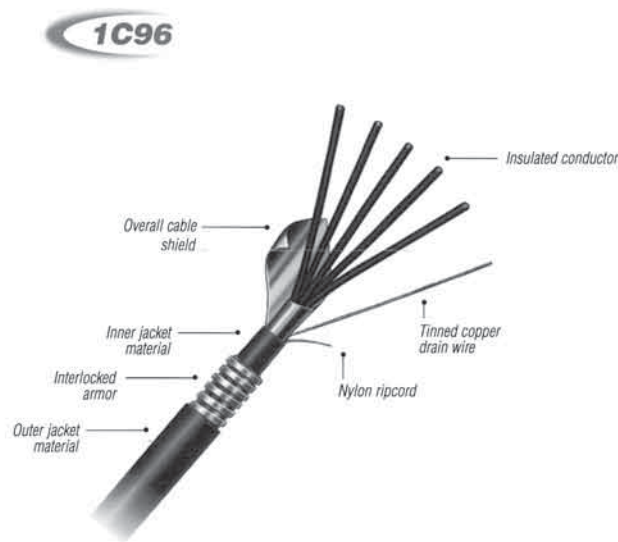
Cable Type

- 1C96 – Multiple conductor cable

Cable Options

- Manufactured in accordance with Dekoron standards. Also available to ICEA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design
- Tinned copper conductors

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



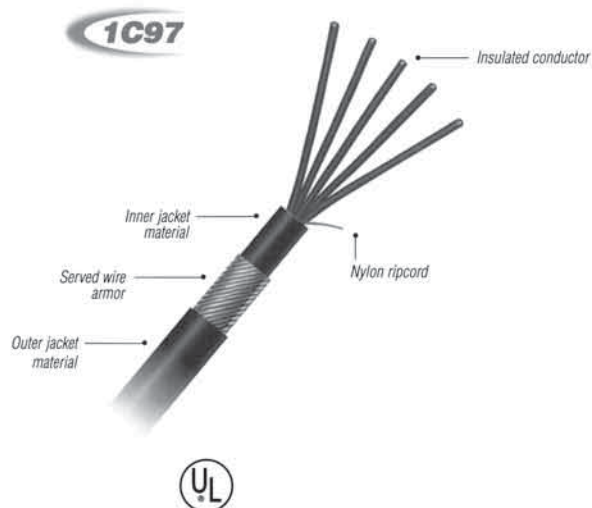
Electrical Properties	Units		Conductor Size					
			16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	2.6	8.6	2.2	7.2
L/R Ratio	μH/Ω	μH/Ω	21	21	31	31	37	37
Inductance (L)	μH/ft	μH/m	0.17	0.58	0.17	0.54	0.16	0.53

Product Dimensions

Part Number*	Conductors	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 16 AWG / 1.3 mm ²									
1C96-6050LC	5	0.386	9.8	0.656	16.7	0.356	0.533	50	1.27
1C96-6070LC	7	0.416	10.6	0.686	17.4	0.404	0.605	50	1.27
1C96-6090LC	9	0.477	12.1	0.747	19.0	0.506	0.759	50	1.27
1C96-6120LC	12	0.532	13.5	0.802	20.4	0.584	0.875	50	1.27
1C96-6190LC	19	0.656	16.7	0.926	23.5	0.737	1.106	50	1.27
Conductor size: 14 AWG / 2.1 mm ²									
1C96-4050LC	5	0.426	10.8	0.696	17.7	0.514	0.770	50	1.27
1C96-4070LC	7	0.461	11.7	0.731	18.6	0.586	0.879	50	1.27
1C96-4090LC	9	0.531	13.5	0.801	20.3	0.689	1.033	50	1.27
1C96-4120LC	12	0.634	16.1	0.904	23.0	0.816	1.223	50	1.27
1C96-4190LC	19	0.731	18.6	1.001	25.4	1.121	1.681	50	1.27
Conductor size: 2.5 mm ²									
1C96-P050LC	5	0.445	11.3	0.715	18.2	0.537	0.805	50	1.27
1C96-P070LC	7	0.482	12.2	0.752	19.1	0.616	0.923	50	1.27
1C96-P090LC	9	0.596	15.1	0.866	22.0	0.732	1.097	50	1.27
1C96-P120LC	12	0.663	16.8	0.933	23.7	0.918	1.377	50	1.27
1C96-P190LC	19	0.766	19.5	1.036	26.3	1.194	1.790	50	1.27

* Change ninth digit in part number to 0 for shielded cable.

600 Volt Thermoplastic PVC/Nylon (Served Wire Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) PVC,
4 mils (0.1 mm) nylon
- Color code ICEA Method 4, black and numbered
- Cable shield
(optional). 100% coverage, an aluminum-
polyester tape shield and a 7-strand
tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor. Multiple strands of served galvanized
steel wire (SWA)

Application

- Offers resistance to a wide range of chemicals, including acids, alkalies, alcohol, petroleum and mineral oils
- 600 volt rated insulation

Bending Radius

- 12 x d (d = overall diameter)

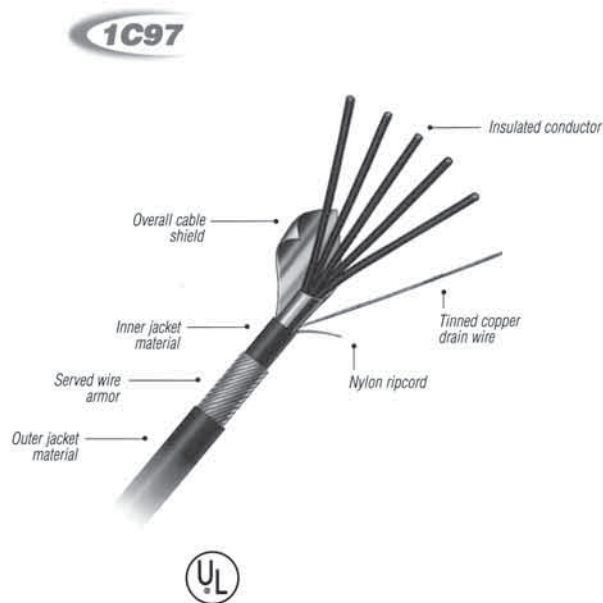
Cable Type

- 1C97 – Multiple conductor cable

Cable Options

- Manufactured in accordance with Dekoron standards. Also available to ICEA or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Tinned copper conductors

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



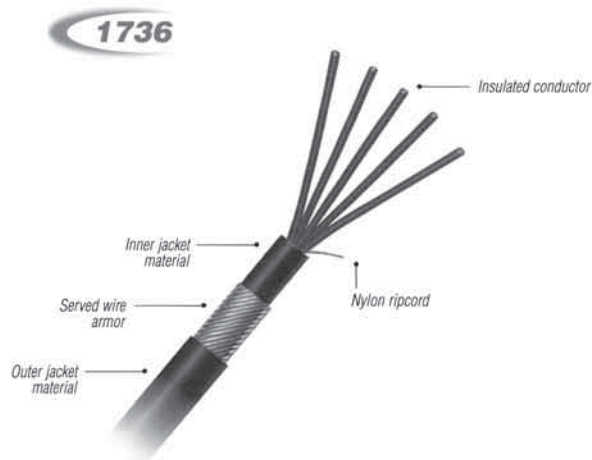
Electrical Properties	Units		Conductor Size					
			16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	2.6	8.6	2.2	7.2
L/R Ratio	μH/Ω	μH/Ω	21	21	31	31	37	37
Inductance (L)	μH/ft	μH/m	0.17	0.58	0.17	0.54	0.16	0.53

Product Dimensions

Part Number*	Conductors	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 16 AWG / 1.3 mm ²									
1C97-6050LC	5	0.386	9.8	0.586	14.9	0.314	0.471	65	1.65
1C97-6070LC	7	0.416	10.6	0.616	15.6	0.362	0.542	65	1.65
1C97-6090LC	9	0.477	12.1	0.677	17.2	0.534	0.801	65	1.65
1C97-6120LC	12	0.532	13.5	0.758	19.3	0.622	0.932	65	1.65
1C97-6190LC	19	0.656	16.7	0.912	23.2	0.920	1.380	65	1.65
Conductor size: 14 AWG/ 2.1 mm ²									
1C97-4050LC	5	0.426	10.8	0.626	15.9	0.542	0.813	65	1.65
1C97-4070LC	7	0.461	11.7	0.661	16.8	0.625	0.937	65	1.65
1C97-4090LC	9	0.531	13.5	0.757	19.2	0.872	1.308	65	1.65
1C97-4120LC	12	0.634	16.1	0.860	21.8	1.030	1.544	65	1.65
1C97-4190LC	19	0.731	18.6	0.987	25.1	1.373	2.059	65	1.65
Conductor size: 2.5 mm ²									
1C97-P050LC	5	0.445	11.3	0.645	16.4	0.567	0.850	65	1.65
1C97-P070LC	7	0.482	12.2	0.682	17.3	0.779	1.169	65	1.65
1C97-P090LC	9	0.596	15.1	0.822	20.9	0.917	1.375	65	1.65
1C97-P120LC	12	0.663	16.8	0.889	22.6	1.139	1.707	65	1.65
1C97-P190LC	19	0.766	19.5	1.022	26.0	1.456	2.183	65	1.65

* Change ninth digit in part number to 0 for shielded cable.

600 Volt Thermoplastic Polyethylene (Served Wire Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 25 mils (0.6 mm) for 16 AWG
30 mils (0.8 mm) for 14 AWG
and larger, polyethylene
- Color code ICEA Method 4, black and numbered
- Shield (optional) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor Multiple strands of served galvanized steel wire (SWA)

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Non-flame retardant (does not pass IEEE 383 or IEC 332)
- 600 volt rated insulation per ICEA

Bending Radius

- $12 \times d$ (d = overall diameter)

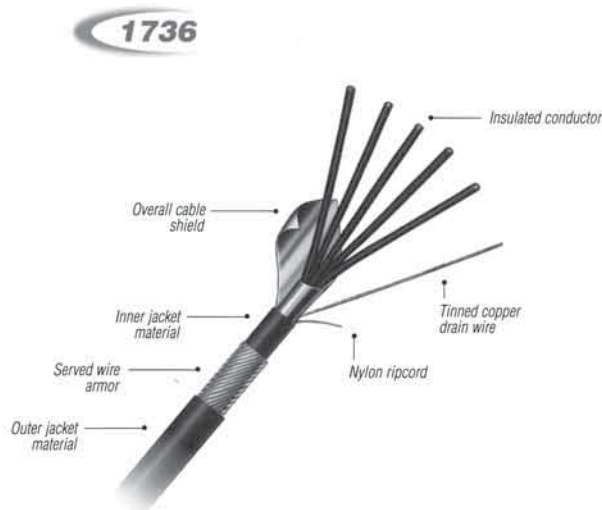
Cable Type

- 1736 – Multiple conductor

Cable Options

- Manufactured in accordance with ICEA. Also available to ICEA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- LDPE or CPE jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



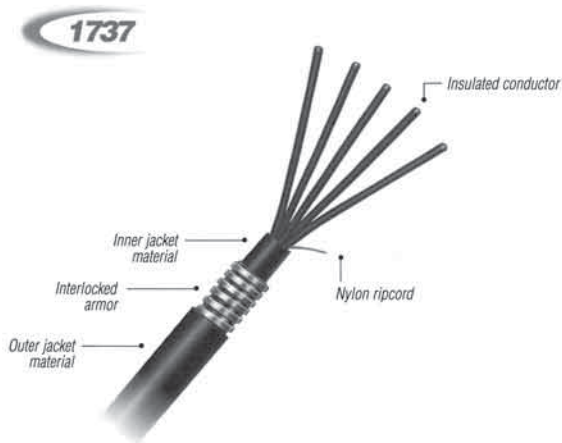
Electrical Properties	Units		Conductor Size					
			16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	2.6	8.6	2.2	7.2
L/R Ratio	μH/Ω	μH/Ω	21	21	33	33	37	37
Inductance (L)	μH/ft	μH/m	0.18	0.59	0.17	0.55	0.16	0.54

Product Dimensions

Part Number *	Conductors	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 16 AWG / 1.3 mm ²									
1736-605FL	5	0.381	9.7	0.511	13.0	0.258	0.386	65	1.65
1736-607FL	7	0.442	11.2	0.572	14.5	0.297	0.445	65	1.65
1736-609FL	9	0.504	12.8	0.634	16.1	0.407	0.610	65	1.65
1736-612FL	12	0.560	14.2	0.690	17.5	0.509	0.762	65	1.65
1736-619FL	19	0.666	16.9	0.796	20.2	0.760	1.139	65	1.65
Conductor size: 14 AWG/ 2.1 mm ²									
1736-405LL	5	0.451	11.5	0.651	16.5	0.316	0.474	65	1.65
1736-407LL	7	0.487	12.4	0.687	17.4	0.436	0.654	65	1.65
1736-409LL	9	0.558	14.2	0.784	19.9	0.549	0.823	65	1.65
1736-412LL	12	0.623	15.8	0.849	21.6	0.770	1.154	65	1.65
1736-419LL	19	0.741	18.8	1.027	26.1	0.973	1.460	65	1.65
Conductor size: 2.5 mm ²									
1736-P05LL	5	0.470	11.9	0.670	17.0	0.394	0.591	65	1.65
1736-P07LL	7	0.508	12.9	0.734	18.6	0.490	0.735	65	1.65
1736-P09LL	9	0.583	14.8	0.809	20.5	0.580	0.869	65	1.65
1736-P12LL	12	0.672	17.1	0.928	23.6	0.816	1.223	65	1.65
1736-P19LL	19	0.776	19.7	1.062	27.0	1.095	1.642	65	1.65

* Change ninth digit in part number to 0 for shielded cable.

600 Volt Thermoplastic Polyethylene (Steel Interlocked Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 25 mils (0.6 mm) for 16 AWG
30 mils (0.8 mm) for 14 AWG
and larger, polyethylene
- Color code ICEA Method 4, black and numbered
- Shield (optional) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket Black FR-PVC
- Armor Flexible, interlocked galvanized steel armor

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Non-flame retardant (does not pass IEEE 383 or IEC 332)
- 600 volt rated insulation per ICEA

Bending Radius

- $12 \times d$ (d = overall diameter)

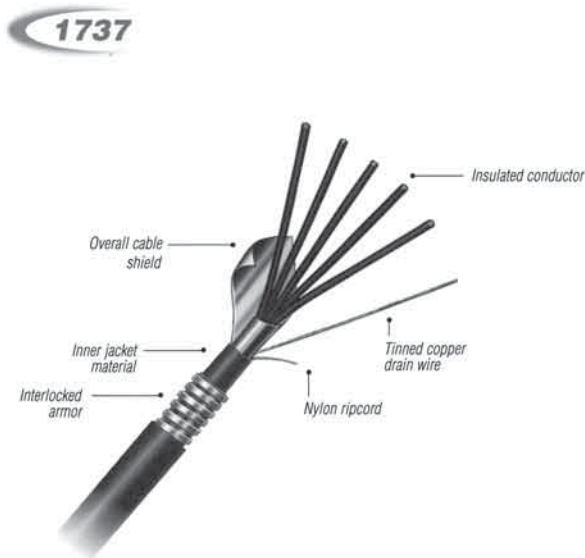
Cable Type

- 1737 – Multiple conductor

Cable Options

- Manufactured in accordance with ICEA. Also available to IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design
- LDPE or CPE jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

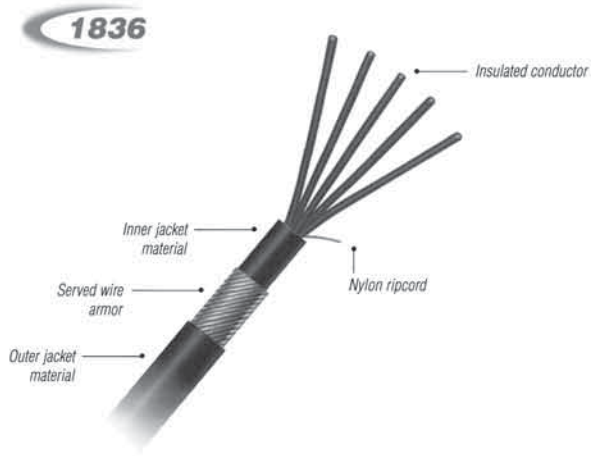


Electrical Properties	Units		Conductor Size					
			16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	2.6	8.6	2.2	7.2
L/R Ratio	$\mu\text{H}/\Omega$	$\mu\text{H}/\Omega$	21	21	32	32	37	37
Inductance (L)	$\mu\text{H}/\text{ft}$	$\mu\text{H}/\text{m}$	0.18	0.59	0.17	0.55	0.16	0.54

Product Dimensions

Part Number*	Conductors	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 16 AWG / 1.3 mm ²									
1737-605FL	5	0.381	9.7	0.651	16.5	0.258	0.386	50	1.27
1737-607FL	7	0.442	11.2	0.712	18.1	0.297	0.445	50	1.27
1737-609FL	9	0.504	12.8	0.774	19.7	0.407	0.610	50	1.27
1737-612FL	12	0.560	14.2	0.830	21.1	0.509	0.762	50	1.27
1737-619FL	19	0.666	16.9	0.936	23.8	0.760	1.139	50	1.27
Conductor size: 14 AWG/ 2.1 mm ²									
1737-405LL	5	0.451	11.5	0.721	18.3	0.316	0.474	50	1.27
1737-407LL	7	0.487	12.4	0.757	19.2	0.436	0.654	50	1.27
1737-409LL	9	0.558	14.2	0.828	21.0	0.549	0.823	50	1.27
1737-412LL	12	0.623	15.8	0.893	22.7	0.770	1.154	50	1.27
1737-419LL	19	0.741	18.8	1.011	25.7	0.973	1.460	50	1.27
Conductor size: 2.5 mm ²									
1737-P05LL	5	0.470	11.9	0.740	18.8	0.394	0.591	50	1.27
1737-P07LL	7	0.508	12.9	0.778	19.8	0.490	0.735	50	1.27
1737-P09LL	9	0.583	14.8	0.853	21.7	0.580	0.869	50	1.27
1737-P12LL	12	0.672	17.1	0.942	23.9	0.816	1.223	50	1.27
1737-P19LL	19	0.776	19.7	1.046	26.6	1.095	1.642	50	1.27

* Change ninth digit in part number to 0 for shielded cable.



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 30 mils (0.8 mm)
- Color code ICEA Method 4, black and numbered
- Cable shield (optional) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor Multiple strands of served galvanized steel wire (SWA)

Application

- Offers resistance to a wide range of chemicals
- 600 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

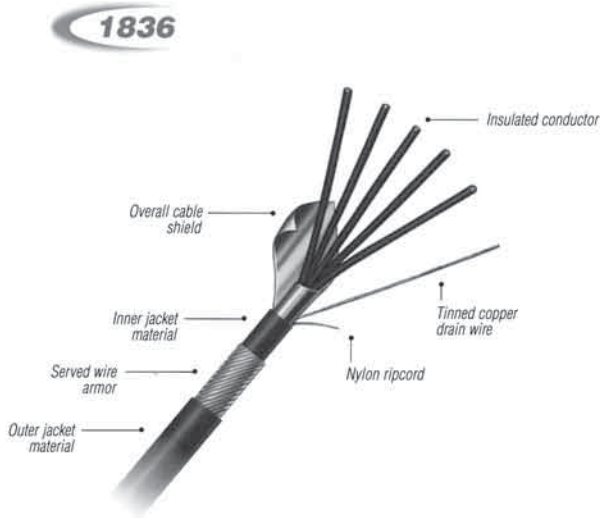
Cable Type

- 1836 – Multiple conductor cable

Cable Options

- Manufactured in accordance with Dekoron standards. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



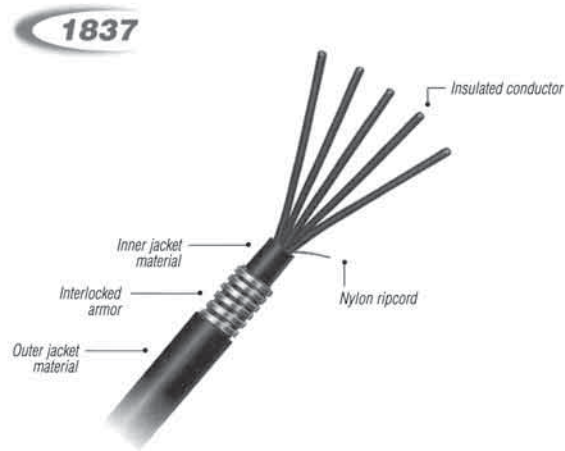
Electrical Properties	Units		Conductor Size					
			16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	2.6	8.6	2.2	7.2
L/R Ratio	μH/Ω	μH/Ω	24	24	40	40	47	47
Inductance (L)	μH/ft	μH/m	0.20	0.66	0.21	0.70	0.21	0.68

Product Dimensions

Part Number*	Conductors	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 16 AWG / 1.3 mm ²									
1836-605LLC	5	0.445	11.3	0.645	16.4	0.314	0.471	65	1.65
1836-607LLC	7	0.482	12.2	0.682	17.3	0.362	0.542	65	1.65
1836-609LLC	9	0.596	15.1	0.822	20.9	0.534	0.801	65	1.65
1836-612LLC	12	0.663	16.8	0.889	22.6	0.622	0.932	65	1.65
1836-619LLC	19	0.766	19.5	1.022	26.0	0.920	1.380	65	1.65
Conductor size: 14 AWG/ 2.1 mm ²									
1836-405PLC	5	0.610	15.5	0.836	21.2	0.542	0.813	65	1.65
1836-407PLC	7	0.661	16.8	0.887	22.5	0.625	0.937	65	1.65
1836-409PLC	9	0.764	19.4	1.020	25.9	0.872	1.308	65	1.65
1836-412PLC	12	0.896	22.8	1.152	29.3	1.030	1.544	65	1.65
1836-419PLC	19	1.038	26.4	1.294	32.9	1.373	2.059	65	1.65
Conductor size: 2.5 mm ²									
1836-P05PLC	5	0.629	16.0	0.855	21.7	0.567	0.850	65	1.65
1836-P07PLC	7	0.682	17.3	0.938	23.8	0.779	1.169	65	1.65
1836-P09PLC	9	0.789	20.0	1.045	26.5	0.917	1.375	65	1.65
1836-P12PLC	12	0.925	23.5	1.181	30.0	1.139	1.707	65	1.65
1836-P19PLC	19	1.073	27.3	1.329	33.8	1.456	2.183	65	1.65

* Change ninth digit in part number to 0 for shielded cable.

600 Volt Thermoplastic PVC (Steel Interlocked Armor)



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation 30 mils (0.8 mm)
- Color code ICEA Method 4, black and numbered
- Cable shield (optional) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner and outer jacket . . Black FR-PVC
- Armor Flexible, interlocked galvanized steel armor

Application

- Offers resistance to a wide range of chemicals
- 600 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1837 – Multiple conductor cable

Cable Options

- Manufactured in accordance with Dekoron standards. Also available to ICEA, IEC, CSA, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Aluminum interlocked armor cable design

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



Electrical Properties	Units		Conductor Size					
			16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	2.6	8.6	2.2	7.2
L/R Ratio	μH/Ω	μH/Ω	24	24	40	40	47	47
Inductance (L)	μH/ft	μH/m	0.20	0.66	0.21	0.70	0.21	0.68

Product Dimensions

Part Number*	Conductors	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 16 AWG / 1.3 mm ²									
1837-605LLC	5	0.445	11.3	0.715	18.2	0.356	0.533	50	1.27
1837-607LLC	7	0.482	12.2	0.752	19.1	0.404	0.605	50	1.27
1837-609LLC	9	0.596	15.1	0.866	22.0	0.506	0.759	50	1.27
1837-612LLC	12	0.663	16.8	0.933	23.7	0.584	0.875	50	1.27
1837-619LLC	19	0.766	19.5	1.036	26.3	0.737	1.106	50	1.27
Conductor size: 14 AWG/ 2.1 mm ²									
1837-405PLC	5	0.610	15.5	0.880	22.4	0.514	0.770	50	1.27
1837-407PLC	7	0.661	16.8	0.931	23.6	0.586	0.879	50	1.27
1837-409PLC	9	0.764	19.4	1.034	26.3	0.689	1.033	50	1.27
1837-412PLC	12	0.896	22.8	1.156	29.4	0.816	1.223	50	1.27
1837-419PLC	19	1.038	26.4	1.308	33.2	1.121	1.681	50	1.27
Conductor size: 2.5 mm ²									
1837-P05PLC	5	0.629	16.0	0.899	22.8	0.537	0.805	50	1.27
1837-P07PLC	7	0.681	17.3	0.952	24.2	0.616	0.923	50	1.27
1837-P09PLC	9	0.789	20.0	1.059	26.9	0.732	1.097	50	1.27
1837-P12PLC	12	0.925	23.5	1.195	30.4	0.918	1.377	50	1.27
1837-P19PLC	19	1.073	27.3	1.343	34.1	1.194	1.790	50	1.27

* Change ninth digit in part number to 0 for shielded cable.



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation. . . . 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors 2
- Color code Black and white
- Pair shield (Type 1855) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner jacket. Black FR-PVC
- Dekabon layer An aluminum tape 8 mils (0.2 mm) thick, coated on both sides with a protective polymer 2 mils (0.05 mm) thick
- Outer jacket Dekabon Black CPE

Application

- Dekabon cable provides special protection against moisture, most chemicals and abrasive backfilling
- Suitable for direct burial
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC article 725/727

Bending Radius

- $12 \times d$ (d = overall diameter)

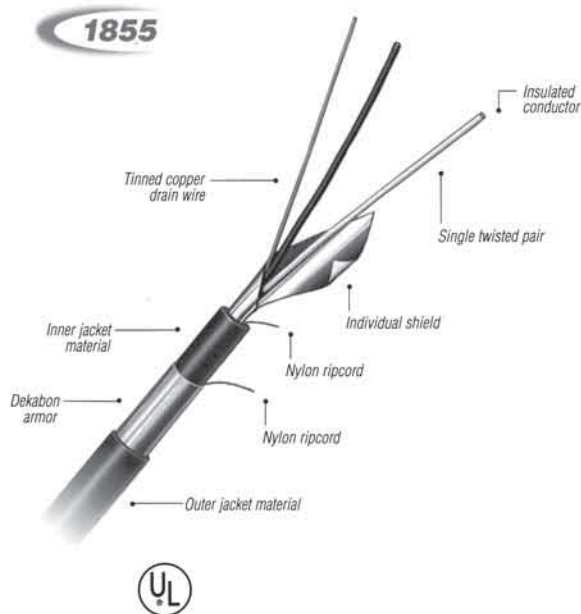
Cable Type

- 1854 – Single pair unshielded
- 1855 – Single pair shielded

Cable Options

- Manufactured in accordance with UL. Also available to ICEA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- HDPE jacket
- LDPE jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

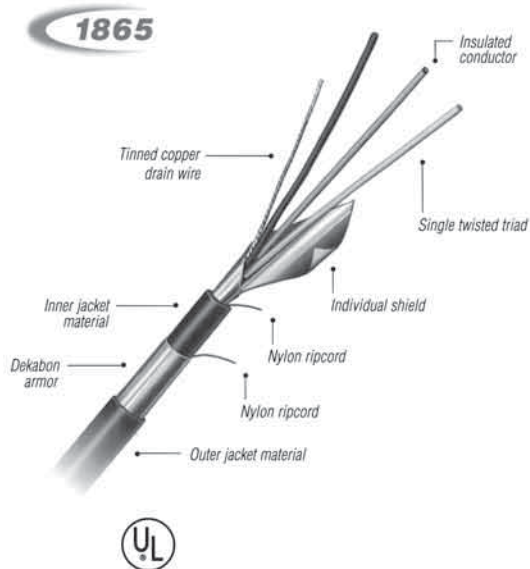


Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.2	13.7	3.6	11.9
Mutual Capacitance								
Type 1854	pF/ft	pF/m	31	100	36	119	37	122
Type 1855	pF/ft	pF/m	49	160	64	210	67	218
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

Part Number	Pairs	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²									
Dekabon									
1854-086RS	1	0.231	5.9	0.361	9.2	0.059	0.088	35	0.89
1855-086RS	1	0.236	6.0	0.366	9.3	0.062	0.093	35	0.89
Conductor Size: 16 AWG / 1.3 mm ²									
Dekabon									
1854-686RS	1	0.274	7.0	0.404	10.3	0.081	0.120	35	0.89
1855-686RS	1	0.278	7.1	0.408	10.4	0.088	0.131	35	0.89
Conductor Size: 1.5 mm ²									
Dekabon									
1854-N86RS	1	0.282	7.2	0.412	10.5	0.084	0.125	35	0.89
1855-N86RS	1	0.286	7.3	0.416	10.6	0.091	0.137	35	0.89

300 Volt Thermoplastic PVC (Single Triad) – Dekabon



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation. . . . 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors 3
- Color code Black, white and red
- Pair shield (Type 1865) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner jacket. Black FR-PVC
- Dekabon layer An aluminum tape 8 mils (0.2 mm) thick, coated on both sides with a protective polymer 2 mils (0.05 mm) thick
- Outer jacket Dekabon – Black CPE

Application

- Dekabon cable provides special protection against moisture, most chemicals and abrasive backfilling
- Suitable for direct burial
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC article 725/727

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1864 – Single triad unshielded
- 1865 – Single triad shielded

Cable Options

- Manufactured in accordance with UL. Also available to ICEA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- HDPE jacket
- LDPE jacket

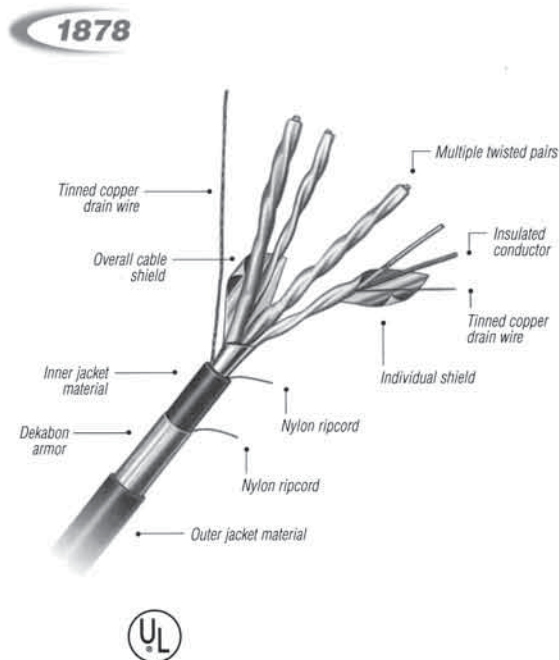
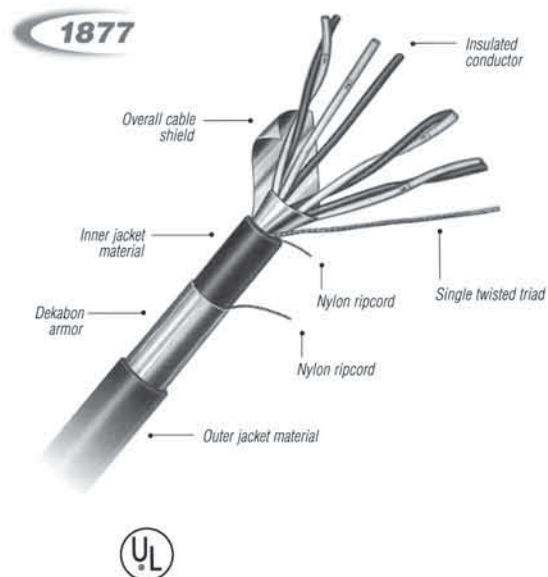
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size					
			20 AWG / 0.5 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5	4.2	13.7	3.6	11.9
Mutual Capacitance								
Type 1864	pF/ft	pF/m	31	100	36	119	37	122
Type 1865	pF/ft	pF/m	49	160	64	210	67	218
L/R Ratio	μH/Ω	μH/Ω	9	9	20	20	22	22
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54	0.16	0.53

Product Dimensions

Part Number	Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²									
Dekabon									
1864-086RS	1	0.242	6.2	0.372	9.4	0.062	0.093	35	0.89
1865-086RS	1	0.253	6.4	0.383	9.7	0.070	0.104	35	0.89
Conductor Size: 16 AWG / 1.3 mm ²									
Dekabon									
1864-686RS	1	0.288	7.3	0.418	10.6	0.089	0.134	35	0.89
1865-686RS	1	0.312	7.9	0.442	11.2	0.102	0.152	35	0.89
Conductor Size: 1.5 mm ²									
Dekabon									
1864-N86RS	1	0.307	7.8	0.437	11.1	0.095	0.142	35	0.89
1865-N86RS	1	0.321	8.2	0.451	11.5	0.115	0.172	35	0.89

300 Volt Thermoplastic PVC (Multiple Pair) – Dekabon



Description

- Conductor. 7-strand bare copper, Class B
- Primary insulation 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors 2
- Color code Black and white
- Group identification Each pair numbered
- Pair shield (Type 1878) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1877/1878) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Communications wire. 22 AWG copper, color-coded orange
- Inner jacket. Black FR-PVC
- Dekabon layer An aluminum tape 8 mils (0.2 mm) thick, coated on both sides with a protective polymer 2 mils (0.05 mm) thick
- Outer jacket Dekabon – Black CPE

Application

- Dekabon cable provides special protection against moisture, most chemicals and abrasive backfilling
- Suitable for direct burial
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC article 725/727

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1877 – Multiple pair overall shield
- 1878 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- HDPE jacket
- LDPE jacket

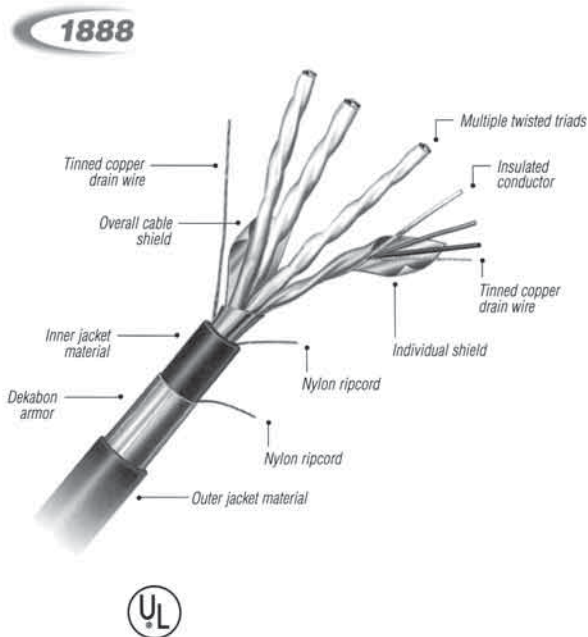
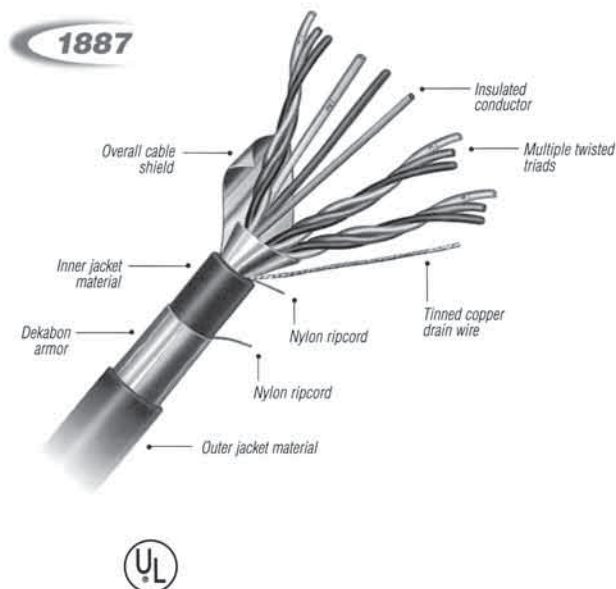
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size	
			20 AWG / 0.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5
Mutual Capacitance				
Type 1877	pF/ft	pF/m	31	100
Type 1878	pF/ft	pF/m	49	160
L/R Ratio	μH/Ω	μH/Ω	9	9
Inductance (L)	μH/ft	μH/m	0.19	0.62

Product Dimensions

Part Number	Pairs	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²									
Dekabon									
1877-0048S	4	0.396	10.1	0.556	14.1	0.171	0.255	50	1.27
1877-0088S	8	0.523	13.3	0.683	17.3	0.239	0.356	50	1.27
1877-0128S	12	0.606	15.4	0.786	20.0	0.304	0.453	60	1.52
1877-0168S	16	0.696	17.7	0.876	22.3	0.412	0.613	60	1.52
1877-0248S	24	0.813	20.6	1.010	25.7	0.537	0.799	70	1.78
1877-0368S	36	0.951	24.2	1.151	29.2	0.747	1.111	70	1.78
Dekabon									
1878-0048S	4	0.457	11.6	0.597	15.2	0.188	0.28	40	1.02
1878-0088S	8	0.575	14.6	0.735	18.7	0.267	0.398	50	1.27
1878-0128S	12	0.708	18.0	0.865	22.0	0.402	0.599	50	1.27
1878-0168S	16	0.781	19.8	0.961	24.4	0.479	0.713	60	1.52
1878-0248S	24	0.972	24.7	1.152	29.3	0.683	1.016	60	1.52
1878-0368S	36	1.105	28.0	1.305	33.1	0.896	1.333	70	1.78

300 Volt Thermoplastic PVC (Multiple Triad) – Dekabon

**Description**

- Conductor 7-strand bare copper, Class B
- Primary insulation. 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors 3
- Color code Black, white and red
- Group identification Each triad numbered
- Pair shield (Type 1888) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Cable shield (Type 1887/1888) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Communications wire. 22 AWG copper, color-coded orange
- Inner jacket. Black FR-PVC
- Dekabon layer An aluminum tape 8 mils (0.2 mm) thick, coated on both sides with a protective polymer 2 mils (0.05 mm) thick
- Outer jacket Dekabon – Black CPE

Application

- Dekabon cable provides special protection against moisture, most chemicals and abrasive backfilling
- Suitable for direct burial
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1887 – Multiple triad overall shield
- 1888 – Multiple triad individual and overall shield

Cable Options

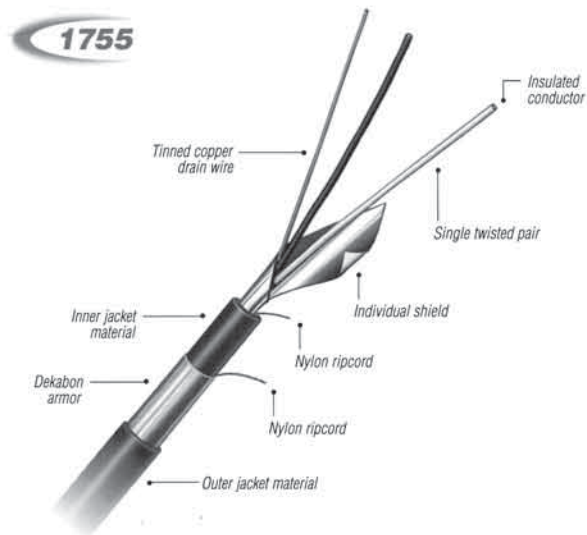
- Manufactured in accordance with UL. Also available to ICEA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- HDPE jacket
- LDPE jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size	
			20 AWG / 0.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5
Mutual Capacitance				
Type 1887	pF/ft	pF/m	31	100
Type 1888	pF/ft	pF/m	49	160
L/R Ratio	μH/Ω	μH/Ω	9	9
Inductance (L)	μH/ft	μH/m	0.19	0.62

Product Dimensions

Part Number	Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor size: 20 AWG / 0.5 mm ²									
Dekabon									
1887-0048S	4	0.470	11.9	0.630	16.0	0.203	0.302	50	1.27
1887-0128S	12	0.732	18.6	0.981	24.9	0.446	0.663	60	1.52
1887-0168S	16	0.808	20.5	1.062	27.0	0.534	0.795	60	1.52
Dekabon									
1888-0048S	4	0.497	12.6	0.657	16.7	0.22	0.328	50	1.27
1888-0128S	12	0.777	19.7	0.957	24.3	0.492	0.733	60	1.52
1888-0168S	16	0.859	21.8	1.059	26.9	0.593	0.883	70	1.78



Description

- Conductor 7-strand bare copper Class B
- Primary insulation. 15 mils (0.4 mm) for 20 AWG
20 mils (0.5 mm) for 16 AWG
and larger, polyethylene
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification Each pair/triad numbered
- Pair/triad shield (Type 1755/1765/1778/1788) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1777/1778/1787/1788) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner jacket. Black FR-PVC
- Dekabon layer An aluminum tape 8 mils (0.2 mm) thick, coated on both sides with a protective polymer 2 mils (0.05 mm) thick
- Outer jacket Dekabon – Black LDPE
Dekabon – Black CPE

Application

- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- Suitable for direct burial

Bending Radius

- $12 \times d$ (d = overall diameter)

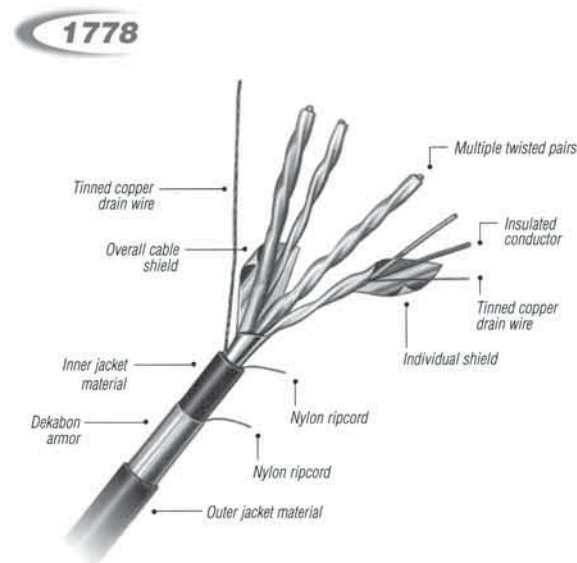
Cable Type

- 1754 – Single pair unshielded
- 1755 – Single pair shielded
- 1764 – Single triad unshielded
- 1765 – Single triad shielded
- 1777 – Multiple pair overall shield
- 1778 – Multiple pair individual and overall shield
- 1787 – Multiple triad overall shield
- 1788 – Multiple triad individual and overall shield

Cable Options

- Manufactured in accordance with ICEA. Also available to customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- HDPE jacket

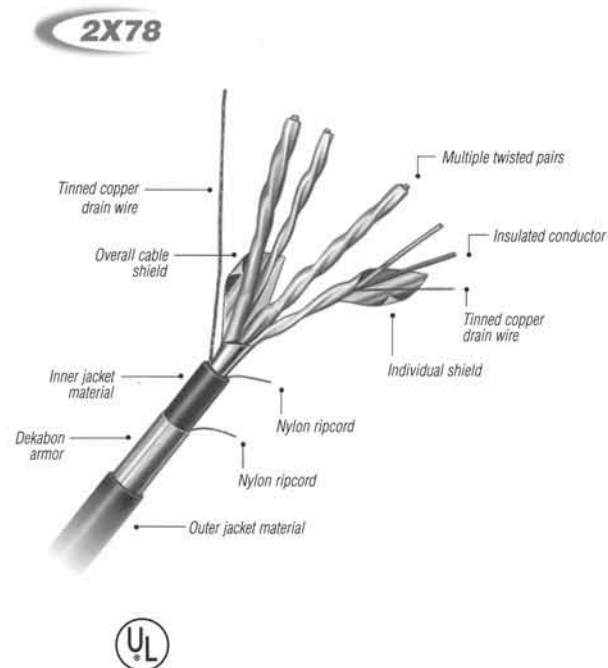
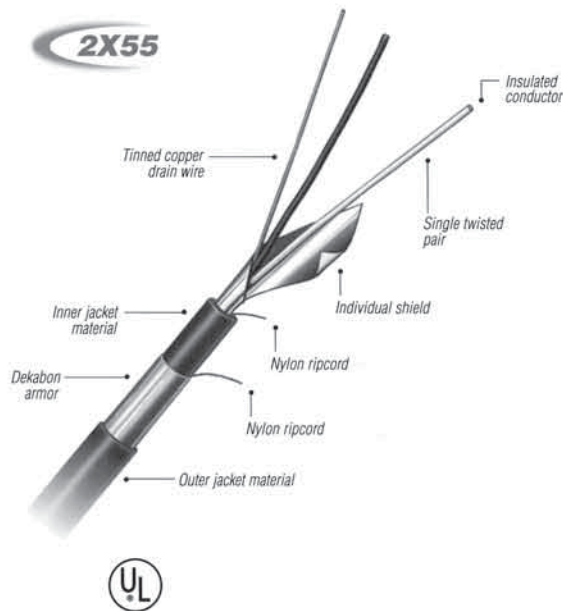
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



Electrical Properties	Units		Conductor Size	
			20 AWG / 0.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	10.5	34.5
Mutual Capacitance				
Type 1754	pF/ft	pF/m	15	51
Type 1764	pF/ft	pF/m	15	51
Type 1755	pF/ft	pF/m	26	85
Type 1765	pF/ft	pF/m	26	85
Type 1777	pF/ft	pF/m	15	51
Type 1778	pF/ft	pF/m	26	85
Type 1787	pF/ft	pF/m	15	51
Type 1788	pF/ft	pF/m	26	85
L/R Ratio	μH/Ω	μH/Ω	9	9
Inductance (L)	μH/ft	μH/m	0.19	0.62

Product Dimensions

Part Number	Pairs	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²									
Dekabon									
1754-086RS	1	0.231	5.9	0.391	9.9	0.061	0.091	50	1.27
1777-0048S	4	0.396	10.1	0.556	14.1	0.171	0.255	50	1.27
1777-0088S	8	0.532	13.3	0.683	17.3	0.239	0.356	50	1.27
1777-0128S	12	0.606	15.4	0.766	19.5	0.304	0.453	50	1.27
1777-0248S	24	0.813	20.6	1.003	25.5	0.537	0.799	65	1.65
Dekabon									
1755-086RS	1	0.291	7.4	0.451	11.5	0.065	0.097	50	1.27
1778-0048S	4	0.457	11.6	0.617	15.7	0.188	0.280	50	1.27
1778-0088S	8	0.575	14.6	0.735	18.7	0.267	0.398	50	1.27
1778-0128S	12	0.708	18.0	0.898	22.8	0.402	0.599	65	1.65
1778-0368S	36	0.972	24.7	1.162	29.5	0.896	1.333	65	1.65



Description

- Conductor 7-strand bare copper Class B
- Primary insulation. . . . 15 mils (0.5 mm) XLPE
- Color code Black and white (pairs)
Black, white and red (triads)
- Group identification . . . Each pair/triad numbered
- Pair/triad shield (Type 2X55/2X65/2X78/2X88) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 2X77/2X78/2X87/2X88) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner jacket. Black FR-PVC
- Dekabon layer An aluminum tape 8 mils (0.2 mm) thick, coated on both sides with a protective polymer 2 mils (0.05 mm) thick
- Outer jacket Dekabon – Black CPE

Application

- UL listed as PLTC/ITC
- Excellent dielectric properties
- Good chemical and long-term moisture resistance
- NEC Article 725/727
- Flame retardant

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 2X54 – Single pair unshielded
- 2X55 – Single pair shielded
- 2X64 – Single triad unshielded
- 2X65 – Single triad shielded
- 2X77 – Multiple pair overall shield
- 2X78 – Multiple pair individual and overall shield
- 2X87 – Multiple triad overall shield
- 2X88 – Multiple triad individual and overall shield

Cable Options

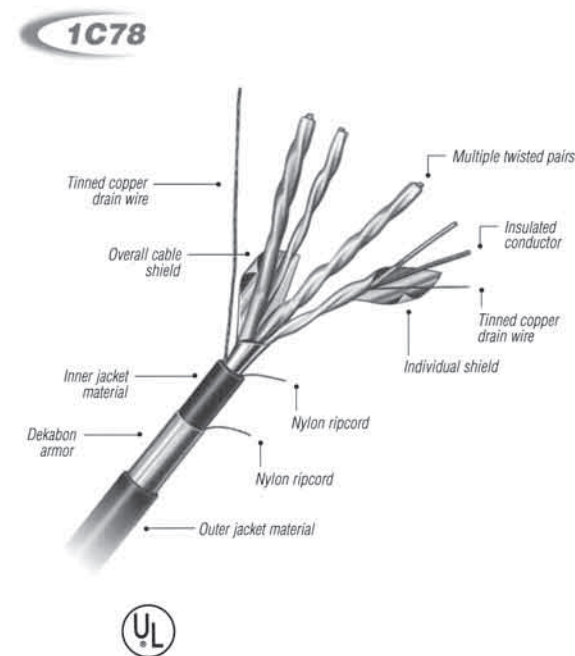
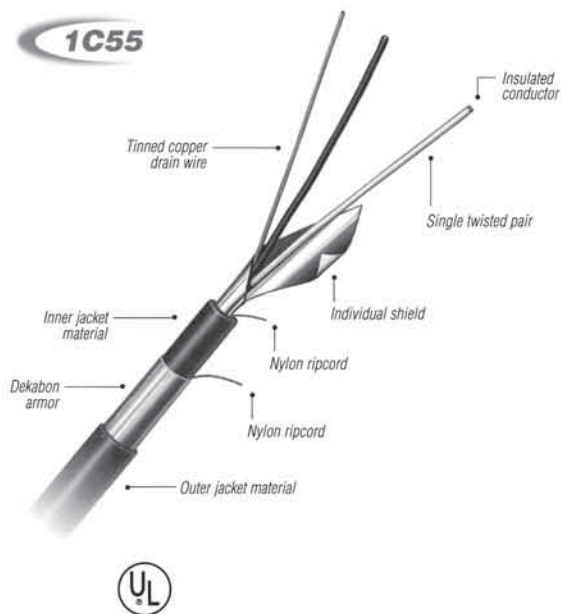
- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- LDPE jacket

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size	
			20 AWG / 0.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	11.1	36.4
Mutual Capacitance				
Type 2X54	pF/ft	pF/m	18	60
Type 2X55	pF/ft	pF/m	28	93
Type 2X64	pF/ft	pF/m	18	60
Type 2X65	pF/ft	pF/m	28	93
Type 2X77	pF/ft	pF/m	18	60
Type 2X78	pF/ft	pF/m	28	93
Type 2X87	pF/ft	pF/m	18	60
Type 2X88	pF/ft	pF/m	28	93
L/R Ratio	μH/Ω	μH/Ω	9	9
Inductance (L)	μH/ft	μH/m	0.21	0.67

Product Dimensions

Part Number	Pairs	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²									
Dekabon									
2X77-0045S	4	0.474	12.0	0.634	16.1	0.171	0.255	50	1.27
2X77-0085S	8	0.587	14.9	0.747	19.0	0.239	0.356	50	1.27
2X77-0125S	12	0.704	17.9	0.884	22.5	0.304	0.453	60	1.52
2X77-0245S	24	0.942	23.9	1.142	29.0	0.537	0.799	70	1.78
Dekabon									
2X78-0045S	4	0.508	12.9	0.668	17.0	0.188	0.280	50	1.27
2X78-0085S	8	0.665	16.9	0.845	21.5	0.267	0.398	60	1.52
2X78-0125S	12	0.796	20.2	0.976	24.8	0.402	0.599	60	1.52
2X78-0245S	24	1.099	27.9	1.299	33.0	0.896	1.333	70	1.78



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation. . . . 15 mils (0.4 mm) FR-PVC, 4 mils (0.1 mm) nylon
- Color code Black and red (pairs)
Black, red and white (triads)
- Group identification Each pair/triad numbered
- Pair shield (Type 1C55/1C65/1C78/1C88) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1C77/1C78/1C87/1C88) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Inner jacket. Black FR-PVC
- Dekabon layer An aluminum tape 8 mils (0.2 mm) thick, coated on both sides with a protective polymer 2 mils (0.05 mm) thick
- Outer jacket Dekabon – Black CPE

Application

- Offers resistance to a wide range of chemicals, including acids, alkalies, alcohol, petroleum and mineral oils
- UL listed as TC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- 600 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1C54 – Single pair unshielded
- 1C55 – Single pair shielded
- 1C64 – Single triad unshielded
- 1C65 – Single triad shielded
- 1C77 – Multiple pair overall shield
- 1C78 – Multiple pair individual and overall shield
- 1C87 – Multiple triad overall shield
- 1C88 – Multiple triad individual and overall shield

Cable Options

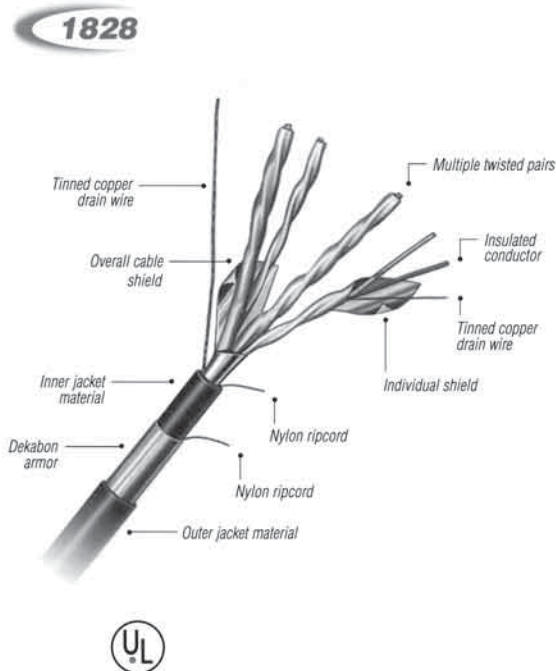
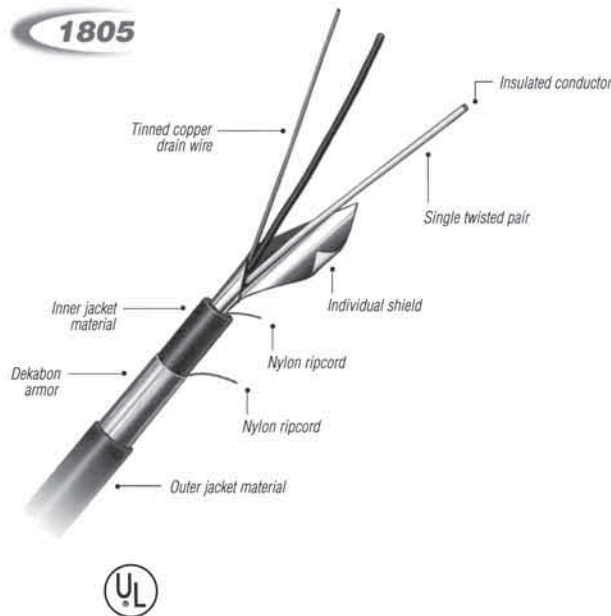
- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Pairs color-coded black and red
- Triads color-coded black, red and blue
- Tinned copper conductors available

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size			
			16 AWG / 1.3 mm ²		18 AWG / 0.8 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	6.7	21.9
Mutual Capacitance						
Type 1C54	pF/ft	pF/m	33	110	31	101
Type 1C55	pF/ft	pF/m	56	184	49	161
Type 1C64	pF/ft	pF/m	33	110	31	101
Type 1C65	pF/ft	pF/m	56	184	49	161
Type 1C77	pF/ft	pF/m	33	110	31	101
Type 1C78	pF/ft	pF/m	56	184	49	161
Type 1C87	pF/ft	pF/m	33	110	31	101
Type 1C88	pF/ft	pF/m	56	184	49	161
L/R Ratio	μH/Ω	μH/Ω	21	21	14	14
Inductance (L)	μH/ft	μH/m	0.18	0.58	0.19	0.62

Product Dimensions

Part Number	Pairs/Triads	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²									
1C55-6700S	1 PR	0.317	8.1	0.477	12.1	0.117	0.175	50	1.27
1C65-6700S	1 TR	0.343	8.7	0.503	12.8	0.133	0.199	50	1.27
1C78-6040S	4 PR	0.615	15.6	0.775	19.7	0.315	0.472	50	1.27
1C78-6080S	8 PR	0.784	19.9	0.974	24.7	0.520	0.779	65	1.65
1C78-6120S	12 PR	0.986	25.0	1.176	29.9	0.737	1.104	65	1.65
1C78-6240S	24 PR	1.335	33.9	1.525	38.7	1.223	1.834	65	1.65
1C88-6040S	4 TR	0.672	17.1	0.832	21.1	0.377	0.565	50	1.27
1C88-6120S	12 TR	1.084	27.5	1.274	32.4	0.909	1.364	65	1.65
1C88-6240S	24 TR	1.477	37.5	1.697	43.1	1.588	2.381	80	2.03
Conductor Size: 18 AWG / 0.8 mm ²									
1C55-8700S	1 PR	0.293	7.4	0.453	11.5	0.100	0.149	50	1.27
1C65-8700S	1 TR	0.316	8.0	0.476	12.1	0.117	0.175	50	1.27
1C78-8040S	4 PR	0.521	13.2	0.681	17.3	0.305	0.454	50	1.27
1C78-8080S	8 PR	0.711	18.1	0.901	22.9	0.510	0.767	65	1.65
1C78-8120S	12 PR	0.853	21.7	1.043	26.5	0.700	1.050	65	1.65
1C78-8240S	24 PR	1.202	30.5	1.392	35.4	1.200	1.800	65	2.03
1C88-8040S	4 TR	0.612	15.5	0.772	19.6	0.315	0.472	50	1.65
1C88-8120S	12 TR	0.980	24.9	1.170	29.7	0.737	1.104	65	1.65
1C88-8240S	24 TR	1.327	33.7	1.517	38.5	1.220	1.830	65	1.65



Description

- Conductor Solid alloy wire
- Primary insulation. 15 mils (0.4 mm) 105°C FR-PVC
- Number of conductors 2
- Color code ANSI standard
- Pair shield (Type 1805/1828) 100% coverage, an aluminum-polyester tape and a solid a 7-strand tinned copper drain wire
- Overall shield. (Type 1827/1828) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Communication wire. (Type 1827/1828) 22-AWG copper, color-coded orange
- Inner jacket. Black FR-PVC, ANSI color-coded
- Dekabon layer An aluminum tape 8 mils (0.2 mm) thick, coated on both sides with a protective polymer 2 mils (0.05 mm) thick
- Outer jacket CPE, ANSI Color Coded

Application

- Dekabon cable provides special protection against moisture, most chemicals and abrasive backfilling
- Suitable for direct burial
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- 300 volt rated insulation

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1804 – Single pair unshielded
- 1805 – Single pair shielded
- 1827 – Multiple pair overall shield
- 1828 – Multiple pair individual and overall shield

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Also available in 18 AWG

Electrical Properties	Units		Conductor Size			
			20 AWG / .5 mm ²		16 AWG / 1.3 mm ²	
Mutual Capacitance						
Type 1804	pF/ft	pF/m	31	100	36	119
Type 1805	pF/ft	pF/m	49	160	64	210
Type 1827	pF/ft	pF/m	31	100	36	119
Type 1828	pF/ft	pF/m	49	160	64	210
Inductance (L)	μH/ft	μH/m	0.19	0.62	0.17	0.54

Product Dimensions

Part Number*	Pairs	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.5 mm ²									
Dekabon									
1804-0+6RS	1	0.231	5.9	0.361	9.2	0.083	0.123	35	1.27
1805-0+6RS	1	0.236	6.0	0.366	9.3	0.09	0.134	35	1.27
1827-004+S	4	0.396	10.1	0.556	14.1	0.136	0.203	50	1.27
1827-008+S	8	0.523	13.3	0.683	17.3	0.217	0.325	50	1.27
1827-012+S	12	0.606	15.4	0.786	20.0	0.275	0.412	60	1.52
1827-016+S	16	0.696	17.7	0.876	22.3	0.331	0.497	60	1.52
1827-024+S	24	0.813	20.6	1.010	25.7	0.487	0.73	70	1.78
1827-036+S	36	0.915	24.2	1.151	29.2	0.638	0.956	70	1.78
1828-004+S	4	0.457	11.6	0.597	15.2	0.152	0.228	40	1.02
1828-008+S	8	0.575	14.6	0.735	18.7	0.252	0.378	50	1.27
1828-012+S	12	0.708	18.0	0.868	22.0	0.332	0.497	50	1.27
1828-016+S	16	0.781	19.8	0.967	24.6	0.448	0.672	60	1.52
1828-024+S	24	0.972	24.7	1.152	29.3	0.603	0.903	60	1.52
1828-036+S	36	1.105	28.1	1.305	33.1	0.836	1.253	70	1.78
Conductor Size: 16 AWG / 1.3mm ²									
Dekabon									
1804-6+6RS	1	0.274	7.0	0.404	10.3	0.082	0.123	35	0.89
1805-6+6RS	1	0.278	7.1	0.408	10.4	0.089	0.134	35	0.89
1827-604+S	4	0.476	13.6	0.656	16.7	0.233	0.348	50	1.27
1827-608+S	8	0.663	16.8	0.843	21.4	0.355	0.532	60	1.52
1827-612+S	12	0.772	19.6	0.952	24.2	0.522	0.782	60	1.52
1827-616+S	16	0.903	22.9	1.088	27.6	0.638	0.957	60	1.52
1827-624+S	24	1.058	26.9	1.250	31.8	0.911	1.366	70	1.78
1827-636+S	36	1.312	30.6	1.412	35.9	1.228	1.842	70	1.78
1828-604+S	4	0.533	13.5	0.693	17.6	0.267	0.399	50	1.27
1828-608+S	8	0.727	18.5	0.907	23.0	0.47	0.705	60	1.52
1828-612+S	12	0.913	23.2	1.093	27.8	0.63	0.944	60	1.52
1828-616+S	16	1.008	25.6	1.188	30.2	0.819	1.228	60	1.52
1828-624+S	24	1.231	31.3	1.431	36.3	1.128	1.691	70	1.78
1828-636+S	36	1.404	35.7	1.624	41.2	1.585	2.377	80	2.03

* Part number may change to 12 digits at time of order.

Alloy Identification

Substitute for + in Part No.	ANSI Type	Alloy Identification		ANSI Color Code		Overall Jacket	Temperature Range °C	Limits of Error
		Positive Wire	Negative Wire	Positive Wire	Negative Wire			
1	EX	Chromel	Constantan	Purple	Red	Purple	0 to +200°C	+/-1.7°C
2	JX	Iron	Constantan	White	Red	Black	0 to +200°C	+/-2.2°C
3	KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200°C	+/-2.2°C
4	SX	Copper	Copper-Alloy II	Black	Red	Green	0 to +200°C	+/-5.0°C
5	TX	Copper	Constantan	Blue	Red	Blue	-60 to +100°C	+/-1.0°C



Description

- Conductor 7-strand bare copper, Class B
- Primary insulation. . . . 15 mils (0.4 mm) FR-PVC,
4 mils (0.1 mm) nylon
- Color code ICEA Method 4, black and numbered
- Cable shield
(optional) (Type 1C98) 100% coverage, an
aluminum-polyester tape and a
7-strand tinned copper drain wire
- Inner jacket. Black FR-PVC
- Dekabon layer An aluminum tape 8 mils (0.2 mm)
thick, coated on both sides with a
protective polymer 2 mils (0.05 mm)
thick
- Outer jacket Dekabon – Black CPE

Application

- Offers resistance to a wide range of chemicals, including
acids, alkalis, alcohol, petroleum and mineral oils
- 600 volt rated insulation
- Suitable for direct burial

Bending Radius

- $12 \times d$ (d = overall diameter)

Cable Type

- 1C98 – Multiple conductor cable

Cable Options

- Manufactured in accordance with Dekoron standards. Also
available to ICEA standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Tinned copper conductors available

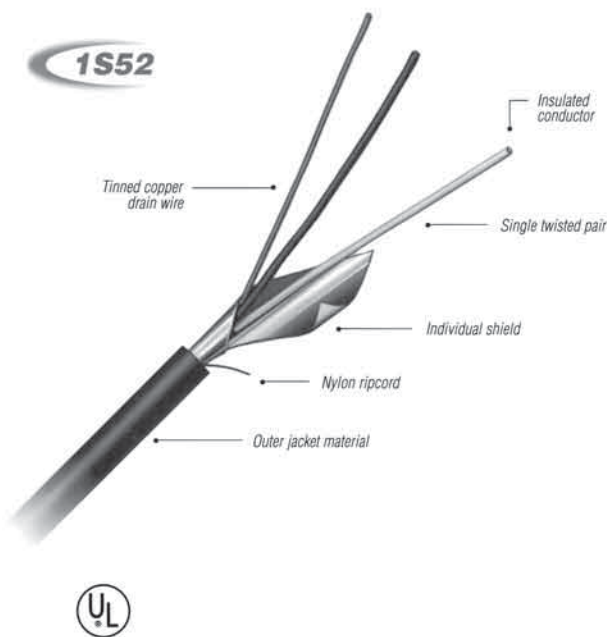
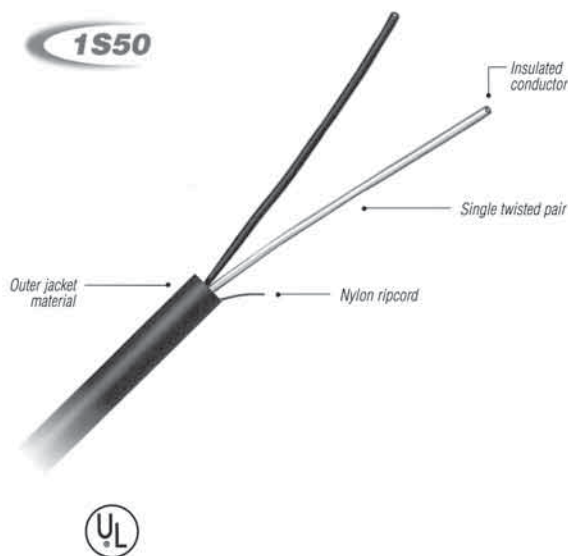
The specifications listed above are subject to change without notice. In any
change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size					
			16 AWG / 1.3 mm ²		14 AWG / 2.1 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.2	13.7	2.6	8.6	2.2	7.2
L/R Ratio	$\mu\text{H}/\Omega$	$\mu\text{H}/\Omega$	21	21	31	31	37	37
Inductance (L)	$\mu\text{H}/\text{ft}$	$\mu\text{H}/\text{m}$	0.18	0.58	0.17	0.54	0.16	0.53

Product Dimensions

Part Number	Conductors	Diameter Under Armor		Nominal O.D.		Weight		Jacket Thickness	
		in	mm	in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²									
1C98-6050S	5	0.386	9.8	0.546	13.9	0.258	0.384	50	1.27
1C98-6070S	7	0.416	10.6	0.576	14.6	0.297	0.442	50	1.27
1C98-6090S	9	0.477	12.1	0.667	16.9	0.407	0.606	65	1.65
1C98-6120S	12	0.532	13.5	0.722	18.3	0.509	0.758	65	1.65
1C98-6190S	19	0.656	16.7	0.846	21.5	0.760	1.132	65	1.65
Conductor Size: 14 AWG / 2.1 mm ²									
1C98-4050S	5	0.426	10.8	0.616	15.6	0.316	0.471	65	1.65
1C98-4070S	7	0.461	11.7	0.651	16.5	0.436	0.650	65	1.65
1C98-4090S	9	0.531	13.5	0.721	18.3	0.549	0.817	65	1.65
1C98-4120S	12	0.634	16.1	0.824	20.9	0.770	1.146	65	1.65
1C98-4190S	19	0.731	18.6	0.921	23.4	0.973	1.450	65	1.65
Conductor Size: 2.5 mm ²									
1C98-P050S	5	0.445	11.3	0.635	16.1	0.394	0.591	65	1.65
1C98-P070S	7	0.482	12.2	0.672	17.1	0.490	0.626	65	1.65
1C98-P090S	9	0.596	15.1	0.786	20.0	0.580	0.769	65	1.65
1C98-P120S	12	0.663	16.8	0.853	21.7	0.816	0.842	65	1.65
1C98-P190S	19	0.766	19.5	0.956	24.3	1.095	0.967	65	1.65

300 Volt Thermoset Silicone (Single Pair)



Description

- Conductor. 7-strand tinned copper, Class B
- Primary insulation. . . . 30 mils (0.8 mm) 90°C thermoset silicone alloy
- Number of conductors per group 2
- Color code Black and white
- Shield (Type 1S52) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket. Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1S50 – Single pair unshielded
- 1S52 – Single pair shielded

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size							
			20 AWG / 0.5 mm ²		18 AWG / 0.8 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	11.1	36.4	7.1	23.2	4.4	14.5	3.8	12.4
Mutual Capacitance										
Type 1S50	pF/ft	pF/m	16	54	18	58	19	63	20	65
Type 1S52	pF/ft	pF/m	24	79	27	90	31	103	33	107
L/R Ratio	μH/Ω	μH/Ω	10	10	14	14	21	21	25	25
Inductance (L)	μH/ft	μH/m	0.22	0.72	0.2	0.67	0.19	0.62	0.19	0.61

Product Dimensions

300V UL Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.52 mm ²							
1S50-08603	1	0.283	7.2	0.39	0.582	35	0.89
1S52-08603	1	0.287	7.3	0.42	0.626	35	0.89
Conductor Size: 18 AWG / 0.82 mm ²							
1S50-88603	1	0.313	7.9	0.46	0.686	40	1.02
1S52-88603	1	0.317	8.0	0.49	0.731	40	1.02
Conductor Size: 16 AWG / 1.3 mm ²							
1S50-68603	1	0.337	8.6	0.58	0.865	40	1.02
1S52-68603	1	0.348	8.8	0.63	0.940	40	1.02
Conductor Size: 1.5 mm ²							
1S50-N8603	1	0.345	8.8	0.63	0.940	40	1.02
1S52-N8603	1	0.349	8.9	0.67	0.999	40	1.02

300 Volt Thermoset Silicone (Single Triad)



Description

- Conductor 7-strand tinned copper, Class B
- Primary insulation. 30 mils (0.8 mm) 90°C thermoset silicone alloy
- Number of conductors per group 3
- Color code Black, white and red
- Shield (Type 1S62) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

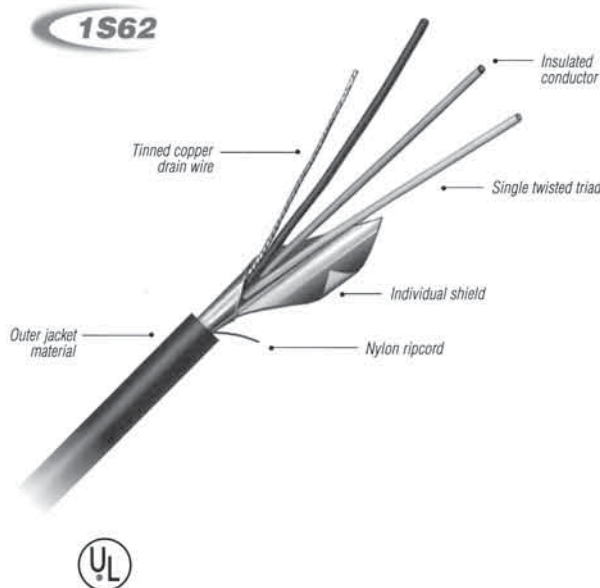
Cable Type

- 1S60 – Single triad unshielded
- 1S62 – Single triad shielded

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

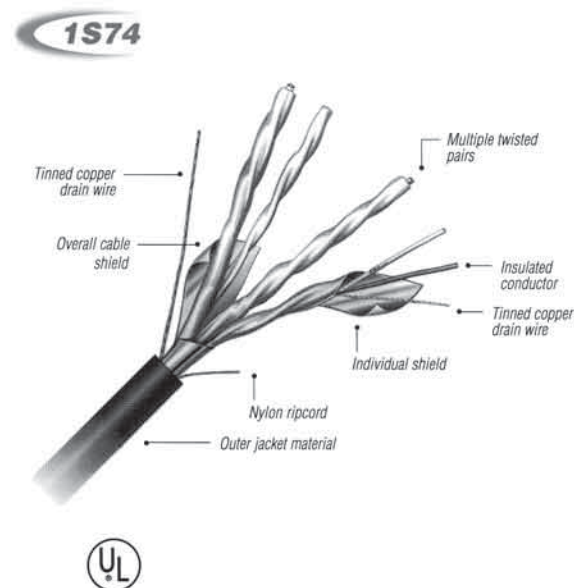
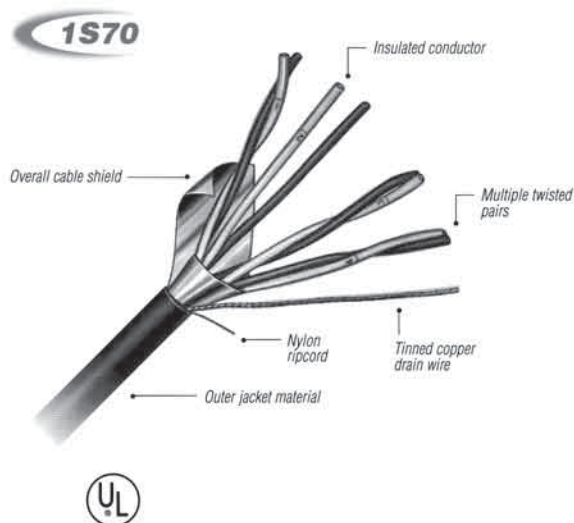


Electrical Properties*	Units		Conductor Size							
			20 AWG / 0.5 mm ²		18 AWG / 0.8 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	11.1	36.4	7.1	23.2	4.4	14.5	3.8	12.4
Mutual Capacitance										
Type 1S60	pF/ft	pF/m	16	54	18	58	19	63	20	65
Type 1S62	pF/ft	pF/m	24	79	27	90	31	103	33	107
L/R Ratio	μH/Ω	μH/Ω	10	10	14	14	21	21	25	25
Inductance (L)	μH/ft	μH/m	0.22	0.72	0.2	0.67	0.19	0.62	0.19	0.61

Product Dimensions

300V UL Part Number	Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.52 mm ²							
1S60-08603	1	0.292	7.4	0.50	0.746	40	1.02
1S62-08603	1	0.296	7.5	0.55	0.820	40	1.02
Conductor Size: 18 AWG / 0.82 mm ²							
1S60-88603	1	0.313	8.0	0.60	0.895	40	1.02
1S62-88603	1	0.317	8.1	0.65	0.969	40	1.02
Conductor Size: 16 AWG / 1.3 mm ²							
1S60-68603	1	0.339	8.6	0.74	1.104	40	1.02
1S62-68603	1	0.343	8.7	0.79	1.178	40	1.02
Conductor Size: 1.5 mm ²							
1S60-N8603	1	0.348	8.8	0.80	1.193	40	1.02
1S62-N8603	1	0.352	8.9	0.85	1.268	40	1.02

300 Volt Thermoset Silicone (Multiple Pair)



Description

- Conductor 7-strand tinned copper, Class B
- Primary insulation. . . . 30 mils (0.8 mm) 90°C thermoset silicone alloy
- Number of conductors per group 2
- Color code Black and white
- Pair shield (Type 1S74) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire.
- Cable shield (Type 1S70/1S74) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- 300 volt rated insulation

Bending Radius

- 6 x d (d = overall diameter)

Cable Type

- 1S70 – Multiple pair overall shield
- 1S74 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

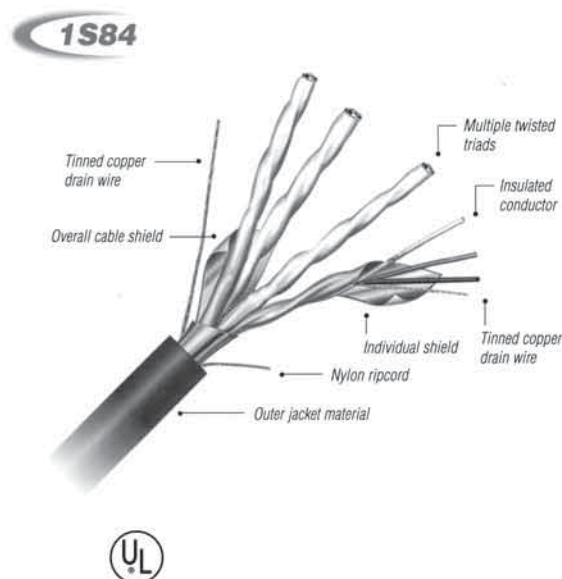
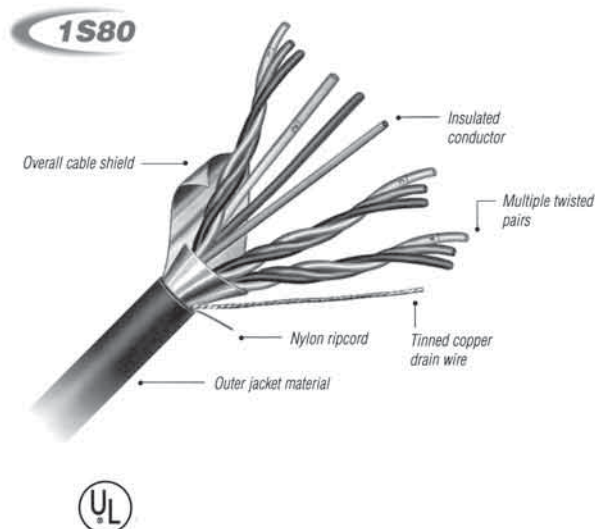
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size							
			20 AWG / 0.5 mm ²	18 AWG / 0.8 mm ²	16 AWG / 1.3 mm ²	14 AWG / 2.1 mm ²	12 AWG / 3.3 mm ²	10 AWG / 5.3 mm ²	8 AWG / 8.4 mm ²	6 AWG / 13.3 mm ²
Resistance (R)	Ω/Mft	Ω/km	11.1	36.4	7.1	23.2	4.4	14.5	3.8	12.4
Mutual Capacitance										
Type 1S70	pF/ft	pF/m	16	54	18	58	19	63	20	65
Type 1S74	pF/ft	pF/m	24	79	27	90	31	103	33	107
L/R Ratio	μH/Ω	μH/Ω	10	10	14	14	21	21	25	25
Inductance (L)	μH/ft	μH/m	0.22	0.72	0.2	0.67	0.19	0.62	0.19	0.61

Product Dimensions

300V UL Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.52 mm ²							
1S70-00463	4	0.539	13.7	0.131	0.195	50	1.27
1S70-00863	8	0.705	17.9	0.173	0.258	60	1.52
1S70-01263	12	0.824	20.9	0.315	0.470	60	1.52
1S70-02463	24	1.112	28.3	0.571	0.852	70	1.78
1S70-05063	50	1.763	44.8	1.166	1.739	90	2.29
1S74-00463	4	0.571	14.5	0.154	0.230	50	1.27
1S74-00863	8	0.763	19.4	0.282	0.421	60	1.52
1S74-01263	12	0.940	23.9	0.410	0.611	70	1.78
1S74-02463	24	1.300	33.0	0.472	0.704	80	2.03
1S74-05063	50	1.766	44.8	1.398	2.085	90	2.29
Conductor Size: 18 AWG / 0.82 mm ²							
1S70-80463	4	0.581	14.7	0.156	0.233	50	1.27
1S70-80863	8	0.761	19.3	0.284	0.424	60	1.52
1S70-81263	12	0.973	24.7	0.390	0.582	70	1.78
1S70-82463	24	1.315	33.4	0.713	1.063	80	2.03
1S70-85063	50	1.794	45.6	1.432	2.136	90	2.29
1S74-80463	4	0.613	15.6	0.142	0.212	50	1.27
1S74-80863	8	0.821	20.9	0.210	0.313	60	1.52
1S74-81263	12	1.015	25.8	0.345	0.514	70	1.78
1S74-82463	24	1.409	35.8	0.775	1.156	80	2.03
1S74-85063	50	1.919	48.8	0.918	1.369	90	2.29
Conductor Size: 16 AWG / 1.3 mm ²							
1S70-60463	4	0.658	16.7	0.214	0.319	60	1.52
1S70-60863	8	0.828	21.0	0.353	0.526	60	1.52
1S70-61263	12	1.079	27.4	0.526	0.784	70	1.78
1S70-62463	24	1.463	37.2	0.962	1.435	80	2.03
1S70-65063	50	1.999	50.8	1.841	2.745	90	2.29
1S74-60463	4	0.694	17.6	0.239	0.356	60	1.52
1S74-60863	8	0.895	22.7	0.406	0.605	60	1.52
1S74-61263	12	1.108	28.1	0.591	0.881	70	1.78
1S74-62463	24	1.543	39.2	1.099	1.639	80	2.03
1S74-65063	50	2.147	54.5	2.206	3.290	110	2.79
Conductor Size: 1.5 mm ²							
1S70-N0463	4	0.675	17.1	0.230	0.343	60	1.52
1S70-N0863	8	0.850	21.6	0.383	0.571	60	1.52
1S70-N1263	12	1.109	28.2	0.572	0.853	70	1.78
1S70-N2463	24	1.505	38.2	1.052	1.569	80	2.03
1S70-N5063	50	2.098	53.3	2.111	3.148	110	2.79
1S74-N0463	4	0.712	18.1	0.235	0.350	60	1.52
1S74-N0863	8	0.940	23.9	0.416	0.620	70	1.78
1S74-N1263	12	1.138	28.9	0.577	0.860	70	1.78
1S74-N2463	24	1.587	40.3	1.069	1.594	80	2.03
1S74-N5063	50	2.210	56.1	2.140	3.191	110	2.79

300 Volt Thermoset Silicone (Multiple Triad)

**Description**

- Conductor 7-strand tinned copper, Class B
- Primary insulation. 30 mils (0.8 mm) 90°C thermoset silicone alloy
- Number of conductors per group 3
- Color code Black, white and red
- Triad shield (Type 1S84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1S80/1S84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725/727
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1S80 – Multiple triad overall shield
- 1S84 – Multiple triad individual and overall shield

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size							
			20 AWG / 0.5 mm ²		18 AWG / 0.8 mm ²		16 AWG / 1.3 mm ²		1.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	11.1	36.4	7.1	23.2	4.4	14.5	3.8	12.4
Mutual Capacitance										
Type 1S80	pF/ft	pF/m	16	54	18	58	19	63	20	65
Type 1S84	pF/ft	pF/m	24	79	27	90	31	103	33	107
L/R Ratio	μH/Ω	μH/Ω	10	10	14	14	21	21	25	25
Inductance (L)	μH/ft	μH/m	0.22	0.72	0.2	0.67	0.19	0.62	0.19	0.61

Product Dimensions

300V UL Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 20 AWG / 0.52 mm ²							
1S80-00463	4	0.602	15.3	0.172	0.257	50	1.27
1S80-00863	8	0.806	20.5	0.314	0.468	60	1.52
1S80-01263	12	0.995	25.3	0.457	0.682	70	1.78
1S80-02463	24	1.381	35.1	0.836	1.247	80	2.03
1S80-05063	50	1.880	47.7	1.590	2.371	90	2.29
1S84-00463	4	0.650	16.5	0.213	0.318	60	1.52
1S84-00863	8	0.834	21.2	0.355	0.529	60	1.52
1S84-01263	12	1.030	26.2	0.519	0.774	70	1.78
1S84-02463	24	1.432	36.4	0.956	1.426	80	2.03
1S84-05063	50	1.951	49.5	1.835	2.737	90	2.29
Conductor Size: 18 AWG / 0.82 mm ²							
1S80-80463	4	0.677	17.2	0.230	0.343	60	1.52
1S80-80863	8	0.872	22.2	0.387	0.577	60	1.52
1S80-81263	12	1.078	27.4	0.565	0.843	70	1.78
1S80-82463	24	1.501	38.1	1.050	1.566	80	2.03
1S80-85063	50	2.088	53.0	2.102	3.135	110	2.79
1S84-80463	4	0.700	17.8	0.252	0.376	60	1.52
1S84-80863	8	0.923	23.4	0.448	0.668	70	1.78
1S84-81263	12	1.117	28.4	0.627	0.935	70	1.78
1S84-82463	24	1.557	39.5	1.170	1.745	80	2.03
1S84-85063	50	2.167	55.0	2.353	3.509	110	2.79
Conductor Size: 16 AWG / 1.3 mm ²							
1S80-60463	4	0.735	18.7	0.283	0.422	60	1.52
1S80-60863	8	0.972	24.7	0.508	0.758	70	1.78
1S80-61263	12	1.178	29.9	0.715	1.066	70	1.78
1S80-62463	24	1.645	41.8	1.341	2.000	80	2.03
1S80-65063	50	2.290	58.2	2.704	4.032	110	2.79
1S84-60463	4	0.761	19.3	0.307	0.458	60	1.52
1S84-60863	8	1.006	25.5	0.555	0.828	70	1.78
1S84-61263	12	1.221	31.0	0.784	1.169	70	1.78
1S84-62463	24	1.727	43.9	1.511	2.253	90	2.29
1S84-65063	50	2.377	60.4	2.983	4.449	110	2.79
Conductor Size: 1.5 mm ²							
1S80-N0463	4	0.755	19.2	0.305	0.455	60	1.52
1S80-N0863	8	0.998	25.4	0.552	0.823	70	1.78
1S80-N1263	12	1.211	30.8	0.781	1.165	70	1.78
1S80-N2463	24	1.713	43.5	1.504	2.243	90	2.29
1S80-N5063	50	2.357	59.9	2.971	4.431	110	2.79
1S84-N0463	4	0.781	19.8	0.331	0.494	60	1.52
1S84-N0863	8	1.034	26.3	0.601	0.896	70	1.78
1S84-N1263	12	1.259	32.0	0.852	1.271	70	1.78
1S84-N2463	24	1.777	45.1	1.645	2.453	90	2.29
1S84-N5063	50	2.447	62.1	3.260	4.862	110	2.79



Description

- Conductor 7-strand tinned copper, Class B
- Primary insulation. . . 30 mils (0.8 mm) silicone alloy, 15 mils (0.4 mm) nylon covering
- Number of conductors per group 2
- Color code Black and white
- Shield (Type 6S52) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- 600 volt rated insulation per UL 1277
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- UL listed as Type TC

Bending Radius

- $6 \times d$ (d = overall diameter)

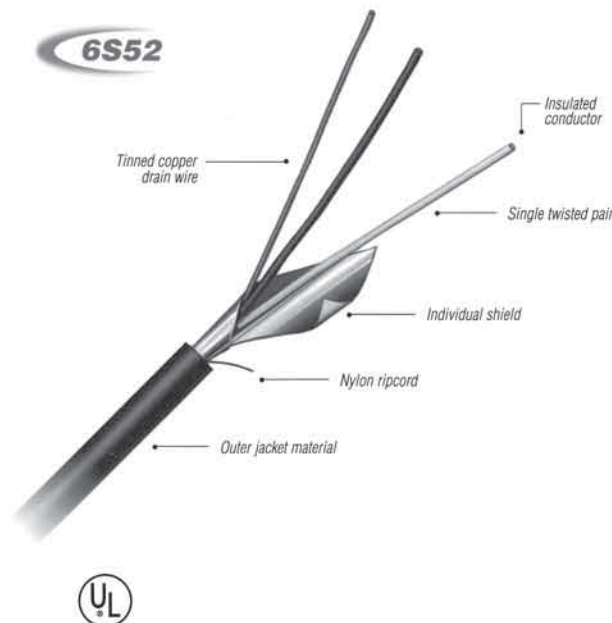
Cable Type

- 6S50 – Single pair unshielded
- 6S52 – Single pair shielded

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.7	9.0	3.8	12.4	2.3	7.5
Mutual Capacitance										
Type 6S50	pF/ft	pF/m	18	59	20	64	18	61	20	66
Type 6S52	pF/ft	pF/m	28	93	32	106	29	96	34	111
L/R Ratio	μH/Ω	μH/Ω	23	23	34	34	26	26	40	40
Inductance (L)	μH/ft	μH/m	0.20	0.66	0.19	0.62	0.20	0.65	0.18	0.60

Product Dimensions

600V UL Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
6S50-68613	1	0.419	10.6	0.082	0.120	45	1.14
6S52-68613	1	0.424	10.8	0.096	0.142	45	1.14
Conductor Size: 14 AWG / 2.1 mm ²							
6S50-48613	1	0.449	11.4	0.097	0.144	45	1.14
6S52-48613	1	0.454	11.5	0.112	0.167	45	1.14
Conductor Size: 1.5 mm ²							
6S50-N8603	1	0.427	10.9	0.085	0.126	45	1.14
6S52-N8603	1	0.432	11.0	0.103	0.153	45	1.14
Conductor Size: 2.5 mm ²							
6S50-P8603	1	0.463	11.8	0.105	0.156	45	1.14
6S52-P8603	1	0.468	11.9	0.123	0.183	45	1.14

600 Volt Thermoset Silicone (Single Triad)



Description

- Conductor. 7-strand tinned copper, Class B
- Primary insulation. 30 mils (0.8 mm) silicone alloy, 15 mils (0.4 mm) nylon covering
- Number of conductors per group 2
- Color code Black, white and red
- Shield (Type 6S62) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- 600 volt rated insulation per UL 1277
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- UL listed as Type TC

Bending Radius

- $6 \times d$ (d = overall diameter)

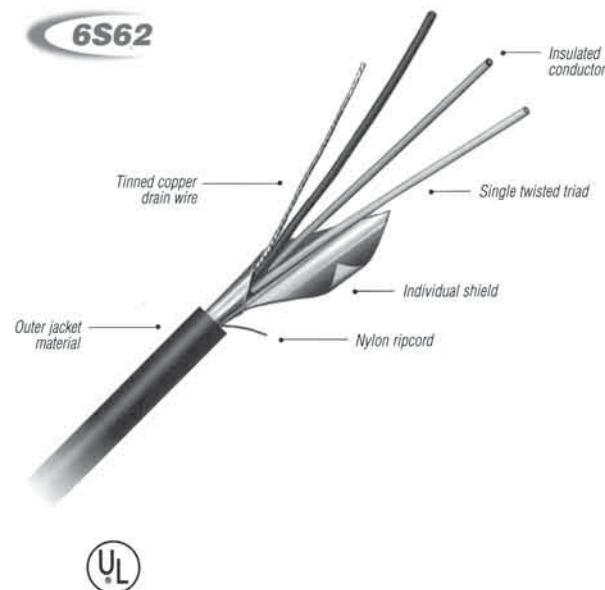
Cable Type

- 6S60 – Single triad unshielded
- 6S62 – Single triad shielded

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

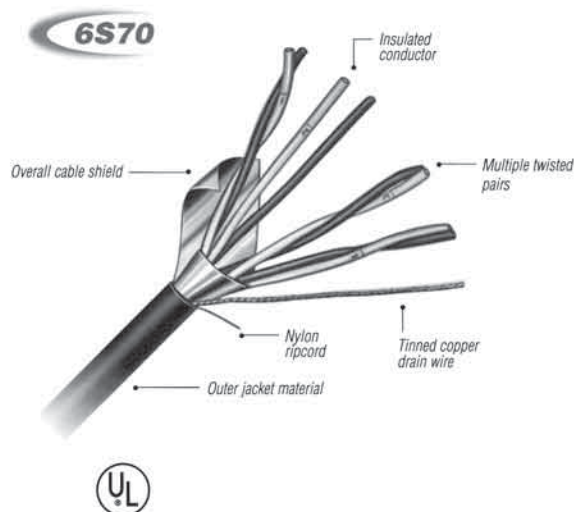


Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.9	9	3.8	12.4	2.3	7.5
Mutual Capacitance										
Type 6S60	pF/ft	pF/m	17	56	18	61	18	60	20	66
Type 6S62	pF/ft	pF/m	26	88	30	98	29	97	34	111
L/R Ratio	μH/Ω	μH/Ω	23	23	34	34	26	26	40	40
Inductance (L)	μH/ft	μH/m	0.2	0.66	0.19	0.62	0.2	0.65	0.18	0.60

Product Dimensions

600V UL Part Number	Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
6S60-68613	1	0.444	11.3	0.102	0.153	45	1.14
6S62-68613	1	0.463	11.8	0.120	0.178	45	1.14
Conductor Size: 14 AWG / 2.1 mm ²							
6S60-48613	1	0.476	12.1	0.126	0.187	45	1.14
6S62-48613	1	0.496	12.6	0.143	0.213	45	1.14
Conductor Size: 1.5 mm ²							
6S60-N8603	1	0.452	11.5	0.108	0.161	45	1.14
6S62-N8603	1	0.472	12.0	0.128	0.191	45	1.14
Conductor Size: 2.5 mm ²							
6S60-P8603	1	0.491	12.5	0.137	0.205	45	1.14
6S62-P8603	1	0.512	13.0	0.157	0.234	45	1.14

600 Volt Thermoset Silicone (Multiple Pair)



Description

- Conductor 7-strand tinned copper, Class B
- Primary insulation. 30 mils (0.8 mm) silicone alloy, 15 mils (0.4 mm) nylon covering
- Number of conductors per group 2
- Color code Black and white
- Pair shield (Type 6S74) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 6S70/6S74) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- 600 volt rated insulation per UL 1277
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- UL listed as Type TC

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 6S70 – Multiple pair overall shield
- 6S74 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

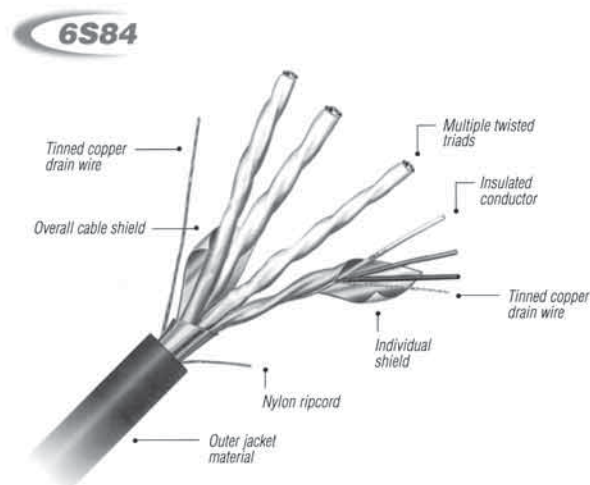
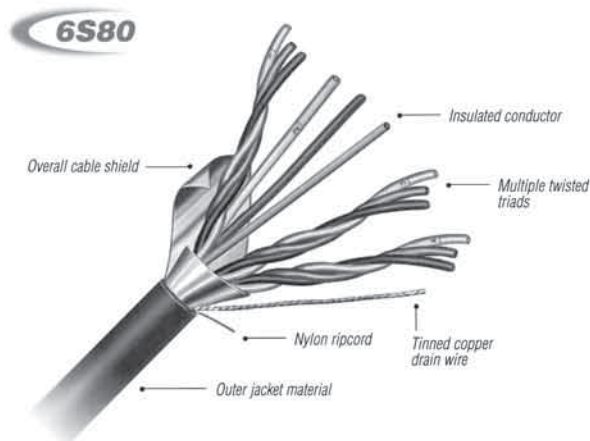
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.7	9	3.8	12.4	2.3	7.5
Mutual Capacitance										
Type 6S70	pF/ft	pF/m	18	59	20	64	18	61	20	66
Type 6S74	pF/ft	pF/m	28	93	32	106	29	96	34	111
L/R Ratio	μH/Ω	μH/Ω	23	23	34	34	26	26	40	40
Inductance (L)	μH/ft	μH/m	0.2	0.66	0.19	0.62	0.2	0.65	0.18	0.6

Product Dimensions

600V UL Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
6S70-60463	4	0.800	20.3	0.277	0.413	60	1.52
6S70-60863	8	1.055	26.8	0.509	0.758	80	2.03
6S70-61263	12	1.239	31.5	0.700	1.043	80	2.03
6S70-62463	24	1.654	42.0	1.248	1.858	80	2.03
6S70-65063	50	2.313	58.7	2.514	3.744	110	2.79
6S74-60463	4	0.854	21.7	0.346	0.515	60	1.52
6S74-60863	8	1.151	29.2	0.647	0.964	80	2.03
6S74-61263	12	1.397	35.5	0.911	1.357	80	2.03
6S74-62463	24	1.988	50.5	1.780	2.652	110	2.79
6S74-65063	50	2.684	68.2	3.357	5.001	110	2.79
Conductor Size: 14 AWG / 2.1 mm ²							
6S70-40463	4	0.903	22.9	0.375	0.559	80	2.03
6S70-40863	8	1.139	28.9	0.629	0.937	80	2.03
6S70-41263	12	1.341	34.1	0.876	1.305	80	2.03
6S70-42463	24	1.857	47.2	1.699	2.531	110	2.79
6S70-45063	50	2.514	63.9	3.215	4.788	110	2.79
6S74-40463	4	0.961	24.4	0.478	0.712	80	2.03
6S74-40863	8	1.243	31.6	0.832	1.239	80	2.03
6S74-41263	12	1.512	38.4	1.183	1.763	80	2.03
6S74-42463	24	2.155	54.7	2.324	3.461	110	2.79
6S74-45063	50	2.918	74.1	4.459	6.642	110	2.79
Conductor Size: 1.5 mm ²							
6S70-N0463	4	0.817	20.74	0.295	0.439	60	1.52
6S70-N0863	8	1.078	27.37	0.541	0.806	80	2.03
6S70-N1263	12	1.267	32.17	0.747	1.112	80	2.03
6S70-N2463	24	1.692	42.97	1.336	1.990	80	2.03
6S70-N5063	50	2.367	60.11	2.696	4.015	110	2.79
6S74-N0463	4	0.912	23.16	0.410	0.611	80	2.03
6S74-N0863	8	1.176	29.86	0.701	1.044	80	2.03
6S74-N1263	12	1.427	36.24	0.989	1.474	80	2.03
6S74-N2463	24	2.033	51.63	1.936	2.884	110	2.79
6S74-N5063	50	2.747	69.77	3.673	5.471	110	2.79
Conductor Size: 2.5 mm ²							
6S70-P0463	4	0.933	23.69	0.416	0.619	80	2.03
6S70-P0863	8	1.178	29.91	0.698	1.040	80	2.03
6S70-P1263	12	1.389	35.27	0.973	1.450	80	2.03
6S70-P2463	24	1.923	48.84	1.885	2.807	110	2.79
6S70-P5063	50	2.608	66.24	3.581	5.334	110	2.79
6S74-P0463	4	0.993	25.21	0.498	0.741	80	2.03
6S74-P0863	8	1.286	32.66	0.860	1.281	80	2.03
6S74-P1263	12	1.566	39.77	1.219	1.816	80	2.03
6S74-P2463	24	2.232	56.69	2.386	3.555	110	2.79
6S74-P5063	50	3.027	76.88	4.569	6.805	110	2.79

600 Volt Thermoset Silicone (Multiple Triad)



Description

- Conductor 7-strand tinned copper, Class B
- Primary insulation. . . . 30 mils (0.8 mm) silicone alloy, 15 mils (0.4 mm) nylon covering
- Number of conductors per group 3
- Color code Black, white and red
- Group identification Each triad numbered
- Triad shield (Type 6S84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 6S80/6S84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- 600 volt rated insulation per UL 1277
- UL listed as Type TC

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 6S80 – Multiple triad overall shield
- 6S84 – Multiple triad individual and overall shield

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

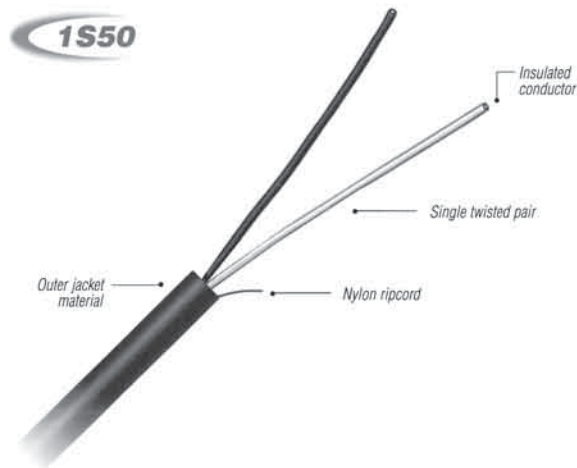
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.7	9	3.8	12.4	2.3	7.5
Mutual Capacitance										
Type 6S80	pF/ft	pF/m	18	59	20	64	18	61	20	66
Type 6S84	pF/ft	pF/m	28	93	32	106	29	96	34	111
L/R Ratio	μH/Ω	μH/Ω	23	23	34	34	26	26	40	40
Inductance (L)	μH/ft	μH/m	0.20	0.66	0.19	0.62	0.20	0.65	0.18	0.60

Product Dimensions

600V UL Part Number	Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
6S80-60463	4	0.938	23.8	0.408	0.607	80	2.03
6S80-60863	8	1.212	30.8	0.695	1.035	80	2.03
6S80-61263	12	1.473	37.4	0.979	1.458	80	2.03
6S80-62463	24	2.098	53.3	1.915	2.853	110	2.79
6S80-65063	50	2.839	72.1	3.619	5.391	110	2.79
6S84-60463	4	0.981	24.9	0.476	0.709	80	2.03
6S84-60863	8	1.270	32.3	0.826	1.230	80	2.03
6S84-61263	12	1.546	39.3	1.173	1.747	80	2.03
6S84-62463	24	2.204	56.0	2.302	3.428	110	2.79
6S84-65063	50	2.986	75.8	4.405	6.561	110	2.79
Conductor Size: 14 AWG / 2.1 mm ²							
6S80-40463	4	1.011	25.7	0.500	0.745	80	2.03
6S80-40863	8	1.311	33.3	0.870	1.296	80	2.03
6S80-41263	12	1.598	40.6	1.237	1.843	80	2.03
6S80-42463	24	2.278	57.9	2.429	3.618	110	2.79
6S80-45063	50	3.091	78.5	4.658	6.937	110	2.79
6S84-40463	4	1.056	26.8	0.600	0.894	80	2.03
6S84-40863	8	1.373	34.9	1.065	1.586	80	2.03
6S84-41263	12	1.676	42.6	1.526	2.274	80	2.03
6S84-42463	24	2.391	60.7	3.006	4.477	110	2.79
6S84-45063	50	3.249	82.5	5.838	8.696	110	2.79
Conductor Size: 1.5 mm ²							
6S80-N0463	4	0.958	24.33	0.433	0.645	80	2.03
6S80-N0863	8	1.238	31.44	0.741	1.104	80	2.03
6S80-N1263	12	1.506	38.24	1.047	1.559	80	2.03
6S80-N2463	24	2.146	54.5	2.049	3.052	110	2.79
6S80-N5063	50	2.906	73.8	3.888	5.791	110	2.79
6S84-N0463	4	1.001	25.42	0.512	0.762	80	2.03
6S84-N0863	8	1.298	32.96	0.894	1.331	80	2.03
6S84-N1263	12	1.581	40.15	1.273	1.895	80	2.03
6S84-N2463	24	2.254	57.24	2.499	3.722	110	2.79
6S84-N5063	50	3.056	77.61	4.805	7.157	110	2.79
Conductor Size: 2.5 mm ²							
6S80-P0463	4	1.045	26.54	0.555	0.826	80	2.03
6S80-P0863	8	1.357	34.46	0.967	1.440	80	2.03
6S80-P1263	12	1.656	42.05	1.377	2.051	80	2.03
6S80-P2463	24	2.362	59.99	2.700	4.021	110	2.79
6S80-P5063	50	3.209	81.50	5.198	7.743	110	2.79
6S84-P0463	4	1.092	27.73	0.634	0.945	80	2.03
6S84-P0863	8	1.421	36.09	1.120	1.669	80	2.03
6S84-P1263	12	1.796	45.61	1.712	2.550	110	2.79
6S84-P2463	24	2.478	62.93	3.151	4.694	110	2.79
6S84-P5063	50	3.371	85.62	6.119	9.114	110	2.79

600 Volt Thermoset Silicone (Single Pair)



Description

- Conductor 7-strand tinned copper, Class B
- Primary insulation30 mils (0.8 mm) 90°C thermoset silicone alloy
- Number of conductors per group 2
- Color code Black and white
- Shield (Type 1S52) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- 600 volt rated insulation per ICEA
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas

Bending Radius

- $6 \times d$ (d = overall diameter)

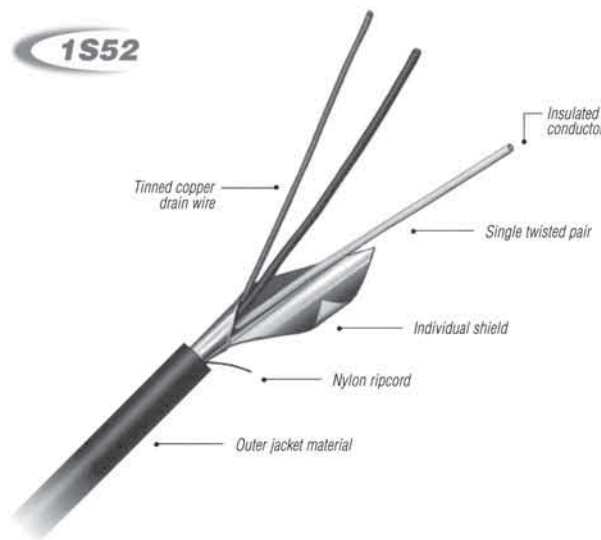
Cable Type

- 1S50 – Single pair unshielded
- 1S52 – Single pair shielded

Other Options

- Manufactured in accordance with ICEA. Also available to IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

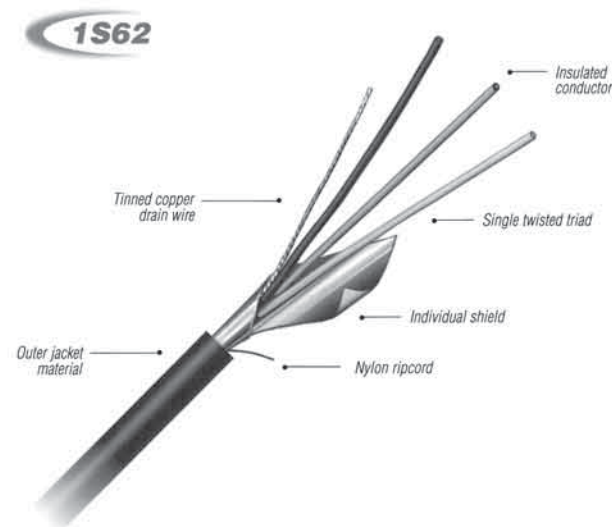
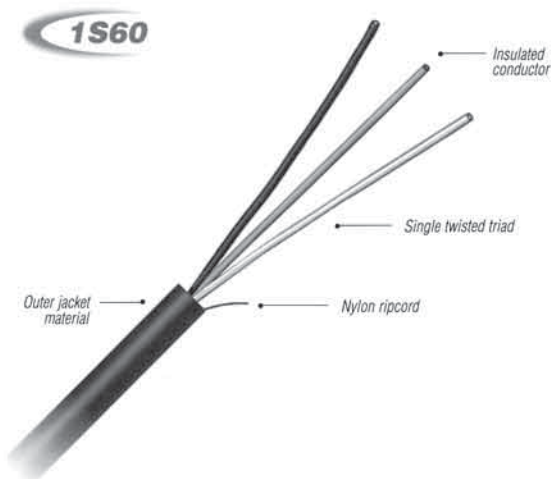


Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.7	9	3.8	12.4	2.3	7.5
Mutual Capacitance										
Type 1S50	pF/ft	pF/m	18	59	20	64	18	61	20	66
Type 1S52	pF/ft	pF/m	28	93	32	106	29	96	34	111
L/R Ratio	μH/Ω	μH/Ω	23	23	34	34	26	26	40	40
Inductance (L)	μH/ft	μH/m	0.20	0.66	0.19	0.62	0.20	0.65	0.18	0.60

Product Dimensions

600V ICEA Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1S50-68603	1	0.356	9.0	0.064	0.095	45	1.14
1S52-68603	1	0.361	9.2	0.074	0.110	45	1.14
Conductor Size: 14 AWG / 2.1 mm ²							
1S50-48603	1	0.386	9.8	0.079	0.118	45	1.14
1S52-48603	1	0.391	9.9	0.090	0.134	45	1.14
Conductor Size: 1.5 mm ²							
1S50-N8603	1	0.364	9.3	0.068	0.101	45	1.14
1S52-N8603	1	0.369	9.4	0.076	0.113	45	1.14
Conductor Size: 2.5 mm ²							
1S50-P8603	1	0.400	10.2	0.087	0.129	45	1.14
1S52-P8603	1	0.405	10.3	0.099	0.147	45	1.14

600 Volt Thermoset Silicone (Single Triad)



Description

- Conductor 7-strand tinned copper, Class B
- Primary insulation. 30 mils (0.8 mm) 90°C thermoset silicone alloy
- Number of conductors per group 3
- Color code Black, white and red
- Shield (Type 1S62) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- 600 volt rated insulation per ICEA
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1S60 – Single triad unshielded
- 1S62 – Single triad shielded

Other Options

- Manufactured in accordance with ICEA. Also available to IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

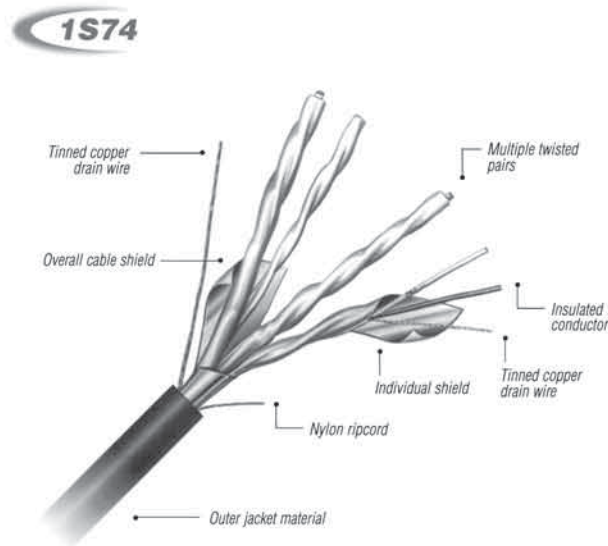
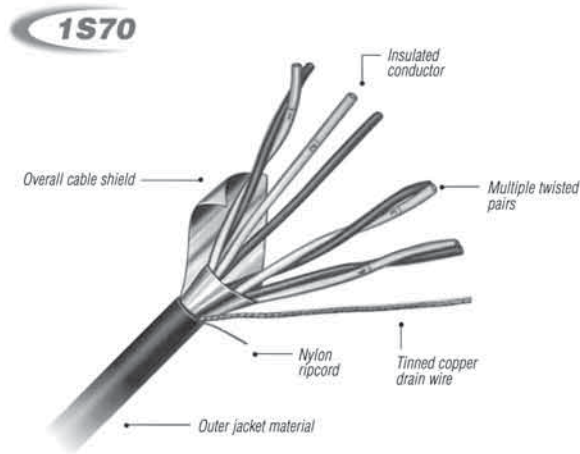
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.7	9	3.8	12.4	2.3	7.5
Mutual Capacitance										
Type 1S60	pF/ft	pF/m	18	59	20	64	18	61	20	66
Type 1S62	pF/ft	pF/m	28	93	32	106	29	96	34	111
L/R Ratio	μH/Ω	μH/Ω	23	23	34	34	26	26	40	40
Inductance (L)	μH/ft	μH/m	0.2	0.66	0.19	0.62	0.2	0.65	0.18	0.6

Product Dimensions

600V ICEA Part Number	Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1S60-68603	1	0.376	9.6	0.081	0.120	45	1.14
1S62-68603	1	0.392	10.0	0.092	0.138	45	1.14
Conductor Size: 14 AWG / 2.1 mm ²							
1S60-48603	1	0.408	10.4	0.102	0.152	45	1.14
1S62-48603	1	0.426	10.8	0.114	0.170	45	1.14
Conductor Size: 1.5 mm ²							
1S60-N8603	1	0.385	9.8	0.086	0.129	45	1.14
1S62-N8603	1	0.401	10.2	0.096	0.143	45	1.14
Conductor Size: 2.5 mm ²							
1S60-P8603	1	0.423	10.7	0.113	0.169	45	1.14
1S62-P8603	1	0.442	11.2	0.127	0.189	45	1.14

600 Volt Thermoset Silicone (Multiple Pair)



Description

- Conductor 7-strand tinned copper, Class B
- Primary insulation. 30 mils (0.8 mm) 90°C thermoset silicone alloy
- Number of conductors per group 2
- Color code Black and white
- Pair shield (Type 1S74) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1S70/1S74) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- 600 volt rated insulation per ICEA
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1S70 – Multiple pair overall shield
- 1S74 – Multiple pair individual and overall shield

Cable Options

- Manufactured in accordance with ICEA. Also available to IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

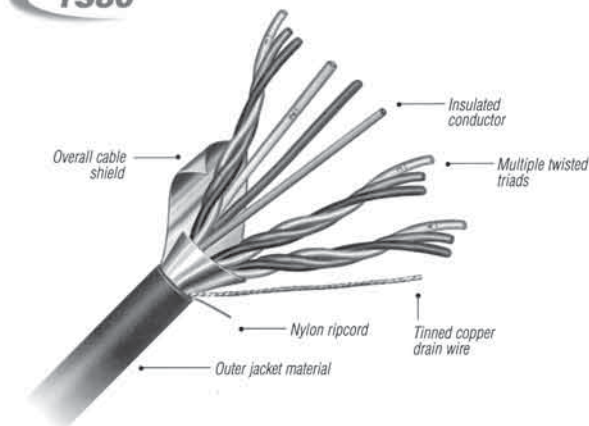
Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.7	9	3.8	12.4	2.3	7.5
Mutual Capacitance										
Type 1S70	pF/ft	pF/m	18	59	20	64	18	61	20	66
Type 1S74	pF/ft	pF/m	28	93	32	106	29	96	34	111
L/R Ratio	μH/Ω	μH/Ω	23	23	34	34	26	26	40	40
Inductance (L)	μH/ft	μH/m	0.2	0.66	0.19	0.62	0.2	0.65	0.18	0.6

Product Dimensions

600V ICEA Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1S70-60463	4	0.668	17.0	0.219	0.326	60	1.52
1S70-60863	8	0.839	21.3	0.363	0.541	60	1.52
1S70-61263	12	1.026	26.1	0.545	0.812	80	2.03
1S70-62463	24	1.356	34.4	0.963	1.434	80	2.03
1S70-65063	50	1.892	48.1	1.934	2.881	110	2.79
1S74-60463	4	0.713	18.1	0.264	0.394	60	1.52
1S74-60863	8	0.959	24.4	0.490	0.730	80	2.03
1S74-61263	12	1.155	29.3	0.685	1.020	80	2.03
1S74-62463	24	1.58	40.1	1.235	1.840	80	2.03
1S74-65063	50	2.196	55.8	2.489	3.707	110	2.79
Conductor Size: 14 AWG / 2.1 mm ²							
1S70-40463	4	0.731	18.6	0.277	0.412	60	1.52
1S70-40863	8	0.963	24.5	0.511	0.761	80	2.03
1S70-41263	12	1.128	28.6	0.709	1.055	80	2.03
1S70-42463	24	1.498	38.0	1.278	1.903	80	2.03
1S70-45063	50	2.093	53.2	2.584	3.849	110	2.79
1S74-40463	4	0.781	19.8	0.344	0.513	60	1.52
1S74-40863	8	1.051	26.7	0.648	0.965	80	2.03
1S74-41263	12	1.270	32.3	0.916	1.365	80	2.03
1S74-42463	24	1.806	45.9	1.794	2.673	110	2.79
1S74-45063	50	2.429	61.7	3.419	5.092	110	2.79
Conductor Size: 1.5 mm ²							
1S70-N0463	4	0.685	17.4	0.235	0.35	60	1.52
1S70-N0863	8	0.902	22.9	0.429	0.639	80	2.03
1S70-N1263	12	1.053	26.7	0.588	0.876	80	2.03
1S70-N2463	24	1.394	35.4	1.045	1.557	80	2.03
1S70-N5063	50	1.946	49.4	2.103	3.133	110	2.79
1S74-N0463	4	0.731	18.6	0.273	0.406	60	1.52
1S74-N0863	8	0.983	25.0	0.505	0.752	80	2.03
1S74-N1263	12	1.186	30.1	0.705	1.051	80	2.03
1S74-N2463	24	1.624	41.2	1.272	1.895	80	2.03
1S74-N5063	50	2.258	57.4	2.562	3.816	110	2.79
Conductor Size: 2.5 mm ²							
1S70-P0463	4	0.761	19.3	0.314	0.468	60	1.52
1S70-P0863	8	1.003	25.5	0.576	0.858	80	2.03
1S70-P1263	12	1.176	29.9	0.801	1.193	80	2.03
1S70-P2463	24	1.565	39.7	1.448	2.157	80	2.03
1S70-P5063	50	2.187	55.5	2.928	4.361	110	2.79
1S74-P0463	4	0.812	20.6	0.367	0.547	60	1.52
1S74-P0863	8	1.094	27.8	0.684	1.019	80	2.03
1S74-P1263	12	1.324	33.6	0.965	1.437	80	2.03
1S74-P2463	24	1.884	47.9	1.884	2.805	110	2.79
1S74-P5063	50	2.538	64.5	3.582	5.336	110	2.79

600 Volt Thermoset Silicone (Multiple Triad)

1S80

**Description**

- Conductor 7-strand tinned copper, Class B
- Primary insulation. 30 mils (0.8 mm) 90°C thermoset silicone alloy
- Number of conductors per group 2
- Color code Black, white and red
- Group identification Each triad numbered
- Triad shield (Type 1S84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall shield. (Type 1S80/1S84) 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- 600 volt rated insulation per ICEA
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

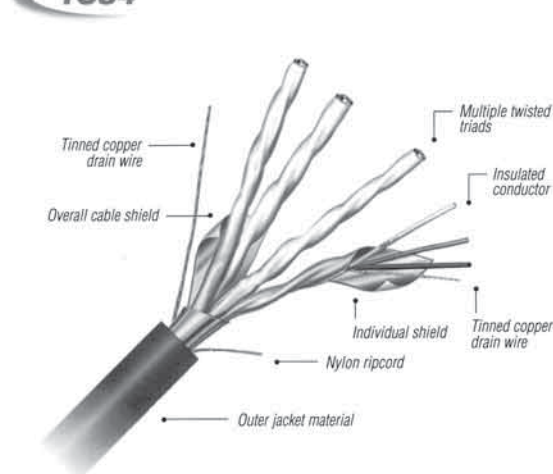
- 1S80 – Multiple triad overall shield
- 1S84 – Multiple triad individual and overall shield

Cable Options

- Manufactured in accordance with ICEA. Also available to IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

1S84



Electrical Properties	Units		Conductor Size							
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.7	9	3.8	12.4	2.3	7.5
Mutual Capacitance										
Type 1S80	pF/ft	pF/m	18	59	20	64	18	61	20	66
Type 1S84	pF/ft	pF/m	28	93	32	106	29	96	34	111
L/R Ratio	μH/Ω	μH/Ω	23	23	34	34	26	26	40	40
Inductance (L)	μH/ft	μH/m	0.20	0.66	0.19	0.62	0.20	0.65	0.18	0.60

Product Dimensions

600V ICEA Part Number	Triads	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1S80-60463	4	0.746	18.9	0.290	0.432	60	1.52
1S80-60863	8	1.004	25.5	0.541	0.805	80	2.03
1S80-61263	12	1.212	30.8	0.758	1.129	80	2.03
1S80-62463	24	1.661	42.2	1.375	2.049	80	2.03
1S80-65063	50	2.310	58.7	2.776	4.135	110	2.79
1S84-60463	4	0.783	19.9	0.336	0.500	60	1.52
1S84-60863	8	1.054	26.8	0.630	0.939	80	2.03
1S84-61263	12	1.274	32.4	0.890	1.326	80	2.03
1S84-62463	24	1.812	46.0	1.742	2.595	110	2.79
1S84-65063	50	2.437	61.9	3.309	4.929	110	2.79
Conductor Size: 14 AWG / 2.1 mm ²							
1S80-40463	4	0.819	20.8	0.373	0.556	60	1.52
1S80-40863	8	1.103	28.0	0.704	1.048	80	2.03
1S80-41263	12	1.337	34.0	0.998	1.486	80	2.03
1S80-42463	24	1.901	48.3	1.956	2.914	110	2.79
1S80-45063	50	2.563	65.1	3.739	5.569	110	2.79
1S84-40463	4	0.898	22.8	0.475	0.708	80	2.03
1S84-40863	8	1.157	29.4	0.834	1.242	80	2.03
1S84-41263	12	1.404	35.7	1.191	1.773	80	2.03
1S84-42463	24	1.999	50.8	2.340	3.486	110	2.79
1S84-45063	50	2.699	68.6	4.522	6.735	110	2.79
Conductor Size: 1.5 mm ²							
1S80-N0463	4	0.766	19.5	0.313	0.466	60	1.52
1S80-N0863	8	1.030	26.2	0.584	0.87	80	2.03
1S80-N1263	12	1.245	31.6	0.821	1.223	80	2.03
1S80-N2463	24	1.769	44.9	1.603	2.388	110	2.79
1S80-N5063	50	2.378	60.4	3.026	4.507	110	2.79
1S84-N0463	4	0.803	20.4	0.351	0.522	60	1.52
1S84-N0863	8	1.081	27.5	0.658	0.98	80	2.03
1S84-N1263	12	1.309	33.2	0.930	1.386	80	2.03
1S84-N2463	24	1.862	47.3	1.820	2.711	110	2.79
1S84-N5063	50	2.507	63.7	3.461	5.156	110	2.79
Conductor Size: 2.5 mm ²							
1S80-P0463	4	0.853	21.7	0.424	0.631	60	1.52
1S80-P0863	8	1.150	29.2	0.795	1.185	80	2.03
1S80-P1263	12	1.395	35.4	1.129	1.682	80	2.03
1S80-P2463	24	1.985	50.4	2.210	3.292	110	2.79
1S80-P5063	50	2.680	68.1	4.245	6.323	110	2.79
1S84-P0463	4	0.934	23.7	0.512	0.763	80	2.03
1S84-P0863	8	1.205	30.6	0.896	1.335	80	2.03
1S84-P1263	12	1.465	37.2	1.278	1.904	80	2.03
1S84-P2463	24	2.086	53.0	2.507	3.733	110	2.79
1S84-P5063	50	2.822	71.7	4.845	7.216	110	2.79

600 Volt Thermoset Silicone (Multiple Conductors)



Description

- Conductor 7-strand tinned copper, Class B
- Primary insulation. . . . 30 mils (0.8 mm) 90°C thermoset silicone alloy,
15 mils (0.4 mm) nylon covering
- Color code ICEA Method 4, black and numbered
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- 600 volt rated insulation
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 340
- UL listed as Type TC

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 6S35 – Multiple conductor control cable

Other Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

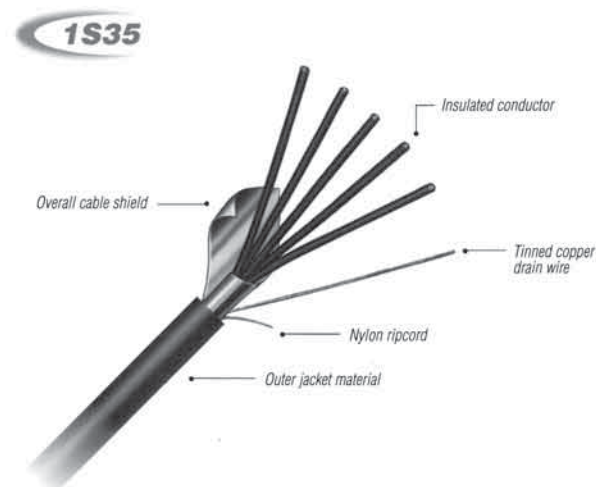
The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Electrical Properties	Units		Conductor Size									
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		12 AWG / 3.3 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.7	9.0	1.7	5.6	3.8	12.4	2.3	7.5
Mutual Capacitance	pF/ft	pF/m	14	45	14	48	15	52	14	47	15	51
L/R Ratio	μH/Ω	μH/Ω	26	26	39	39	51	51	30	30	45	45
Inductance (L)	μH/ft	μH/m	0.23	0.75	0.21	0.70	0.18	0.58	0.22	0.74	0.21	0.68

Product Dimensions

600V UL Control Part Number	Conductors	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor size: 16 AWG / 1.3 mm ²							
6S35-60263	2	0.415	10.5	0.087	0.130	45	1.14
6S35-60363	3	0.447	11.4	0.109	0.163	45	1.14
6S35-60563	5	0.530	13.5	0.156	0.232	45	1.14
6S35-60763	7	0.616	15.6	0.223	0.331	60	1.52
6S35-60963	9	0.709	18.0	0.274	0.408	60	1.52
6S35-61263	12	0.794	20.2	0.343	0.511	60	1.52
6S35-61963	19	0.963	24.5	0.531	0.791	80	2.03
6S35-63763	37	1.270	32.3	0.924	1.376	80	2.03
Conductor size: 14 AWG / 2.1 mm ²							
6S35-40263	2	0.444	11.3	0.103	0.153	45	1.14
6S35-40363	3	0.479	12.2	0.132	0.196	45	1.14
6S35-40563	5	0.610	15.5	0.216	0.321	60	1.52
6S35-40763	7	0.661	16.8	0.273	0.407	60	1.52
6S35-40963	9	0.764	19.4	0.338	0.504	60	1.52
6S35-41263	12	0.896	22.8	0.463	0.639	80	2.03
6S35-41963	19	1.038	26.4	0.663	0.988	80	2.03
6S35-43763	37	1.375	34.9	1.174	1.748	80	2.03
Conductor size: 12 AWG/3.31 mm ²							
6S35-20263	2	0.481	12.2	0.126	0.187	45	1.14
6S35-20363	3	0.520	13.2	0.164	0.245	45	1.14
6S35-20563	5	0.662	16.8	0.271	0.403	60	1.52
6S35-20763	7	0.718	18.2	0.347	0.517	60	1.52
6S35-20963	9	0.832	21.1	0.433	0.645	60	1.52
6S35-21263	12	0.975	24.8	0.590	0.879	80	2.03
6S35-21963	19	1.133	28.8	0.859	1.280	80	2.03
6S35-23763	37	1.508	38.3	1.545	2.302	80	2.03
Conductor size: 1.5 mm ²							
6S35-N0263	2	0.422	10.7	0.092	0.137	45	1.14
6S35-N0363	3	0.455	11.6	0.116	0.173	45	1.14
6S35-N0563	5	0.581	14.8	0.189	0.282	60	1.52
6S35-N0763	7	0.628	15.9	0.237	0.353	60	1.52
6S35-N0963	9	0.724	18.4	0.292	0.435	60	1.52
6S35-N1263	12	0.811	20.6	0.366	0.545	60	1.52
6S35-N1963	19	0.983	25.0	0.566	0.843	80	2.03
6S35-N3763	37	1.298	33.0	0.990	1.474	80	2.03
Conductor size: 2.5 mm ²							
6S35-P0263	2	0.457	11.6	0.118	0.176	45	1.14
6S35-P0363	3	0.494	12.5	0.150	0.224	45	1.14
6S35-P0563	5	0.629	16.0	0.242	0.361	60	1.52
6S35-P0763	7	0.682	17.3	0.306	0.456	60	1.52
6S35-P0963	9	0.789	20.0	0.379	0.564	60	1.52
6S35-P1263	12	0.925	23.5	0.514	0.766	80	2.03
6S35-P1963	19	1.073	27.3	0.738	1.100	80	2.03
6S35-P3763	37	1.424	36.2	1.309	1.949	80	2.03

600 Volt Thermoset Silicone (Multiple Conductors)

**Description**

- Conductor 7-strand tinned copper, Class B
- Primary insulation 30 mils (0.8 mm) 90°C thermoset silicone alloy
- Color code ICEA Method 4, black and numbered
- Jacket Black TPN

Application

- Provides extended service while exposed to fire
- Meets IEC 331 and BS 6387 C, S and Z fire tests
- 600 volt rated insulation per ICEA
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1S35 – Multiple conductor control cable

Other Options

- Manufactured in accordance with ICEA. Also available to IEC, BS standards or customized configurations.
- Cable constructions to meet BS 6387 C, S, W and Z
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

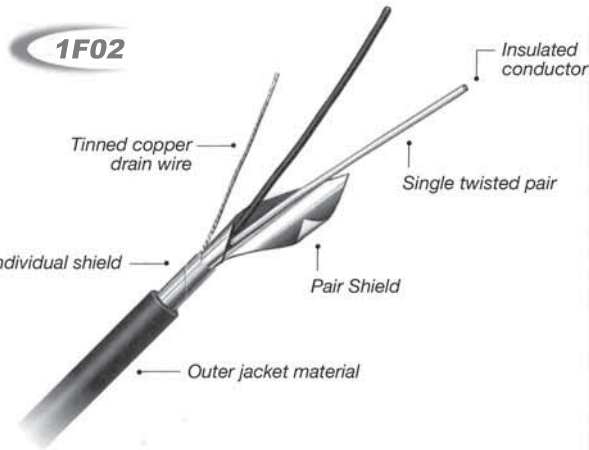


Electrical Properties	Units		Conductor Size									
			16 AWG / 1.3 mm ²		14 AWG / 2.0 mm ²		12 AWG / 3.3 mm ²		1.5 mm ²		2.5 mm ²	
Resistance (R)	Ω/Mft	Ω/km	4.4	14.5	2.7	9.0	1.7	5.6	3.8	12.4	2.3	7.5
Mutual Capacitance	pF/ft	pF/m	16	51	17	54	18	58	16	53	18	58
L/R Ratio	μH/Ω	μH/Ω	23	23	34	34	51	51	26	26	40	40
Inductance (L)	μH/ft	μH/m	0.20	0.66	0.19	0.62	0.18	0.58	0.20	0.65	0.18	0.60

Product Dimensions

600V ICEA Control Part Number	Conductors	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mm
Conductor Size: 16 AWG / 1.3 mm ²							
1S35-60263	2	0.353	9.0	0.071	0.106	45	1.14
1S35-60363	3	0.379	9.6	0.088	0.131	45	1.14
1S35-60563	5	0.445	11.3	0.124	0.184	45	1.14
1S35-60763	7	0.482	12.2	0.156	0.232	45	1.14
1S35-60963	9	0.596	15.1	0.216	0.322	60	1.52
1S35-61263	12	0.663	16.8	0.269	0.400	60	1.52
1S35-61963	19	0.766	19.5	0.383	0.570	60	1.52
1S35-63763	37	1.050	26.7	0.715	1.064	80	2.03
Conductor Size: 14 AWG / 2.1 mm ²							
1S35-40263	2	0.383	9.7	0.086	0.128	45	1.14
1S35-40363	3	0.411	10.4	0.109	0.162	45	1.14
1S35-40563	5	0.485	12.3	0.157	0.234	45	1.14
1S35-40763	7	0.527	13.4	0.201	0.300	45	1.14
1S35-40963	9	0.650	16.5	0.276	0.411	60	1.52
1S35-41263	12	0.726	18.4	0.347	0.517	60	1.52
1S35-41963	19	0.841	21.4	0.503	0.749	60	1.52
1S35-43763	37	1.155	29.3	0.946	1.409	80	2.03
Conductor Size: 12 AWG / 3.31 mm ²							
1S35-20263	2	0.420	10.7	0.108	0.160	45	1.14
1S35-20363	3	0.452	11.5	0.140	0.208	45	1.14
1S35-20563	5	0.537	13.6	0.207	0.308	45	1.14
1S35-20763	7	0.624	15.8	0.294	0.437	60	1.52
1S35-20963	9	0.719	18.3	0.365	0.544	60	1.52
1S35-21263	12	0.805	20.4	0.464	0.691	60	1.52
1S35-21963	19	0.976	24.8	0.723	1.076	80	2.03
1S35-23763	37	1.288	32.7	1.296	1.930	80	2.03
Conductor Size: 1.5 mm ²							
1S35-N0263	2	0.361	9.2	0.076	0.113	45	1.14
1S35-N0363	3	0.388	9.9	0.095	0.141	45	1.14
1S35-N0563	5	0.456	11.6	0.134	0.199	45	1.14
1S35-N0763	7	0.494	12.5	0.169	0.251	45	1.14
1S35-N0963	9	0.611	15.5	0.233	0.347	60	1.52
1S35-N1263	12	0.680	17.3	0.290	0.432	60	1.52
1S35-N1963	19	0.786	20.0	0.415	0.618	60	1.52
1S35-N3763	37	1.078	27.4	0.776	1.155	80	2.03
Conductor Size: 2.5 mm ²							
1S35-P0263	2	0.396	10.1	0.101	0.150	45	1.14
1S35-P0363	3	0.426	10.8	0.127	0.189	45	1.14
1S35-P0563	5	0.504	12.8	0.181	0.270	45	1.14
1S35-P0763	7	0.588	14.9	0.255	0.380	60	1.52
1S35-P0963	9	0.676	17.2	0.314	0.468	60	1.52
1S35-P1263	12	0.755	19.2	0.395	0.588	60	1.52
1S35-P1963	19	0.916	23.3	0.609	0.906	80	2.03
1S35-P3763	37	1.204	30.6	1.073	1.599	80	2.03

For ambient temperature applications for up to 200°C, we offer cables that are flame retardant and abrasion resistant with high temperature properties, making them ideal for both tray and conduit installation.



Description

Thermocouple Extensions

- Conductor Solid thermocouple Extension alloy wire
- Primary insulation 10 mils FEP
- Color Code..... ANSI standard
- Shield Aluminum-Polyester and a 7-strand tinned copper drain wire
- Jacket 12 mils FEP, color-coded to ANSI Standard

Instrument

- Conductor 7-strand tinned copper, Class B
- Primary Insulation 10 mils FEP
- Color code Black and white
- Shield Aluminum-Polyester and a 7-strand tinned copper drain wire
- Jacket 12 mils FEP

Application

- UL Listed as PLTC
- Continuous, high temperature service rating of 200°C (400°F)
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas
- NEC Article 725
- 300 volt rated insulation

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1F02 – Single pair shielded thermocouple extension
- 1F52 – Single pair shielded instrument

Product Characteristics

- Tensile strength (minimum PSI)..... 2,000
- Elongation..... 150
- Hardness, durometer D55
- Continuous service temperature, °F..... -400 to +400
- IEEE 383/IEEE 1202 Fire Test..... Pass
- Weather and chemical resistance Excellent

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same or be improved.

Product Dimensions

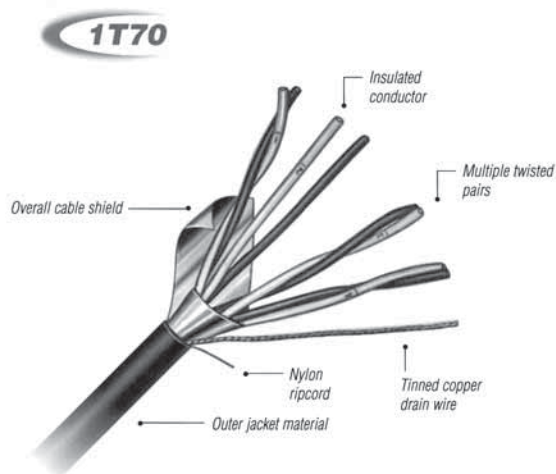
Part Number	Pairs	Nominal O.D.		Weight		Jacket Thickness	
		in	mm	lb/ft	kg/m	mils	mils
Conductor Size: 16 AWG / 1.3 mm²							
1F02-6+130	1	0.177	4.5	0.031	0.046	13	0.33
1F52-62130	1	0.190	4.8	0.034	0.051	13	0.33

Alloy Identification

Substitute for + in Part No.	ANSI TYPE	Allow Identification		ANSI Color Code		Overall Jacket	Temperature Range °C	Limits of Error
		Positive Wire	Negative Wire	Positive Wire	Negative Wire			
1	EX	Chromel	Constantan	Purple	Red	Purple	0 to +200	+/-1.7°C
2	JX	Iron	Constantan	White	Red	Black	0 to +200	+/-2.2°C
3	KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200	+/-2.2°C
4	SX	Copper	Copper-Alloy II	Black	Red	Green	0 to +200	+/-5.0°C
5	TX	Copper	Constantan	Blue	Red	Blue	-60 to +100	+/-1.0°C

Tough, flexible Dekoron TPE (thermoplastic elastomer) cable protects against arctic weather conditions.

- Designed especially for cold-weather applications, Dekoron TPE cable stays flexible, bends easily at -65°C and withstands the brutal conditions of arctic environments.
- With many of the properties of thermoset materials, TPE also offers good flexibility at low temperatures, excellent dielectric properties and long-term moisture resistance.
- It is used as both a primary insulation and jacket for Dekoron instrument, thermocouple extension wire and control cable.



Description

- Conductor 7-strand bare copper Class B
- Primary insulation. . . 15 mils (0.4 mm), TPE
- Color code Black and white pairs
- Shield 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket Black TPE

Application

- UL listed as PLTC or 600 volt rated insulation per UL 1277
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas

Cable Options

- Manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials

Cable Types

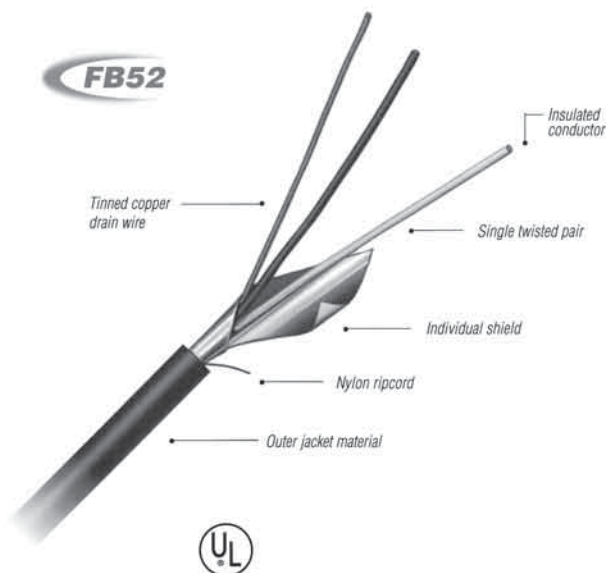
- 1T50 – Single pair unshielded
- 1T52 – Single pair shielded
- 1T60 – Single triad unshielded
- 1T62 – Single triad shielded
- 1T70 – Multiple pair overall shield
- 1T74 – Multiple pair individual and overall shield
- 1T80 – Multiple triad overall shield
- 1T84 – Multiple triad individual and overall shield

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Fieldbus

Tough, flexible Dekoron XLPE (Crosslinked Polyethylene) fieldbus cable meets the ISA/50.02 Fieldbus standards.

- Dekoron fieldbus cable is constructed of XLPE insulation material to ensure good dielectric properties and excellent flame retardance.



Description

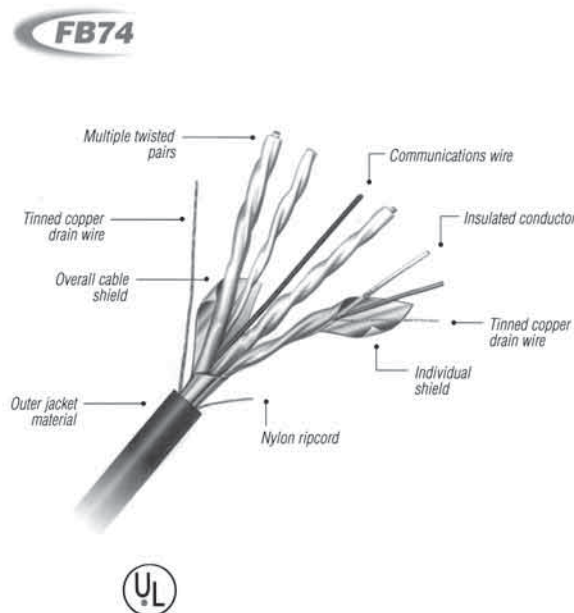
- Conductor 7-strand bare copper, Class B
- Primary insulation..... 25 mils XLPE
- Color code..... Black and white
Blue and orange
- Shield..... 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket..... PVC, color-coded orange

Application

- Excellent electrical characteristics and flame retardance to meet ISA/50.02 fieldbus standards
- UL listed as PLTC/ITC
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas.
- NEC 725/727
- 300 volt rated insulation

Cable Type

- FB52 – Single pair shielded
- FB74 – Multiple Pair - Individual & Overall Shield



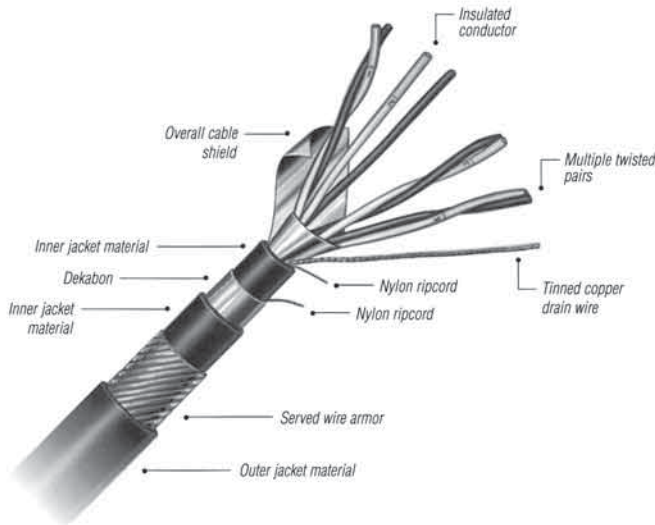
*The specifications listed above are subject to change without notice.
In any change, the product's performance will remain the same, or be improved.*

Electrical Performance Requirement	ISA/SP50	Obtained
Impedance, ohms at 31.25 kHz	100 +/- 20	101.40
Attenuation, dB/Km maximum	3.0	2.36
Capacitive unbalance maximum, nanofarads/km at 31.25 kHz	2.0	1.07
Conductor DC resistance maximum, ohms/leg	22	21

Part Number	Color Code	AWG	Nominal O.D.	Weight	Jacket Thickness
			<i>in</i>	<i>lb/ft</i>	<i>mils</i>
FB52-8931A	Black & White	18	0.295	0.045	35
FB52-8931A-264	Blue & Orange	18	0.295	0.045	35

Dual Armor

For additional protection, all cables can be combined with metallic armors: galvanized steel served wire armor (SWA) and galvanized steel or aluminum interlocked armor. When combined with armor, Dekabon offers superior cable protection.



Description

Multiple Pair Dual Armor

- Conductor 7-strand or solid copper, Class B
- Primary insulation. All Dekoron insulations available
- Color code Black and white pairs
- Pair shield 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Overall Shield 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket All Dekoron jackets available
- First armor Dekabon aluminum sheath
- Jacket **Select** Dekoron jackets available
- Optional nylon layer
- Second armor. Steel served wire armor, steel or aluminum interlocked armor
- Outer jacket All Dekoron jackets available

Single Pair Dual Armor

- Conductor 7-strand or solid copper
- Primary insulation. All Dekoron insulations available
- Color code Black and white
- Shield 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Jacket All Dekoron jackets available
- First armor Dekabon aluminum sheath
- Jacket **Select** Dekoron jackets available
- Optional nylon layer
- Second armor. Steel served wire armor, steel or aluminum interlocked armor
- Outer jacket All Dekoron jackets available

Application

- Dekoron dual armored cables provide superb mechanical protection with excellent crush and cut resistance
- Excellent moisture and chemical resistance when Dekabon aluminum sheath is combined with one of Dekoron's metal armors
- Ideal for direct burial applications
- Dual armored cables are available with any insulation and jacket material that Dekoron offers

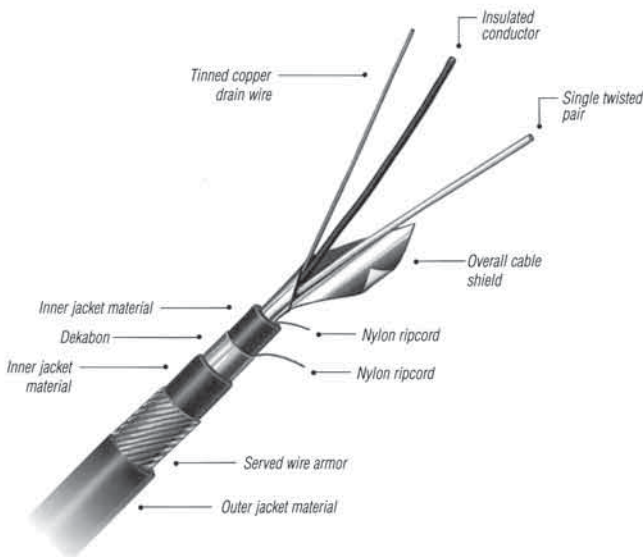
Bending Radius

- 15 x d (d = overall diameter)

Cable Options

- Can be manufactured in accordance with UL. Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Steel served wire armor and steel or aluminum interlocked armor available for single pair cable constructions

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.



Zero Halogen

Cables that use PVC, CPE, Hypalon and fluoropolymer materials contain halogens. In a fire, these materials release acid gas that is toxic to people and can damage sensitive equipment. Dekoron offers several cable types that can meet Zero Halogen standards.



Description

- Conductor Solid thermocouple alloy, solid or 7-strand copper
- Primary insulation. HDPE or silicone alloy
- Color code ANSI standard (thermocouple), Black and white pairs (instrument), Black, white and red triads (instrument)
- Overall shield. 100% coverage, an aluminum-polyester tape shield and a 7-strand tinned copper drain wire
- Outer jacket LDPE, HDPE or TPN

Application

- Designed to help minimize injury and damage to personnel and sensitive equipment
- Silicone alloy insulated, TPN jacketed cables, UL listed
- Suitable for Class I, Division 2 and Class II, Division 2 hazardous areas

Bending Radius

- $6 \times d$ (d = overall diameter)

Cable Type

- 1720 – Multiple pair overall shielded thermocouple extension
- 1770 – Multiple pair overall shielded instrument
- 1780 – Multiple triad overall shielded instrument
- 1S02 – Single pair shielded thermocouple extension
- 1S20 – Multiple pair overall shielded thermocouple extension
- 1S52 – Single pair shielded instrument
- 1S70 – Multiple pair overall shielded instrument
- 1S80 – Multiple triad overall shielded instrument

Cable Options

- Manufactured in accordance with UL (as noted). Also available to ICEA, IEC, BS standards or customized configurations.
- Various metric and AWG size conductors
- Special color coding of insulation and jacket materials
- Cable can be constructed to 300 or 600 volt rating

Low Smoke

Along with zero halogen cables, Dekoron can also supply cables that demonstrate low smoke characteristics when subjected to an industrial emergency involving fire or explosion. Dekoron's silicone alloy insulation and TPN jacket demonstrate proven low smoke emissions.

Smoke Comparisons – NBS Smoke Chamber, Dm		
Chemical	Flaming	Smoldering
Silicone Alloy	50	150
TPN Jacket	100	250
PVC	300	400
XLPE Insulation	600	350
CPE Jacket	400	300
Hypalon Jacket	500	400

Cable Type

- 1S02 – Single pair shielded thermocouple extension
- 1S20 – Multiple pair overall shielded thermocouple extension
- 1S52 – Single pair shielded instrument
- 1S70 – Multiple pair overall shielded instrument
- 1S80 – Multiple triad overall shielded instrument

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved.

Glossary

AC – Alternating current.

Accelerated Aging – A test that simulates long-time environmental conditions in a relatively short time.

Ambient – Conditions existing at a test or operating (e.g. ambient temperature).

Ampere – The unit of current. Defined as the amount of current that flows when one volt of emf is applied across one ohm of resistance.

Analog – Representation of data by continuously variable quantities.

Anneal – To soften and relieve strains in any solid material, such as metal or glass, by heating it just below its melting point and then slowly cooling it. Annealing generally lowers the tensile strength of the material, while improving its flex life and flexibility.

ANSI – American National Standards Institute. Publishes nationally recognized standards.

ASTM – American Society for Testing and Materials. Writes standards for testing materials as well as specifications for materials.

AWG – American Wire Gauge. A wire diameter specification. The smaller the AWG number, the larger the wire diameter.

Bend Radius – Radius of curvature that a cable can bend without any adverse effects.

Binder – A tape or thread used for holding assembled cable components in place.

Braid – A group of textile or metallic filaments interwoven to form a tubular structure which may be applied over one or more wires.

BS – British Standards.

Cabling – The method by which a group of insulated conductors is mechanically assembled or twisted.

Capacitance – The ability of a dielectric material between conductors to store electricity when a difference of potential exists between the conductors. The unit of measurement is the farad.

CMA – Circular mil area.

Concentric Stranding – A group of wires twisted together and containing a center core with subsequent layers spirally wrapped around the core.

Conductivity – The ability of a material to allow electrons to flow, measured by the current per unit of voltage applied. It is the reciprocal of resistivity.

Conductor – A material that offers little resistance to the flow of electrical current.

CPE – Chlorinated polyethylene.

Crosstalk – A type of interference caused by audio frequencies from one line being coupled into adjacent lines. The term is loosely used to also include coupling at higher frequencies.

CSA® – Canadian Standards Association.

Cut-through Resistance – The ability of a material to withstand mechanical pressure without damage.

Dielectric – An insulating (nonconductive) medium.

Dielectric Constant – Also called permittivity. The dielectric which determines the amount of electrostatic energy that can be stored by the material when a given voltage is applied. Actually, the ratio of the capacitance of a capacitor with a dielectric to the capacitance of an identical capacitor in vacuum as a dielectric.

Digital – Representation of data by discrete characters.

Drain Wire – An uninsulated wire in contact with the sheath throughout the length of a cable. Used for terminating the sheath.

Electrostatic – Pertaining to static electricity, or the force exerted by an electric charge for example.

Emf – Electromotive force.

Energy – The capability of doing work.

EPDM – Ethylene-propylene-diene monomer rubber. A synthetic rubber with good electrical insulating properties.

EPR – Ethylene-propylene rubber.

Farad (F) – A unit of capacitance.

FEP – Fluorinated ethylene-propylene. A thermoplastic with good electrical insulating properties and chemical resistance.

Ferrous – Composed of and/or containing iron. A material that exhibits magnetic characteristics.

Frequency (f) – The number of times a periodic wave repeats in a unit of time.

Ground (GND) – An electrical connection to earth, usually through a ground rod. Also a common return to a reference potential, such as the metal chassis in radio equipment.

HDPE – High density polyethylene.

Henry (H) – The unit of inductance.

Hertz (Hz) – The unit of frequency, one cycle per second.

HL – Hazardous locations.

Hypalon® – A DuPont trade name for a synthetic material (chlorosulfonated polyethylene) used as insulating material for wire and cable.

ICEA – Insulated Cable Engineers Association. Publishes nationally recognized specifications and tests for electrical cables.

IEC – International Electrotechnical Commission.

IEEE – Institute of Electrical and Electronic Engineers. Publishes its own standards and is a member of ANSI and ISO.

Glossary

Inductance (L) – The property of a circuit or circuit element that opposes a change in current flow. Inductance causes current changes to lag behind voltage changes. Inductance is measured in Henrys.

Insulation – A material having good dielectric properties which is used to separate close electrical components, such as cable conductors and circuit components.

Insulation Resistance – That property of an insulating material that resists electrical flow through the insulating material when a potential difference is applied.

Isolation – The ability of a circuit or component to reject interference, usually expressed in decibels (dB).

ISA – Instrumentation Society.

ISO – International Standards Organization.

Jacket – Pertaining to wire and cable, the outer protective covering. Also known as sheath.

LDPE – Low density polyethylene.

MC – Metal Clad cable, a UL classification indicating a metal clad cable. An assembly of insulated conductors with a metal cladding applied over the core and with grounding conductor(s) if the cladding is interlocked armor.

Mega – Prefix meaning million (10^6).

Megahertz (MHz) – Unit of frequency equal to one million hertz (one million cycles per second).

Micro – Prefix meaning one-millionth (10^{-6}).

Microfarad (μf) – One-millionth of a farad.

Micron (μm) – One-millionth of a meter.

Mil – A unit of length equal to one-thousandth (10^{-3}) of an inch (.001").

Milli – Prefix meaning one-thousandth (10^{-3}).

Mutual Capacitance (Cm) – Capacitance between two conductors when all other conductors including ground are connected together and then regarded as an ignored ground. Measured at 10000 Hz frequency.

Nano – Prefix meaning one-billionth (10^{-9}).

Nanometer (nm) – One-billionth of a meter.

Nanosecond – One-billionth of a second.

NEC – National Electric Code.

NEMA – National Electric Manufacturers Association.

Noise – In a cable or circuit, any extraneous signal which tends to interfere with the signal normally present in or passing through the system.

Nomex® – DuPont trademark for a temperature-resistant flame-retardant nylon.

Nylon – An abrasion-resistant thermoplastic with good chemical resistance.

O.D. – Outside diameter.

Ohm (Ω) – The electrical unit of resistance.

Ohm's Law – Stated $E=IR$, $I=E/R$, or $R=E/I$, the current I in a circuit is directly proportional to the voltage E , and inversely proportional to the resistance R .

Pico – Prefix meaning one-millionth of one-millionth (10^{-12}).

Picofarad (pF) – One-millionth of one-millionth of a farad.

Plastic – High polymeric substances, including both natural and synthetic products, but excluding the rubbers that are capable of flowing under heat and pressure.

PLTC – Power Limited Tray Cable, 300 volt UL designation.

Polyethylene (PE) – A thermoplastic material having good electrical properties.

Polypropylene (PP) – A thermoplastic similar to polyethylene but stiffer and having a higher softening point (temperature).

Polyurethane (PU) – Broad class of polymers noted for good abrasion and solvent resistance.

Polyvinyl Chloride (PVC) – A general purpose thermoplastic used for wire and cable insulation and jackets.

R – The symbol for resistance.

Shield – A tape or braid of metal, usually copper, aluminum or other conductive material, placed around or between electric cables or their components, to prevent signal leakage or interference.

TC – Tray Cable, UL designation 600 volt.

Teck 90 – CSA designation for a single or multiconductor cable.

TPE – Thermoplastic elastomer.

TPN – Dekoron designation for a non-halogenated thermoplastic jacket material.

UL – Underwriters Laboratory.

XLPE – Crosslinked polyethylene.

XLPO – Crosslinked polyolefin.

Cable Installation

Only brief installation instructions are given in this publication. Please refer to the Dekoron Cable Installation Guide for detailed installation instructions.

Tensile Strength of Conductors

If a cable contains conductors of different gauge sizes the pulling tension must be calculated for each conductor group size and summed for the total tension. The tensile strength limitation of conductors for pulling cables is determined by the following formula:

$$T_{\max} = K \times N \times CMA$$

T_{\max} – Maximum allowable pulling tension in pounds
 K – Constant for copper, 0.008 (lb/CMA)
 N – Number of conductors*
 CMA – Circular mil area of each size of conductor

Sidewall Pressure

1. Sidewall pressure is the radial force exerted on the cable's sheath, jacket and/or insulation at the radius of a bend in a conduit, duct and/or pulley when the cable is under pulling tension.
2. Sidewall pressure is a major factor in determining the maximum allowable pulling tension that can be applied to a cable without causing cable damage.
3. Maximum sidewall pressure must not exceed 500 pounds per foot of the conduit or duct bend radius.

one cable per conduit
 $P_s = T_{\text{out}} / R$

2, 4 or more cables per conduit
 $P_s = T_{\text{out}} / (R \times N) \times 1.4$

T_{out} – Tension coming out of bend
 R – Bend radius in feet
 N – Number of cables
 1.4 – Weight correction factor for 2 or more cables (constant)
 P_s – Sidewall pressure

Pulling Devices

1. Cables may be pulled with a pulling grip attached to the conductors or by a basket grip over the sheathing, jacket and/or insulation.
2. When pulling with a pulling eye attached to the conductors, the maximum allowable pulling tension is determined by the tensile strength of the conductors.
3. When pulling with a basket grip, the maximum allowable pulling tension should not exceed 1,000 lbs and in any case, may not exceed the maximum allowable pulling tension based on the tensile strength of the conductors.

Bending Radius

1. Proper installation of cable requires that consideration is given to the minimum bending radius and training radius of a cable.
2. The minimum bending radius of a cable is the minimum to which a cable should be bent while under pulling tension during installation.
3. The training radius, also known as permanent training, of a cable is the minimum to which a cable should be bent without tension on the cable.
4. During installation, the bending radius should be as large as practicable for the installation conditions.

Low voltage cable – analog, 300 volt and 600 volt

Minimum Bending Radius – 6 x diameter (O.D.) of the cable
Minimum Training Radius – 4 x diameter (O.D.) of the cable

Armored cables – interlocked, served wire or Dekabon

Minimum Bending Radius – 12 x diameter (O.D.) of the cable
Minimum Training Radius – 8 x diameter (O.D.) of the cable

Support Spacing

The maximum recommended support spacing for copper conductors in a vertical position is 100 ft (30m) for conductor sizes 22 to 10 AWG (0.3mm² to 6.0mm²).

Support Devices

Cables should be supported in vertical trays, conduits, ducts and boxes by basket grips, hardwood support blocks, cable clamps, etc., at intervals not to exceed the maximum recommended support spacing. Cables should normally be supported in vertical trays with cable ties by securing the cable to the tray every 5 to 10 feet (1.5 to 3 metres).

Handling, Storage and Packing

Standard Packaging (Domestic)

- The packaging, marking and shipping methods utilized by Dekoron are per industry (NEMA) and ISO 9000 requirements, or specified by the customer.
- The mode of transportation is selected by the customer. Where no requirements are specified, the mode of transportation is selected by Dekoron; consideration shall be given to the mode of transportation and product destination.
- The product shall be placed on reels of substantial construction to withstand handling during transit. The reels are non-returnable.
- After passing final tests, all products receive additional visual inspection during packaging.
- Both the free and hub ends of the product are covered by heat shrinkable end caps to inhibit moisture ingress.
- The free end of the product is fastened to its adjacent winding by a plastic tie-down strap.
- The product on the reel is securely covered with durable stretch film secured with Dekoron packaging tape.
- The Dekoron part number, quantity and sequential marking located closest to the reel drum (hub number) of the product is marked on the outside of the reel flange.
- Waterproof labels affixed to each reel outline recommended handling practices.
- Other identification appearing on the reel is provided in accordance with the individual customer's requirements. Durable tagging of reels available upon request.
- When certifications must accompany the shipment, these documents are placed in a weather resistant envelope and securely attached to the reel. Reel(s) containing the document package are prominently identified with "CERTIFICATIONS ENCLOSED".

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International Packaging (Export)

In addition to the standard packaging procedure, the following is provided at a minimal charge for international shipments.

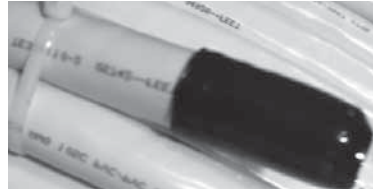
Air Freight and Standard Ocean Freight

- Products packed in accordance with customer requirements.

Heavy Duty Ocean Freight

- Products packed in accordance with customer requirements.
- Both the free and hub ends of the product are covered by heat shrinkable end caps to inhibit moisture ingress.
- The outside of the reel is enclosed by wooden slats nailed to the flanges of the reel.
- The wooden slats are secured to the reel with steel banding
- Other identification appearing on the reel is provided in accordance with the individual customer's requirements, such as:
 - Customer name
 - Purchase order number
 - Ultimate destination
 - Weights and dimensions
 - Country of origin
 - Package Numbers(s)
- Durable tagging of reels available upon request.

Handling, Storage and Packing



**Sturdy Cable Tie
Heat-Shrink End Cap**

Standard Packaging (Domestic)



Resilient Stretch Film Cover

*Permits Visual Inspection
Moisture Protection
Secures traverse*

Sturdy Wooden Reel

*Heat treated and stamped for
compliance with International
Plant Protection Committee's
ISPM 15: Guidelines for
Regulating Wood Packaging
Material in International Trade*

Handling Instruction Label

*Offer instruction for best
handling practices*

International Packaging (Export)



In addition to the above

Durable Wood Lagging

*Heat treated and stamped for
compliance with International
Plant Protection Committee's
ISPM 15: Guidelines for
Regulating Wood Packaging
Material in International Trade
Excellent Damage Protection*

Steel Strap Banding

*Provides additional packaging
support & security*