

\$12.00



**Standard Wire
& Cable Co.**

Technical Handbook & Catalog



INSTRUCTIONS

for accessing the
Standard Wire & Cable Co.

Technical Handbook and Catalog

The next 9 pages contain the table of contents for our catalog. You can directly access any page in the catalog by "clicking" with your mouse on any of the items listed in the table of contents.

We also offer a CD ROM version. Using the CD ROM version is much faster than accessing our catalog from the web. To obtain a CD ROM version contact a salesman or request one from the web site link on the home page.

This *Technical Handbook and Catalog* supersedes all previous Standard Wire & Cable Co. publications and is copyrighted. All reproduction rights are reserved. Information on our web site and CD ROMs are the property of Standard Wire & Cable Co. Your use of any information on our web site or CD ROMs evidences your agreement to respect the property rights of Standard Wire & Cable Co.

No part of this Technical Handbook and Catalog may be reproduced without the express written consent of Standard Wire & Cable Co.

© Copyright 2006 Standard Wire & Cable Co.

Twelfth Edition

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com

Standard Wire & Cable Co.

your fast, dependable source

compliant to the ISO 9001:2008 / AS9120 / 2009 standards

Answers to your wire and cable requirements are as close as the telephone. Our large inventories ensure that we will have the right stock when you need it, just in time for your production or installation schedule. We carry a full line of mil spec wire and cable, commercial wire and cable, coaxial cables, heat shrinkable products, and fiber optic products. We can supply you with the right sizes, types, and quantities of product you need to keep you on schedule and your management happy. We have been doing this for companies since 1947.

If you need a non-stock item, don't worry. We will make it for you. Custom cable and custom heat shrink shapes are another of our specialties. We will design, engineer, and manufacture to meet your exact requirements.

Our Quality Assurance Department makes certain you get exactly what you order - the right size, construction, and quality. We carefully inspect each order before it is shipped.

Our quality assurance system has received independent certification that we are

compliant to the ISO 9001:2008 / AS9120 / 2009 standards.

For our international customers, we have an export department that specializes in providing the right product with the proper export documentation and packaging necessary to deliver the product to you quickly and efficiently, anywhere in the world. Our export department professionals earned the United States of America Department of Commerce's coveted **President's "E" award for excellence in export** in recognition of our outstanding service.

Start with this Technical Handbook and Catalog. Though it does not begin to include everything we stock, it gets you close to one-stop shopping. If you do not see what you need, call, fax, or E-Mail us. We'll check our computerized inventories of over 25,000 different items. We will be glad to help you obtain the right product for your needs, whether it is off-the-shelf or custom engineered. Contact one of our outside or inside sales professionals whenever you have a wire and cable requirement. Let us put our technical know-how, quality, and service to work for you.

Corporate Office California

2050 E. Vista Bella Way
Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006
FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Southwest Regional Office Arizona

3120 West Thomas Road, Bldg. #801
Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478
FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Table of Contents

Capabilities

Insulation Types	1
Conductor Types	1
Custom Services	1

COMMERCIAL PRODUCTS

Alarm and Security Cables

Burglar Alarm	2
Unshielded Multi-Conductor	2

Audio and Security Cables

Unshielded Multi-Conductor	3
Unshielded Multi-Conductor	4

Audio and Data Cable

Shielded Pairs	5
Shielded Multi-Conductor	6
Shielded Multi-Conductor	7

Fire Alarm Cable

Shielded Multi-Conductor	7
Unshielded Multi-Conductor	8

Inside Telephone Multi-Pair

CAT 5E 350 MHz UTP	9
CAT 5E 350 MHz Shielded	10
CAT 6 600 MHz UTP	11

Air Plenum

CAT 6 600 MHz UTP	12
Unshielded Multi-Conductor	13
Shielded Multi-Conductor	14
CAT 5E 350 MHz UTP	15
CAT 5E 350 MHz Shielded	16
Sound and Intercom Shielded Pairs	17
Unshielded Fire Alarm Cable	17
Shielded Fire Alarm Cable	18

Microminim[®]

Ultra-Flex Micro-Miniature Wire & Cable	18
---	----

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Coaxial Cable	
CATV-CCTV	19
National Electric Code	20
Color Code Charts.....	21
Traffic Signal Cable	
Cal-Trans Loop Detector Lead-In Cable.....	22
Inductance Loop Detector Wire DETECTA-DUCT®	22
Retractable Cords	
Flexoprene®	23
PVC Communication & Electronic Control Cords.....	24
Heavy Duty Outdoor Use - Communication & Electronic Control Cords	24
Shielded Communication Cords	25
Test Lead.....	25
Rubber Portable Flexible Cord	
Type SJ	26
Flexoprene® Welding Cable	26
Flexoprene® Portable Cord	
Type SOOW	27
Types SVO & SJOOW	27
Polyvinylchloride (PVC) Insulated UL/CSA Hook-Up Wire	
UL Style 1007, CSA TR-64	28
UL Style 1015, CSA TEW	28
UL Style 1028, CSA TEW	29
UL Style 1061, CSA AWM	29
PTFE Insulated Hook-Up Wire	
UL Style 1180, CSA 300V.....	30
UL Style 1199, CSA 600V	31
UL Style 1213, CSA 150V	32
Appliance Lead Wire for High Temperature	
TAGT/TGGT	33
Appliance, Fixture, Apparatus, and Motor Lead Wire	
SRML.....	34

MIL SPEC PRODUCTS

Instrumentation Control Cable	
22 AWG Conductors	35
24 AWG Conductors	35
20 AWG Conductors	36
18 AWG Conductors.....	36

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Instrumentation Control Cable with Overall Shield	
24 AWG Conductors	37
22 AWG Conductors	37
20 AWG Conductors	38
18 AWG Conductors.....	38
Multiple Pair Control Cable, Each Pair Shielded	
22 AWG Conductors	39
20 AWG Conductors	39
18 AWG Conductors.....	40
16 AWG Conductors.....	40
Tinned Copper Flexible Braid QQ-B-575 (A-A-59569)	41
Bare Solid Soft Drawn Copper Wire	
QQ-W-343 (A-A-59551)	42
Tinned Solid Soft Drawn Copper Wire	
QQ-W-343 (A-A-59551)	42
MIL-DTL-5086 (SAE AS50861)	43
MIL-DTL-16878	
MIL-DTL-16878/1 Type B	44
MIL-DTL-16878/2 Type C	44
MIL-DTL-16878/17 Type B/N	44
MIL-DTL-16878/18 Type C/N	44
MIL-DTL-16878/3 Type D	45
MIL-DTL-16878/19 Type D/N	45
Single Conductor B/N, C/N, D/N Shielded	46
Two Conductor B/N, C/N, D/N Shielded	47
Three Conductor B/N, C/N, D/N Shielded	48
Four Conductor B/N, C/N, D/N Shielded	49
Extruded PTFE Hook-Up Wire	
MIL-W-16878E/4 Type E NEMA HP-3.....	50
MIL-W-16878E/5 Type EE NEMA HP-3.....	51
MIL-W-16878E/6 Type ET NEMA HP-3.....	52
MIL-W-16878 Rev. F Supersession of Duplicate Strandings to MIL-DTL-22759	53
MIL-W-16878 Cable Designation	
Cable Description	54
Specification Number	54
Conductor Material	55
Color Code.....	55
Conductor Size	55
Conductor Stranding	55
Class H Shielded & Jacketed Type E Cables	
Single Conductor MIL-W-16878/4.....	56
Two Conductor MIL-W-16878/4.....	57
Three Conductor MIL-W-16878/4	57

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Four Conductor MIL-W-16878/4	58
MIL-DTL-13486	
Type I, Class A Cable, Special Purpose, Electrical, Low Tension	59
Flexible Strand	
Pigtail.....	60
Special Purpose Miniature Flexible Cables (MIL-DTL-5898F, MIL-C-10392B)	60
Antenna Wire (MIL-W-6370C, MIL-DTL-25136, MIL-DTL-12995)	61
Test Lead Wire	
Stanflex®	61
MIL-DTL-8777D (ASG) MS 25471 (ASG)	62
MS 27110 (ASG)	63
MIL-DTL-25038/1	64
MIL-DTL-25038/3	64
MIL-DTL-22759 (SAE-AS22759)	
MIL-DTL-22759/1 (SAE-AS22759)	65
MIL-DTL-22759/2 (SAE-AS22759)	65
MIL-DTL-22759/3 (SAE-AS22759)	66
MIL-DTL-22759/4 (SAE-AS22759) MS 90294	67
MIL-DTL-22759/5 (SAE-AS22759)	68
MIL-DTL-22759/6 (SAE-AS22759)	68
MIL-DTL-22759/7 (SAE-AS22759)	69
MIL-DTL-22759/8 (SAE-AS22759)	69
MIL-DTL-22759/9 (SAE-AS22759)	70
MIL-DTL-22759/10 (SAE-AS22759)	70
MIL-DTL-22759/11 (SAE-AS22759)	71
MIL-DTL-22759/12 (SAE-AS22759)	71
MIL-DTL-22759/16 (SAE-AS22759)	72
MIL-DTL-22759/17 (SAE-AS22759)	72
MIL-DTL-22759/18 (SAE-AS22759)	73
MIL-DTL-22759/19 (SAE-AS22759)	73
MIL-DTL-22759/20 (SAE-AS22759)	74
MIL-DTL-22759/21 (SAE-AS22759)	74
MIL-DTL-22759/22 (SAE-AS22759)	75
MIL-DTL-22759/23 (SAE-AS22759)	75
MIL-DTL-22759/32 (SAE-AS22759)	76
MIL-DTL-22759/33 (SAE-AS22759)	76
MIL-DTL-22759/34 (SAE-AS22759)	77
MIL-DTL-22759/35 (SAE-AS22759)	77
MIL-DTL-22759/41 (SAE-AS22759)	78
MIL-DTL-22759/42 (SAE-AS22759)	78
MIL-DTL-22759/43 (SAE-AS22759)	79
MIL-DTL-22759/44 (SAE-AS22759)	79
MIL-DTL-22759/45 (SAE-AS22759)	80

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/46 (SAE-AS22759)	80
MIL-DTL-22759/80A (SAE-AS22759)	81
MIL-DTL-22759/81A (SAE-AS22759)	81
MIL-DTL-22759/82A (SAE-AS22759)	82
MIL-DTL-22759/83A (SAE-AS22759)	82
MIL-DTL-22759/84A (SAE-AS22759)	83
MIL-DTL-22759/85A (SAE-AS22759)	83
MIL-DTL-22759/86A (SAE-AS22759)	84
MIL-DTL-22759/87A (SAE-AS22759)	85
MIL-DTL-22759/88A (SAE-AS22759)	86
MIL-DTL-22759/89A (SAE-AS22759)	87
MIL-DTL-22759/90A (SAE-AS22759)	87
MIL-DTL-22759/91A (SAE-AS22759)	88
MIL-DTL-22759/92A (SAE-AS22759)	88
MIL-DTL-81044/9 (SAE AS81044)	89
MIL-DTL-81044/12 (SAE AS81044)	90
MIL-DTL-81044/13 (SAE AS81044)	90
MIL-DTL-81381/7	91
MIL-DTL-81381/8	91
MIL-DTL-81381/9	92
MIL-DTL-81381/11	92
MIL-DTL-81381/12	93
MIL-DTL-81381/13	93
MIL-DTL-81381/17	94
MIL-DTL-81381/21	94
MIL-DTL-81381/22	95
MIL-DTL-27500 (NEMA WC27500) Cable Designation	96
Table I - Basic Wire Specifications	97
Table I A - Shield Material	97
Table I B - Jacket Material and Color	98
Table II - Allowable Shield and Jacket Materials for Each Basic Type Wire	99
Table III C - Color of Insulation for Identification of Wire Sizes	99
Table III A - Circuit Identification Colors for Basic Wires in Cable	100
Table III B - Circuit Identification Colors for Basic Wires in Cable	100
COAXIAL CABLE	
THEORY AND APPLICATION	101
DEFINITIONS	102
TABLE 1 - Inner Conductors	103
TABLE 2 - Outer Conductors	104
TABLE 3 - Primary Dielectrics	104
TABLE 4 - Jackets	105
TABLE 5 - Dielectric Properties	105
MANUFACTURING	108

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-17 Cable Descriptions.....	109
RG/U Cable Descriptions	118
COAX CABLE CROSS-REFERENCE	131
MIL-DTL-17 Attenuation.....	133
RG Attenuation	137

HEAT SHRINKABLE PRODUCTS

Heat Shrinkable Products

Medium/Heavy Wall Tubing	144
Wrap Around Sleeves.....	144
Cable End Caps	144
Transition Boots	144
Cable Breakout Boots.....	144
Adhesive and Mastic Tapes	144
Shrink Tubing.....	144
Cable Entry Seals.....	144
Ratio Tubing	144
Motor Connection Kits	144
Military Heavy Wall Tubing	
Heavy Wall Splice Tubing - Military/Industrial OEM Grade	145
Commercial Heavy Wall Tubing	145
Commercial Medium Wall Tubing	146
Wrap Around Sleeves	
XWSA	146
Military/Industrial Grade End Caps	
Heat Shrinkable End Caps With or Without Sealant & Valves	147
Transition Boot	
Strain Relief & Boots for Harness Systems	148
Right Angle	149
Low-Profile	150
with Lip.....	151
Ratio Cable Breakout Boot	152
Cable Breakout Boot	153
Very Flexible Sealing Tape XTPA 080	155
Shrink Tube	
MIL-DTL-23053/1 (SWCPLD-100)	156
MIL-DTL-23053/4 (SWCPLSRDW-100)	157
MIL-DTL-23053/4 (SWCPLDW-100).....	158
MIL-DTL-23053/4 (SWCPLDW-104).....	159
MIL-DTL-23053/5 (SWCPLF-100).....	160

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-23053/5 (SWCPLF-103).....	161
MIL-DTL-23053/5 (SWCPLF-104).....	162
MIL-DTL-23053/6 (SWCPLSR-100)	163
MIL-DTL-23053/8 (KYNAR®).....	164
MIL-DTL-23053/13 (VITON®)	165
MIL-DTL-23053/16 (SWCPLD-101)	166
Technical Data & Conversion Tables	
Recovered Wall Thickness	167
Temperature Conversions	167
Mathematical Formulas.....	167
Conversion Tables and Equivalencies	
Area.....	168
Fractional Inches & Millimeters	168
Length.....	168
Decimal Equivalents of Millimeters	168
Weight.....	168
Volume	168
Shrink Tube Usage Requirement Table	169

FIBER OPTIC PRODUCTS

FIBER OPTIC CABLE

THEORY AND CONSTRUCTION	171
SYSTEMS COMPONENTS	171
FUNDAMENTAL PRINCIPLE	172
FIBER TYPES.....	172
CABLE CONSTRUCTION CONSIDERATIONS.....	172
TRANSMISSION CONSIDERATIONS	173
Simplex & Duplex Cables	
UL Type OFNR	174
UL Type OFNP.....	174
Distribution Cables	
UL Type OFNR	175
UL Type OFNP.....	176
Breakout Cables	
UL Type OFNP.....	177
UL Type OFNR	178
Loose Tube Cables	
UL Type OFNR - Outdoor.....	179
UL Type OFNR - Indoor/Outdoor	181

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

REFERENCE MATERIAL

Comparative Properties of Insulating and Jacketing Compounds.....	182
Current Carrying Capacity of Copper Conductors	183
Amperes	184
Derating Factors for Bundled Conductors	184
COMPARISON CHART FOR UL WIRES & CABLES	185
COMPARISON CHART FOR MILITARY SPECIFICATION WIRES & CABLES	192
Cable Design Formulas	
Weight of Conductor:.....	206
Weight of Insulation:.....	206
Weight of Jacket:	206
Weight of Tape:	206
Total Weight of Cabled Conductor:	206
Cabling Factors:	206
Percent of Shield Coverage:	207
Diameter of Shield:	207
Property Values (nominal):	207
Twisting Loss:	207
Weight of Shield:	207
GLOSSARY OF WIRE & CABLE TERMINOLOGY	208
DECIMAL EQUIVALENTS	254
CONVERSION TABLE OF TEMPERATURES	255
WIRE DATA - SOLID BARE COPPER	257
Diameter	257
Cross Sectional Area.....	257
Weight.....	257
Soft or Annealed	258
Hard Drawn	258
Stranding	259
WIRE DATA - STRANDED TINNED COPPER	
Nominal O.D. of Strand	259
Approximate O.D.	259
Cross Sectional Area.....	259
Weight.....	259
Stranding	261
DC Resistance.....	261
Trademarks.....	262
Index of Catalog Numbers	263
Index	276

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

CAPABILITIES

Standard Wire & Cable Co. has inventory in multiple locations with over 57,000 square feet of warehouse space that includes combinations using the insulation material and conductor types shown below.

Our quality assurance system has received independent certification of compliance to the ISO 9001:2008 and AS9120 / 2009 standards.

Insulation Types

Alcryn
Cellular Polyethylene
CLPE
Copolene
EPDM (Ethylene Propylenediene Monomer Rubber)
EPOM
EPR (Ethylene Propylene)
ETFE (Ethylene Tetrafluoroethylene)
FEP (Fluorinated Ethylene Propylene)
FHPE (high density Polyethylene)
FRPE (fire retardant Polyethylene)
Glass Braids
Halar - ECTFE (Ethylene Chlorotrifluoroethylene)
HDP (high density Polyethylene)
HDXLPE (high density cross linked Polyethylene)

HMWPE (high molecular weight Polyethylene)
Hypalon - CSPE (Chlorosulfonated Polyethylene)
Kapton (Polyimide)
Kynar - PVDF (Polyvinylidene Fluoride)
LDPE (low density Polyethylene)
Low Smoke PVC (Polyvinylchloride)
Neoprene
Nylon
PCTFE (Polychlorotrifluoroethylene)
PFA (Perfluoroalkoxy resin)
Polyalkylene
Polyamide
Polyethylene
Polyolefin
Polypropylene
Polystyrene

Polysulfone
Polyurethane
PPE (Polypropylene Ethylene)
PTFE (Polytetrafluoroethylene)
PVC (Polyvinylchloride)
Rubber
Santoprene
Semi-conductive Materials
Silicone Rubber
TPE
TPR
XLETFE (Ethylene Tetrafluoroethylene Copolymer)
XLPA (cross-linked extruded Polyalkene)
XLPE (cross-linked Polyethylene)
XLPVF (cross-linked extruded Polyvinylidene Fluoride)

Conductor Types

Copper and High Strength Alloys in:
Alumel
Beryllium-Copper
Cadmium-Bronze
Chromel
Copper-clad Steel (Copperweld)
Litz Wire
Nickel Plated
Silver Plated
Tin Plated
Tinsel
Other Special Types on Request

Special Services

Bar Coding
Cabling: Planetary or Twisting
Custom Cable Design, Prototyping, and Fabrication
Cut and Strip
Dying
Etching
Export Packaging / Documentation
Extrusion
Inventory Management Programs
Packaging / Labeling

Printing
Quick Turnaround Available on Short Runs
Retractable Cords
RoHS
Shielding: Braid, Spiral and Aluminum Mylar
Sintering
Striping
Taping
UL / CSA Repackaging

... over 60 years of customer service in wire and cable

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Alarm and Security Cables Burglar Alarm



CONDUCTOR: Solid bare copper.
INSULATION: PVC.
CONSTRUCTION: Parallel conductors.
JACKET: PVC.

COLOR: White*.
VOLTAGE: 300 V / 150 V.
UL: CM / CL2 / CL3 (R).

USES: For use as burglar alarm wire and as telephone station wire. Good for surface installation in factories, commercial buildings, and homes in compliance with the National Electric Code, NEC article 725 type CL3 or NEC article 800 type CM, as applicable.

Catalog No.	No.** of Cond.	AWG Size	Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)
400-4A	2	22	0.017	0.432	0.120	3.05	Red, green	1,000
400-8A	4	22	0.017	0.432	0.145	3.68	Red, green, yellow, black	1,000

Alarm and Security Cables Unshielded Multi-Conductor



CONDUCTOR: Solid bare copper.
INSULATION: Polyethylene.
CONSTRUCTION: Unshielded, cabled.
JACKET: PVC.

COLOR: Gray*.
VOLTAGE: 300 V / 150 V.
UL: CM / CL2 / CL3 (R).

USES: Public address systems, burglar alarm systems, unbalanced intercom systems, interconnecting cables, remote control circuits, and low voltage relay control systems in compliance with the National Electric Code, NEC article 725 type CL3 or NEC article 800 type CM, as applicable.

Catalog No.	No.** of Cond.	AWG Size	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)
1326-13BCA	6	22	0.008	0.203	0.020	0.508	0.180	4.57	Chart 1 Pg. 21	1,000
1326-14BCA	8	22	0.008	0.203	0.020	0.508	0.203	5.16	Chart 1 Pg. 21	1,000
1326-16BCA	10	22	0.008	0.203	0.020	0.508	0.224	5.69	Chart 1 Pg. 21	1,000
1326-17BCA	12	22	0.008	0.203	0.020	0.508	0.235	5.97	Chart 1 Pg. 21	1,000

* Custom jacket colors available.

** Consult Standard Wire & Cable Co.'s sales department for conductor counts not listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Audio and Security Cables Unshielded Multi-Conductor (bare copper)



CONDUCTOR: Stranded bare copper.
INSULATION: PVC.
CONSTRUCTION: Unshielded, cabled.
JACKET: PVC.

COLOR: Gray, white*.
VOLTAGE: 300 V / 150 V.
UL: CM / CL2 / CL3 (R).

USES: Public address systems, burglar alarm systems, unbalanced intercom systems, interconnecting cables, remote control circuits, instrumentation, and low voltage relay control systems in compliance with the National Electric Code, NEC article 725 type CL3 or NEC article 800 type CM, as applicable.

Catalog No.	No.** of Cond.	AWG Size	Stranding	Insulation Thickness		Jacket Thickness		Nominal O. D.		Color Code	Put Up (ft)	Weight (lbs / (kgs / 1000 ft) km)	
				(in)	(mm)	(in)	(mm)	(in)	(mm)				
400-4BC	2	22	7/30	0.008	0.203	0.017	0.432	0.130	3.30	Chart 1 Pg. 21	1,000	12	18
400-8BC	4	22	7/30	0.008	0.203	0.017	0.432	0.160	4.06	Chart 1 Pg. 21	1,000	19	28
1326-3BC	5	22	7/30	0.008	0.203	0.020	0.508	0.170	4.32	Chart 1 Pg. 21	1,000	22	33
1326-13BC	6	22	7/30	0.008	0.203	0.020	0.508	0.175	4.45	Chart 1 Pg. 21	1,000	27	40
1326-14BC	8	22	7/30	0.008	0.203	0.020	0.508	0.195	4.95	Chart 1 Pg. 21	1,000	34	51
1326-16BC	10	22	7/30	0.008	0.203	0.020	0.508	0.210	5.33	Chart 1 Pg. 21	1,000	41	61
1326-17BC	12	22	7/30	0.008	0.203	0.020	0.508	0.230	5.84	Chart 1 Pg. 21	1,000	48	71
400-9BC	2	20	10/30	0.010	0.254	0.020	0.508	0.162	4.11	Chart 1 Pg. 21	1,000	16	24
400-16BC	2	18	16/30	0.010	0.254	0.020	0.508	0.182	4.62	Chart 1 Pg. 21	1,000	21	31
400-20BC	4	18	16/30	0.010	0.254	0.020	0.508	0.210	5.33	Chart 1 Pg. 21	1,000	36	54
400-25BC	2	16	26/30	0.010	0.254	0.020	0.508	0.225	5.72	Chart 1 Pg. 21	1,000	30	45
400-27BC	4	16	26/30	0.010	0.254	0.020	0.508	0.268	6.81	Chart 1 Pg. 21	1,000	54	80

** Consult Standard Wire & Cable Co.'s sales department for conductor counts not listed.

Audio and Security Cables Unshielded Multi-Conductor (tinned copper)



CONDUCTOR: Stranded tinned copper.
INSULATION: PVC.
CONSTRUCTION: Unshielded, cabled.
JACKET: PVC.

COLOR: Gray*.
VOLTAGE: 300 V / 150 V.
UL: CM / CL2 / CL3 (R).

USES: Public address systems, burglar alarm systems, unbalanced intercom systems, interconnecting cables, remote control circuits, instrumentation, and low voltage relay control systems in compliance with the National Electric Code, NEC article 725 type CL3 or NEC article 800 type CM, as applicable.

* Custom jacket colors available.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Audio and Security Cables (cont.) Unshielded Multi-Conductor

Catalog No.	No.** of Cond.	AWG Size	Stranding	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / (kgs / 1000 ft) km)	
400-4	2	22	7/30	0.010	0.254	0.020	0.508	0.146	3.71	Chart 1 Pg. 21	1,000	12	18
400-5	3	22	7/30	0.010	0.254	0.020	0.508	0.154	3.91	Chart 1 Pg. 21	1,000	15	22
400-8	4	22	7/30	0.010	0.254	0.020	0.508	0.167	4.24	Chart 1 Pg. 21	1,000	19	28
1326-3	5	22	7/30	0.010	0.254	0.020	0.508	0.180	4.57	Chart 1 Pg. 21	1,000	22	33
1326-13	6	22	7/30	0.010	0.254	0.020	0.508	0.195	4.95	Chart 1 Pg. 21	1,000	27	40
1326-14	8	22	7/30	0.010	0.254	0.020	0.508	0.225	5.72	Chart 1 Pg. 21	1,000	34	51
1326-16	10	22	7/30	0.010	0.254	0.020	0.508	0.245	6.22	Chart 1 Pg. 21	1,000	41	61
1326-17	12	22	7/30	0.010	0.254	0.020	0.508	0.252	6.40	Chart 1 Pg. 21	1,000	48	71
1326-18	15	22	7/30	0.010	0.254	0.020	0.508	0.279	7.09	Chart 2 Pg. 21	1,000	58	86
1326-20	20	22	7/30	0.010	0.254	0.020	0.508	0.308	7.82	Chart 2 Pg. 21	1,000	74	110
1326-25	25	22	7/30	0.010	0.254	0.025	0.635	0.354	8.99	Chart 2 Pg. 21	1,000	93	138
400-9	2	20	10/30	0.010	0.254	0.020	0.508	0.162	4.11	Chart 1 Pg. 21	1,000	17	25
400-10	3	20	10/30	0.010	0.254	0.020	0.508	0.171	4.34	Chart 1 Pg. 21	1,000	23	34
400-11	4	20	10/30	0.010	0.254	0.020	0.508	0.186	4.72	Chart 1 Pg. 21	1,000	26	39
400-16	2	18	16/30	0.010	0.254	0.020	0.508	0.182	4.62	Chart 1 Pg. 21	1,000	21	31
400-17	3	18	16/30	0.010	0.254	0.020	0.508	0.193	4.90	Chart 1 Pg. 21	1,000	28	42
400-20	4	18	16/30	0.010	0.254	0.020	0.508	0.210	5.33	Chart 1 Pg. 21	1,000	36	54
1327-5	5	18	16/30	0.010	0.254	0.020	0.508	0.229	5.82	Chart 1 Pg. 21	1,000	44	65
1327-6	6	18	16/30	0.010	0.254	0.020	0.508	0.239	6.07	Chart 1 Pg. 21	1,000	51	76
1327-7	7	18	16/30	0.010	0.254	0.020	0.508	0.249	6.32	Chart 1 Pg. 21	1,000	59	88
1327-8	8	18	16/30	0.010	0.254	0.025	0.635	0.272	6.91	Chart 1 Pg. 21	1,000	68	101
1327-9	9	18	16/30	0.010	0.254	0.025	0.635	0.295	7.49	Chart 1 Pg. 21	1,000	76	113
1327-10	10	18	16/30	0.010	0.254	0.025	0.635	0.305	7.75	Chart 1 Pg. 21	1,000	85	126
1327-12	12	18	16/30	0.010	0.254	0.025	0.635	0.332	8.43	Chart 1 Pg. 21	1,000	98	146
1327-15	15	18	16/30	0.010	0.254	0.030	0.762	0.379	9.63	Chart 2 Pg. 21	1,000	124	185
1327-19	19	18	16/30	0.010	0.254	0.030	0.762	0.398	10.1	Chart 2 Pg. 21	1,000	153	228
1327-25	25	18	16/30	0.010	0.254	0.030	0.762	0.475	12.1	Chart 2 Pg. 21	1,000	198	295
400-25	2	16	26/30	0.012	0.305	0.025	0.635	0.225	5.72	Chart 1 Pg. 21	1,000	30	45
400-26	3	16	26/30	0.012	0.305	0.025	0.635	0.240	6.10	Chart 1 Pg. 21	1,000	42	62
400-27	4	16	26/30	0.012	0.305	0.025	0.635	0.268	6.81	Chart 1 Pg. 21	1,000	54	80
400-30	2	14	19/27	0.015	0.381	0.025	0.635	0.256	6.50	Chart 1 Pg. 21	1,000	41	61

** Consult Standard Wire & Cable Co.'s sales department for conductor counts not listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Audio and Data Cable Shielded Pairs



CONDUCTOR: Stranded tinned copper.
INSULATION: Polypropylene.
JACKET: PVC.

COLOR: Gray.
VOLTAGE: 300 V / 150 V.
UL: CM / CL2 / CL3 (R).

CONSTRUCTION: Conductors paired and pairs individually shielded with an aluminum polyester foil shield and with a stranded tinned copper drain wire.

USES: Used for audio, data, and instrumentation in compliance with the National Electric Code, NEC article 725 type CL3 or NEC article 800 type CM, as applicable. Completely color coded cable providing positive pair and conductor identification.

Catalog No.	No. of Pairs	AWG Size	Stranding	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / (kgs / 1000 ft) km)	
405-2A	2	22	7/30	0.010	0.254	0.020	0.508	0.210	5.33	Chart 3 Pg. 21	1,000	21	31
405-3A	3	22	7/30	0.010	0.254	0.020	0.508	0.228	5.79	Chart 3 Pg. 21	1,000	28	42
405-6A	6	22	7/30	0.010	0.254	0.020	0.508	0.289	7.34	Chart 3 Pg. 21	1,000	50	74

Audio and Data Cable Shielded Pairs



CONDUCTOR: Stranded tinned copper.
INSULATION: Polypropylene.
JACKET: PVC.

COLOR: Gray.
VOLTAGE: 300 V / 150 V.
UL: CM / CL2 / CL3 (R).

CONSTRUCTION: Pairs twisted on a common axis with reversed aluminum polyester foil shield and common tinned copper drain wire.

USES: Used for audio, data, and instrumentation in compliance with the National Electric Code, NEC article 725 type CL3 or NEC article 800 type CM, as applicable. Completely color coded cable providing positive pair and conductor identification.

Catalog No.	No. of Pairs	AWG Size	Stranding	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / (kg / 1000 ft) km)	
405-2AG	2	22	7/30	0.008	0.203	0.020	0.508	0.175	4.45	1st pair red/black, 2nd pair green/white	1,000	19	28

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

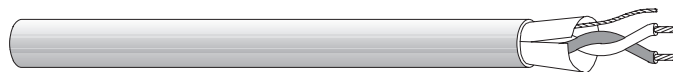
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Audio and Data Cable Shielded Multi-Conductor



CONDUCTOR: Solid and stranded tinned
copper.
INSULATION: PVC.

JACKET: PVC.
COLOR: Gray*.
VOLTAGE: 300 V / 150 V.
UL: CM / CL2 / CL3 (R).

CONSTRUCTION: Conductors cabled. Overall shield of 100% aluminum polyester foil with a stranded tinned copper drain wire.

USES: Used extensively for remote signaling circuits, broadcast systems, sound systems, intercom systems, audio systems, and instrumentation in compliance with the National Electric Code, NEC article 725 type CL3 or NEC article 800 type CM, as applicable.

Catalog No.	No.** of Cond.	AWG Size	Stranding	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / (kgs / 1000 ft) km)	
504-8A	2	24	7/30	0.008	0.203	0.020	0.508	0.125	3.18	Chart 1 Pg. 21	1,000	10	15
504-14A	2	22	Solid	0.008	0.203	0.020	0.508	0.130	3.30	Chart 1 Pg. 21	1,000	12	18
504-15A	2	22	7/30	0.008	0.203	0.020	0.508	0.130	3.30	Chart 1 Pg. 21	1,000	14	21
504-20A	3	22	7/30	0.008	0.203	0.020	0.508	0.150	3.81	Chart 1 Pg. 21	1,000	16	24
504-24A	4	22	7/30	0.008	0.203	0.020	0.508	0.165	4.19	Chart 1 Pg. 21	1,000	18	27
1326-13A	6	22	7/30	0.008	0.203	0.020	0.508	0.190	4.83	Chart 1 Pg. 21	1,000	24	36
1326-14A	8	22	7/30	0.008	0.203	0.020	0.508	0.210	5.33	Chart 1 Pg. 21	1,000	29	43
1326-16A	10	22	7/30	0.008	0.203	0.020	0.508	0.230	5.84	Chart 1 Pg. 21	1,000	35	52
1326-17A	12	22	7/30	0.008	0.203	0.020	0.508	0.250	6.35	Chart 1 Pg. 21	1,000	41	61
504-34A	2	20	10/30	0.010	0.254	0.020	0.508	0.150	3.81	Chart 1 Pg. 21	1,000	16	24
504-49A	3	20	10/30	0.010	0.254	0.020	0.508	0.160	4.06	Chart 1 Pg. 21	1,000	20	30
504-67A	2	18	16/30	0.010	0.254	0.025	0.635	0.175	4.45	Chart 1 Pg. 21	1,000	23	34
504-71A	3	18	16/30	0.010	0.254	0.025	0.635	0.190	4.83	Chart 1 Pg. 21	1,000	31	46
504-72A	4	18	16/30	0.010	0.254	0.025	0.635	0.200	5.08	Chart 1 Pg. 21	1,000	37	55
1327-6A	6	18	16/30	0.010	0.254	0.025	0.635	0.285	7.24	Chart 1 Pg. 21	1,000	54	80
504-74A	2	16	26/30	0.012	0.305	0.025	0.635	0.210	5.33	Chart 1 Pg. 21	1,000	34	51
504-84A	4	16	26/30	0.012	0.305	0.025	0.635	0.265	6.73	Chart 1 Pg. 21	1,000	62	92

* Custom jacket colors available.

** Consult Standard Wire & Cable Co.'s sales department for conductor counts not listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Audio and Data Cable Shielded Multi-Conductor



CONDUCTOR: Stranded tinned copper.
INSULATION: PVC.
JACKET: PVC.
COLOR: Gray.

VOLTAGE: 300 V / 150 V.
COLOR CODE: Red & black shielded, white & green unshielded.
UL: CM / CL2 / CL3 (R).

CONSTRUCTION: Two conductors and drain wire under an aluminum polyester foil shield, two conductors outside of shield.

USES: Used extensively for sound systems, intercom systems, and instrumentation in compliance with the National Electric Code, NEC article 725 type CL3 or NEC article 800 type CM, as applicable.

Catalog No.	No. of Cond.	AWG Size	Stranding	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Put Up (ft)	Weight (lbs / 1000 ft) (kgs / km)	
504-25A	4	22	7/30	0.008	0.203	0.020	0.508	0.132	3.35	1,000	18	27

Fire Alarm Cable Shielded Multi-Conductor



CONDUCTOR: Solid bare copper.
INSULATION: PVC.
JACKET: PVC.

COLOR: Red*.
VOLTAGE: 300 V.
UL: FPL (R).

CONSTRUCTION: Conductors cabled. Overall shield of 100% aluminum polyester foil with a stranded tinned copper drain wire.

USES: Used extensively for low energy communication and safety control wiring in compliance with the National Fire Protective Association and the National Electric Code, NEC article 760 type FPL.

Catalog No.	No.* of Cond.	AWG Size	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / 1000 ft) (kgs / km)	
504-67FA	2	18	0.010	0.254	0.020	0.508	0.171	4.34	Chart 5 Pg. 21	1,000	22	33
504-72FA	4	18	0.010	0.254	0.020	0.508	0.196	4.98	Chart 5 Pg. 21	1,000	35	52
504-74FA	2	16	0.010	0.254	0.020	0.508	0.198	5.03	Chart 5 Pg. 21	1,000	29	43
504-75FA	4	16	0.010	0.254	0.020	0.508	0.222	5.64	Chart 5 Pg. 21	1,000	50	74
504-87FA	2	14	0.015	0.381	0.020	0.508	0.245	6.22	Chart 5 Pg. 21	1,000	46	68
504-89FA	4	14	0.015	0.381	0.020	0.508	0.285	7.24	Chart 5 Pg. 21	1,000	55	82
504-90FA	2	12	0.015	0.381	0.020	0.508	0.275	6.99	Chart 5 Pg. 21	1,000	58	86
504-94FA	4	12	0.015	0.381	0.020	0.508	0.325	8.26	Chart 5 Pg. 21	1,000	107	159

* Consult Standard Wire & Cable Co.'s sales department for conductor counts not listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Fire Alarm Cable Unshielded Multi-Conductor



CONDUCTOR: Solid bare copper.

INSULATION: PVC.

JACKET: PVC.

CONSTRUCTION: Conductors cabled.

COLOR: Red*.

VOLTAGE: 300 V.

UL: FPL (R).

USES: Used extensively for low energy communication and safety control wiring in compliance with the National Fire Protective Association and the National Electric Code, NEC article 760 type FPL.

Catalog No.	No.** of Cond.	AWG Size	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / (kgs / 1000 ft) km)	
400-8FA	4	22	0.010	0.254	0.020	0.508	0.159	4.04	Chart 5 Pg. 21	1,000	19	28
1326-12FA	6	22	0.010	0.254	0.020	0.508	0.185	4.70	Chart 5 Pg. 21	1,000	25	37
1326-16FA	10	22	0.010	0.254	0.020	0.508	0.229	5.82	Chart 5 Pg. 21	1,000	38	57
400-16FA	2	18	0.010	0.254	0.020	0.508	0.171	4.34	Chart 5 Pg. 21	1,000	20	30
400-20FA	4	18	0.010	0.254	0.020	0.508	0.196	4.98	Chart 5 Pg. 21	1,000	33	49
1327-12FA	6	18	0.010	0.254	0.020	0.508	0.230	5.84	Chart 5 Pg. 21	1,000	48	71
1327-14FA	8	18	0.010	0.254	0.020	0.508	0.266	6.76	Chart 5 Pg. 21	1,000	62	92
400-25FA	2	16	0.010	0.254	0.020	0.508	0.182	4.62	Chart 5 Pg. 21	1,000	24	36
400-27FA	4	16	0.010	0.254	0.020	0.508	0.212	5.38	Chart 5 Pg. 21	1,000	43	64
400-30FA	2	14	0.015	0.381	0.020	0.508	0.208	5.28	Chart 5 Pg. 21	1,000	35	52
400-34FA	4	14	0.015	0.381	0.020	0.508	0.350	8.89	Chart 5 Pg. 21	1,000	75	112
400-38FA	2	12	0.015	0.381	0.020	0.508	0.320	8.13	Chart 5 Pg. 21	1,000	57	85

* Custom jacket colors available.

** Consult Standard Wire & Cable Co.'s sales department for conductor counts not listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

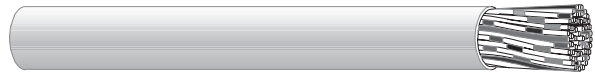
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Inside Telephone Multi-Pair CAT 5E 350 MHz UTP



CONDUCTOR: Solid bare copper. **COLOR:** Blue, white, green*.
INSULATION: Polyolefin. **VOLTAGE:** 300 V.
JACKET: PVC. **UL:** CM or CMR.
CONSTRUCTION: Twisted pairs, varying lays to minimize cross talk, each pair is banded with insulation color mating conductor, nylon rip cord, cabled. These cables meet or exceeds the requirements of UL/ETL listed type CM/CMR per UL 444, c(UL)/c(ETL) listed CMG FT4, UL/ETL verified Category 5E, ANSI/TIA/EIA 568 (category 5e), ICEA S-90-661 (draft Category 5e), ISO/ICE 11801. Swept tested up to 350 MHz.
USES: Applications supported include Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Fast Ethernet, T1, ISDN, Token Ring and other high-speed LAN applications.

ELECTRICAL SPECIFICATIONS:

DC Resistance Max.	9.38 ohms / 100 m @ 20°
DC Resistance Unbalanced Max.	5%
Pair-To-Ground Capacitance	330 pF / 100 m

Impedance:	1.0 - 100 MHz	85 - 115 ohms
	100 - 200 MHz	75 - 125 ohms
	200 - 350 MHz	65 - 135 ohms

Frequency (MHz)	Attenuation (db/100 ft)		Attenuation (db/100 m)		Min. Return Loss (db)	Structural Return Loss (db)
	Avg.	Min.	Avg.	Min.		
0.772	4.9	5.5	1.6	1.8	22.0	23.0
1.0	5.5	3.8	1.8	2.0	22.0	23.0
4.0	11.6	5.4	3.8	4.1	23.0	23.0
8.0	16.5	6.0	5.4	5.8	24.5	23.0
10.0	18.3	7.6	6.0	6.5	25.0	23.0
16.0	23.2	8.6	7.6	8.2	25.0	23.0
20.0	26.2	9.7	8.6	9.3	25.0	23.0
25.0	29.6	11.0	9.7	10.4	24.3	22.0
31.3	33.5	16.1	11.0	11.5	23.6	21.1
62.5	49.1	21.0	16.1	16.7	21.5	18.1
100.0	64.0	26.9	21.0	21.6	20.1	16.0
155.0	82.0	31.1	26.9	27.6	18.8	14.1
200.0	94.8	43.0	31.1	31.9	18.0	13.0
350.0	131.1	135.0	43.0	44.2	16.3	10.6

Catalog No.	No of Pairs	AWG Size	Insulation Thickness		Jacket Thickness		Nominal O. D.		Color Code	Put Up (ft)	Weight	
			(in)	(mm)	(in)	(mm)	(in)	(mm)			(lbs / 1000 ft)	(kgs / 1000 ft)
401-4F-C5	4	24	0.008	0.203	0.025	0.635	0.205	5.21	Chart 4 Pg. 21	1,000	22	33
401-25F-C5	25	24	0.008	0.203	0.035	0.889	0.427	10.8	Chart 4 Pg. 21	1,000	107	159

* Custom jacket colors available.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Inside Telephone Multi-Pair CAT 5E 350 MHz Shielded



CONDUCTOR: Solid bare copper.

INSULATION: Polyolefin.

JACKET: PVC.

CONSTRUCTION: Twisted pairs, varying lays to minimize cross talk, each pair is banded with insulation color mating conductor with overall shield of aluminum polyester foil with solid tinned copper drain wire, nylon rip cord, cabled. These cables meet or exceeds the requirements of UL/ETL listed type CM/CMR per UL 444, c(UL)/c(ETL) listed CMG FT4, UL/ETL verified Category 5E, ANSI/TIA/EIA 568 (category 5e), ICEA S-90-661 (draft Category 5e), ISO/ICE 11801. Swept tested up to 350 MHz.

COLOR: Gray*.

VOLTAGE: 300 V.

UL: CM or CMR.

USES: Applications supported include Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Fast Ethernet, T1, ISDN, Token Ring and other high-speed LAN applications.

ELECTRICAL SPECIFICATIONS:

DC Resistance Max.	9.38 ohms / 100 m @ 20°
DC Resistance Unbalanced Max.	5%
Pair-To-Ground Capacitance	330 pF / 100 m

Impedance:	1.0 - 100 MHz	85 - 115 ohms
	100 - 200 MHz	75 - 125 ohms
	200 - 350 MHz	65 - 135 ohms

Frequency (MHz)	Attenuation (db/100 ft)		Attenuation (db/100 m)		Min. Return Loss (db)	Structural Return Loss (db)
	Avg.	Min.	Avg.	Min.		
0.772	4.9	5.5	1.6	1.8	22.0	23.0
1.0	5.5	3.8	1.8	2.0	22.0	23.0
4.0	11.6	5.4	3.8	4.1	23.0	23.0
8.0	16.5	6.0	5.4	5.8	24.5	23.0
10.0	18.3	7.6	6.0	6.5	25.0	23.0
16.0	23.2	8.6	7.6	8.2	25.0	23.0
20.0	26.2	9.7	8.6	9.3	25.0	23.0
25.0	29.6	11.0	9.7	10.4	24.3	22.0
31.3	33.5	16.1	11.0	11.5	23.6	21.1
62.5	49.1	21.0	16.1	16.7	21.5	18.1
100.0	64.0	26.9	21.0	21.6	20.1	16.0
155.0	82.0	31.1	26.9	27.6	18.8	14.1
200.0	94.8	43.0	31.1	31.9	18.0	13.0
350.0	131.1	135.0	43.0	44.2	16.3	10.6

Catalog No.	No of Pairs	AWG Size	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / (kgs / 1000 ft) km)	
401-4FS-C5	4	24	0.011	0.279	0.025	0.635	0.220	5.59	Chart 4 Pg. 21	1,000	24	36
401-25FS-C5	25	24	0.011	0.279	0.035	0.889	0.500	12.7	Chart 4 Pg. 21	1,000	114	170

* Custom jacket colors available.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Inside Telephone Multi-Pair CAT 6 600 MHz UTP



CONDUCTOR: Solid bare copper.
INSULATION: Polyethylene (FRPE).
JACKET: PVC.

COLOR: Yellow, blue*.
VOLTAGE: 300 V.
UL: CM or CMR.

CONSTRUCTION: Twisted pairs, varying lays to minimize cross talk, each pair is banded with insulation color mating conductor, nylon rip cord, cabled. These cables meet or exceeds NEMA WC-66 (Category 6), TIA/EIA 568B.2-1, C(UL) listed CMG FT4. Swept tested up to 600 MHz.

USES: Provides bandwidth required for multimedia, broadband video, analog video and other future applications.

ELECTRICAL SPECIFICATIONS:

DC Resistance Max.	8.9 ohms / 100 m @ 20°
Delay Skew	25 ns / 100 m
Mutual Capacitance	4.4 nF / 100 m

Velocity of Prop.	72 (1%)	
Impedance:	1.0 - 100 MHz	100 +/- 15 ohms
	100 - 500 MHz	100 +/- 32 ohms

Freq.	Attenuation (db/ 1000 ft) (db/ 100 m)		Next Loss Min. (db)	PSNEXT Loss Min. (db)	ARC Minimum (db@ 1000 ft) (db@ 100 M)		PSCAR Minimum (db@ 1000 ft) (db@ 100 M)		ELFEXT Minimum (db@ 1000 ft) (db@ 100 M)		PS-ELFEXT Minimum (db@ 1000 ft) (db@ 100 M)		Return Loss (db)
1	6.1	2.0	74.3	72.3	220	72.3	214	70.3	207	67.8	198	64.8	20.0
10	18	6.0	59.3	57.3	162	53.3	156	51.3	146	47.8	137	44.8	25.0
16	23	7.6	56.2	54.2	148	48.6	142	46.6	133	43.7	124	40.7	25.0
20	26	8.5	54.8	52.8	141	46.3	135	44.3	127	41.8	118	38.8	25.0
31.25	32.6	10.7	51.9	49.9	126	41.2	119	39.2	116	37.9	106	34.9	23.6
62.50	46.9	15.4	47.4	45.4	97.5	32.0	91.4	30.0	97.2	31.9	88.1	28.9	21.5
100	60.4	19.8	44.3	42.3	74.7	24.5	68.6	22.5	84.7	27.8	75.6	24.8	20.1
200	88.4	29.0	39.8	37.8	32.9	10.8	27	8.8	66.4	21.8	57.3	18.8	18.0
250	100	32.8	38.3	36.3	17	5.5	11	3.5	60.4	19.8	51.2	16.8	17.3
350	122	40.0	36.2	34.2	-	-	-	-	51.5	16.9	42.4	13.9	16.3
400	132	43.2	35.3	33.3	-	-	-	-	47.9	15.7	38.7	12.7	15.9

Catalog No.	No. of Pairs	AWG Size	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Put Up (ft)	Weight (lbs / (kgs / 1000 ft) km)	
401-4F-C6	4	23	0.009	0.229	0.025	0.635	0.230	5.84	1,000	32	48

Pair Colors: W/BL with BL, W/OR with O, W/GR with GR, W/BR with BR.

* Custom jacket colors available.

** The cross talk values are only shown as a rough guide.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

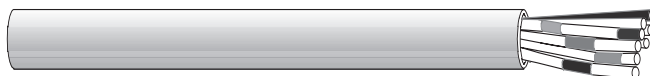
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Air Plenum CAT 6 600 MHz UTP



CONDUCTOR: Solid bare copper.
INSULATION: FEP.
JACKET: Low smoke PVC 75° C.

COLOR: Blue*.
VOLTAGE: 300 V.
UL: CMP.

CONSTRUCTION: Twisted pairs, varying lays to minimize cross talk, each pair is banded with insulation color mating conductor, nylon rip cord, cabled. These cables are ETL verified to EIA/TIA 568B.2-1. Swept tested up to 600 MHz..

USES: Provides bandwidth required for multimedia, broadband video, analog video and other future applications.

ELECTRICAL SPECIFICATIONS:

DC Resistance Max.	8.9 ohms / 100 m @ 20°
Delay Skew	25 ns / 100 m
Mutual Capacitance	4.4 nF / 100 m

Velocity of Prop.	72 (1%)	
Impedance:	1.0 - 100 MHz	100 +/- 15 ohms
	100 - 500 MHz	100 +/- 32 ohms

Freq.	Attenuation (db/ 1000 ft) (db/ 100 m)		Next Loss Min. (db)	PSNEXT Loss Min. (db)	ARC Minimum (db@ 1000 ft) (db@ 100 M)		PSCAR Minimum (db@ 1000 ft) (db@ 100 M)		ELFEXT Minimum (db@ 1000 ft) (db@ 100 M)		PS-ELFEXT Minimum (db@ 1000 ft) (db@ 100 M)		Return Loss (db)
1	6.1	2.0	74.3	72.3	220	72.3	214	70.3	207	67.8	198	64.8	20.0
10	18	6.0	59.3	57.3	162	53.3	156	51.3	146	47.8	137	44.8	25.0
16	23	7.6	56.2	54.2	148	48.6	142	46.6	133	43.7	124	40.7	25.0
20	26	8.5	54.8	52.8	141	46.3	135	44.3	127	41.8	118	38.8	25.0
31.25	32.6	10.7	51.9	49.9	126	41.2	119	39.2	116	37.9	106	34.9	23.6
62.50	46.9	15.4	47.4	45.4	97.5	32.0	91.4	30.0	97.2	31.9	88.1	28.9	21.5
100	60.4	19.8	44.3	42.3	74.7	24.5	68.6	22.5	84.7	27.8	75.6	24.8	20.1
200	88.4	29.0	39.8	37.8	32.9	10.8	27	8.8	66.4	21.8	57.3	18.8	18.0
250	100	32.8	38.3	36.3	17	5.5	11	3.5	60.4	19.8	51.2	16.8	17.3
350	122	40.0	36.2	34.2	-	-	-	-	51.5	16.9	42.4	13.9	16.3
400	132	43.2	35.3	33.3	-	-	-	-	47.9	15.7	38.7	12.7	15.9

Catalog No.	No. of Pairs	AWG Size	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / 1000 ft) (kgs / km)	
401-4FPL-C6	4	23	0.009	0.229	0.025	0.635	0.225	5.72	Chart 4 Pg. 21	1,000	40	60

Pair Colors: W/BL with BL, W/OR with O, W/GR with GR, W/BR with BR.

* Custom jacket colors available.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Air Plenum Unshielded Multi-Conductor



CONDUCTOR: Stranded bare copper.
INSULATION: Low smoke PVC.
VOLTAGE: 150 V.
CONSTRUCTION: Conductors cabled.

COLOR: White*.
JACKET: Low smoke PVC 75° C.
UL: CL3P, CMP.

USES: For use in air plenums without conduit for audio systems, intercom systems, computer systems, and low energy communication and safety control wiring in compliance with the National Fire Protective Association and the National Electric Code, NEC article 725 type CL3P.

Catalog No.	No.** of Cond.	AWG Size	Insulation Thickness		Jacket Thickness		Nominal O. D.		Color Code	Put Up (ft)	Weight	
			(in)	(mm)	(in)	(mm)	(in)	(mm)			(lbs / 1000 ft)	(kgs / km)
400-4PL	2	22	0.008	0.203	0.020	0.508	0.120	3.05	Chart 1 Pg. 21	1,000	8	12
400-5PL	3	22	0.008	0.203	0.020	0.508	0.145	3.68	Chart 1 Pg. 21	1,000	10	15
400-8PL	4	22	0.008	0.203	0.020	0.508	0.160	4.06	Chart 1 Pg. 21	1,000	12	18
1326-3PL	5	22	0.008	0.203	0.020	0.508	0.165	4.19	Chart 1 Pg. 21	1,000	14	21
1326-13PL	6	22	0.008	0.203	0.020	0.508	0.175	4.45	Chart 1 Pg. 21	1,000	16	24
400-16PL	2	18	0.008	0.203	0.020	0.508	0.150	3.81	Chart 1 Pg. 21	1,000	16	24
400-17PL	3	18	0.008	0.203	0.020	0.508	0.190	4.83	Chart 1 Pg. 21	1,000	21	31
400-20PL	4	18	0.008	0.203	0.020	0.508	0.205	5.21	Chart 1 Pg. 21	1,000	28	42
1327-5PL	5	18	0.008	0.203	0.020	0.508	0.230	5.84	Chart 1 Pg. 21	1,000	32	48
1327-6PL	6	18	0.008	0.203	0.020	0.508	0.240	6.10	Chart 1 Pg. 21	1,000	42	62
1327-7PL	7	18	0.008	0.203	0.020	0.508	0.260	6.60	Chart 1 Pg. 21	1,000	50	74
1327-8PL	8	18	0.008	0.203	0.020	0.508	0.275	6.99	Chart 1 Pg. 21	1,000	60	89
400-25PL	2	16	0.008	0.203	0.020	0.508	0.165	4.19	Chart 1 Pg. 21	1,000	26	39
400-27PL	4	16	0.008	0.203	0.020	0.508	0.230	5.84	Chart 1 Pg. 21	1,000	29	43

* Custom jacket colors available.

** Consult Standard Wire & Cable Co.'s sales department for conductor counts not listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Air Plenum Shielded Multi-Conductor



CONDUCTOR: Stranded bare copper.
INSULATION: Low smoke PVC.
VOLTAGE: 150 V.

COLOR: White*.
JACKET: Low smoke PVC 75° C.
UL: CL3P, CMP.

CONSTRUCTION: Conductors cabled. Overall shield of 100% aluminum polyester foil with a stranded tinned copper drain wire.

USES: For use in air plenums without conduit for audio systems, intercom systems, computer systems, and low energy communication and safety control wiring in compliance with the National Fire Protective Association and the National Electric Code, NEC article 725 type CL3P.

Catalog No.	No.** of Cond.	AWG Size	Insulation Thickness (in) (mm)	Jacket Thickness (in) (mm)	Nominal O. D. (in) (mm)	Color Code	Put Up (ft)	Weight (lbs / 1000 ft) (kgs / km)
504-15APL	2	22	0.008 0.203	0.020 0.508	0.130 3.30	Chart 1 Pg. 21	1,000	13 19
504-20APL	3	22	0.008 0.203	0.020 0.508	0.140 3.56	Chart 1 Pg. 21	1,000	16 24
504-25APL	4	22	0.008 0.203	0.020 0.508	0.150 3.81	Chart 1 Pg. 21	1,000	19 28
1326-3APL	5	22	0.008 0.203	0.020 0.508	0.160 4.06	Chart 1 Pg. 21	1,000	23 34
1326-13APL	6	22	0.008 0.203	0.020 0.508	0.175 4.45	Chart 1 Pg. 21	1,000	26 39
1326-14APL	8	22	0.008 0.203	0.020 0.508	0.200 5.08	Chart 1 Pg. 21	1,000	33 49
1326-16APL	10	22	0.008 0.203	0.020 0.508	0.220 5.59	Chart 1 Pg. 21	1,000	39 58
504-67APL	2	18	0.008 0.203	0.020 0.508	0.170 4.32	Chart 1 Pg. 21	1,000	23 34
504-71APL	3	18	0.008 0.203	0.020 0.508	0.180 4.57	Chart 1 Pg. 21	1,000	28 42
504-72APL	4	18	0.008 0.203	0.020 0.508	0.195 4.95	Chart 1 Pg. 21	1,000	37 55
1327-5APL	5	18	0.008 0.203	0.020 0.508	0.210 5.33	Chart 1 Pg. 21	1,000	44 65
1327-6APL	6	18	0.008 0.203	0.020 0.508	0.230 5.84	Chart 1 Pg. 21	1,000	51 76
1327-7APL	7	18	0.008 0.203	0.020 0.508	0.235 5.97	Chart 1 Pg. 21	1,000	58 86
1327-8APL	8	18	0.008 0.203	0.020 0.508	0.265 6.73	Chart 1 Pg. 21	1,000	65 97
504-74APL	2	16	0.008 0.203	0.020 0.508	0.185 4.70	Chart 1 Pg. 21	1,000	30 45
504-75APL	3	16	0.008 0.203	0.020 0.508	0.195 4.95	Chart 1 Pg. 21	1,000	39 58
504-76APL	4	16	0.008 0.203	0.020 0.508	0.210 5.33	Chart 1 Pg. 21	1,000	49 73

* Custom jacket colors available.

** Consult Standard Wire & Cable Co.'s sales department for conductor counts not listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

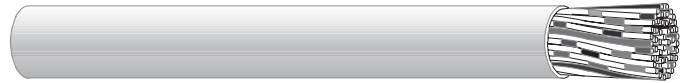
3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Air Plenum CAT 5E 350 MHz UTP



CONDUCTOR: Solid bare copper.
INSULATION: FEP.
JACKET: Low smoke PVC 75° C.

COLOR: Blue*.
VOLTAGE: 300 V.
UL: CMP.

CONSTRUCTION: Twisted pairs, varying lays to minimize cross talk, each pair is banded with insulation color mating conductor, nylon rip cord, cabled. These cables meet the requirements of EIA/TIA TSB-36 Category 5e, and NEMA WC63 Extended Frequency specifications. Swept tested up to 350 MHz.

USES: Applications supported include ANSI X3T9.5 100 Mbps TP-PMD standard under development, 100 Mbps TPDDI or CDDI (FDDI on UTP), as well as 16 Mbps Token Ring, and other high-speed LAN applications up to and including 100 Mbps data transmission rates. This is the highest level available UTP or Data Grade UTP.

ELECTRICAL SPECIFICATIONS:

DC Resistance Max.	9.38 ohms / 100 m @ 20°
DC Resistance Unbalanced Max.	5%
Pair-To-Ground Capacitance	330 pF / 100 m

Impedance:	1.0 - 100 MHz	85 - 115 ohms
	100 - 200 MHz	75 - 125 ohms
	200 - 350 MHz	65 - 135 ohms

Frequency (MHz)	Attenuation (db/100 ft)		Attenuation (db/100 m)		Min. Return Loss (db)	Structural Return Loss (db)
	Avg.	Min.	Avg.	Min.		
0.772	4.9	5.5	1.6	1.8	22.0	23.0
1.0	5.5	3.8	1.8	2.0	22.0	23.0
4.0	11.6	5.4	3.8	4.1	23.0	23.0
8.0	16.5	6.0	5.4	5.8	24.5	23.0
10.0	18.3	7.6	6.0	6.5	25.0	23.0
16.0	23.2	8.6	7.6	8.2	25.0	23.0
20.0	26.2	9.7	8.6	9.3	25.0	23.0
25.0	29.6	11.0	9.7	10.4	24.3	22.0
31.3	33.5	16.1	11.0	11.5	23.6	21.1
62.5	49.1	21.0	16.1	16.7	21.5	18.1
100.0	64.0	26.9	21.0	21.6	20.1	16.0
155.0	82.0	31.1	26.9	27.6	18.8	14.1
200.0	94.8	43.0	31.1	31.9	18.0	13.0
350.0	131.1	135.0	43.0	44.2	16.3	10.6

Catalog No.	No. of Pairs	AWG Size	Insulation Thickness		Jacket Thickness		Nominal O. D.		Color Code	Put Up (ft)	Weight	
			(in)	(mm)	(in)	(mm)	(in)	(mm)			(lbs / 1000 ft)	(kgs / km)
401-4FP-C5	4	24	0.011	0.279	0.025	0.635	0.210	5.33	Chart 4 Pg. 21	1,000	24	36
401-25FP-C5	25	24	0.011	0.279	0.035	0.889	0.500	12.7	Chart 4 Pg. 21	1,000	114	170

* Custom jacket colors available.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Air Plenum CAT 5E 350 MHz Shielded



CONDUCTOR: Solid bare copper. COLOR: Blue*.
INSULATION: FEP. VOLTAGE: 300 V.
JACKET: Low smoke PVC 75° C. UL: CMP.

CONSTRUCTION: Twisted pairs, varying lays to minimize cross talk, each pair is banded with insulation color mating conductor with overall shield of aluminum polyester foil with solid tinned copper drain wire, nylon rip cord, cabled. Overall shield of 100% aluminum polyester foil with solid tinned copper drain wire. These cables meet the requirements of EIA/TIA TSB-36 Category 5E, and NEMA WC63 Extended Frequency specifications. Swept tested up to 350 MHz.

USES: Applications supported include ANSI X3T9.5 100 Mbps TP-PMD standard under development, 100 Mbps TPDDI or CDDI (FDDI on UTP), as well as 16 Mbps Token Ring, and other high-speed LAN applications up to and including 100 Mbps data transmission rates. This is the highest level available UTP or Data Grade UTP.

ELECTRICAL SPECIFICATIONS:

DC Resistance Max.	9.38 ohms / 100 m @ 20°
DC Resistance Unbalanced Max.	5%
Pair-To-Ground Capacitance	330 pF / 100 m

Impedance:	1.0 - 100 MHz	85 - 115 ohms
	100 - 200 MHz	75 - 125 ohms
	200 - 350 MHz	65 - 135 ohms

Frequency (MHz)	Attenuation (db/100 ft)		Attenuation (db/100 m)		Min. Return Loss (db)	Structural Return Loss (db)
	Avg.	Min.	Avg.	Min.		
0.772	4.9	5.5	1.6	1.8	22.0	23.0
1.0	5.5	3.8	1.8	2.0	22.0	23.0
4.0	11.6	5.4	3.8	4.1	23.0	23.0
8.0	16.5	6.0	5.4	5.8	24.5	23.0
10.0	18.3	7.6	6.0	6.5	25.0	23.0
16.0	23.2	8.6	7.6	8.2	25.0	23.0
20.0	26.2	9.7	8.6	9.3	25.0	23.0
25.0	29.6	11.0	9.7	10.4	24.3	22.0
31.3	33.5	16.1	11.0	11.5	23.6	21.1
62.5	49.1	21.0	16.1	16.7	21.5	18.1
100.0	64.0	26.9	21.0	21.6	20.1	16.0
155.0	82.0	31.1	26.9	27.6	18.8	14.1
200.0	94.8	43.0	31.1	31.9	18.0	13.0
350.0	131.1	135.0	43.0	44.2	16.3	10.6

Catalog No.	No. of Pairs	AWG Size	Insulation Thickness		Jacket Thickness		Nominal O. D.		Color Code	Put Up (ft)	Weight	
			(in)	(mm)	(in)	(mm)	(in)	(mm)			(lbs / 1000 ft)	(kgs / km)
401-4FPS-C5	4	24	0.011	0.279	0.025	0.635	0.210	5.33	Chart 4 Pg. 21	1,000	24	36

* Custom jacket colors available.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Air Plenum Sound and Intercom Shielded Pairs



CONDUCTOR: Stranded bare copper.
INSULATION: Low smoke PVC.
VOLTAGE: 150 V.

COLOR: White*.
JACKET: Low smoke PVC 75° C.
UL: CL3P, CMP.

CONSTRUCTION: Conductors paired and pairs individually shielded with an aluminum polyester foil shield and a stranded tinned copper drain wire.

USES: For use in air plenums without conduit for audio, intercom, computer systems, and low energy communication and safety control wiring in compliance with the National Fire Protective Association and the National Electric Code, NEC article 725 type CL3P.

Catalog No.	No.** of Pairs	AWG Size	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code
405-2APL	2	22	0.008	0.203	0.015	0.381	0.197	5.00	Chart 3 Pg. 21
405-3APL	3	22	0.008	0.203	0.015	0.381	0.211	5.36	Chart 3 Pg. 21
405-6APL	6	22	0.008	0.203	0.015	0.381	0.266	6.76	Chart 3 Pg. 21

Air Plenum Unshielded Fire Alarm Cable



CONDUCTOR: Solid bare copper.
INSULATION: Low smoke PVC.
VOLTAGE: 300 V.
CONSTRUCTION: Conductors cabled.

COLOR: Red*.
JACKET: Low smoke PVC 75° C.
UL: FPLP.

USES: For use in air plenums without conduit for fire alarm systems in compliance with the National Fire Protective Association and the National Electric Code, NEC article 760 type FPLP.

Catalog No.	No.** of Cond.	AWG Size	Insulation Thickness (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / (kgs / 1000 ft) (kgs / km)	
400-16FPL	2	18	0.010	0.254	0.013	0.330	0.140	3.56	Chart 5 Pg. 21	1,000	18	27
400-20FPL	4	18	0.010	0.254	0.013	0.330	0.165	4.19	Chart 5 Pg. 21	1,000	32	48
1327-6FPL	6	18	0.010	0.254	0.013	0.330	0.205	5.21	Chart 5 Pg. 21	1,000	46	68
1327-8FPL	8	18	0.010	0.254	0.013	0.330	0.220	5.59	Chart 5 Pg. 21	1,000	60	89
400-25FPL	2	16	0.010	0.254	0.013	0.330	0.170	4.32	Chart 5 Pg. 21	1,000	26	39

*Custom jacket colors available.

** Consult Standard Wire & Cable Co.'s sales department for pair/conductor counts not listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Air Plenum Shielded Fire Alarm Cable



CONDUCTOR: Solid bare copper.
INSULATION: Low smoke PVC.
VOLTAGE: 300 V.

COLOR: Red.
JACKET: Low smoke PVC 75° C.
UL: FPLP.

CONSTRUCTION: Conductors cabled. Overall shield of 100% aluminum polyester foil with a stranded tinned copper drain wire.

USES: For use in air plenums without conduit for fire alarm systems in compliance with the National Fire Protective Association and the National Electric Code, NEC article 760 type FPLP.

Catalog No.	No.** of Cond.	AWG Size	Insulation Thickness (in)		Jacket Thickness (in)		Nominal O. D. (in) (mm)		Color Code	Put Up (ft)	Weight (lbs / 1000 ft) (kgs / km)	
504-67FAP	2	18	0.010	0.254	0.013	0.330	0.150	3.81	Chart 1 Pg. 21	1,000	22	33
504-72FAP	4	18	0.010	0.254	0.013	0.330	0.180	4.57	Chart 1 Pg. 21	1,000	36	54
504-74FAP	2	16	0.010	0.254	0.013	0.330	0.170	4.32	Chart 1 Pg. 21	1,000	31	46

** Consult Standard Wire & Cable Co.'s sales department for conductor counts not listed.

Microminim® Ultra-Flex Micro-Miniature Wire & Cable



INSULATION: A special compound of synthetic resin which has been formulated for maximum flexibility and dielectric reliability.

USES: Essentially for use as instrument lead wire (sensors, guidance controls, etc.)

Catalog No.	No. of Cond.	AWG Size	Stranding	Nominal O. D. (in) (mm)		Nominal Diameter Over Shield (in) (mm)		Nominal Diameter Over Jacket (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
503-6B	1	29	16/40 TC	0.064	1.63	0.076	1.93	0.090	2.29	4.20	6.25
503-6C	1	29	16/40 TC	0.046	1.17	0.058	1.47	0.072	1.83	3.50	5.21
801-10	1	29	51/46 BC	0.030	0.762	N/A				0.75	1.12
503-7C	1	29	51/46 BC	0.030	0.762	0.042	1.07	0.058	1.47	2.30	3.42
402-1F	2	29	51/46 BC	0.060	1.52	N/A				1.50	2.23
504-1B	2	29	51/46 BC	0.060	1.52	0.072	1.83	0.086	2.18	4.30	6.40
504-2B	3	29	51/46 BC	0.066	1.68	0.078	1.98	0.092	2.34	4.50	6.70
801-30	1	26	66/44 BC	0.042	1.07	N/A				1.40	2.08
503-9C	1	26	66/44 BC	0.042	1.07	0.054	1.37	0.069	1.75	2.80	4.17
504-5B	2	26	66/44 BC	0.084	2.13	0.096	2.44	0.106	2.69	6.00	8.93
504-6B	3	26	66/44 BC	0.092	2.34	0.104	2.64	0.114	2.90	7.30	10.9
801-45	1	24	41/40 TC	0.056	1.42	N/A				2.50	3.72

Electrical data furnished upon request. Standard color is gray. Other colors and constructions available upon request.

Microminim® is a trademark of Standard Wire & Cable Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Coaxial Cable CATV-CCTV



CONSTRUCTION: Solid bare copper or copper-clad steel conductors, polyethylene foam dielectric, FEP foam for plenum applications, aluminum braid, and aluminum polyester foil shields for CATV and bare copper braid shields for CCTV.

JACKET: PVC or low smoke PVC for plenum applications.

USES: For use in CATV, CCTV, and MATV systems in compliance with the National Electric Code, NEC article 725 type CL2 or CL2P for plenum applications.

Catalog No.	Type	Nom. Imp. (Ohms)	Nom. Cap. (pF/ft)	Nom. Cap. (pF/m)	Innder Cond. Size/Type	Vel. of Prop.	Dielectric Material	Dielectric Diameter (in) (mm)		Shield	Jacket	Nominal O. D. (in) (mm)		Put Up (ft)	Weight (lbs / 1000 ft) (kgs / km)	
507-6FA	RG6/U	75	17.3	56.8	18AWG BCCS	78%	PE Foam	0.182	4.62	60% AL Braid, AL/MY	PVC, black, white	0.270	6.86	1,000	34	51
507-6FBC	RG6/U	75	17.3	56.8	18 AWG BC	78%	PE Foam	0.182	4.62	60 % AL Braid, AL/MY	PVC, black, white	0.270	6.86	1,000	34	51
507-6Q	RG6/U	75	16.2	53.1	18AWG BCCS	78%	PE Foam	0.180	4.57	40% AL Braid, 60% AL Braid, + two AL/MY	PVC, black, white	0.302	7.67	1,000	59	88
507-6QBC	RG6/U	75	16.2	53.1	18AWG BC	78%	PE Foam	0.180	4.57	40% AL Braid, 60% AL Braid, + two AL/MY	PVC, black, white	0.302	7.67	1,000	59	88
507-6F	RG6/U	75	17.5	57.4	18 AWG BC	78%	PE Foam	0.146	3.71	95% BC Braid	PVC, black	0.270	6.86	1,000	30	45
507-6FPL	RG6/U	75	16.2	53.1	18 AWG BC	78%	FEP Foam	0.146	3.71	95% BC Braid	Low smoke PVC, white	0.272	6.91	1,000	33	49
507-59FA	RG59/U	75	17.5	57.4	20 AWG BCCS	78%	PE Foam	0.146	3.71	60% AL Braid, AL/MY	PVC, black, white	0.242	6.15	1,000	25	37
507-59F	RG59/U	75	16.2	53.1	20 AWG BCCS	78%	PE Foam	0.146	3.71	95% BC Braid	PVC, black	0.242	6.15	1,000	33	49

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

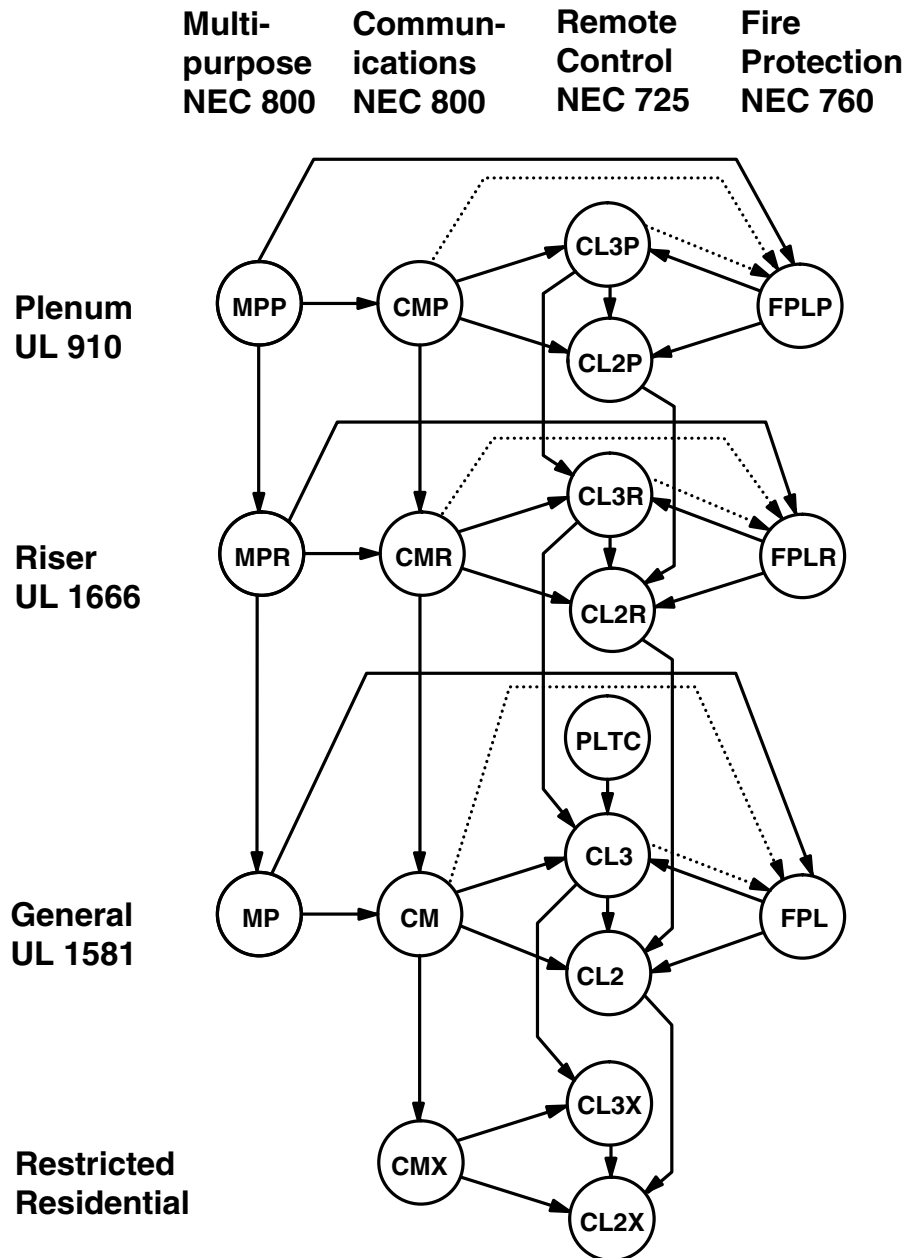
3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

National Electric Code

The 1990 National Electric Code set forth a new category and organization of multipurpose cables. These fall into articles 725, 760, and 800. The diagram below summarizes the new categories and organization. Solid lines with arrows indicate substitution may be made in the direction of the arrow. Dashed lines with arrows indicate substitution with restrictions may be made in the direction of the arrow.



Note that local fire marshals enforce their municipal codes in accordance with their local laws. Awareness of these local codes is essential.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Color Code Charts

COLOR CODE CHART NO. 1

COND.	COLOR
1	Black
2	Red
3	White
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Purple
10	Gray
11	Pink
12	Tan

COLOR CODE CHART NO. 2

COND.	COLOR	COND.	COLOR
1	Black	26	Orange / Black / White
2	White	27	Blue / Black / White
3	Red	28	Black / Red / Green
4	Green	29	White / Red / Green
5	Orange	30	Red / Black / Green
6	Blue	31	Green / Black / Orange
7	White / Black	32	Orange / Black / Green
8	Red / Black	33	Blue / White / Orange
9	Green / Black	34	Black / White / Orange
10	Orange / Black	35	White / Red / Orange
11	Blue / Black	36	Orange / White / Blue
12	Black / White	37	White / Red / Blue
13	Red / White	38	Black / White / Green
14	Green / White	39	White / Black / Green
15	Blue / White	40	Red / White / Green
16	Black / Red	41	Green / White / Blue
17	White / Red	42	Orange / Red / Green
18	Orange / Red	43	Blue / Red / Green
19	Blue / Red	44	Black / White / Blue
20	Red / Green	45	White / Black / Blue
21	Orange / Green	46	Red / White / Blue
22	Black / White / Red	47	Green / Orange / Red
23	White / Black / Red	48	Orange / Red / Blue
24	Red / Black / White	49	Blue / Red / Orange
25	Green / Black / White	50	Black / Orange / Red

COLOR CODE CHART NO. 3

PAIR	COLOR	PAIR	COLOR
1	Black with Red	27	Brown with Yellow
2	Black with White	28	Purple with Red
3	Black with Green	29	Purple with White
4	Black with Blue	30	Purple with Green
5	Black with Brown	31	Purple with Blue
6	Black with Yellow	32	Purple with Brown
7	Black with Orange	33	Purple with Yellow
8	Red with Green	34	Purple with Orange
9	Red with White	35	Purple with Slate
10	Red with Blue	36	Purple with Black
11	Red with Yellow	37	Slate with Red
12	Red with Brown	38	Slate with White
13	Red with Orange	39	Slate with Green
14	Green with Blue	40	Slate with Blue
15	Green with White	41	Slate with Brown
16	Green with Brown	42	Slate with Yellow
17	Green with Orange	43	Slate with Orange
18	Green with Yellow	44	Slate with Black
19	White with Blue	45	White / Black with Red
20	White with Brown	46	White / Black with Green
21	White with Orange	47	White / Black with Blue
22	White with Yellow	48	White / Black with Brown
23	Blue with Brown	49	White / Black with Yellow
24	Blue with Orange	50	White / Black with Orange
25	Blue with Yellow	51	White / Black with Purple
26	Brown with Orange		

COLOR CODE CHART NO. 4 (RING BAND)

PAIR	COLOR	PAIR	COLOR
1	White-Blue paired with Blue-White	14	Black-Brown paired with Brown-Black
2	White-Orange paired with Orange-White	15	Black-Slate paired with Slate-Black
3	White-Green paired with Green-White	16	Yellow-Blue paired with Blue-Yellow
4	White-Brown paired with Brown-White	17	Yellow-Orange paired with Orange-Yellow
5	White-Slate paired with Slate-White	18	Yellow-Green paired with Green-Yellow
6	Red-Blue paired with Blue-Red	19	Yellow-Brown paired with Brown-Yellow
7	Red-Orange paired with Orange-Red	20	Yellow-Slate paired with Slate-Yellow
8	Red-Green paired with Green-Red	21	Violet-Blue paired with Blue-Violet
9	Red-Brown paired with Brown-Red	22	Violet-Orange paired with Orange-Violet
10	Red-Slate paired with Slate-Red	23	Violet-Green paired with Green-Violet
11	Black-Blue paired with Blue-Black	24	Violet-Brown paired with Brown-Violet
12	Black-Orange paired with Orange-Black	25	Violet-Slate paired with Slate-Violet
13	Black-Green paired with Green-Black		

COLOR CODE CHART NO. 5

COND.	COLOR
1	Black
2	Red
3	Brown
4	Blue
5	Orange
6	Yellow
7	Violet
8	Pink
9	Tan
10	Gray

COLOR CODE CHART NO. 6 (MIL-STD-681D)

COND.	COLOR
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Gray
9	White

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Traffic Signal Cable Cal-Trans Loop Detector Lead-In Cable



CONDUCTOR: 2 conductors of stranded tinned copper.
 JACKET: High-density polyethylene, black.
 INSULATION: Polyethylene.
 CONSTRUCTION: Aluminum polyester shield with 20 AWG stranded tinned copper drain wire. Interior moisture penetration filler of non hygroscopic polypropylene in type B cables.
 USES: Loop detector lead-in cable, from the pull box adjacent to the loop to the field terminals in the cabinet. Meets Cal-Trans specifications.

Catalog No.	Type	AWG Size	Stranding	Insulation Thickness PVC (in) (mm)		Moisture Barrier	Insulation Thickness Nylon (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Put Up (ft)	Weight (lbs / 1000 ft) (kgs / km)	
504-74B	B	16	19/29	0.020	0.508	yes	0.035	0.889	0.035	0.889	0.310	7.87	2,500	37	55
504-74C	C	16	19/29	0.020	0.508	no	0.035	0.889	0.035	0.889	0.285	7.24	2,500	34	51

Consult Standard Wire & Cable Co.'s sales department for other traffic signal and IMSA cables.

Traffic Signal Cable Inductance Loop Detector Wire DETECTA-DUCT®



CONDUCTOR: Stranded bare copper.
 JACKET: PVC 105° C.
 INSULATION: PVC / nylon (THHN).
 COLOR: Black, orange.
 CONSTRUCTION: THHN wire loosely encased in a tube of polyvinylchloride.
 VOLTAGE: 600 V.
 USES: Traffic signal inductance loop detector wire. Meets both Cal-Trans type 2 and IMSA Spec. No. 51-5 requirements. Detecta-Duct® is a trademark of Standard Wire & Cable Co., the originator of tubed loop wire.

Catalog No.	Type	AWG Size	Stranding	Insulation Thickness PVC (in) (mm)		Moisture Barrier	Insulation Thickness Nylon (in) (mm)		Jacket Thickness (in) (mm)		Nominal O. D. (in) (mm)		Put Up (ft)	Weight (lbs / 1000 ft) (kgs / km)	
903-1	14	19/27	0.015	0.381	0.004	0.102	0.03	0.76	0.19	4.8	0.250	6.35	2,500	28	42
903-2*	14	19/27	0.015	0.381	0.004	0.102	0.03	0.76	0.15	3.8	0.210	5.33	2,500	26	39

* Cal-Trans reduced diameter cable.

Detecta-Duct® is a trademark of Standard Wire & Cable Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

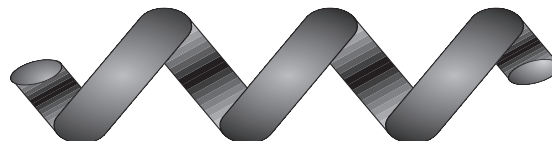
3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Retractable Cords Flexoprene®



CONDUCTOR: Stranded bare copper.

INSULATION: Rubber.

TEMPERATURE: 90° C.

USES: Any power cable that requires mobility such as truck trailers and magnetic cranes.

CONSTRUCTION: Multi-conductor stranded, length 48 in. retracted, 20 ft. extended. Also available in lengths of 12, 24, and 36 in.

Catalog No.	AWG Size	No. of Cond.	Stranding	U.L. / CSA	Max. Working Voltage	Cond. Amp Rating	Cable O.D. (in) (mm)		Coil O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
18 AWG												
710-1	18	2	41/34	SVO	300	7	0.260	6.60	7/8	22.2	1.3	1.9
710-3A	18	3	41/34	SVO	300	7	0.275	6.99	1	25.4	1.5	2.2
710-2	18	2	41/34	SJOW	300	7	0.320	8.13	1 3/16	30.2	1.8	2.7
710-3	18	3	41/34	SJOW	300	7	0.350	8.89	1 3/8	34.9	2.3	3.4
710-3B	18	3	41/34	SOW	600	7	0.425	10.8	1 9/16	39.7	3.3	4.9
710-4	18	4	41/34	SJOW	300	5.6	0.385	9.78	1 7/16	36.5	2.5	3.7
710-4B	18	4	41/34	SOW	600	5.6	0.465	11.8	1 5/8	41.3	4.0	6.0
710-17	18	5	41/34	SJOW	300	5.6	0.440	11.2	1 5/8	41.3	3.8	5.7
710-18	18	7	41/34	SJOW	300	4.9	0.500	12.7	1 7/8	47.6	5.0	7.4
710-18B	18	10	41/34	SOW	600	4.9	0.650	16.5	2 3/8	60.3	7.2	11
16 AWG												
710-5	16	2	65/34	SJOW	300	10	0.360	9.14	1 3/8	34.9	2.3	3.4
710-6	16	3	65/34	SJOW	300	10	0.390	9.91	1 7/16	36.5	2.9	4.3
710-7	16	3	65/34	SJOW	300	8	0.425	10.8	1 1/2	38.1	3.6	5.4
710-8	16	4	65/34	SOW	600	10	0.470	11.9	1 13/16	46.0	3.9	5.8
710-9	16	4	65/34	SOW	600	8	0.500	12.7	1 7/8	47.6	4.3	6.4
710-10	16	5	65/34	SOW	600	8	0.540	13.7	2 1/8	54.0	5.5	8.2
710-20	16	6	65/34	SOW	600	7	0.545	13.8	2	50.8	5.7	8.5
710-20B	16	8	65/34	SOW	600	7	0.626	15.9	2 1/2	63.5	8.3	12
14 AWG												
710-11	14	2	41/30	SOW	600	15	0.540	13.7	2 1/8	54.0	4.6	6.8
710-12	14	3	41/30	SOW	600	15	0.560	14.2	2 1/8	54.0	5.7	8.5
710-13	14	4	41/30	SOW	600	12	0.605	15.4	2 1/4	57.2	6.6	9.8
710-21B	14	7	41/30	SOW	600	10	0.720	18.3	2 7/8	73.0	11	16
12 AWG												
710-15	12	3	65/30	SOW	600	20	0.635	16.1	2 3/8	60.3	7.3	11
710-16	12	4	65/30	SOW	600	16	0.678	17.2	2 3/8	60.3	8.7	13
710-22	12	7	65/30	SOW	600	16	0.775	19.7	2 5/8	66.7	13	19
10 AWG												
710-22E	10	4	104/30	SOW	600	20	0.745	18.9	2 3/4	69.9	13	20

Flexoprene® is a trademark of Standard Wire & Cable Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

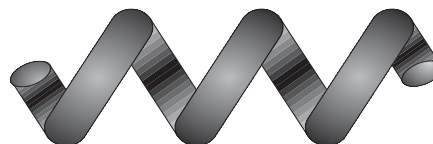
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

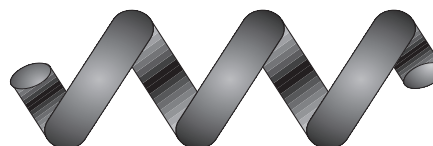
Retractable Cords PVC Communication & Electronic Control Cords



CONDUCTOR: Stranded tinned copper.
VOLTAGE: 300 V, 80° C, 1 amp.
CONSTRUCTION: Multi-conductor stranded, PVC jacket, length 48 in. retracted, 20 ft. extended. Also available in lengths of 12, 24, and 36 in. UL (CSA available).

Catalog No.	AWG Size	No. of Cond.	Stranding	Retracted Length (in) (mm)		Cable O.D. (in) (mm)		Coil O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
712-8	23	2	21/36	48	1,219	0.180	4.57	5/8	15.9	0.36	0.54
712-9	23	3	21/36	48	1,219	0.190	4.83	11/16	17.5	0.54	0.80
712-10	23	4	21/36	48	1,219	0.200	5.08	11/16	17.5	0.60	0.89
712-11	23	5	21/36	48	1,219	0.215	5.46	3/4	19.1	0.62	0.92
712-12	23	6	21/36	48	1,219	0.225	5.72	7/8	22.2	0.81	1.2
712-13	23	7	21/36	48	1,219	0.240	6.10	7/8	22.2	0.90	1.3
712-14	23	8	21/36	48	1,219	0.245	6.22	7/8	22.2	0.94	1.4
712-16	23	10	21/36	48	1,219	0.280	7.11	15/16	23.8	1.06	1.58
712-18	23	12	21/36	48	1,219	0.285	7.24	1	25.4	1.30	1.93
712-21	23	15	21/36	48	1,219	0.310	7.87	1 1/16	17.5	1.60	2.38

Retractable Cords Heavy Duty Outdoor Use - Communication & Electronic Control Cords



CONDUCTOR: Stranded tinned copper.
VOLTAGE: 300 V, 80° C, 1 amp.
CONSTRUCTION: Multi-conductor stranded, TPE jacket, length 48 in. retracted, 20 ft. extended. Also available in lengths of 12, 24, and 36 in. UL (CSA available).

Catalog No.	AWG Size	No. of Cond.	Stranding	Retracted Length (in) (mm)		Cable O.D. (in) (mm)		Coil O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
711-8	23	2	21/36	48	1,219	0.180	4.57	5/8	15.9	0.36	0.54
711-9	23	3	21/36	48	1,219	0.190	4.83	11/16	17.5	0.54	0.80
711-10	23	4	21/36	48	1,219	0.200	5.08	11/16	17.5	0.60	0.89
711-11	23	5	21/36	48	1,219	0.215	5.46	3/4	19.1	0.62	0.92
711-12	23	6	21/36	48	1,219	0.225	5.72	7/8	22.2	0.81	1.2
711-13	23	7	21/36	48	1,219	0.240	6.10	7/8	22.2	0.90	1.3
711-14	23	8	21/36	48	1,219	0.245	6.22	7/8	22.2	0.94	1.4
711-16	23	10	21/36	48	1,219	0.280	7.11	15/16	23.8	1.06	1.58
711-18	23	12	21/36	48	1,219	0.285	7.24	1	25.4	1.30	1.93
711-21	23	15	21/36	48	1,219	0.310	7.87	1 1/16	17.5	1.60	2.38

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

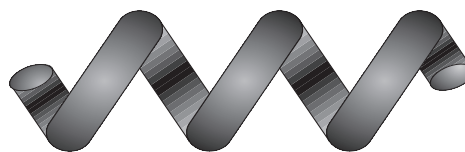
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Retractable Cords Shielded Communication Cords



CONDUCTOR: Stranded tinned copper.

INSULATION: Polypropylene.

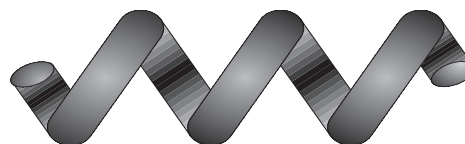
VOLTAGE: 300 V, 80° C, 1 amp.

CONSTRUCTION: Multi-conductor, shielded and unshielded, 711 series = TPE jacketed, 712 series = PVC jacketed. Length 48 in. retracted, 20 ft. extended. Also available in lengths of 12, 24, and 36 in.

USES: Shielded communication applications.

Catalog No.	AWG Size	No. of Cond.	U.L. / (CSA available)	Stranding	Retracted Length (in) (mm)		Cable O.D. (in) (mm)		Coil O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
711-1	23	1 (shielded)	no	21/36	48	1,219	0.165	4.19	5/8	15.9	0.41	0.61
711-2	23	2 (individually shielded)	no	21/36	48	1,219	0.210	5.33	3/4	19.1	0.72	1.1
711-3	23	3 (1 shielded, 2 unshielded)	no	21/36	48	1,219	0.205	5.21	3/4	19.1	0.69	1.0
711-4	23	4 (2 shielded, 2 unshielded)	no	21/36	48	1,219	0.230	5.84	7/8	22.2	0.96	1.4
712-1	23	1 (shielded)	yes	21/36	48	1,219	0.165	4.19	5/8	15.9	0.41	0.61
712-2	23	2 (individually shielded)	yes	21/36	48	1,219	0.210	5.33	3/4	19.1	0.72	1.1
712-3	23	3 (1 shielded, 2 unshielded)	yes	21/36	48	1,219	0.205	5.21	3/4	19.1	0.69	1.0
712-4	23	4 (2 shielded, 2 unshielded)	yes	21/36	48	1,219	0.230	5.84	7/8	22.2	0.96	1.4

Retractable Cords Test Lead



CONDUCTOR: Stranded tinned copper.

COLOR: Black, red.

INSULATION: TPE.

VOLTAGE: 5 KV.

CONSTRUCTION: Length 24 in. retracted, 12 ft. extended.

Catalog No.	AWG Size	No. of Cond.	Stranding	Retracted Length (in) (mm)		Cable O.D. (in) (mm)		Coil O.D. (in) (mm)		COLOR	Weight (lbs / (kgs / 1000 ft) km)	
710-23	20	1	41/36	24	610	0.165	4.19	5/8	15.9	Black	0.20	0.30
710-24	20	1	41/36	24	610	0.165	4.19	5/8	15.9	Red	0.20	0.30

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Rubber Portable Flexible Cord

Type SJ



CONDUCTOR: 2, 3, and 4 conductors of stranded bare copper. VOLTAGE: 300 V 60° C.
INSULATION: EPDM. JACKET: Black rubber.
CONSTRUCTION: Flexible, portable power cord. Conductors cabled with fillers. Tough, resilient black rubber jacket. UL flexible cord, UL subject 62.

Catalog No.	AWG Size	Stranding	No. of Cond.	Nominal Diameter (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)		Ampere Capacity
702-3	18	16/30	2	0.285	7.24	45	67	10
702-5	18	16/30	3	0.305	7.75	60	89	10
702-7	18	16/30	4	0.330	8.38	70	104	7
702-9	16	26/30	2	0.315	8.00	60	89	13
702-11	16	26/30	3	0.330	8.38	75	112	13
702-13	16	26/30	4	0.365	9.3	90	134	10
702-15	14	65/30	2	0.340	8.64	75	112	18
702-17	14	65/30	3	0.365	9.27	105	156	18
702-19	14	65/30	4	0.415	10.5	120	179	15

Color Code: 2 conductors - black, white; 3 conductors - black, white, green; 4 conductors - black, white, red, green.

Flexoprene® Welding Cable



CONDUCTOR: Extra flexible bare copper strands. VOLTAGE: 600 V.
CONSTRUCTION: Separator, smooth black Flexoprene® JACKET: Black Flexoprene®.
jacket. Conforms to ASTM designation D-752.

Catalog No.	AWG Size	Amps Rating	Stranding	Nominal Diameter (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
701-4	6	75	259/30	0.370	9.40	140	208
701-6	4	100	374/30	0.420	10.7	180	268
701-8	2	200	625/30	0.490	12.4	265	394
701-10	1	250	778/30	0.511	13.0	320	476
701-12	1/0	300	990/30	0.586	14.9	405	603
701-14	2/0	375	1,248/30	0.629	16.0	485	722
701-16	3/0	450	1,586/30	0.691	17.6	620	923
701-18	4/0	550	2,054/30	0.803	20.4	790	1,176

®Flexoprene is a trademark of Standard Wire & Cable Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Flexoprene® Portable Cord Type SOOW



CONDUCTOR: 2, 3, and 4 conductors of stranded bare copper. UL LISTED: UL flexible cord - subject 62.
INSULATION: EPDM. JACKET: Resilient, black Flexoprene®.
CONSTRUCTION: Flexible portable power cord, cabled with fillers, color coded. VOLTAGE: 600 V 90° C.

Catalog No.	AWG Size	Stranding	No. of Cond.	Nominal Diameter (in) (mm)		Approx. Weight (lbs / 1000 ft) (kgs / km)		Ampere Capacity
703-2	18	16/30	2	0.345	8.76	70	104	10
703-4	18	16/30	3	0.365	9.27	80	119	10
703-6	18	16/30	4	0.390	9.91	95	141	7
703-8	16	26/30	2	0.370	9.40	80	119	13
703-10	16	26/30	3	0.390	9.91	95	141	13
703-12	16	26/30	4	0.415	10.5	115	171	10
703-14	14	41/30	2	0.500	12.7	135	201	18
703-16	14	41/30	3	0.530	13.5	170	253	18
703-18	14	41/30	4	0.570	14.5	205	305	15
703-20	12	65/30	2	0.575	14.6	195	290	25
703-22	12	65/30	3	0.600	15.2	225	335	25
703-24	12	65/30	4	0.650	16.5	270	402	20
703-26	10	104/30	2	0.625	15.9	250	372	30
703-28	10	104/30	3	0.660	16.8	290	432	30
703-30	10	104/30	4	0.710	18.0	355	528	25

Flexoprene® Portable Cord Types SVO & SJOOW



CONDUCTOR: 2, 3, and 4 conductors of stranded bare copper. UL LISTED: UL flexible cord - subject 62.
INSULATION: EPDM. JACKET: Resilient, black Flexoprene®.
CONSTRUCTION: Flexible light-duty power cord, cabled with fillers, color coded. VOLTAGE: 300 V 90° C.

Catalog No.	AWG Size	Stranding	No. of Cond.	Nominal Diameter (in) (mm)		Approx. Weight (lbs / 1000 ft) (kgs / km)		Ampere Capacity	Type
703-1	18	41/30	2	0.245	6.22	36	54	10	SVO
703-1A	18	41/30	3	0.255	6.48	43	64	10	SVO
703-3	18	16/30	2	0.285	7.24	50	74	10	SJOOW
703-5	18	16/30	3	0.305	7.75	60	89	10	SJOOW
703-7	18	16/30	4	0.330	8.38	70	104	7	SJOOW
703-9	16	26/30	2	0.310	7.87	60	89	13	SJOOW
703-11	16	26/30	3	0.330	8.38	75	112	13	SJOOW
703-13	16	26/30	4	0.365	9.27	95	141	10	SJOOW
703-15	14	41/30	2	0.350	8.89	75	112	18	SJOOW
703-17	14	41/30	3	0.365	9.27	105	156	18	SJOOW
703-19	14	41/30	4	0.415	10.5	125	186	15	SJOOW
703-20A	12	65/30	2	0.410	10.4	105	156	25	SJOOW
703-22A	12	65/30	3	0.430	10.9	140	208	25	SJOOW

Color Code: 2 conductors - black, white; 3 conductors - black, white, green; 4 conductors - black, white, red, green.

®Flexoprene is a trademark of Standard Wire & Cable Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Polyvinylchloride (PVC) Insulated UL/CSA Hook-Up Wire

UL Style 1007, CSA TR-64



UL Listed



CSA Listed

CONDUCTOR: Tinned copper*.

VOLTAGE: 300 V.

INSULATION: 1/64" PVC, -40° C to 80° C.

USES: Internal appliance and electronic wiring. Resistant to moisture, oil, solvents, and fungus.
Passes VW-1 Vertical Flame Test.

Catalog No.	AWG Size	Stranding	Nominal Wall Thickness (in) (mm)		Insulation Nominal O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
857-1	24	Solid	1/64	0.397	0.052	1.32	2.6	3.9
857-3	22	Solid	1/64	0.397	0.059	1.50	3.6	5.4
857-5	20	Solid	1/64	0.397	0.065	1.65	5.1	7.6
857-2	24	7/32	1/64	0.397	0.056	1.42	2.8	4.2
857-4	22	7/30	1/64	0.397	0.062	1.57	3.9	5.8
857-6	20	10/30	1/64	0.397	0.071	1.80	5.0	7.4
857-8	18	16/30	1/64	0.397	0.081	2.06	7.8	12
857-10	16	26/30	1/64	0.397	0.092	2.34	10.9	16.2

UL Style 1015, CSA TEW

CONDUCTOR: Tinned copper*.

VOLTAGE: 600 V.

INSULATION: 1/32" PVC, -40° C to 105° C.

USES: Internal appliance and electronic wiring. Resistant to moisture, oil, solvents, and fungus.
Passes VW-1 Vertical Flame Test and is self-extinguishing.

Catalog No.	AWG Size	Stranding	Nominal Wall Thickness (in) (mm)		Insulation Nominal O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
865-2	24	7/32	1/32	0.794	0.087	2.21	5.10	7.59
865-4	22	7/30	1/32	0.794	0.094	2.39	6.30	9.37
865-6	20	10/30	1/32	0.794	0.102	2.59	7.60	11.3
865-8	18	16/30	1/32	0.794	0.113	2.87	10.1	15.0
865-10	16	26/30	1/32	0.794	0.124	3.15	14.4	21.4
865-12	14	41/30	1/32	0.794	0.138	3.51	20.1	29.9
865-14	12	65/30	1/32	0.794	0.158	4.01	29.6	44.0
865-16	10	105/30	1/32	0.794	0.184	4.67	42.2	62.8

*Available in solid or stranded and bare or tinned copper conductors.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

UL Style 1028, CSA TEW

CONDUCTOR: Tinned copper*.
VOLTAGE: 600 V.

INSULATION: 3/64" PVC, -40° C to 105° C.

USES: Internal wiring of appliances where exposed to temperatures not exceeding 105° C. Resistant to moisture, oil, solvents, and fungus and is self-extinguishing. PVC compound to resist deformation under load. Business machine wire and computer hook-up wire for internal wiring.

Catalog No.	AWG Size	Stranding	Nominal Wall Thickness		Insulation Nominal O.D.		Weight	
			(in)	(mm)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
869-4	22	7/30	3/64	1.19	0.124	3.15	9.40	14.0
869-6	20	10/30	3/64	1.19	0.132	3.35	11.0	16.4
869-8	18	16/30	3/64	1.19	0.144	3.66	13.9	20.7
869-10	16	26/30	3/64	1.19	0.156	3.96	18.2	27.1
869-12	14	41/30	3/64	1.19	0.174	4.42	24.3	36.2
869-14	12	65/30	3/64	1.19	0.190	4.83	33.7	50.1
869-15	10	105/30	3/64	1.19	0.215	5.46	48.0	71.4
869-18	8	133/29	3/64	1.19	0.262	6.65	77.0	115

UL Style 1061, CSA AWM

CONDUCTOR: Tinned copper*.
VOLTAGE: 300 V.

INSULATION: 0.009" semi-rigid PVC, -40° C to 80° C.

USES: Business machine wire and computer hook-up wire for internal wiring. Resistant to moisture, oil, solvents, and fungus and is self-extinguishing. PVC compound to resist deformation under load.

Catalog No.	AWG Size	Stranding	Nominal Wall Thickness		Insulation Nominal O.D.		Weight	
			(in)	(mm)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
875-2	26	7/34	0.009	0.23	0.038	0.97	1.4	2.1
875-4	24	7/32	0.009	0.23	0.041	1.04	2.1	3.1
875-6	22	7/30	0.009	0.23	0.048	1.22	3.1	4.6
875-8	20	7/28	0.009	0.23	0.057	1.45	4.6	6.8
875-10	20	10/30	0.009	0.23	0.058	1.47	4.4	6.5
875-14	18	16/30	0.009	0.23	0.072	1.83	5.9	8.8
875-16	16	26/30	0.009	0.23	0.084	2.13	9.1	13.5
875-1	26	Solid	0.009	0.23	0.036	0.91	1.2	1.8
875-3	24	Solid	0.009	0.23	0.040	1.02	1.9	2.8
875-5	22	Solid	0.009	0.23	0.047	1.19	3.0	4.5
875-7	20	Solid	0.009	0.23	0.056	1.42	4.5	6.7

*Available in solid or stranded and bare or tinned copper conductors.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

PTFE Insulated Hook-Up Wire UL Style 1180, CSA 300V



UL Listed



CSA Listed

CONDUCTOR: Silver plated copper.
VOLTAGE: 300 V (UL allows 600V for electronic use only).
IDENTIFICATION: Surface printed as required by UL or CSA.

INSULATION: Extruded PTFE, 0.013" (0.33 mm) wall thickness.
TEMPERATURE: 200° C for UL 1180 and CSA.

USES: General appliance wiring and other applications where chemical exposure, temperature extremes, and dielectric stress are possible.

Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Conductor Diameter (in) (mm)		Insulation Diameter (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1098-32C	28	solid	65.3	214	0.013	0.330	0.042	1.07	1.68	2.50
1098-32	28	7/36	62.0	203	0.015	0.381	0.045	1.14	1.91	2.84
1098-32A	28	19/40	63.1	207	0.015	0.381	0.045	1.14	1.91	2.84
1098-43C	26	solid	41.0	135	0.016	0.406	0.045	1.14	2.09	3.11
1098-43	26	7/34	38.7	127	0.019	0.483	0.048	1.22	2.36	3.51
1098-43A	26	19/38	37.3	122	0.019	0.483	0.048	1.22	2.40	3.57
1098-54C	24	solid	25.7	84.3	0.020	0.508	0.049	1.24	2.72	4.05
1098-54	24	7/32	23.9	78.4	0.024	0.610	0.053	1.35	3.13	4.66
1098-54A	24	19/36	23.6	77.4	0.024	0.610	0.053	1.35	3.13	4.66
1098-65C	22	solid	16.5	54.1	0.025	0.635	0.054	1.37	3.65	5.43
1098-65	22	7/30	15.2	49.9	0.030	0.762	0.060	1.52	4.29	6.38
1098-65A	22	19/34	14.8	48.6	0.030	0.762	0.060	1.52	4.34	6.46
1098-76C	20	solid	10.1	33.1	0.032	0.813	0.061	1.55	5.12	7.62
1098-76	20	7/28	9.56	31.4	0.038	0.965	0.068	1.73	6.01	8.94
1098-76A	20	19/32	8.87	29.1	0.038	0.965	0.068	1.73	6.09	9.06
1098-87	18	7/26	6.01	19.7	0.048	1.22	0.079	2.01	8.72	12.98
1098-87A	18	19/30	5.80	19.0	0.047	1.19	0.079	2.01	8.79	13.1
1098-98A	16	19/0.0117	4.52	14.8	0.056	1.42	0.090	2.29	11.6	17.3
1098-109A	14	19/0.0147	2.87	9.42	0.070	1.78	0.105	2.67	17.1	25.4
1098-120A	12	19/0.0186	1.81	5.94	0.088	2.24	0.125	3.18	26.3	39.1
1098-131A	10	37/0.0167	1.19	3.90	0.113	2.87	0.146	3.71	39.3	58.5

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

PTFE Insulated Hook-Up Wire

UL Style 1199, CSA 600V



UL Listed



CSA Listed



CONDUCTOR: Silver plated copper. **INSULATION:** Extruded PTFE wall thickness for 8 AWG is 0.030" (0.76 mm); wall thickness for 10-30 AWG is 0.020" (0.51 mm).
VOLTAGE: 600 V (UL allows 2,500V peak for electronic use only).
IDENTIFICATION: Surface printed as required by UL or CSA. **TEMPERATURE:** 200° C for UL and CSA.
USES: General appliance wiring and other applications where chemical exposure, temperature extremes, and dielectric stress are possible.

Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Conductor Diameter		Insulation Diameter		Weight	
			(Ohms/ 1000 ft)	(Ohms/ km)	(in)	(mm)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1099-32	28	7/36	62.0	203	0.015	0.381	0.058	1.47	2.92	4.34
1099-43C	26	solid	41.0	135	0.016	0.406	0.060	1.52	3.27	4.87
1099-43	26	7/34	38.7	127	0.019	0.483	0.063	1.60	3.65	5.43
1099-43A	26	19/38	37.3	122	0.019	0.483	0.063	1.60	3.65	5.43
1099-54C	24	solid	25.7	84.3	0.020	0.508	0.064	1.63	4.01	5.97
1099-54	24	7/32	23.9	78.4	0.024	0.610	0.068	1.73	4.49	6.68
1099-54A	24	19/36	23.6	77.4	0.024	0.610	0.068	1.73	4.49	6.68
1099-65C	22	solid	16.5	54.1	0.025	0.635	0.069	1.75	5.03	7.48
1099-65	22	7/30	15.2	49.9	0.030	0.762	0.074	1.88	5.78	8.60
1099-65A	22	19/34	14.8	48.6	0.030	0.762	0.074	1.88	5.78	8.60
1099-76C	20	solid	10.1	33.1	0.032	0.813	0.077	1.96	7.00	10.4
1099-76	20	7/28	9.56	31.4	0.038	0.965	0.083	2.11	7.71	11.5
1099-76A	20	19/32	8.87	29.1	0.038	0.965	0.083	2.11	7.79	11.6
1099-87	18	7/26	6.01	19.7	0.048	1.22	0.093	2.36	10.5	15.6
1099-87A	18	19/30	5.80	19.0	0.047	1.19	0.093	2.36	10.6	15.8
1099-98A	16	19/0.0117	4.52	14.8	0.056	1.42	0.102	2.59	13.3	19.8
1099-109A	14	19/0.0147	2.87	9.42	0.070	1.78	0.115	2.92	18.7	27.8
1099-120A	12	19/0.0186	1.81	5.94	0.088	2.24	0.134	3.40	28.1	41.8
1099-131A	10	37/0.0167	1.19	3.90	0.113	2.87	0.159	4.04	41.8	62.2
1099-142A	8	133/29	0.658	2.16	0.162	4.11	0.230	5.84	76.5	114

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

PTFE Insulated Hook-Up Wire

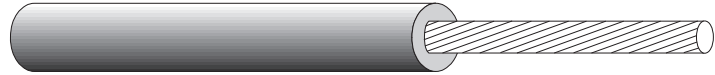
UL Style 1213, CSA 150V



UL Listed



CSA Listed



CONDUCTOR: Silver plated copper*.
INSULATION: Extruded PTFE 0.008" (0.20 mm).
IDENTIFICATION: Surface printed as required by UL or CSA.

TEMPERATURE: 150° C for UL and 200° C for CSA.
VOLTAGE: Not specified by UL, 150V for CSA.

USES: Applications where weight and space savings are required. Due to thin wall insulation these wires are restricted to low voltage applications..

Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (km)		Conductor Diameter (in) (mm)		Insulation Diameter (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1097-5	36	7/44	412	1352	0.006	0.152	0.025	0.64	0.52	0.77
1097-8	34	7/42	258	846	0.008	0.203	0.028	0.71	0.67	1.00
1097-10C	32	solid	162	531	0.008	0.203	0.027	0.69	0.69	1.03
1097-10	32	7/40	166	545	0.009	0.229	0.029	0.74	0.78	1.17
1097-10A	32	19/44	153	502	0.010	0.254	0.029	0.74	0.80	1.19
1097-21C	30	solid	104	341	0.010	0.254	0.029	0.74	0.86	1.28
1097-21	30	7/38	97.5	320	0.012	0.305	0.032	0.81	1.02	1.52
1097-21A	30	19/42	96.1	315	0.012	0.305	0.032	0.81	1.03	1.53
1097-32C	28	solid	65.3	214	0.013	0.330	0.032	0.81	1.13	1.68
1097-32	28	7/36	62.0	203	0.015	0.381	0.035	0.89	1.32	1.96
1097-32A	28	19/40	63.1	207	0.015	0.381	0.035	0.89	1.32	1.96
1097-43C	26	solid	41.0	135	0.016	0.406	0.035	0.89	1.49	2.22
1097-43	26	7/34	38.7	127	0.019	0.483	0.038	0.97	1.71	2.54
1097-43A	26	19/38	37.3	122	0.019	0.483	0.038	0.97	1.74	2.59
1097-54C	24	solid	25.7	84.3	0.020	0.508	0.040	1.02	2.12	3.15
1097-54	24	7/32	23.9	78.4	0.024	0.610	0.043	1.09	2.41	3.59
1097-54A	24	19/36	23.6	77.4	0.024	0.610	0.043	1.09	2.41	3.59
1097-65C	22	solid	16.5	54.1	0.025	0.64	0.046	1.17	3.06	4.55
1097-65	22	7/30	15.2	49.9	0.030	0.76	0.050	1.27	3.47	5.16
1097-65A	22	19/34	14.8	48.6	0.030	0.76	0.050	1.27	3.51	5.22
1097-76C	20	solid	10.1	33.1	0.032	0.81	0.054	1.37	4.89	7.28
1097-76	20	7/28	9.56	31.4	0.038	0.97	0.058	1.47	5.05	7.51
1097-76A	20	19/32	8.87	29.1	0.038	0.97	0.058	1.47	5.15	7.66
1097-87	18	7/26	6.01	19.7	0.048	1.22	0.068	1.73	7.50	11.2
1097-87A	18	19/30	5.79	19.0	0.047	1.19	0.068	1.73	7.50	11.2
1097-98A	16	19/29	4.52	14.8	0.053	1.35	0.077	1.96	9.65	14.4

*Available in nickel plated copper conductors, silver or nickel plated high strength copper alloy conductor.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

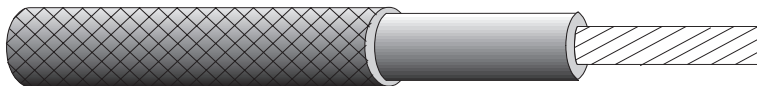
3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Appliance Lead Wire for High Temperature TAGT/TGGT



UL Listed



CSA Listed

CONDUCTOR: Stranded nickel-clad copper.
CONSTRUCTION: Fused PTFE tape, high temperature barrier and PTFE impregnated glass braid for flame and moisture resistance.
VOLTAGE: 600 V.
TEMPERATURE: 250° C.
USES: This product has excellent flexibility and stripability qualities as well as ability to resist abrasion, flame, moisture, and chemicals.

Catalog No.	AWG Size	Stranding	Nominal O.D.		Weight	
			(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1126-24	22	7/30	0.090	2.29	8	12
1126-44	20	10/30	0.100	2.54	10	15
1126-54	18	16/30	0.110	2.79	13	19
1126-71	16	26/30	0.120	3.05	18	27
1126-77	14	41/30	0.140	3.56	24	36
1126-84	12	65/30	0.160	4.06	34	51
1126-88	10	105/30	0.185	4.70	51	76
1126-90	8	133/29	0.230	5.84	65	97
1126-92	6	133/27	0.285	7.24	114	170
1126-94	4	133/25	0.340	8.64	168	250
1126-96	2	133/23	0.410	10.4	246	366
1126-98	1	259/25	0.470	11.9	320	476
1126-110	1/0	259/24	0.515	13.1	392	583
1126-120	2/0	259/23	0.570	14.5	490	729
1126-130	3/0	259/22	0.625	15.9	599	891
1126-140	4/0	259/21	0.690	17.5	746	1,110

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

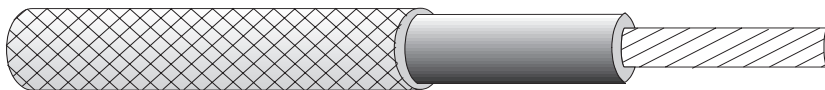
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Appliance, Fixture, Apparatus, and Motor Lead Wire SRML



UL Listed



CSA Listed

CONDUCTOR: Stranded tinned copper. **INSULATION:** Extruded silicone rubber, glass braid, 150° C / 200° C.
VOLTAGE: 600 V. **COLOR:** Black, white*.

PROPERTIES: Heat stable to 200° C; flexible down to -90° C; unaffected by severe thermal cycling; resists aging under heat and outdoors; unaffected by ultraviolet radiation; resists moisture and chemicals; highly flame-retardant; unaffected by ozone and corona.

USES: Ideally suited for use in areas where temperatures range from -90° C to 200° C. Can be used near ranges, furnaces, or other types of heating elements. Even soldering heat won't cause the insulation to melt or peel. Can be used where very low temperatures are a factor and won't harden or crack, even when flexed after lengthy aging and exposure.

Catalog No.	AWG Size	Stranding	Insulation Wall. (in) (mm)		Nominal O.D. (in) (mm)		Ampacity 30° C (86° F)	Weight (lbs / (kgs / 1000 ft) km)	
1130-9	18	16/30	2/64	0.794	0.130	3.30	24	12	18
1130-12	16	26/30	2/64	0.794	0.140	3.56	30	16	24
1130-15	14	41/30	2/64	0.794	0.160	4.06	40	22	33
1130-18	12	65/30	2/64	0.794	0.180	4.57	55	32	48
1130-21	10	105/30	3/64	1.191	0.230	5.84	75	62	92
1130-24	8	133/29	4/64	1.588	0.316	8.03	115	90	134
1130-27	6	133/27	4/64	1.588	0.362	9.19	154	140	208
1130-30	4	133/25	4/64	1.588	0.417	10.6	205	205	305
1130-33	2	133/23	4/64	1.588	0.486	12.3	280	300	446
1130-36	1	259/25	5/64	1.984	0.585	14.9	325	400	595
1130-39	1/0	259/24	5/64	1.984	0.631	16.0	385	480	714
1130-42	2/0	259/23	5/64	1.984	0.684	17.4	450	620	923
1130-45	3/0	259/22	5/64	1.984	0.743	18.9	520	760	1,131
1130-48	4/0	259/21	5/64	1.984	0.804	20.4	600	890	1,324

* Custom jacket colors available.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Instrumentation Control Cable



CONDUCTORS: Stranded tinned copper. **CODED:** Numbered consecutively in black on white.
INSULATION: 0.010" semi-rigid, -55° C to 105° C **CABLED:** Round with fillers where needed.
PVC Type "B" to MIL-DTL-16878D. **JACKET:** Black flexible PVC, -40° C to 105° C.
VOLTAGE: 600 V.
USES: Interconnecting cables for electronic equipment, telemetering, and instrumentation control. Resistant to flame, moisture, and many oils and chemicals.

		24 AWG Conductors, 7/32 stranding (32 pF / ft between adjacent conductors)						22 AWG Conductors, 7/30 stranding (35 pF / ft between adjacent conductors)						
No. of Cond.	Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)		Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
2	5001	0.025	0.635	0.143	3.63	11	16	5101	0.025	0.635	0.155	3.94	12	18
3	5002	0.025	0.635	0.150	3.81	13	19	5102	0.025	0.635	0.163	4.14	16	24
4	5003	0.025	0.635	0.162	4.11	16	24	5103	0.025	0.635	0.176	4.47	19	28
5	5004	0.025	0.635	0.174	4.42	18	27	5104	0.025	0.635	0.190	4.83	23	34
6	5005	0.025	0.635	0.187	4.75	22	33	5105	0.025	0.635	0.205	5.21	28	42
7	5006	0.025	0.635	0.187	4.75	24	36	5106	0.025	0.635	0.205	5.21	30	45
8	5007	0.025	0.635	0.201	5.11	26	39	5107	0.025	0.635	0.221	5.61	33	49
9	5008	0.025	0.635	0.214	5.44	30	45	5108	0.025	0.635	0.236	5.99	39	58
10	5009	0.025	0.635	0.231	5.87	32	48	5109	0.025	0.635	0.255	6.48	41	61
11	5010	0.025	0.635	0.231	5.87	35	52	5110	0.025	0.635	0.255	6.48	44	65
12	5011	0.025	0.635	0.238	6.05	37	55	5111	0.025	0.635	0.263	6.68	47	70
13	5012	0.025	0.635	0.249	6.32	40	60	5112	0.025	0.635	0.276	7.01	52	77
14	5013	0.025	0.635	0.249	6.32	42	62	5113	0.025	0.635	0.276	7.01	54	80
15	5014	0.025	0.635	0.263	6.68	46	68	5114	0.025	0.635	0.291	7.39	59	88
20	5015	0.025	0.635	0.289	7.34	58	86	5115	0.030	0.762	0.331	8.41	77	115
25	5016	0.030	0.762	0.329	8.36	74	110	5116	0.030	0.762	0.365	9.27	96	143
30	5017	0.030	0.762	0.347	8.81	84	125	5117	0.035	0.889	0.396	10.1	113	168
35	5018	0.035	0.889	0.383	9.73	101	150	5118	0.035	0.889	0.425	10.8	132	196
40	5019	0.035	0.889	0.397	10.1	111	165	5119	0.040	1.02	0.451	11.5	150	223
45	5020	0.040	1.02	0.437	11.1	135	201	5120	0.040	1.02	0.485	12.3	172	256
50	5021	0.040	1.02	0.455	11.6	146	217	5121	0.045	1.14	0.516	13.1	191	284
60	5022	0.040	1.02	0.481	12.2	169	251	5122	0.045	1.14	0.545	13.8	222	330
70	5023	0.045	1.14	0.535	13.6	199	296	5123	0.050	1.27	0.605	15.4	261	388
80	5024	0.050	1.27	0.564	14.3	222	330	5124	0.050	1.27	0.627	15.9	292	434
90	5025	0.050	1.27	0.589	15.0	247	368	5125	0.050	1.27	0.655	16.6	326	485
100	5026	0.050	1.27	0.633	16.1	273	406	5126	0.055	1.40	0.715	18.2	368	548
110	5027	0.050	1.27	0.652	16.6	299	445	5127	0.055	1.40	0.737	18.7	403	600
120	5028	0.050	1.27	0.665	16.9	318	473	5128	0.055	1.40	0.751	19.1	430	640

All dimensions are nominal.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Instrumentation Control Cable



CONDUCTORS: Stranded tinned copper. **CODED:** Numbered consecutively in black on white.
INSULATION: 0.010" semi-rigid, -55° C to 105° C
VOLTAGE: PVC Type "B" to MIL-DTL-16878/1. **CABLED:** Round with fillers where needed.
600 V. **JACKET:** Black flexible PVC, -40° C to 105° C.
USES: Interconnecting cables for electronic equipment, telemetering, and instrumentation control. Resistant to flame, moisture, and many oils and chemicals.

	20 AWG Conductors, 7/28 stranding (41 pF / ft between adjacent conductors)							18 AWG Conductors, 7/26 stranding (41 pF / ft between adjacent conductors)						
No. of Cond.	Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)		Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
2	5201	0.025	0.635	0.171	4.34	16	24	5301	0.025	0.635	0.191	4.85	22	33
3	5202	0.025	0.635	0.181	4.60	22	33	5302	0.025	0.635	0.202	5.13	29	43
4	5203	0.025	0.635	0.196	4.98	27	40	5303	0.025	0.635	0.220	5.59	37	55
5	5204	0.025	0.635	0.211	5.36	33	49	5304	0.025	0.635	0.239	6.07	46	68
6	5205	0.025	0.635	0.229	5.82	39	58	5305	0.025	0.635	0.259	6.58	55	82
7	5206	0.025	0.635	0.229	5.82	42	62	5306	0.025	0.635	0.259	6.58	60	89
8	5207	0.025	0.635	0.247	6.27	48	71	5307	0.025	0.635	0.280	7.11	68	101
9	5208	0.025	0.635	0.265	6.73	55	82	5308	0.025	0.635	0.301	7.65	79	118
10	5209	0.025	0.635	0.287	7.29	59	88	5309	0.030	0.762	0.337	8.56	84	125
11	5210	0.025	0.635	0.287	7.29	65	97	5310	0.030	0.762	0.337	8.56	97	144
12	5211	0.025	0.635	0.297	7.54	69	103	5311	0.030	0.762	0.348	8.84	101	150
13	5212	0.030	0.762	0.321	8.15	78	116	5312	0.030	0.762	0.365	9.27	112	167
14	5213	0.030	0.762	0.321	8.15	82	122	5313	0.030	0.762	0.365	9.27	116	173
15	5214	0.030	0.762	0.339	8.61	89	132	5314	0.035	0.889	0.395	10.0	131	195
20	5215	0.035	0.889	0.383	9.73	118	176	5315	0.040	1.02	0.446	11.3	169	251
25	5216	0.035	0.889	0.423	10.7	145	216	5316	0.040	1.02	0.493	12.5	206	307
30	5217	0.040	1.02	0.457	11.6	171	254	5317	0.045	1.14	0.531	13.5	250	372
35	5218	0.045	1.14	0.501	12.7	204	304	5318	0.050	1.27	0.581	14.8	298	443
40	5219	0.045	1.14	0.510	13.0	226	336	5319	0.050	1.27	0.602	15.3	330	491
45	5220	0.050	1.27	0.569	14.5	262	390	5320	0.050	1.27	0.649	16.5	377	561
50	5221	0.050	1.27	0.593	15.1	286	426	5321	0.050	1.27	0.677	17.2	411	612
60	5222	0.050	1.27	0.627	15.9	334	497	5322	0.055	1.40	0.727	18.5	489	728
70	5223	0.055	1.40	0.695	17.7	392	583	5323	0.060	1.52	0.805	20.4	571	850
80	5224	0.055	1.40	0.720	18.3	440	655	5324	0.060	1.52	0.834	21.2	643	957
90	5225	0.055	1.40	0.753	19.1	491	731	5325	0.060	1.52	0.873	22.2	719	1,070
100	5226	0.060	1.52	0.821	20.9	553	823	5326	0.065	1.65	0.951	24.2	808	1,202
110	5227	0.060	1.52	0.845	21.5	555	826	5327	0.065	1.65	0.980	24.9	885	1,317
120	5228	0.060	1.52	0.863	21.9	648	964	5328	0.065	1.65	1.000	25.4	949	1,412

All dimensions are nominal.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Instrumentation Control Cable with Overall Shield



CONDUCTORS: Stranded tinned copper. **CODED:** Numbered consecutively in black on white.
INSULATION: 0.010" semi-rigid, -55° C to 105° C **CABLED:** Round with fillers where needed.
PVC Type "B" to MIL-DTL-16878/1. **SHIELD:** Braided tinned copper, 80% coverage.
VOLTAGE: 600 V. **JACKET:** Black flexible PVC, -40° C to 105° C.
USES: Interconnecting cables for electronic equipment, telemetering, and instrumentation control.
Resistant to flame, moisture, and many oils and chemicals.

	24 AWG Conductors, 7/32 stranding (32 pF / ft between adjacent conductors)							22 AWG Conductors, 7/30 stranding (35 pF / ft between adjacent conductors)						
No. of Cond.	Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)		Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
2	5001-S	0.025	0.635	0.166	4.22	19	28	5101-S	0.025	0.635	0.178	4.52	20	30
3	5002-S	0.025	0.635	0.173	4.39	22	33	5102-S	0.025	0.635	0.186	4.72	25	37
4	5003-S	0.025	0.635	0.185	4.70	25	37	5103-S	0.025	0.635	0.199	5.05	29	43
5	5004-S	0.025	0.635	0.197	5.00	29	43	5104-S	0.025	0.635	0.213	5.41	34	51
6	5005-S	0.025	0.635	0.210	5.33	33	49	5105-S	0.025	0.635	0.228	5.79	40	60
7	5006-S	0.025	0.635	0.210	5.33	35	52	5106-S	0.025	0.635	0.228	5.79	42	62
8	5007-S	0.025	0.635	0.224	5.69	39	58	5107-S	0.025	0.635	0.244	6.20	48	71
9	5008-S	0.025	0.635	0.237	6.02	46	68	5108-S	0.025	0.635	0.259	6.58	55	82
10	5009-S	0.025	0.635	0.254	6.45	48	71	5109-S	0.025	0.635	0.278	7.06	57	85
11	5010-S	0.025	0.635	0.254	6.45	50	74	5110-S	0.025	0.635	0.278	7.06	62	92
12	5011-S	0.025	0.635	0.261	6.63	52	77	5111-S	0.025	0.635	0.286	7.26	64	95
13	5012-S	0.025	0.635	0.272	6.91	57	85	5112-S	0.025	0.635	0.299	7.59	68	101
14	5013-S	0.025	0.635	0.272	6.91	59	88	5113-S	0.025	0.635	0.299	7.59	70	104
15	5014-S	0.025	0.635	0.286	7.26	63	94	5114-S	0.025	0.635	0.314	7.98	84	125
20	5015-S	0.025	0.635	0.312	7.92	79	118	5115-S	0.030	0.762	0.361	9.17	100	149
25	5016-S	0.030	0.762	0.359	9.12	82	122	5116-S	0.030	0.762	0.395	10.0	120	178
30	5017-S	0.030	0.762	0.377	9.58	107	159	5117-S	0.035	0.889	0.426	10.8	140	209
35	5018-S	0.035	0.889	0.413	10.5	128	191	5118-S	0.035	0.889	0.455	11.6	159	237
40	5019-S	0.035	0.889	0.427	10.8	138	205	5119-S	0.040	1.02	0.481	12.2	183	272
45	5020-S	0.040	1.02	0.467	11.9	167	248	5120-S	0.040	1.02	0.515	13.1	203	302
50	5021-S	0.040	1.02	0.485	12.3	177	264	5121-S	0.045	1.14	0.546	13.9	224	334
60	5022-S	0.040	1.02	0.511	13.0	204	304	5122-S	0.045	1.14	0.575	14.6	259	385
70	5023-S	0.045	1.14	0.565	14.4	235	350	5123-S	0.050	1.27	0.635	16.1	302	449
80	5024-S	0.050	1.27	0.594	15.1	260	387	5124-S	0.050	1.27	0.657	16.7	336	500
90	5025-S	0.050	1.27	0.619	15.7	289	431	5125-S	0.050	1.27	0.685	17.4	371	552
100	5026-S	0.050	1.27	0.663	16.8	317	472	5126-S	0.055	1.40	0.745	18.9	417	620
110	5027-S	0.050	1.27	0.682	17.3	344	511	5127-S	0.055	1.40	0.767	19.5	450	670
120	5028-S	0.050	1.27	0.695	17.7	364	541	5128-S	0.055	1.40	0.781	19.8	486	723

All dimensions are nominal.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Instrumentation Control Cable with Overall Shield



CONDUCTORS: Stranded tinned copper. **CODED:** Numbered consecutively in black on white.
INSULATION: 0.010" semi-rigid, -55° C to 105° C **CABLED:** Round with fillers where needed.
VOLTAGE: 600 V. **SHIELD:** Braided tinned copper, 80% coverage.
JACKET: Black flexible PVC, -40° C to 105° C.
USES: Interconnecting cables for electronic equipment, telemetering, and instrumentation control. Resistant to flame, moisture, and many oils and chemicals.

	20 AWG Conductors, 7/28 stranding (38 pF / ft between adjacent conductors)							18 AWG Conductors, 7/26 stranding (41 pF / ft between adjacent conductors)						
No. of Cond.	Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)		Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
2	5201-S	0.025	0.635	0.194	4.93	28	42	5301-S	0.025	0.635	0.214	5.44	35	52
3	5202-S	0.025	0.635	0.204	5.18	34	51	5302-S	0.025	0.635	0.225	5.72	44	65
4	5203-S	0.025	0.635	0.219	5.56	39	58	5303-S	0.025	0.635	0.243	6.17	53	79
5	5204-S	0.025	0.635	0.234	5.94	47	70	5304-S	0.025	0.635	0.262	6.65	62	92
6	5205-S	0.025	0.635	0.252	6.40	54	80	5305-S	0.025	0.635	0.282	7.16	72	107
7	5206-S	0.025	0.635	0.252	6.40	60	89	5306-S	0.025	0.635	0.282	7.16	80	119
8	5207-S	0.025	0.635	0.270	6.86	66	98	5307-S	0.025	0.635	0.303	7.70	88	131
9	5208-S	0.025	0.635	0.288	7.32	76	113	5308-S	0.025	0.635	0.324	8.23	100	149
10	5209-S	0.025	0.635	0.310	7.87	80	119	5309-S	0.030	0.762	0.367	9.32	111	165
11	5210-S	0.025	0.635	0.310	7.87	87	129	5310-S	0.030	0.762	0.367	9.32	119	177
12	5211-S	0.025	0.635	0.320	8.13	92	137	5311-S	0.030	0.762	0.378	9.60	126	187
13	5212-S	0.030	0.762	0.351	8.92	101	150	5312-S	0.030	0.762	0.395	10.0	135	201
14	5213-S	0.030	0.762	0.351	8.92	105	157	5313-S	0.030	0.762	0.395	10.0	142	212
15	5214-S	0.030	0.762	0.369	9.37	113	168	5314-S	0.035	0.889	0.425	10.8	156	232
20	5215-S	0.035	0.889	0.413	10.5	143	213	5315-S	0.040	1.02	0.476	12.1	201	299
25	5216-S	0.035	0.889	0.453	11.5	176	262	5316-S	0.040	1.02	0.523	13.3	245	364
30	5217-S	0.040	1.02	0.487	12.4	205	306	5317-S	0.045	1.14	0.561	14.2	288	428
35	5218-S	0.045	1.14	0.531	13.5	237	353	5318-S	0.050	1.27	0.611	15.5	335	498
40	5219-S	0.045	1.14	0.540	13.7	263	392	5319-S	0.050	1.27	0.632	16.1	373	555
45	5220-S	0.050	1.27	0.599	15.2	301	447	5320-S	0.050	1.27	0.679	17.2	418	622
50	5221-S	0.050	1.27	0.623	15.8	329	489	5321-S	0.050	1.27	0.707	18.0	456	679
60	5222-S	0.050	1.27	0.657	16.7	379	563	5322-S	0.055	1.40	0.757	19.2	539	803
70	5223-S	0.055	1.40	0.725	18.4	442	658	5323-S	0.060	1.52	0.835	21.2	630	937
80	5224-S	0.055	1.40	0.750	19.1	496	738	5324-S	0.060	1.52	0.864	21.9	705	1,048
90	5225-S	0.055	1.40	0.783	19.9	546	812	5325-S	0.060	1.52	0.903	22.9	781	1,163
100	5226-S	0.060	1.52	0.851	21.6	611	909	5326-S	0.065	1.65	0.981	24.9	874	1,300
110	5227-S	0.060	1.52	0.875	22.2	666	991	5327-S	0.065	1.65	1.010	25.65	949	1,412
120	5228-S	0.060	1.52	0.893	22.7	716	1,065	5328-S	0.065	1.65	1.030	26.16	1,022	1,521

All dimensions are nominal.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Multiple Pair Control Cable, Each Pair Shielded



CONDUCTORS: Stranded tinned soft copper.
INSULATION: High dielectric strength, low loss polyethylene. 22 and 20 AWG with 0.015" nominal wall.

JACKET: Black flexible PVC, -40° C to 80° C.
COLOR CODE: See color code chart No. 4 on page 21.

CONSTRUCTION: Formed by twisting 2 conductors with an uninsulated stranded tinned copper drain wire (for terminating shield). The 22 and 20 AWG pairs utilize a 22 AWG drain wire. Each pair is shielded with Mylar® supported aluminum foil, spirally wrapped. The aluminum foil is 0.00035" thick and the Mylar® supporting film is 0.0005" thick. Cabled round with fillers where needed with 0.001" thick binder. Temperature rating -40° C to 80° C. Resistant to flame, moisture, and many oils and chemicals.

USES: Monitoring, data recording, and conveyance of information, such as telemetering, communication, temperature, pressure, and flow.

	22 AWG Conductors, 7/30 stranding (48 pF / ft between one conductor & other conductor tied to shield; 25 pF mutual)							20 AWG Conductors, 7/28 stranding (56 pF / ft between one conductor & other conductor tied to shield; 30 pF mutual)						
No. of Pairs	Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)		Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
2	5401-S	0.030	0.762	0.297	7.53	32	48	5501-S	0.030	0.762	0.315	8.00	45	67
3	5402-S	0.030	0.762	0.315	8.00	41	61	5502-S	0.030	0.762	0.335	8.51	59	88
4	5403-S	0.030	0.762	0.345	8.76	51	76	5503-S	0.030	0.762	0.365	9.27	75	112
5	5404-S	0.035	0.889	0.385	9.78	65	97	5504-S	0.035	0.889	0.410	10.4	95	141
6	5405-S	0.035	0.889	0.420	10.7	76	113	5505-S	0.040	1.02	0.460	11.7	115	171
9	5406-S	0.045	1.14	0.510	13.0	119	177	5506-S	0.045	1.14	0.545	13.8	172	256
12	5407-S	0.050	1.27	0.580	14.7	152	226	5507-S	0.050	1.27	0.625	15.9	221	329
15	5408-S	0.050	1.27	0.645	16.4	183	272	5508-S	0.055	1.40	0.700	17.8	276	411
19	5409-S	0.050	1.27	0.675	17.1	220	327	5509-S	0.055	1.40	0.735	18.7	335	498
27	5410-S	0.060	1.52	0.830	21.1	315	469	5510-S	0.060	1.52	0.890	22.6	469	698
50	5411-S	0.070	1.78	1.105	28.07	561	835	5511-S	0.075	1.91	1.200	30.48	854	1,271

Mylar® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Multiple Pair Control Cable, Each Pair Shielded



CONDUCTORS: Stranded tinned soft copper.
INSULATION: High dielectric strength, low loss polyethylene. 18 and 16 AWG with 0.020" nominal wall.

JACKET: Black flexible PVC, -40° C to 80° C.
COLOR CODE: See color code chart No. 4 on page 21.

CONSTRUCTION: Formed by twisting 2 conductors with an uninsulated stranded tinned copper drain wire (for terminating shield). The 18 and 16 AWG pairs utilize a 20 AWG drain wire. Each pair is shielded with Mylar® supported aluminum foil, spirally wrapped. The aluminum foil is 0.00035" thick and the Mylar® supporting film is 0.0005" thick. Cabled round with fillers where needed with 0.001" thick binder. Temperature rating -40° C to 80° C. Resistant to flame, moisture, and many oils and chemicals.

USES: Monitoring, data recording, and conveyance of information, such as telemetering, communication, temperature, pressure, and flow.

18 AWG Conductors, 16/30 stranding								16 AWG Conductors, 26/30 stranding							
(53 pF / ft between one conductor & other conductor tied to shield; 28 pF mutual)								(67 pF / ft between one conductor & other conductor tied to shield; 35 pF mutual)							
No. of Pairs	Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)		Catalog No.	Jacket Thickness (in) (mm)		Cable O.D. (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)		
2.0	5601-S	0.035	0.889	0.390	9.91	64	95	5701-S	0.040	1.02	0.450	11.4	92	137	
3.0	5602-S	0.035	0.889	0.415	10.5	86	128	5702-S	0.040	1.02	0.480	12.2	124	185	
4.0	5603-S	0.040	1.02	0.465	11.8	114	170	5703-S	0.045	1.14	0.535	13.6	164	244	
5.0	5604-S	0.045	1.14	0.520	13.2	142	211	5704-S	0.050	1.27	0.600	15.2	204	304	
6.0	5605-S	0.050	1.27	0.575	14.6	172	256	5705-S	0.050	1.27	0.655	16.6	240	357	
9.0	5606-S	0.050	1.27	0.670	17.0	248	369	5706-S	0.055	1.40	0.775	19.7	356	530	
12.0	5607-S	0.055	1.40	0.765	19.4	318	473	5707-S	0.060	1.52	0.885	22.5	459	683	
15.0	5608-S	0.060	1.52	0.860	21.8	396	589	5708-S	0.065	1.65	0.995	25.3	571	850	
19.0	5609-S	0.065	1.65	0.915	23.2	491	731	5709-S	0.070	1.78	1.06	26.8	714	1,062	
27.0	5610-S	0.070	1.78	1.105	28.07	687	1,022	5710-S	0.080	2.03	1.29	32.6	1,005	1,495	
50.0	5611-S	0.080	2.03	1.480	37.59	1,227	1,826	5711-S	0.090	2.29	1.72	43.6	1,808	2,690	

Mylar® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Tinned Copper Flexible Braid QQ-B-575 (A-A-59569)



CONDUCTOR: Fine drawn tinned copper.
CONSTRUCTION: Flexible braid in tubular form (also available flattened).
USES: Used as shielding over electrical conductors or connections to motor brushes, controller contacts, and grounding bonds.

¹Key to Military Specifications

QQB575 R 36 T 375
Federal Specification _____
Form (R=Tubular, F=Flat) _____
American Wire Gauge of individual strands _____
Strand Coating (T=Tinned, S=Silver, N=Nickel) _____
Inside Diameter _____

Catalog No.	Mil. Spec. ¹	Approx. AWG	Nominal I.D. (in) (mm)		Total No. Ends	Gauge of Wires	Construction	Weight (# ft / lb) (#m / kg)	
300-5	N/A	24	1/32	0.79	16	36	16x1x36	800	111
300-8	QQB575R36T0031	22	1/32	0.79	24	36	24x1x36	500	69.1
300-12	QQB575R34T0062	19	1/16	1.59	32	34	16x2x34	233	32.2
300-13	QQB575R36T0062	19	1/16	1.59	48	36	24x2x36	250	34.6
300-15	QQB575R36T0078	18	5/64	1.98	72	36	24x3x36	165	22.8
300-18	QQB575R34T0109	16	7/64	2.78	64	34	16x4x34	114	15.8
300-19	QQB575R36T0109	16	7/64	2.78	96	36	24x4x36	122	16.9
300-19B	QQB575R34T0125	16	1/8	3.18	72	34	24x3x34	109	15.1
300-20	QQB575R36T0125	15	1/8	3.18	120	36	24x5x36	97.0	13.4
300-23	QQB575R36T0171	14	11/64	4.37	168	36	24x7x36	69.9	9.66
300-23B	QQB575R34T0171	13	11/64	4.37	120	34	24x5x34	64.1	8.86
300-26	QQB575R36T0156	12	5/32	3.97	240	36	24x10x36	47.8	6.61
300-28	QQB575R36T0203	11	13/64	5.16	312	36	24x13x36	38.0	5.25
300-28B	QQB575R34T0203	11	13/64	5.16	192	34	24x8x34	35.8	4.95
300-30	N/A	11	1/4	6.35	344	36	16x14x36 8x15x36	30.4	4.20
300-31	QQB575R36T0250	10	1/4	6.35	384	36	24x16x36	29.0	4.01
300-33	QQB575R34T0375	10	3/8	9.53	240	34	48x5x34	30.6	4.23
300-35	QQB575R36T0375	10	3/8	9.53	384	36	48x8x36	29.0	4.01
300-38	QQB575R34T0500	9	1/2	12.7	336	34	48x7x34	21.0	2.90
300-40	QQB575R36T0500	9	1/2	12.7	528	36	48x11x36	21.0	2.90
300-42	QQB575R30T0375	8	3/8	9.53	168	30	24x7x30	17.5	2.42
300-44	QQB575R36T0781	7	25/32	19.8	864	36	48x18x36	13.6	1.88
300-46	QQB575R30T0437	6	7/16	11.1	240	30	24x10x30	12.5	1.73
300-48	QQB575R30T0500	6	1/2	12.7	360	30	24x15x30	8.5	1.2
300-50	N/A	5	3/4	19.1	288	30	48x6x30	9.7	1.3
300-51	QQB575R30T0875	5	7/8	22.2	336	30	48x7x30	8.5	1.2
300-52	QQB575R30T1000	4	1	25.4	384	30	48x8x30	7.4	1.0
300-53	QQB575R30T1125	4	1 1/8	28.6	432	30	48x9x30	6.7	0.93
300-55	QQB575R30T0562	3	9/16	14.3	480	30	48x10x30	6.6	0.91
300-56	QQB575R30T1375	3	1 3/8	34.9	528	30	48x11x30	5.6	0.77
300-57	QQB575R30T1500	3	1 1/2	38.1	576	30	48x12x30	5.1	0.71
300-59	QQB575R30T2000	2	2	50.8	672	30	48x14x30	4.4	0.61
300-61	QQB575R30T0656	1	2 1/32	51.6	768	30	48x16x30	3.9	0.54

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Bare Solid Soft Drawn Copper Wire QQ-W-343 (A-A-59551)



CONDUCTOR: Electrolytic copper, fully annealed, smooth, bright finish.
USES: Conforms to Mil. Spec. QQ-W-343 & MIL-W-3861 Type S.

Catalog No.	Mil. Spec.	Size AWG	Diameter		Maximum Tensile Strength		Breaking Strength		Maximum DC Resistance		Weight	
			(in)	(mm)	(lbs / sq in)	(kgs / sq cm)	(max lbs)	(max kgs)	(Ohms / 1000 ft)*	(Ohms / km)*	(lbs / 1000 ft)	(kgs / km)
303-7	QQW343S30S1B	30	0.010	0.254	40,000	2,812	3.16	1.43	103	339	0.304	0.453
303-8	QQW343S28S1B	28	0.013	0.320	40,000	2,812	5.02	2.28	64.9	213	0.484	0.720
303-9	QQW343S26S1B	26	0.016	0.404	40,000	2,812	7.98	3.62	40.8	134	0.769	1.14
303-10	QQW343S24S1B	24	0.020	0.511	40,000	2,812	12.7	5.76	25.7	84.2	1.22	1.82
303-11	QQW343S22S1B	22	0.025	0.643	38,500	2,707	19.4	8.81	16.1	53.0	1.95	2.89
303-12	QQW343S20S1B	20	0.032	0.813	38,500	2,707	30.9	14.0	10.2	33.3	3.09	4.60
303-13	QQW343S18S1B	18	0.040	1.02	38,500	2,707	49.1	22.3	6.39	20.9	4.92	7.32
303-14	QQW343S16S1B	16	0.051	1.29	38,500	2,707	78.1	35.4	4.02	13.2	7.82	11.6
303-15	QQW343S14S1B	14	0.064	1.63	38,500	2,707	124	56.3	2.53	8.28	12.4	18.5
303-16	QQW343S12S1B	12	0.081	2.05	38,500	2,707	198	89.6	1.59	5.21	19.8	29.4
303-17	QQW343S10S1B	10	0.102	2.59	38,500	2,707	314	142	1.00	3.28	31.4	46.8
303-18	QQW343S08S1B	8	0.129	3.26	37,000	2,601	480	218	0.63	2.1	50.0	74.4

Tinned Solid Soft Drawn Copper Wire QQ-W-343 (A-A-59551)



CONDUCTOR: Uniform thickness of pure tin coating, fully annealed, smooth, bright finish.
USES: Conforms to Mil. Spec. QQ-W-343 & MIL-W-3861 Type S.

Catalog No.	Mil. Spec.	Size AWG	Diameter		Maximum Tensile Strength		Breaking Strength		Maximum DC Resistance		Weight	
			(in)	(mm)	(lbs / sq in)	(kgs / sq cm)	(max lbs)	(max kgs)	(Ohms / 1000 ft)*	(Ohms / km)*	(lbs / 1000 ft)	(kgs / km)
302-3	QQW343S38S1T	38	0.004	0.102	40,000	2,812	0.494	0.224	708	2,323	0.048	0.072
302-4	QQW343S36S1T	36	0.005	0.127	40,000	2,812	0.785	0.356	445	1,461	0.076	0.113
302-5	QQW343S34S1T	34	0.006	0.160	40,000	2,812	1.25	0.567	280	919	0.120	0.179
302-6	QQW343S32S1T	32	0.008	0.203	40,000	2,812	1.99	0.901	176	578	0.191	0.285
302-7	QQW343S30S1T	30	0.010	0.254	40,000	2,812	3.16	1.43	111	364	0.304	0.453
302-8	QQW343S28S1T	28	0.013	0.320	39,000	2,742	5.02	2.28	68.9	226	0.484	0.720
302-9	QQW343S26S1T	26	0.016	0.404	39,000	2,742	7.98	3.62	43.3	142	0.769	1.14
302-10	QQW343S24S1T	24	0.020	0.511	39,000	2,742	12.7	5.76	27.3	89.4	1.22	1.82
302-11	QQW343S22S1T	22	0.025	0.643	38,500	2,707	19.4	8.81	17.0	55.7	1.95	2.89
302-12	QQW343S20S1T	20	0.032	0.813	38,500	2,707	30.9	14.0	10.6	34.6	3.09	4.60
302-13	QQW343S18S1T	18	0.040	1.02	38,500	2,707	49.1	22.3	6.64	21.8	4.92	7.32
302-14	QQW343S16S1T	16	0.051	1.29	38,500	2,707	78.1	35.4	4.18	13.7	7.82	11.6
302-15	QQW343S14S1T	14	0.064	1.63	38,500	2,707	124	56.3	2.63	8.62	12.4	18.5
302-16	QQW343S12S1T	12	0.081	2.05	38,500	2,707	198	89.6	1.65	5.42	19.8	29.4
302-17	QQW343S10S1T	10	0.102	2.59	38,500	2,707	314	142	1.04	3.41	31.4	46.8
302-18	QQW343S08S1T	8	0.129	3.26	37,000	2,601	480	218	0.646	2.12	50.0	74.4
302-19	QQW343S06S1T	6	0.162	4.11	37,000	2,601	783	355	0.407	1.33	79.4	118

*@20° C (68° F)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

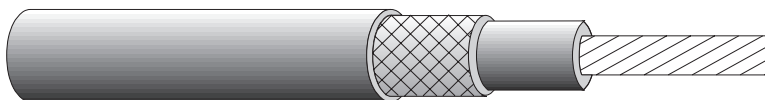
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-5086 (SAE AS50861)



CONDUCTOR: Stranded tinned-coated copper. **CONSTRUCTION:** M5086/1 - Polyvinylchloride insulated, nylon jacket.
VOLTAGE: 600 V.
TEMPERATURE: 105° C.
COLOR: White.
USES: Excellent resistance to abrasion, cold, moisture, fungus, solvents and flame.

M5086/2 - Polyvinylchloride insulated, glass braid, nylon jacket.
 Sizes 10 AWG and greater have braid with lacquer.

Catalog No.	Mil Spec	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter		Weight	
				(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
107- 1	M5086/1	22	19/34	16.2	53.1	0.068 ± 0.004	1.73 ± 0.1	4.40	6.55
107- 2	M5086/1	20	19/32	9.88	32.4	0.078 ± 0.004	1.98 ± 0.1	6.30	9.37
107- 3	M5086/1	18	19/30	6.23	20.4	0.088 ± 0.004	2.24 ± 0.1	8.60	12.8
107- 4	M5086/1	16	19/29	4.81	15.8	0.098 ± 0.004	2.49 ± 0.1	10.70	15.92
107- 5	M5086/1	14	19/27	3.06	10.0	0.117 ± 0.005	2.97 ± 0.13	16.40	24.40
107- 6	M5086/1	12	37/28	2.02	6.63	0.137 ± 0.005	3.48 ± 0.13	24.70	36.75
107- 7	M5086/1	10	37/26	1.26	4.13	0.159 ± 0.005	4.04 ± 0.13	36.50	54.31
107- 1A	M5086/2	22	19/34	16.20	53.1	0.075 ± 0.005	1.91 ± 0.13	4.70	6.99
107- 2A	M5086/2	20	19/32	9.88	32.4	0.085 ± 0.005	2.16 ± 0.13	6.80	10.1
107- 3A	M5086/2	18	19/30	6.23	20.4	0.095 ± 0.005	2.41 ± 0.13	9.50	14.1
107- 4A	M5086/2	16	19/29	4.81	15.8	0.105 ± 0.005	2.67 ± 0.13	11.90	17.71
107- 5A	M5086/2	14	19/27	3.06	10.0	0.125 ± 0.007	3.18 ± 0.18	18.30	27.23
107- 6A	M5086/2	12	37/28	2.02	6.63	0.143 ± 0.007	3.63 ± 0.18	26.0	38.7
107- 7A	M5086/2	10	37/26	1.26	4.13	0.189 ± 0.007	4.80 ± 0.18	44.0	65.5
107- 8A	M5086/2	8	133/29	0.701	2.30	0.240 ± 0.007	6.10 ± 0.18	70.0	104
107- 9A	M5086/2	6	133/27	0.455	1.49	0.293 ± 0.007	7.44 ± 0.18	110.0	163.7
107- 10A	M5086/2	4	133/25	0.280	0.919	0.355 ± 0.01	9.02 ± 0.25	165.0	245.5
107- 11A	M5086/2	2	665/30	0.183	0.600	0.425 ± 0.01	10.8 ± 0.25	250.0	372.0
107- 12A	M5086/2	1	817/30	0.149	0.489	0.470 ± 0.01	11.9 ± 0.25	305.0	453.8
107- 13A	M5086/2	1/0	1045/30	0.116	0.381	0.525 ± 0.015	13.3 ± 0.38	400.0	595.2
107- 14A	M5086/2	2/0	1330/30	0.091	0.299	0.590 ± 0.015	15.0 ± 0.38	500.0	744.0
107- 15A	M5086/2	3/0	1665/30	0.071	0.233	0.650 ± 0.015	16.5 ± 0.38	620.0	922.6
107- 16A	M5086/2	4/0	2109/30	0.056	0.184	0.720 ± 0.015	18.3 ± 0.38	785.0	1168

* MIL-DTL-5086/1 Basic Wire Specification: A (see Table I page 97)

* MIL-DTL-5086/2 Basic Wire Specification: B (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-16878 Type B, B/N, C, C/N



CONDUCTOR: Stranded tinned copper.

COLOR:

See Color Code Chart No.

INSULATION: PVC or PVC/nylon.

6 on page 21.

USES:

This wire is intended for use as a general purpose hook-up wire for electronic equipment operating over a temperature range of -55° C to 105° C. The temperature rating may be exceeded approximately 10° C when the wire is covered with a nylon jacket per MIL-DTL-16878.

		MIL-DTL-16878/1 Type B - 600 volt						MIL-DTL-16878/17 Type B/N - 600 volt					
AWG Size	Stranding	Catalog No.	Diameter PVC (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)		Catalog No.	Diameter PVC/Nylon (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)			
30	7/38	500-0	0.031	0.787	0.83	1.24	500-0A	0.035	0.89	1.00	1.49		
28	7/36	500-1	0.034	0.864	1.01	1.50	500-1A	0.038	0.97	1.18	1.76		
26	7/34	500-11	0.038	0.965	1.53	2.28	500-11AA	0.042	1.07	1.70	2.53		
26	19/38	500-11A	0.038	0.965	1.73	2.57	500-11AB	0.042	1.07	2.16	3.21		
24	7/32	500-22	0.043	1.09	2.14	3.18	500-22AA	0.047	1.19	2.45	3.65		
24	19/36	500-22A	0.043	1.09	2.26	3.36	500-22AB	0.047	1.19	2.57	3.82		
22	7/30	500-33	0.049	1.24	2.98	4.43	500-33AA	0.053	1.35	3.33	4.96		
22	19/34	500-33A	0.049	1.24	3.11	4.63	500-33AB	0.053	1.35	3.46	5.15		
20	7/28	500-44	0.057	1.45	4.62	6.87	500-44AA	0.061	1.55	5.02	7.47		
20	19/32	500-44A	0.057	1.45	4.77	7.10	500-44AB	0.061	1.55	5.17	7.69		
18	19/30	500-55A	0.067	1.70	7.22	10.7	500-55AB	0.072	1.83	7.69	11.4		
16	19/29	500-66	0.077	1.96	9.04	13.5	500-66AB	0.082	2.08	9.65	14.4		
14	19/27	500-77	0.091	2.31	13.9	20.6	500-77AB	0.098	2.49	14.6	21.7		

		MIL-DTL-16878/2 Type C - 1000 volt						MIL-DTL-16878/18 Type C/N - 1000 volt					
AWG Size	Stranding	Catalog No.	Diameter PVC (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)		Catalog No.	Diameter PVC/Nylon (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)			
26	7/36	501-11	0.053	1.35	2.00	2.98	501-11AA	0.057	1.45	2.20	3.27		
26	19/38	501-11A	0.053	1.35	2.10	3.12	501-11AB	0.057	1.45	2.60	3.87		
24	7/32	501-22	0.058	1.47	2.61	3.88	501-22AA	0.062	1.57	3.04	4.52		
24	19/36	501-22A	0.058	1.47	2.74	4.08	501-22AB	0.062	1.57	3.17	4.72		
22	7/30	501-33	0.064	1.63	3.51	5.22	501-33AA	0.069	1.75	4.02	5.98		
22	19/34	501-33A	0.064	1.63	3.64	5.42	501-33AB	0.069	1.75	4.15	6.18		
20	7/28	501-44	0.072	1.83	5.19	7.72	501-44AA	0.078	1.98	5.87	8.73		
20	19/32	501-44A	0.072	1.83	5.57	8.29	501-44AB	0.078	1.98	6.25	9.30		
18	19/30	501-55A	0.082	2.08	8.17	12.2	501-55AB	0.088	2.24	10.0	14.9		
16	19/29	501-66	0.091	2.31	9.98	14.9	501-66AB	0.098	2.49	10.6	15.7		
14	19/27	501-77	0.105	2.67	15.2	22.6	501-77AB	0.112	2.84	16.0	23.8		
12	19/25	501-88	0.124	3.15	22.7	33.7	501-88AB	0.137	3.48	23.9	35.5		

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-16878

Type D, D/N



CONDUCTOR: Stranded tinned copper.
INSULATION: PVC or PVC/nylon.

COLOR:

See Color Code Chart No. 6 on page 21.

USES: This wire is intended for use as a general purpose hook-up wire for electronic equipment operating over a temperature range of -55° C to 105° C. The temperature rating may be exceeded approximately 10° C when the wire is covered with a nylon jacket per MIL-DTL-16878.

		MIL-DTL-16878/3 Type D - 3000 volt					MIL-DTL-16878/19 Type D/N - 3000 volt				
AWG Size	Stranding	Catalog No.	Diameter PVC (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)		Catalog No.	Diameter PVC/Nylon (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
24	7/32	502-22	0.083	2.11	4.69	6.98	502-22AA	0.090	2.29	5.46	8.12
24	19/36	502-22A	0.083	2.11	4.82	7.17	502-22AB	0.090	2.29	5.59	8.32
22	7/30	502-33	0.089	2.26	5.97	8.88	502-33AA	0.096	2.44	6.74	10.0
22	19/34	502-33A	0.089	2.26	6.10	9.08	502-33AB	0.096	2.44	6.87	10.2
20	7/28	502-44	0.097	2.46	7.53	11.2	502-44AA	0.104	2.64	8.05	12.0
20	19/32	502-44A	0.097	2.46	7.75	11.5	502-44AB	0.104	2.64	8.26	12.3
18	19/30	502-55A	0.107	2.72	9.87	14.7	502-55AB	0.114	2.90	10.6	15.8
16	19/29	502-66	0.116	2.95	12.1	17.9	502-66AB	0.123	3.12	12.8	19.1
14	19/27	502-77	0.130	3.30	17.3	25.7	502-77AB	0.139	3.53	18.3	27.2
12	19/25	502-88	0.162	4.11	27.1	40.3	502-88AB	0.174	4.42	28.5	42.4
10	37/26	502-99	0.182	4.62	39.3	58.5	502-99AB	0.194	4.93	41.8	62.2
8	133/29	502-110	0.247	6.27	73.8	110	502-110AB	0.265	6.73	77.7	116
6	133/27	502-121	0.291	7.39	101	151	502-121AB	0.312	7.92	106	157
4	133/25	502-132	0.356	9.04	161	239	502-132AB	0.377	9.58	165	245
2	133/23	502-143	0.425	10.8	250	371	502-143AB	0.446	11.3	257	383
1	259/25	502-154	0.478	12.1	316	470	502-154AB	0.499	12.7	325	484
1/0	259/24	502-165	0.528	13.4	418	622	502-165AB	0.549	13.9	431	641

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-16878

Single Conductor

B/N, C/N, D/N Shielded



CONDUCTOR: Stranded tinned copper.
INSULATION: 105° C, PVC/nylon, white*. Conforms to MIL-DTL-16878.

SHIELD: Tinned copper braid.
JACKET: PVC, white*.
VOLTAGE: 600 V, 1000 V, 3000 V.

Type B/Nylon 600 volt

Catalog No.	AWG Size	Stranding	Nominal Diameter (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
500-0D	30	7/38	0.073	1.85	5.37	7.99
500-1D	28	7/36	0.076	1.93	5.92	8.81
500-11D	26	7/34	0.080	2.03	7.23	10.8
500-22D	24	7/32	0.085	2.16	8.78	13.1
500-22DA	24	19/36	0.085	2.16	8.90	13.2
500-33D	22	7/30	0.096	2.44	9.66	14.4
500-33DA	22	19/34	0.096	2.44	9.79	14.6
500-44DA	20	19/32	0.104	2.64	13.1	19.4
500-55DA	18	19/30	0.117	2.97	17.2	25.6
500-66D	16	19/29	0.130	3.30	22.3	33.2
500-77D	14	19/27	0.146	3.71	26.4	39.3

Type C/Nylon 1000 volt

501-11D	26	7/34	0.100	2.54	9.40	14.0
501-22D	24	7/32	0.105	2.67	10.4	15.4
501-22DA	24	19/36	0.105	2.67	10.5	15.6
501-33D	22	7/30	0.111	2.82	12.0	17.9
501-33DA	22	19/34	0.111	2.82	12.1	18.0
501-44DA	20	19/32	0.124	3.15	15.7	23.4
501-55DA	18	19/30	0.135	3.43	20.6	30.7
501-66D	16	19/29	0.145	3.68	22.3	33.2
501-77D	14	19/27	0.165	4.19	30.2	44.9
501-88D	12	19/25	0.188	4.78	40.9	60.8

Type D/Nylon 3000 volt

502-22D	24	7/32	0.136	3.45	16.2	24.0
502-22DA	24	19/36	0.136	3.45	16.9	25.2
502-33D	22	7/30	0.142	3.61	18.1	27.0
502-33DA	22	19/34	0.142	3.61	18.9	28.1
502-44DA	20	19/32	0.154	3.91	21.2	31.5
502-55DA	18	19/30	0.166	4.22	25.0	37.2
502-66D	16	19/29	0.175	4.45	28.2	42.0
502-77D	14	19/27	0.196	4.98	36.6	54.4
502-88D	12	19/25	0.235	5.97	52.0	77.4
502-99D	10	37/26	0.260	6.60	68.7	102
502-110D	8	133/29	0.340	8.64	117	174
502-121D	6	133/27	0.401	10.2	157	233

* Both primary insulation and jacketing available in the following colors: Black, brown, red, orange, yellow, green, blue, purple, gray, and white. Colors conform to MIL-STD-104.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-16878 Two Conductor B/N, C/N, D/N Shielded



CONDUCTOR: Stranded tinned copper.
INSULATION: 105° C, PVC/nylon, white, black*.
Conforms to MIL-DTL-16878.

SHIELD: Tinned copper braid.
JACKET: PVC, white*.
VOLTAGE: 600 V, 1000 V, 3000 V.

Type B/Nylon 600 volt

Catalog No.	AWG Size	Stranding	Nominal Diameter (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
500-12	26	7/34	0.132	3.35	14.0	20.8
500-23	24	7/32	0.142	3.61	16.5	24.6
500-23A	24	19/36	0.142	3.61	16.8	24.9
500-34A	22	19/34	0.158	4.01	20.4	30.4
500-45A	20	19/32	0.176	4.47	26.1	38.9
500-56A	18	19/30	0.202	5.13	34.4	51.1
500-67A	16	19/29	0.228	5.79	41.7	62.0
500-78A	14	19/27	0.264	6.71	55.9	83.1

Type C/Nylon 1000 volt

501-23	24	7/32	0.180	4.57	22.1	32.9
501-23A	24	19/36	0.180	4.57	22.3	33.2
501-34A	22	19/34	0.194	4.93	26.0	38.7
501-45A	20	19/32	0.216	5.49	33.0	49.1
501-56A	18	19/30	0.242	6.15	44.3	65.9
501-67A	16	19/29	0.266	6.76	49.2	73.3
501-78A	14	19/27	0.302	7.67	65.8	97.9
501-89A	12	19/25	0.352	8.94	88.9	132

Type D/Nylon 3000 volt

502-34A	22	19/34	0.258	6.55	40.8	60.7
502-45A	20	19/32	0.280	7.11	47.5	70.7
502-56A	18	19/30	0.302	7.67	55.3	82.3
502-67A	16	19/29	0.324	8.23	62.2	92.5
502-78A	14	19/27	0.364	9.25	80.7	120
502-89A	12	19/25	0.446	11.3	117	174
502-100A	10	37/26	0.504	12.8	157	233
502-111A	8	133/29	0.630	16.0	249	371

* Primary conductors are color coded per the requirements of MIL-C-7078 or MIL-C-915. Custom color coding is available upon request.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

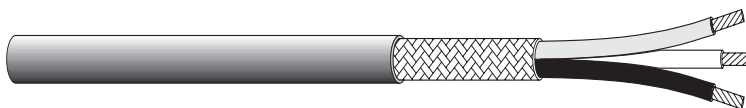


Standard Wire & Cable Co.

MIL-DTL-16878

Three Conductor

B/N, C/N, D/N Shielded



CONDUCTOR: Stranded tinned copper.
INSULATION: 105° C, PVC/nylon, white, black, red*.
Conforms to MIL-DTL-16878.

SHIELD: Tinned copper braid.
JACKET: PVC, white*.
VOLTAGE: 600 V, 1000 V, 3000 V.

Type B/Nylon 600 volt

Catalog No.	AWG Size	Stranding	Nominal Diameter (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
500-14	26	7/34	0.139	3.53	16.1	24.0
500-25	24	7/32	0.151	3.84	19.7	29.3
500-25A	24	19/36	0.151	3.84	20.1	29.8
500-36A	22	19/34	0.168	4.27	27.4	40.7
500-47A	20	19/32	0.187	4.75	31.8	47.4
500-58A	18	19/30	0.217	5.51	43.6	64.8
500-69A	16	19/29	0.243	6.17	53.1	79.0
500-80A	14	19/27	0.283	7.19	71.0	106

Type C/Nylon 1000 volt

501-25	24	7/32	0.092	2.34	26.8	39.8
501-25A	24	19/36	0.206	5.23	27.2	40.4
501-36A	22	19/34	0.230	5.84	31.8	47.3
501-47A	20	19/32	0.257	6.53	47.4	70.5
501-58A	18	19/30	0.285	7.24	63.8	94.9
501-69A	16	19/29	0.321	8.15	73.3	109
501-80A	14	19/27	0.376	9.55	101	150
501-91A	12	19/25	0.390	9.91	123	183

Type D/Nylon 3000 volt

502-36A	22	19/34	0.278	7.06	51.3	76.4
502-47A	20	19/32	0.298	7.57	58.2	86.6
502-58A	18	19/30	0.323	8.20	67.1	99.9
502-69A	16	19/29	0.349	8.86	78.4	117
502-80A	14	19/27	0.389	9.88	103	153
502-91A	12	19/25	0.483	12.3	152	226
502-102A	10	37/26	0.564	14.3	216	321
502-113A	8	133/29	0.705	17.9	356	529

* Primary conductors are color coded per the requirements of MIL-C-7078 or MIL-C-915. Custom color coding is available upon request.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com

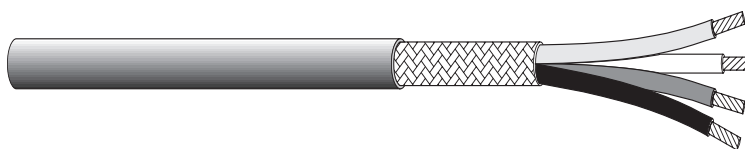


Standard Wire & Cable Co.

MIL-DTL-16878

Four Conductor

B/N, C/N, D/N Shielded



CONDUCTOR:

Stranded tinned copper.

SHIELD: Tinned copper braid.

INSULATION:

105° C, PVC/nylon, white, black, red, green*. Conforms to MIL-DTL-16878.

JACKET: PVC, white*.

VOLTAGE: 600 V, 1000 V, 3000 V.

Type B/Nylon 600 volt

Catalog No.	AWG Size	Stranding	Nominal Diameter (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
500-16	26	7/34	0.152	3.86	19.1	28.4
500-27	24	7/32	0.170	4.32	24.4	36.4
500-27A	24	19/36	0.170	4.32	24.9	37.1
500-38A	22	19/34	0.186	4.72	30.7	45.6
500-49A	20	19/32	0.208	5.28	39.5	58.7
500-60A	18	19/30	0.240	6.10	54.4	80.9
500-71A	16	19/29	0.270	6.86	65.9	98.1
500-82A	14	19/27	0.309	7.85	92.1	137

Type C/Nylon 1000 volt

501-27	24	7/32	0.212	5.38	31.3	46.6
501-27A	24	19/36	0.212	5.38	31.9	47.4
501-38A	22	19/34	0.231	5.87	39.3	58.4
501-49A	20	19/32	0.248	6.30	49.4	73.5
501-60A	18	19/30	0.287	7.29	71.9	107
501-71A	16	19/29	0.315	8.00	77.6	115
501-82A	14	19/27	0.360	9.14	109	161
501-93A	12	19/25	0.413	10.5	149	221

Type D/Nylon 3000 volt

502-38A	22	19/34	0.315	8.00	64.4	95.9
502-49A	20	19/32	0.338	8.59	75.5	112
502-60A	18	19/30	0.370	9.40	90.4	135
502-71A	16	19/29	0.396	10.1	105	156
502-82A	14	19/27	0.437	11.1	134	199
502-93A	12	19/25	0.539	13.7	199	296
502-104A	10	37/26	0.595	15.1	261	388
502-115A	8	133/29	0.790	20.1	465	692

* Primary conductors are color coded per the requirements of MIL-C-7078 or MIL-C-915. Custom color coding is available upon request.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Extruded PTFE Hook-Up Wire

MIL-W-16878E/4 Type E

NEMA HP-3



CONDUCTOR: Silver-plated or nickel-plated.

TEMPERATURE: -65° C to 200° C (silver),
-65° C to 260° C (nickel).

INSULATION: Extruded PTFE.

VOLTAGE: 600 V.

COLOR: See Color Code Chart
No. 6 on page 21.

Catalog No.	AWG Size	Stranding	Strand Diameter (in) (mm)		Diameter (minimum - maximum) (in) (mm)		Nominal Wall Thickness (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)		Maximum Resistance (ohms / 1000 ft) (kgs / km)	
1100-10C	32	Solid	0.0080	0.2032	0.025 - 0.033	0.635 - 0.838	0.010	0.254	0.610	0.908	169	554
1100-10	32	7/40	0.0031	0.0787	0.026 - 0.034	0.660 - 0.864	0.010	0.254	0.790	1.18	173	568
1100-21C	30	Solid	0.0100	0.2540	0.026 - 0.034	0.660 - 0.864	0.010	0.254	0.880	1.31	108	354
1100-21	30	7/38	0.0040	0.1016	0.028 - 0.036	0.711 - 0.914	0.010	0.254	0.990	1.47	101	331
1100-32C	28	Solid	0.0126	0.3200	0.029 - 0.037	0.737 - 0.940	0.010	0.254	1.14	1.70	68.0	223
1100-32	28	7/36	0.0050	0.1270	0.031 - 0.039	0.787 - 0.991	0.010	0.254	1.28	1.90	63.8	209
1100-43C	26	Solid	0.0159	0.4039	0.032 - 0.040	0.813 - 1.02	0.010	0.254	1.51	2.25	42.7	140
1100-43	26	7/34	0.0063	0.1600	0.035 - 0.043	0.889 - 1.09	0.010	0.254	1.74	2.59	40.5	133
1100-43A	26	19/38	0.0040	0.1016	0.035 - 0.043	0.889 - 1.09	0.010	0.254	1.83	2.72	38.4	126
1100-54C	24	Solid	0.0201	0.5105	0.036 - 0.044	0.914 - 1.12	0.010	0.254	2.09	3.11	26.8	87.9
1100-54	24	7/32	0.0080	0.2032	0.040 - 0.048	1.02 - 1.22	0.010	0.254	2.44	3.63	25.2	82.7
1100-54A	24	19/36	0.0050	0.1270	0.040 - 0.048	1.02 - 1.22	0.010	0.254	2.44	3.63	24.3	79.7
1100-65C	22	Solid	0.0253	0.6426	0.041 - 0.049	1.04 - 1.24	0.010	0.254	2.95	4.39	17.0	55.8
1100-65	22	7/30	0.0100	0.2540	0.046 - 0.054	1.17 - 1.37	0.010	0.254	3.44	5.12	15.9	52.2
1100-65A	22	19/34	0.0063	0.1600	0.046 - 0.054	1.17 - 1.37	0.010	0.254	3.47	5.16	15.1	49.5
1100-76C	20	Solid	0.0320	0.8128	0.048 - 0.056	1.22 - 1.42	0.010	0.254	4.34	6.46	10.5	34.4
1100-76	20	7/28	0.0126	0.3200	0.054 - 0.062	1.37 - 1.57	0.010	0.254	5.05	7.51	10.0	32.8
1100-76A	20	19/32	0.0080	0.2032	0.054 - 0.062	1.37 - 1.57	0.010	0.254	5.12	7.62	9.19	30.2
1100-87C	18	Solid	0.0403	1.0236	0.056 - 0.066	1.42 - 1.68	0.010	0.254	6.50	9.7	4.20	13.8
1100-87A	18	19/30	0.0100	0.2540	0.064 - 0.074	1.63 - 1.88	0.010	0.254	7.52	11.2	5.79	19.0
1100-98A	16	19/29	0.0113	0.2870	0.073 - 0.087	1.85 - 2.21	0.010	0.254	9.8	14.5	4.53	14.9
1100-109A	14	19/27	0.0142	0.3607	0.088 - 0.102	2.24 - 2.59	0.010	0.254	14.7	21.9	2.88	9.45
1100-120A	12	19/25	0.0179	0.4547	0.107 - 0.121	2.72 - 3.07	0.010	0.254	22.6	33.6	1.81	5.94
1100-131A	10	37/26	0.0159	0.4039	0.127 - 0.141	3.23 - 3.58	0.010	0.254	34.9	51.9	1.19	3.90

-Conforms to MIL-STD-104.

-Spiral striped color coding as required.

-Can be supplied to NAS-703

MIL-W-16878/4 Rev. E is not printed.

For MIL-W-16878/4 Rev. F, see page 53

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Extruded PTFE Hook-Up Wire MIL-W-16878E/5 Type EE NEMA HP-3



CONDUCTOR: Silver-plated or nickel-plated.
TEMPERATURE: -65° C to 200° C (silver),
-65° C to 260° C (nickel).
INSULATION: Extruded PTFE.

VOLTAGE: 1000 V.
COLOR: See Color Code Chart
No. 6 on page 21.

Catalog No.	AWG Size	Stranding	Strand Diameter (in) (mm)		Diameter (minimum - maximum) (in) (mm)		Nominal Wall Thickness (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)		Maximum Resistance (ohms / 1000 ft) (kgs / km)	
1101-21C	30	Solid	0.0100	0.2540	0.036 - 0.044	0.914 - 1.12	0.015	0.381	1.43	2.13	108	354
1101-21	30	7/38	0.0040	0.1016	0.038 - 0.046	0.965 - 1.17	0.015	0.381	1.55	2.31	101	331
1101-32C	28	Solid	0.0126	0.3200	0.039 - 0.047	0.991 - 1.19	0.015	0.381	1.74	2.59	68.1	223
1101-32	28	7/36	0.0050	0.1270	0.041 - 0.049	1.04 - 1.24	0.015	0.381	1.89	2.81	64	209
1101-43C	26	Solid	0.0159	0.4039	0.042 - 0.050	1.07 - 1.27	0.015	0.381	2.16	3.21	42.7	140
1101-43	26	7/34	0.0063	0.1600	0.045 - 0.053	1.14 - 1.35	0.015	0.381	2.40	3.57	40.5	133
1101-43A	26	19/38	0.0040	0.1016	0.045 - 0.053	1.14 - 1.35	0.015	0.381	2.48	3.69	38.4	126
1101-54C	24	Solid	0.0201	0.5105	0.046 - 0.054	1.17 - 1.37	0.015	0.381	2.80	4.17	26.8	88
1101-54	24	7/32	0.0080	0.2032	0.050 - 0.058	1.27 - 1.47	0.015	0.381	3.12	4.64	25.2	83
1101-54A	24	19/36	0.0050	0.1270	0.050 - 0.058	1.27 - 1.47	0.015	0.381	3.18	4.73	24.3	79.7
1101-65C	22	Solid	0.0253	0.6426	0.051 - 0.060	1.30 - 1.52	0.015	0.381	3.74	5.57	17.0	55.8
1101-65	22	7/30	0.0100	0.2540	0.056 - 0.064	1.42 - 1.63	0.015	0.381	4.18	6.22	15.9	52.2
1101-65A	22	19/34	0.0063	0.1600	0.056 - 0.064	1.42 - 1.63	0.015	0.381	4.32	6.43	15.1	49.5
1101-76C	20	Solid	0.0320	0.8128	0.058 - 0.066	1.47 - 1.68	0.015	0.381	5.22	7.77	10.5	34.4
1101-76	20	7/28	0.0126	0.3200	0.064 - 0.072	1.63 - 1.83	0.015	0.381	5.84	8.69	10.0	32.8
1101-76A	20	19/32	0.0080	0.2032	0.064 - 0.072	1.63 - 1.83	0.015	0.381	6.10	9.08	9.2	30.2
1101-87C	18	Solid	0.0403	1.0236	0.066 - 0.076	1.68 - 1.93	0.015	0.381	7.46	11.1	4.2	13.8
1101-87A	18	19/30	0.0100	0.2540	0.074 - 0.084	1.88 - 2.13	0.015	0.381	8.67	12.9	5.79	19.0
1101-98A	16	19/29	0.0113	0.2870	0.083 - 0.095	2.11 - 2.41	0.015	0.381	11.10	16.52	4.52	14.8
1101-109A	14	19/27	0.0142	0.3607	0.098 - 0.114	2.49 - 2.90	0.015	0.381	16.40	24.40	2.88	9.4
1101-120A	12	19/25	0.0179	0.4547	0.117 - 0.133	2.97 - 3.38	0.015	0.381	24.80	36.90	1.81	5.9
1101-131A	10	37/26	0.0159	0.4039	0.137 - 0.153	3.48 - 3.89	0.015	0.381	35.30	52.53	1.19	3.90
1101-142A	8	133/29	0.0113	0.2870	0.199 - 0.219	5.05 - 5.56	0.015	0.381	65.90	98.06	0.66	2.16

-Conforms to MIL-STD-104.
-Spiral striped color coding as required.

MIL-W-16878/5 Rev. E is not printed.

For MIL-W-16878/5 Rev. F, see page 53.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Extruded PTFE Hook-Up Wire MIL-W-16878E/6 Type ET NEMA HP-3



CONDUCTOR: Silver-plated or nickel-plated. VOLTAGE: 250 V.
TEMPERATURE: -65° C to 200° C (silver), COLOR: See Color Code Chart No. 6 on
-65° C to 260° C (nickel). page 21.
INSULATION: Extruded PTFE.

Catalog No.	AWG Size	Stranding	Strand Diameter (in) (mm)		Diameter (minimum - maximum) (in) (mm)		Nominal Wall Thickness (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)		Maximum Resistance (ohms / 1000 ft) (kgs / km)	
1050-3-9	32	7/40	0.0031	0.0787	0.020 - 0.024	0.508 - 0.610	0.006	0.152	0.480	0.714	173	568
1050-4-9C	30	Solid	0.0100	0.2540	0.020 - 0.024	0.508 - 0.610	0.006	0.152	0.590	0.878	108	354
1050-4-9	30	7/38	0.0040	0.1016	0.022 - 0.026	0.559 - 0.660	0.006	0.152	0.660	0.982	101	331
1050-5-9C	28	Solid	0.0126	0.3200	0.023 - 0.027	0.584 - 0.686	0.006	0.152	0.800	1.19	68.0	223
1050-5-9	28	7/36	0.0050	0.1270	0.025 - 0.029	0.635 - 0.737	0.006	0.152	0.910	1.35	63.8	209
1050-5-9A	28	19/40	0.0031	0.0787	0.025 - 0.029	0.635 - 0.737	0.006	0.152	0.980	1.46	63.1	207
1050-6-9	26	7/34	0.0063	0.1600	0.029 - 0.033	0.737 - 0.838	0.006	0.152	1.30	1.93	40.5	133
1050-6-9A	26	19/38	0.0040	0.1016	0.029 - 0.033	0.737 - 0.838	0.006	0.152	1.40	2.08	38.4	126
1050-7-9	24	7/32	0.0080	0.2032	0.034 - 0.038	0.864 - 0.965	0.006	0.152	1.90	2.83	25.2	83
1050-7-9A	24	19/36	0.0050	0.1270	0.034 - 0.038	0.864 - 0.965	0.006	0.152	2.02	3.01	24.3	79.7
1050-8-9	22	7/30	0.0100	0.2540	0.040 - 0.044	1.02 - 1.12	0.006	0.152	2.80	4.17	15.9	52.2
1050-8-9A	22	19/34	0.0063	0.1600	0.040 - 0.044	1.02 - 1.12	0.006	0.152	3.98	5.92	15.1	49.5
1050-9-9A	20	19/32	0.0080	0.2032	0.048 - 0.052	1.22 - 1.32	0.006	0.152	4.60	6.84	9.2	30.2

-Conforms to MIL-STD-104.

-Spiral striped color coding as required.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



MIL-W-16878 Rev. F Supersession of Duplicate Strandings to MIL-DTL-22759

Former MIL-W-16878 P/N	Description	Replacement MIL-DTL-22759 P/N
MIL-W-16878/4-BCB	E28-7 Silver	MIL-DTL-22759/11-28
MIL-W-16878/4-BDE	E26-19 Silver	MIL-DTL-22759/11-26
MIL-W-16878/4-BEE	E24-19 Silver	MIL-DTL-22759/11-24
MIL-W-16878/4-BFE	E22-19 Silver	MIL-DTL-22759/11-22
MIL-W-16878/4-BGE	E20-19 Silver	MIL-DTL-22759/11-20
MIL-W-16878/4-BHE	E18-19 Silver	MIL-DTL-22759/11-18
MIL-W-16878/4-BJE	E16-19 Silver	MIL-DTL-22759/11-16
MIL-W-16878/4-BKE	E14-19 Silver	MIL-DTL-22759/11-14
MIL-W-16878/4-BLE	E12-19 Silver	MIL-DTL-22759/11-12
MIL-W-16878/4-BMG	E10-37 Silver	MIL-DTL-22759/11-10
MIL-W-16878/4-DCB	E28-7 Silver Alloy	MIL-DTL-22759/22-28
MIL-W-16878/4-DDE	E26-19 Silver Alloy	MIL-DTL-22759/22-26
MIL-W-16878/4-DEE	E24-19 Silver Alloy	MIL-DTL-22759/22-24
MIL-W-16878/4-DFE	E22-19 Silver Alloy	MIL-DTL-22759/22-22
MIL-W-16878/4-DGE	E20-19 Silver Alloy	MIL-DTL-22759/22-20
MIL-W-16878/5-BCB	EE28-7 Silver	MIL-DTL-22759/9-28
MIL-W-16878/5-BDE	EE26-19 Silver	MIL-DTL-22759/9-26
MIL-W-16878/5-BEE	EE24-19 Silver	MIL-DTL-22759/9-24
MIL-W-16878/5-BFE	EE22-19 Silver	MIL-DTL-22759/9-22
MIL-W-16878/5-BGE	EE20-19 Silver	MIL-DTL-22759/9-20
MIL-W-16878/5-BHE	EE18-19 Silver	MIL-DTL-22759/9-18
MIL-W-16878/5-BJE	EE16-19 Silver	MIL-DTL-22759/9-16
MIL-W-16878/5-BKE	EE14-19 Silver	MIL-DTL-22759/9-14
MIL-W-16878/5-BLE	EE12-19 Silver	MIL-DTL-22759/9-12
MIL-W-16878/5-BMG	EE10-37 Silver	MIL-DTL-22759/9-10
MIL-W-16878/5-BNL	EE8-133 Silver	MIL-DTL-22759/9-8
MIL-W-16878/5-DCB	EE28-7 Silver Alloy	MIL-DTL-22759/20-28
MIL-W-16878/5-DDE	EE26-19 Silver Alloy	MIL-DTL-22759/20-26
MIL-W-16878/5-DEE	EE24-19 Silver Alloy	MIL-DTL-22759/20-24
MIL-W-16878/5-DFE	EE22-19 Silver Alloy	MIL-DTL-22759/20-22
MIL-W-16878/5-DGE	EE20-19 Silver Alloy	MIL-DTL-22759/20-20

Former MIL-W-16878 P/N	Description	Replacement MIL-DTL-22759 P/N
MIL-W-16878/25-BCB	E28-7 Nickel	MIL-DTL-22759/12-28
MIL-W-16878/25-BDE	E26-19 Nickel	MIL-DTL-22759/12-26
MIL-W-16878/25-BEE	E24-19 Nickel	MIL-DTL-22759/12-24
MIL-W-16878/25-BFE	E22-19 Nickel	MIL-DTL-22759/12-22
MIL-W-16878/25-BGE	E20-19 Nickel	MIL-DTL-22759/12-20
MIL-W-16878/25-BHE	E18-19 Nickel	MIL-DTL-22759/12-18
MIL-W-16878/25-BJE	E16-19 Nickel	MIL-DTL-22759/12-16
MIL-W-16878/25-BKE	E14-19 Nickel	MIL-DTL-22759/12-14
MIL-W-16878/25-BLE	E12-19 Nickel	MIL-DTL-22759/12-12
MIL-W-16878/25-BMG	E10-37 Nickel	MIL-DTL-22759/12-10
MIL-W-16878/25-DCB	E28-7 Nickel Alloy	MIL-DTL-22759/23-28
MIL-W-16878/25-DDE	E26-19 Nickel Alloy	MIL-DTL-22759/23-26
MIL-W-16878/25-DEE	E24-19 Nickel Alloy	MIL-DTL-22759/23-24
MIL-W-16878/25-DFE	E22-19 Nickel Alloy	MIL-DTL-22759/23-22
MIL-W-16878/25-DGE	E20-19 Nickel Alloy	MIL-DTL-22759/23-20
MIL-W-16878/27-BCB	EE28-7 Nickel	MIL-DTL-22759/10-28
MIL-W-16878/27-BDE	EE26-19 Nickel	MIL-DTL-22759/10-26
MIL-W-16878/27-BEE	EE24-19 Nickel	MIL-DTL-22759/10-24
MIL-W-16878/27-BFE	EE22-19 Nickel	MIL-DTL-22759/10-22
MIL-W-16878/27-BGE	EE20-19 Nickel	MIL-DTL-22759/10-20
MIL-W-16878/27-BHE	EE18-19 Nickel	MIL-DTL-22759/10-18
MIL-W-16878/27-BJE	EE16-19 Nickel	MIL-DTL-22759/10-16
MIL-W-16878/27-BKE	EE14-19 Nickel	MIL-DTL-22759/10-14
MIL-W-16878/27-BLE	EE12-19 Nickel	MIL-DTL-22759/10-12
MIL-W-16878/27-BMG	EE10-37 Nickel	MIL-DTL-22759/10-10
MIL-W-16878/27-BNL	EE8-133 Nickel	MIL-DTL-22759/10-8
MIL-W-16878/27-DCB	EE28-7 Nickel Alloy	MIL-DTL-22759/21-28
MIL-W-16878/27-DDE	EE26-19 Nickel Alloy	MIL-DTL-22759/21-26
MIL-W-16878/27-DEE	EE24-19 Nickel Alloy	MIL-DTL-22759/21-24
MIL-W-16878/27-DFE	EE22-19 Nickel Alloy	MIL-DTL-22759/21-22
MIL-W-16878/27-DGE	EE20-19 Nickel Alloy	MIL-DTL-22759/21-20

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



MIL-W-16878 Cable Designation

All MIL-W-16878 and MIL-DTL-16878 cables are designated by a six field code that indicates the exact construction of each cable. Please note the following example of a MIL-W-16878/5-DCB-2 or MIL-DTL-16878-DCB-2 cables.

Cable Description: MIL-W-16878/5 -DCB-2

(1) (2) (3)(4)(5) (6)

Prefix (1): All MIL-W-16878 cables will carry this prefix.

Specification Number (2): This number code position identifies the type, voltage rating, insulation, nominal wall thickness, conductor coating, and maximum temperature rating of the cable.

Conductor Material (3): This letter code position identifies the material the conductor is made of.

Conductor Size (4): This letter code position identifies the wire size.

Conductor Stranding (5): This letter code position identifies the conductor stranding.

Color Code (6): This number designates the color of the insulation material.

Specification Number

Military Specification	Type	Voltage Rating (RMS)	Insulation	Nominal Wall Thickness (in) (mm)		Conductor Coating *	Temp. Rating Max. (°C)
MIL-DTL-16878 /1	B	600	PVC	0.01	0.254	Tin	105
MIL-DTL-16878 /2	C	1,000	PVC	0.015	0.381	Tin	105
MIL-DTL-16878 /3	D	3,000	PVC	0.03	0.762	Tin	105
MIL-W-16878 /4 NEMA HP-3	E	600	PTFE	0.01	0.254	Silver	200
MIL-W-16878 /5 NEMA HP-3	EE	1,000	PTFE	0.015	0.381	Silver	200
MIL-W-16878 /6 NEMA HP-3	ET	250	PTFE	0.006	0.152	Silver	200
MIL-W-16878 /11 NEMA HP-4	K	600	FEP	0.01	0.254	Silver	200
MIL-W-16878 /12 NEMA HP-4	KK	1,000	FEP	0.015	0.381	Silver	200
MIL-W-16878 /13 NEMA HP-4	KT	250	FEP	0.006	0.152	Silver	200
MIL-DTL-16878 /17	BN	600	PVC / Nylon	0.01	0.254	Tin	105 / 115
MIL-DTL-16878 /18	CN	1000	PVC / Nylon	0.015	0.381	Tin	105 / 115
MIL-DTL-16878 /19	DN	3000	PVC / Nylon	0.03	0.762	Tin	105 / 115
MIL-W-16878 /20 NEMA HP-3		250	PTFE tape	0.006	0.152	Silver	200
MIL-W-16878 /21 NEMA HP-3		600	PTFE tape	0.01	0.254	Silver	200
MIL-W-16878 /22 NEMA HP-3		1,000	PTFE tape	0.015	0.381	Silver	200
MIL-W-16878 /23 NEMA HP-3	ET	250	PTFE	0.006	0.152	Nickel	260
MIL-W-16878 /24 NEMA HP-3		250	PTFE tape	0.006	0.152	Nickel	260
MIL-W-16878 /25 NEMA HP-3	E	600	PTFE	0.01	0.254	Nickel	260
MIL-W-16878 /26 NEMA HP-3		600	PTFE tape	0.01	0.254	Nickel	260
MIL-W-16878 /27 NEMA HP-3	EE	1,000	PTFE	0.015	0.381	Nickel	260
MIL-W-16878 /28 NEMA HP-3		1,000	PTFE tape	0.015	0.381	Nickel	260

* Coatings are those listed in the Military Specification, others available upon request.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Conductor Material	
B	coated copper
C	coated copper covered steel
D	coated high strength copper alloy
E	coated copper with overall metallic coating

Color Code	
Number Designation	Color
0	black
1	brown
2	red
3	orange
4	yellow
5	green
6	blue
7	violet (purple)
8	gray (slate)
9	white

Conductor Size	
Letter	AWG
A	32
B	30
C	28
D	26
E	24
F	22
G	20
H	18
J	16
K	14
L	12
M	10
N	8
P	6
R	4
S	2
T	1
U	0
W	00
Y	000
Z	0000

Conductor Stranding	
Letter	Number of Strands
A	1 (solid)
B	7
C	10
D	16
E	19
F	26
G	37
H	41
J	65
K	105
L	133
M	168
N	259
P	665
R	817
S	1,045
T	1,330
V	1,672
W	2,109

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Class H Shielded & Jacketed Type E Cables

- CONDUCTOR:** Stranded silver-plated or nickel-plated copper.
- CONSTRUCTION:** Dielectric is PTFE with 0.008" / 0.012" wall thickness. Cable twisting 1.5 to 2.5 inch lay. Shield is silver-plated or nickel-plated copper, 90% minimum coverage.
- JACKET:** Extruded FEP or wrapped PTFE with 0.008" / 0.012" wall thickness. Saturated glass fiber braid jackets are also available.
- SPECIFICATION:** The individually insulated conductors are manufactured to meet the requirements of MIL-W-16878/4 Type E. These cables can also be manufactured to MIL-C-55021 & MIL-DTL-27500 upon request. Also available with MIL-W-16878/5 Type EE and MIL-W-16878/6 Type ET conductors.
- COLOR:** Primary conductors are color coded per the requirements of MIL-C-915. Custom color coding per your requirement is available upon request. All colors remain fast on continuous exposure to light, heat, or solvents, and conform to MIL-STD-104. Primary insulation (dielectric) with wrapped PTFE jackets or extruded FEP jackets are available in the following colors: Black, brown, red, orange, yellow, green, blue, purple, gray, and white.
- USES:** When temperature requirements range from -65° C to 260° C at 600 volt RMS maximum (silver-plated: -65° C to 200° C; nickel-plated: -65° C to 260° C.)

Single Conductor MIL-W-16878/4



Catalog No.	AWG Size	Stranding	Conductor O.D. (in) (mm)		Insulation O.D. (in) (mm)		Shield O.D. (in) (mm)		Jacket O.D. (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1100-21E	30	7/38	0.012	0.30	0.032	0.81	0.055	1.40	0.071	1.80	4.78	7.11
1100-21F												
1100-32E	28	7/36	0.015	0.38	0.035	0.89	0.058	1.47	0.074	1.88	5.14	7.65
1100-32F												
1100-43E	26	19/38	0.019	0.48	0.039	0.99	0.062	1.57	0.078	1.98	6.30	9.37
1100-43F												
1100-54E	24	19/36	0.025	0.64	0.045	1.14	0.068	1.73	0.084	2.13	8.55	12.7
1100-54F												
1100-65E	22	19/34	0.031	0.79	0.051	1.30	0.074	1.88	0.090	2.29	9.69	14.4
1100-65F												
1100-76E	20	19/32	0.040	1.02	0.060	1.52	0.083	2.11	0.099	2.51	11.8	17.6
1100-76F												
1100-87E	18	19/30	0.050	1.27	0.070	1.78	0.093	2.36	0.109	2.77	15.7	23.4
1100-87F												
1100-98E	16	19/29	0.057	1.45	0.080	2.03	0.103	2.62	0.119	3.02	18.0	26.8
1100-98F												
1100-109E	14	19/27	0.071	1.80	0.096	2.45	0.121	3.07	0.138	3.51	25.2	37.5
1100-109F												
1100-120E	12	19/25	0.090	2.29	0.110	2.79	0.135	3.43	0.152	3.86	34.9	51.9
1100-120F												

E = Wrapped PTFE jacket.

F = Extruded FEP jacket.

All dimensions are nominal.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

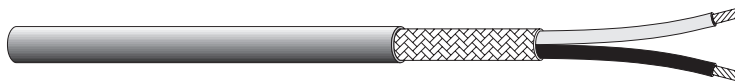
3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Two Conductor MIL-W-16878/4



Catalog No.	AWG Size	Stranding	Conductor O.D. (in) (mm)		Insulation O.D. (in) (mm)		Shield O.D. (in) (mm)		Jacket O.D. (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1100-22E	30	7/38	0.012	0.30	0.032	0.81	0.086	2.18	0.107	2.72	8.73	13.0
1100-22F												
1100-33E	28	7/36	0.015	0.38	0.035	0.89	0.092	2.34	0.113	2.87	9.56	14.2
1100-33F												
1100-44E	26	19/38	0.019	0.48	0.039	0.99	0.100	2.54	0.122	3.10	11.7	17.4
1100-44F												
1100-55E	24	19/36	0.025	0.64	0.045	1.14	0.112	2.84	0.135	3.43	13.8	20.5
1100-55F												
1100-66E	22	19/34	0.031	0.79	0.051	1.30	0.124	3.15	0.148	3.76	16.5	24.6
1100-66F												
1100-77E	20	19/32	0.040	1.02	0.060	1.52	0.142	3.61	0.167	4.24	21.3	31.7
1100-77F												
1100-88E	18	19/30	0.050	1.27	0.070	1.78	0.162	4.11	0.189	4.80	27.8	41.4
1100-88F												
1100-99E	16	19/29	0.057	1.45	0.080	2.03	0.188	4.78	0.208	5.28	33.4	49.7
1100-99F												

E = Wrapped PTFE jacket.

F = Extruded FEP jacket.

All dimensions are nominal.

Three Conductor MIL-W-16878/4



Catalog No.	AWG Size	Stranding	Conductor O.D. (in) (mm)		Insulation O.D. (in) (mm)		Shield O.D. (in) (mm)		Jacket O.D. (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1100-22S	30	7/38	0.012	0.30	0.032	0.81	0.092	2.34	0.114	2.90	10.5	15.6
1100-22T												
1100-33S	28	7/36	0.015	0.38	0.035	0.89	0.098	2.49	0.120	3.05	11.8	17.6
1100-33T												
1100-44S	26	19/38	0.019	0.48	0.039	0.99	0.107	2.72	0.129	3.28	14.8	22.0
1100-44T												
1100-55S	24	19/36	0.025	0.64	0.045	1.14	0.119	3.02	0.135	3.43	17.3	25.7
1100-55T												
1100-66S	22	19/34	0.031	0.79	0.051	1.30	0.132	3.35	0.148	3.76	21.6	32.1
1100-66T												
1100-77S	20	19/32	0.040	1.02	0.060	1.52	0.151	3.84	0.167	4.24	28.2	42.0
1100-77T												
1100-88S	18	19/30	0.050	1.27	0.070	1.78	0.173	4.39	0.189	4.80	37.7	56.1
1100-88T												
1100-99S	16	19/29	0.057	1.45	0.080	2.03	0.195	4.95	0.213	5.41	46.1	68.6
1100-99T												

S = Wrapped PTFE jacket.

T = Extruded FEP jacket.

All dimensions are nominal.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

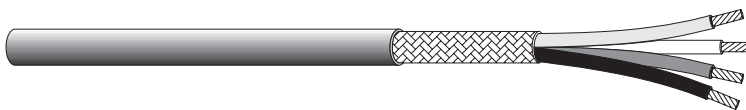
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Four Conductor MIL-W-16878/4



Catalog No.	AWG Size	Stranding	Conductor O.D. (in) (mm)		Insulation O.D. (in) (mm)		Shield O.D. (in) (mm)		Jacket O.D. (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1100-22W	30	7/38	0.012	0.30	0.032	0.81	0.100	2.54	0.116	2.95	12.6	18.7
1100-22X												
1100-33W	28	7/36	0.015	0.38	0.035	0.89	0.108	2.74	0.124	3.15	14.1	21.0
1100-33X												
1100-44W	26	19/38	0.019	0.48	0.039	0.99	0.117	2.97	0.133	3.38	17.8	26.5
1100-44X												
1100-55W	24	19/36	0.025	0.64	0.045	1.14	0.132	3.35	0.148	3.76	21.2	31.5
1100-55X												
1100-66W	22	19/34	0.031	0.79	0.051	1.30	0.146	3.71	0.162	4.11	26.3	39.1
1100-66X												
1100-77W	20	19/32	0.040	1.02	0.060	1.52	0.168	4.27	0.184	4.67	35	52.1
1100-77X												
1100-88W	18	19/30	0.050	1.27	0.070	1.78	0.192	4.88	0.208	5.28	47.3	70.4
1100-88X												
1100-99W	16	19/29	0.057	1.45	0.080	2.03	0.218	5.54	0.236	5.99	58.1	86.5
1100-99X												

W = Wrapped PTFE jacket.

X = Extruded FEP jacket.

All dimensions are nominal.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-13486

**Type I, Class A Cable, Special Purpose,
Electrical, Low Tension**



CONDUCTOR: Stranded tinned copper.
COLOR: Black.
INSULATION: Neoprene® or Hypalon®.

CONSTRUCTION: Heavy-duty, single conductor
with glass reinforcing braid.

USES: All types of military vehicles such as trucks, trailers, tanks, etc., because of its excellent resistance to abrasion, fungus, and exposure to weather. Resists deterioration from fluids usually met in heavy duty vehicle applications such as oils, ethylene glycol, and salt water.

Catalog No.	AWG Size	Military Part No.	Formerly Ordinance Part No.	Conductor Strand	Diameter (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
706-3G	18	M13486/1-2	None	16/30	0.130	3.30	14.0	20.8
706-5G	16	M1348631-3	7722204	19/29	0.135	3.43	16.5	24.6
706-5GA ¹	16	M13486/1-4	8690176	19/29	0.160	4.06	19.2	28.6
706-7G	14	M13486/1-5	7720853	19/27	0.160	4.06	22.2	33.0
706-7GA ¹	14	M13486/1-6	7056679	19/27	0.235	5.97	36.5	54.3
706-8G	12	M13486/1-7	7056678	19/25	0.235	5.97	42.2	62.8
706-11G	10	M13486/1-8	None	105/30	0.300	7.62	73.0	109
706-14G	8	M13486/1-9	7056677	133/29	0.360	9.14	104	154
706-15G	6	M13486/1-10	7056676	133/27	0.422	10.7	152	226
706-16G	4	M13486/1-11	8690175	133/25	0.485	12.3	221	328
706-17G	2	M13486/1-12	7056675	663/30	0.610	15.5	352	523
706-18G	1/0	M13486/1-14	7056674	1,033/30	0.672	17.1	478	711
706-19G	2/0	M13486/1-15	None	1,327/30	0.730	18.5	605	900
706-21G	4/0	M13486/1-17	7056674-1	2,104/30	0.865	22.0	871	1,296

¹ Available only through special order.

Neoprene® is a trademark of the DuPont de Nemours Co.

Hypalon® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

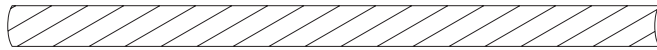
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Flexible Strand Pigtail



CONDUCTOR: Soft stranded tinned copper.
 CONSTRUCTION: Rope lay, close right-hand lay, extra flexible.
 USES: Shunt leads, brush leads, magnetic switches, relays, etc.

Catalog No.	AWG Size	Wires & Ropes	Nominal Diameter (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
301-3	20	7 x 15 x 40	0.040	1.02	3.20	4.76
301-6	19	7 x 21 x 40	0.049	1.24	4.30	6.40
301-7	18	7 x 24 x 40	0.052	1.32	5.10	7.59
301-9	16	7 x 15 x 36	0.067	1.70	8.13	12.10
301-12	14	7 x 24 x 36	0.086	2.18	12.90	19.20
301-15	12	7 x 37 x 36	0.102	2.59	20.00	29.76
301-18	10	7 x 59 x 36	0.130	3.30	31.85	47.39
301-21	8	7 x 95 x 36	0.166	4.22	51.28	76.30

Special Purpose Miniature Flexible Cables MIL-DTL-5898F, MIL-C-10392B



CONDUCTOR: Stranded alloys of copper.
 JACKET: Rubber, Neoprene®, or polyurethane.
 USES: Intercommunication set cord, signal, and control cable.

Catalog No.	AWG Size	Total No. of Cond.	Nominal Diameter (in) (mm)		Cable Type	Conductor Material	Weight (lbs / (kgs / 1000 ft) km)	
704-2 ²	24	3	0.212	5.38	WT 15 A/U	Tinned Cadmium Copper	30	45
704-3 ¹	24	4	0.280	7.11	WF 5/U	Tinned Cadmium Bronze	38	57
704-4 ²	24	4	0.212	5.38	WF 11 A/U	Tinned Cadmium Copper	30	45
704-5 ¹	24	4	0.300	7.62	WF 14 /U	Tinned Cadmium Bronze	39	58
704-6 ¹	24	2	0.160	4.06	WD 34 /U	Tinned Cadmium Bronze	14	21
1336-50 ¹	24	5	0.305	7.75	WM 85 /U	Tinned Cadmium Bronze	43	64
1336-50B ²	24	5	0.289	7.34	WM 59 A/U	Tinned Cadmium Bronze	51	76
1336-51 ²	24	6	0.252	6.40	WM 60 A/U	Tinned Cadmium Copper	38	57
708-5 ²	18 24	6 { ² / ₄	0.262	6.65	WM 69 B/U	Tinned Cadmium Copper	52	77
708-10 ²	18 24	7 { ² / ₅	0.280	7.11	WM 111 A/U	Tinned Cadmium Copper	56	83
708-11 ²	18 24	8 { ² / ₆	0.285	7.24	WM 70 B/U	Tinned Cadmium Copper	58	86

¹ MIL-DTL-5898F

² MIL-C-10392B Latest revision is MIL-C-10392C but this material is only available as Rev. B.
 Neoprene® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Antenna Wire

MIL-W-6370C, MIL-DTL-25136, MIL-DTL-12995



- CONDUCTOR:** Solid hard drawn copper covered steel wire, except in the construction of W-120, where the conductor is 42 strands of 32 AWG (0.008") silicon bronze wire.
- CONSTRUCTION:** Manufactured to rigid government military specifications.
- USES:** Primarily used for antenna systems, however, they have many applications because of their high tensile strength.

Catalog No.	Military Type	AWG Size	Stranding	Dielectric	Nominal Diameter (in) (mm)		Minimum Conductor Breaking Strength		Weight (lbs / (kgs / 1000 ft) km)	
801-176 ¹	6370-1	16	Solid	Poly	0.183	4.65	450	204	20	30
303-13F ²	W-106A	18	Solid	None	0.040	1.02	170	77.1	5	7
303-14D ³	W-120	16	42/32	None	0.062	1.57	200	90.7	8	12

¹ MIL-W-6370C (Formerly WS-25/U)

² MIL-DTL-25136 (USAF)

³ MIL-DTL-12995 (Sig. C)

Note: Standard Wire & Cable Co. takes exception to the print durability portion of the MIL-W-6370 specification.

Test Lead Wire Stanflex®



- CONSTRUCTION:** Finely stranded conductor for long service life in applications requiring repeated flexing such as instrument test leads, etc. Dielectric is free stripping rubber compound. Conforms to MIL-DTL-13169B.

Catalog No.	AWG Size	Stranding	Color	Working Voltage	Nominal Diameter (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
706-3A	18	65/36	Red	5,000	0.140	3.56	14.6	21.7
706-3B	18	65/36	Black	5,000	0.140	3.56	14.6	21.7

Stanflex® is a trademark of Standard Wire & Cable Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

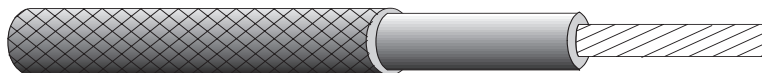
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-8777D (ASG) MS 25471 (ASG)*



CONDUCTOR: Stranded silver-plated copper.
CONSTRUCTION: Silicone rubber and fiber braid.
VOLTAGE: 600 V.

TEMPERATURE: 200° C.
COLOR: Natural (tan), white.

USES: A wire for high temperature use having good flexibility where abrasion, moisture, and fluid resistance are required.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Maximum Diameter		Weight	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1105-3	22	19/34	15.2	49.9	0.090	2.29	5.80	8.63
1105-6	20	19/32	9.42	30.9	0.100	2.54	7.80	11.6
1105-9	18	19/30	6.03	19.8	0.115	2.92	10.8	16.1
1105-12	16	19/29	4.72	15.5	0.130	3.30	13.5	20.1
1105-15	14	19/27	2.99	9.81	0.150	3.81	20.0	29.8
1105-18	12	19/25	1.88	6.17	0.170	4.32	29.0	43.2
1105-21	10	49/27	1.16	3.81	0.200	5.08	45.0	67.0
1105-24	8	133/29	0.700	2.30	0.255	6.48	72.0	107
1105-27	6	133/27	0.436	1.43	0.310	7.87	107	159
1105-30	4	133/25	0.274	0.899	0.370	9.40	165	246
1105-33	2	665/30	0.179	0.587	0.445	11.3	262	390
1105-36	1	817/30	0.144	0.472	0.495	12.6	317	472
1105-39	1/0	1,045/30	0.114	0.374	0.550	14.0	390	580
1105-46	2/0	1,330/30	0.090	0.295	0.610	15.5	500	744

* MIL-DTL-27500 Basic Wire Specification: H (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

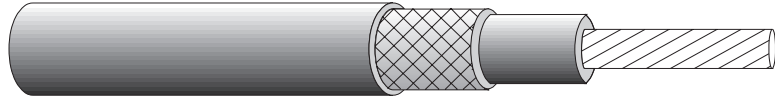
3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MS 27110 (ASG) *



CONDUCTOR: Stranded silver-plated copper.
VOLTAGE: 600 V.
TEMPERATURE: 200° C.

CONSTRUCTION: Silicone rubber & fiber braid and extruded FEP (fluorinated ethylene propylene).
COLOR: Natural (tan).

USES: Silicone insulated FEP jacketed wire for high temperature use having good flexibility and providing excellent barrier against solvents, moisture, flame, and fungus.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Nominal Diameter		Weight	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1106-4	22	19/34	15.2	49.9	0.086	2.18	7.10	10.6
1106-7	20	19/32	9.42	30.9	0.096	2.44	9.00	13.4
1106-10	18	19/30	6.03	19.8	0.108	2.74	12.1	18.0
1106-13	16	19/29	4.72	15.5	0.116	2.95	14.3	21.3
1106-16	14	19/27	2.99	9.81	0.141	3.58	21.5	32.0
1106-19	12	19/25	1.88	6.17	0.160	4.06	30.5	45.4
1106-22	10	49/27	1.16	3.81	0.194	4.93	48.0	71.4
1106-25	8	133/29	0.700	2.30	0.243	6.17	75.0	112
1106-28	6	133/27	0.436	1.43	0.292	7.42	114	170
1106-31	4	133/25	0.274	0.899	0.357	9.07	173	257

* MIL-DTL-27500 Basic Wire Specification: F (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

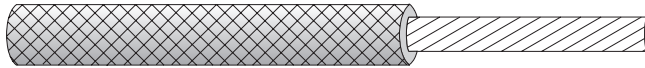
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-25038/1*



CONDUCTOR: 27% nickel-coated copper.
 JACKET: PTFE glass braid or fused PTFE tape wrapped.
 TEMPERATURE: 260° C.

INSULATION: Inorganic dielectric, PTFE/
 polyimide composite fluid/mechanical barrier.
 VOLTAGE: 600 V.

USES: Fire resistant high temperature wire where resistance to moisture, abrasion, oils, and fluids is required. High insulation resistance for short intervals (15 minutes) when exposed to open flame of 1093° C (2000° F) .

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight	
			(Ohms/ 1000 ft)	(Ohms/ km)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1104-6	20	19/32	14.6	47.9	0.109 - 0.125	2.77 - 3.18	12	18
1104-10	18	19/30	9.14	30.0	0.119 - 0.135	3.02 - 3.43	15	22
1104-14	16	19/29	6.85	22.5	0.127 - 0.147	3.23 - 3.73	19	28
1104-18	14	19/27	4.32	14.2	0.150 - 0.170	3.81 - 4.32	25	37
1104-22	12	19/25	2.78	9.12	0.165 - 0.185	4.19 - 4.70	35	52
1104-26	10	49/27	1.68	5.51	0.210 - 0.230	5.33 - 5.84	55	82
1104-30	8	133/29	0.936	3.07	0.256 - 0.280	6.50 - 7.11	85	126
1104-34	6	133/27	0.591	1.94	0.318 - 0.342	8.08 - 8.69	127	189
1104-38	4	133/25	0.375	1.23	0.383 - 0.407	9.73 - 10.3	192	286
1104-42	2	665/30	0.241	0.791	0.460 - 0.484	11.7 - 12.3	291	433
1104-46	1	817/30	0.196	0.643	0.497 - 0.533	12.6 - 13.5	347	516
1104-50	1/0	1,045/30	0.153	0.502	0.537 - 0.573	13.6 - 14.6	415	618
1104-60	2/0	1,330/30	0.120	0.394	0.595 - 0.635	15.1 - 16.1	520	774
1104-70	3/0	1,672/30	0.096	0.315	0.660 - 0.700	16.8 - 17.8	648	964
1104-80	4/0	2,109/30	0.077	0.253	0.730 - 0.770	18.5 - 19.6	793	1,180

* MIL-DTL-27500 Basic Wire Specification: JA (see Table I page 97) Also Available: MS 27125 (USAF).

MIL-DTL-25038/3**



CONDUCTOR: 27% nickel-coated copper (AWG 12-18);
 27% nickel-coated high strength copper (AWG 20-22).

JACKET: Fused PTFE tape wrapped.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight	
			(Ohms/ 1000 ft)	(Ohms/ km)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1104-2A	22	19/34	23.7	77.8	0.040 - 0.054	1.02 - 1.37	4.15	6.18
1104-6A	20	19/32	15.3	50.1	0.048 - 0.083	1.22 - 2.11	9.0	13
1104-10A	18	19/30	8.50	27.9	0.065 - 0.097	1.65 - 2.46	10.5	15.6
1104-14A	16	19/29	6.66	21.9	0.068 - 0.103	1.73 - 2.62	13.5	20.1
1104-16A	14	19/27	4.32	14.2	0.097 - 0.123	2.46 - 3.12	19.5	29.0
1104-22A	12	19/25	2.78	9.12	0.100 - 0.142	2.54 - 3.61	28.0	41.7

** MIL-DTL-27500 Basic Wire Specification: JF (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759 (SAE-AS22759)



Class 1 200° C MIL-DTL-22759/1*

CONDUCTOR: Stranded silver-plated copper.
INSULATION: PTFE tape and PTFE coated glass tape; a PTFE coated fiberglass braid.
COLOR: White.
VOLTS: 600 V.

Class 2 260° C MIL-DTL-22759/2**

CONDUCTOR: Stranded nickel-plated copper.
INSULATION: PTFE tape and PTFE coated glass tape; a PTFE coated fiberglass braid.
COLOR: White.
VOLTS: 600 V.

USES: Heat and abrasion resistant. Excellent flame and fungus resistance.

Class 1 Catalog No.	Class 2 Catalog No.	AWG Size	Stranding	Max Resistance*** @ 20°C (@68°F) (Ohms/ (Ohms / 1000 ft) km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
1103-10B	1103-10C	22	19/34	15.1	49.5	0.080 - 0.088	2.03 - 2.24	7.5	11
1103-17B	1103-17C	20	19/32	9.19	30.2	0.090 - 0.098	2.29 - 2.49	9.5	14
1103-23B	1103-23C	18	19/30	5.79	19.0	0.100 - 0.110	2.54 - 2.79	13.0	19.3
1103-30B	1103-30C	16	19/29	4.52	14.8	0.115 - 0.125	2.92 - 3.18	16.5	24.6
1103-34B	1103-34C	14	19/27	2.88	9.45	0.133 - 0.143	3.38 - 3.63	23.0	34.2
1103-39B	1103-39C	12	37/28	1.90	6.23	0.152 - 0.162	3.86 - 4.11	32.1	47.8
1103-46B	1103-46C	10	37/26	1.19	3.90	0.174 - 0.188	4.42 - 4.78	47.0	69.9
1103-51B	1103-51C	8	133/29	0.658	2.16	0.241 - 0.255	6.12 - 6.48	82.0	122
1103-58B	1103-58C	6	133/27	0.418	1.37	0.283 - 0.303	7.19 - 7.70	122	182
1103-63B	1103-63C	4	133/25	0.264	0.866	0.340 - 0.370	8.64 - 9.40	180	268
1103-70B	1103-70C	2	665/30	0.170	0.558	0.405 - 0.435	10.3 - 11.0	275	409
1103-75B	1103-75C	1	817/30	0.139	0.456	0.455 - 0.485	11.6 - 12.3	348	518
1103-79B	1103-79C	1/0	1,045/30	0.108	0.354	0.495 - 0.535	12.6 - 13.6	429	638
1103-83B	1103-83C	2/0	1,330/30	0.085	0.279	0.555 - 0.595	14.1 - 15.1	542	806
1103-87B	1103-87C	3/0	1,665/30	0.068	0.223	0.620 - 0.660	15.7 - 16.8	668	994
1103-91B	1103-91C	4/0	2,109/30	0.054	0.177	0.690 - 0.730	17.5 - 18.5	835	1,242

* MIL-DTL-27500 Basic Wire Specification: EA (see Table I page 97)

** MIL-DTL-27500 Basic Wire Specification: E (see Table I page 97)

*** Maximum resistance for MIL-DTL-22759/1. For MIL-DTL-22759/2 see military specification.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

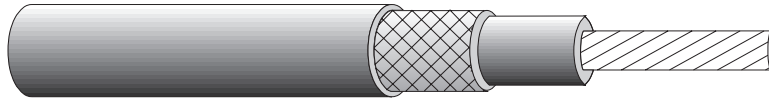
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/3* (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated copper. CONSTRUCTION: Fused PTFE tape, PTFE coated glass braid, PTFE skived tapes and FEP.
TEMPERATURE: -55° C to 260° C.
VOLTAGE: 600 V.
COLOR: White.

USES: Excellent resistance to fluids, oils, solvents, moisture, and fungus. An excellent wire when great thermal stability is required.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Nominal Thickness of FEP Jacket		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1103-10D	22	19/34	16.0	52.5	0.009	0.229	0.071 - 0.077	1.80 - 1.96	5.90	8.78
1103-17D	20	19/32	9.77	32.1	0.009	0.229	0.079 - 0.085	2.01 - 2.16	7.90	11.8
1103-23D	18	19/30	6.10	20.0	0.010	0.254	0.092 - 0.098	2.34 - 2.49	11.0	16.4
1103-30D	16	19/29	4.76	15.6	0.010	0.254	0.099 - 0.107	2.51 - 2.72	13.6	20.2
1103-34D	14	19/27	3.00	9.84	0.010	0.254	0.112 - 0.120	2.84 - 3.05	18.5	27.5
1103-39D	12	37/28	1.98	6.50	0.010	0.254	0.129 - 0.137	3.28 - 3.48	26.6	39.6
1103-46D	10	37/26	1.24	4.07	0.010	0.254	0.158 - 0.170	4.01 - 4.32	41.5	61.8
1103-51D	8	133/29	0.694	2.28	0.010	0.254	0.228 - 0.242	5.79 - 6.15	77.4	115
1103-58D	6	133/27	0.436	1.43	0.010	0.254	0.272 - 0.292	6.91 - 7.42	115	171
1103-63D	4	133/25	0.275	0.902	0.012	0.305	0.336 - 0.366	8.53 - 9.30	184	274
1103-70D	2	665/30	0.177	0.581	0.012	0.305	0.415 - 0.445	10.5 - 11.3	281	418
1103-75D	1	817/30	0.144	0.472	0.014	0.356	0.465 - 0.495	11.8 - 12.6	358	533
1103-79D	1/0	1,045/30	0.113	0.371	0.014	0.356	0.500 - 0.550	12.7 - 14.0	436	649
1103-83D	2/0	1,330/30	0.089	0.292	0.014	0.356	0.560 - 0.610	14.2 - 15.5	554	824

* MIL-DTL-27500 Basic Wire Specification: RA (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

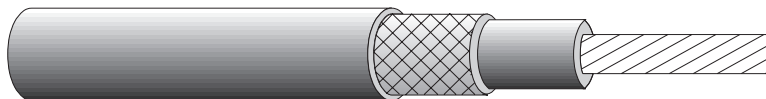
3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/4* (SAE-AS22759)



CONDUCTOR: Stranded silver-plated copper.
TEMPERATURE: -55° C to 200° C.
VOLTAGE: 600 V.

CONSTRUCTION: PTFE tapes, PTFE coated fiberglass tapes, PTFE coated fiberglass braid, and FEP.

USES: Excellent resistance to fluids, oils, solvents, moisture, and fungus. An excellent wire when great thermal stability is required.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Nominal Thickness of FEP Jacket		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1107-10B	22	19/34	15.1	49.5	0.009	0.229	0.071 - 0.077	1.80 - 1.96	5.90	8.78
1107-17B	20	19/32	9.19	30.2	0.009	0.229	0.079 - 0.085	2.01 - 2.16	7.90	11.8
1107-23B	18	19/30	5.79	19.0	0.010	0.254	0.092 - 0.098	2.34 - 2.49	11.0	16.4
1107-30B	16	19/29	4.52	14.8	0.010	0.254	0.099 - 0.107	2.51 - 2.72	13.6	20.2
1107-34B	14	19/27	2.88	9.45	0.010	0.254	0.112 - 0.120	2.84 - 3.05	18.5	27.5
1107-39B	12	37/28	1.90	6.23	0.010	0.254	0.129 - 0.137	3.28 - 3.48	26.6	39.6
1107-46B	10	37/26	1.19	3.90	0.010	0.254	0.158 - 0.170	4.01 - 4.32	41.5	61.8
1107-51B	8	133/29	0.658	2.16	0.010	0.254	0.228 - 0.242	5.79 - 6.15	77.4	115
1107-58B	6	133/27	0.418	1.37	0.010	0.254	0.272 - 0.292	6.91 - 7.42	115	171
1107-63B	4	133/25	0.264	0.866	0.012	0.305	0.336 - 0.366	8.53 - 9.30	184	274
1107-70B	2	665/30	0.170	0.558	0.012	0.305	0.415 - 0.445	10.5 - 11.3	281	418
1107-75B	1	817/30	0.139	0.456	0.014	0.356	0.465 - 0.495	11.8 - 12.6	358	533
1107-79B	1/0	1,045/30	0.108	0.354	0.014	0.356	0.500 - 0.550	12.7 - 14.0	436	649
1107-83B	2/0	1,330/30	0.085	0.279	0.014	0.356	0.560 - 0.610	14.2 - 15.5	554	824

* MIL-DTL-27500 Basic Wire Specification: RB (see Table I page 97).

MIL-DTL-22759/4 was formerly MS 90294

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/5 * (SAE-AS22759)



CONDUCTOR: Stranded silver-plated copper. INSULATION: PTFE, reinforced with abrasion resistant mineral fillers.
TEMPERATURE: -55° C to 200° C.
VOLTAGE: 600 V.
USES: Wire for high temperature use having good flexibility. For use where abrasion resistance is required.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1165-32	24	19/36	24.3	79.7	0.070 - 0.080	1.78 - 2.03	6.00	8.93
1165-34	22	19/34	15.1	49.5	0.080 - 0.090	2.03 - 2.29	8.00	11.9
1165-39	20	19/32	9.19	30.2	0.090 - 0.100	2.29 - 2.54	10.0	14.9
1165-44	18	19/30	5.79	19.0	0.105 - 0.115	2.67 - 2.92	14.0	20.8
1165-49	16	19/29	4.52	14.8	0.120 - 0.130	3.05 - 3.30	18.0	26.8
1165-54	14	19/27	2.88	9.45	0.136 - 0.150	3.45 - 3.81	25.0	37.2
1165-60	12	19/25	1.81	5.94	0.153 - 0.167	3.89 - 4.24	34.5	51.3
1165-64	10	37/26	1.19	3.90	0.172 - 0.186	4.37 - 4.72	48.0	71.4
1165-69	8	133/29	0.658	2.16	0.241 - 0.255	6.12 - 6.48	83.7	125
1165-74	6	133/27	0.418	1.37	0.290 - 0.310	7.37 - 7.87	126	187
1165-79	4	133/25	0.264	0.866	0.340 - 0.370	8.64 - 9.40	188	280

* MIL-DTL-27500 Basic Wire Specification: VA (see Table I page 97)

MIL-DTL-22759/6 ** (SAE-AS22759)



CONDUCTOR: Stranded nickel-plated copper. INSULATION: PTFE, reinforced with abrasion resistant mineral fillers.
TEMPERATURE: -55° C to 260° C.
VOLTAGE: 600 V.
USES: Wire for high temperature use having good flexibility. For use where abrasion resistance is required.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1166-32	24	19/36	25.9	85.0	0.070 - 0.080	1.78 - 2.03	6.00	8.93
1166-34	22	19/34	16.0	52.5	0.080 - 0.090	2.03 - 2.29	8.00	11.9
1166-39	20	19/32	9.77	32.1	0.090 - 0.100	2.29 - 2.54	10.0	14.9
1166-44	18	19/30	6.10	20.0	0.105 - 0.115	2.67 - 2.92	14.0	20.8
1166-49	16	19/29	4.76	15.6	0.120 - 0.130	3.05 - 3.30	18.0	26.8
1166-54	14	19/27	3.00	9.84	0.136 - 0.150	3.45 - 3.81	25.0	37.2
1166-60	12	19/25	1.89	6.20	0.153 - 0.167	3.89 - 4.24	34.5	51.3
1166-64	10	37/26	1.24	4.07	0.172 - 0.186	4.37 - 4.72	48.0	71.4
1166-69	8	133/29	0.694	2.28	0.241 - 0.255	6.12 - 6.48	83.7	125
1166-74	6	133/27	0.436	1.43	0.290 - 0.310	7.37 - 7.87	127	189
1166-79	4	133/25	0.275	0.902	0.340 - 0.370	8.64 - 9.40	190	283

** MIL-DTL-27500 Basic Wire Specification: WA (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/7 * (SAE-AS22759)



CONDUCTOR: Stranded silver-plated copper. INSULATION: PTFE, reinforced with abrasion resistant mineral fillers.
 TEMPERATURE: -55° C to 200° C.
 VOLTAGE: 600 V.
 USES: Wire for high temperature use having good flexibility, medium weight. For use where abrasion resistance is required.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1167-32	24	19/36	24.3	79.7	0.060 - 0.064	1.52 - 1.63	4.3	6.4
1167-34	22	19/34	15.1	49.5	0.071 - 0.075	1.80 - 1.91	6.0	8.9
1167-39	20	19/32	9.19	30.2	0.080 - 0.084	2.03 - 2.13	8.1	12.1
1167-44	18	19/30	5.79	19.0	0.090 - 0.094	2.29 - 2.39	11.0	16.4
1167-49	16	19/29	4.52	14.8	0.099 - 0.105	2.51 - 2.67	13.8	20.5
1167-54	14	19/27	2.88	9.45	0.112 - 0.118	2.84 - 3.00	18.6	27.7
1167-60	12	19/25	1.81	5.94	0.131 - 0.137	3.33 - 3.48	28.5	42.4
1167-64	10	37/26	1.19	3.90	0.154 - 0.162	3.91 - 4.11	41.8	62.2
1167-69	8	133/29	0.658	2.16	0.215 - 0.225	5.46 - 5.72	73.1	109
1167-74	6	133/27	0.418	1.37	0.264 - 0.276	6.71 - 7.01	111	165
1167-79	4	133/25	0.264	0.866	0.321 - 0.335	8.15 - 8.51	169	251

* MIL-DTL-27500 Basic Wire Specification: SA (see Table I page 97)

MIL-DTL-22759/8 ** (SAE-AS22759)



CONDUCTOR: Stranded nickel-plated copper. INSULATION: PTFE, reinforced with abrasion resistant mineral fillers.
 TEMPERATURE: -55° C to 260° C.
 VOLTAGE: 600 V.
 USES: Wire for high temperature use having good flexibility, medium weight. For use where abrasion resistance is required.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
1168-32	24	19/36	25.9	85.0	0.060 - 0.064	1.52 - 1.63	4.3	6.4
1168-34	22	19/34	16.0	52.5	0.071 - 0.075	1.80 - 1.91	6.0	8.9
1168-39	20	19/32	9.77	32.1	0.080 - 0.084	2.03 - 2.13	8.1	12.1
1168-44	18	19/30	6.10	20.0	0.090 - 0.094	2.29 - 2.39	11.0	16.4
1168-49	16	19/29	4.76	15.6	0.099 - 0.105	2.51 - 2.67	13.8	20.5
1168-54	14	19/27	3.00	9.84	0.112 - 0.118	2.84 - 3.00	18.6	27.7
1168-60	12	19/25	1.89	6.20	0.131 - 0.137	3.33 - 3.48	28.5	42.4
1168-64	10	37/26	1.24	4.07	0.154 - 0.162	3.91 - 4.11	41.8	62.2
1168-69	8	133/29	0.694	2.28	0.215 - 0.225	5.46 - 5.72	73.1	109
1168-74	6	133/27	0.436	1.43	0.264 - 0.276	6.71 - 7.01	113	168
1168-79	4	133/25	0.275	0.902	0.321 - 0.335	8.15 - 8.51	173	257

** MIL-DTL-27500 Basic Wire Specification: TA (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/9 ** (SAE-AS22759)



CONDUCTOR: Stranded silver-plated copper. TEMPERATURE: -55° C to 200° C.
VOLTAGE: 1000 V. INSULATION: PTFE.
USES: Wire where resistance to high temperatures and high reliability are required. For use where smoke emission, overload stability, and/or flammability may be a problem.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ (Ohms / 1000 ft) km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
M22759/9-28-*	28	7/36	63.8	209	0.041 - 0.045	1.0 - 1.1	1.90	2.83
M22759/9-26-*	26	19/38	38.4	126	0.046 - 0.050	1.17 - 1.27	2.57	3.82
M22759/9-24-*	24	19/36	24.3	79.7	0.051 - 0.055	1.30 - 1.40	3.33	4.96
M22759/9-22-*	22	19/34	15.1	49.5	0.058 - 0.062	1.47 - 1.57	4.60	6.84
M22759/9-20-*	20	19/32	9.19	30.2	0.066 - 0.070	1.68 - 1.78	6.40	9.52
M22759/9-18-*	18	19/30	5.79	19.0	0.076 - 0.080	1.93 - 2.03	9.10	13.5
M22759/9-16-*	16	19/29	4.52	14.8	0.083 - 0.087	2.11 - 2.21	11.0	16.4
M22759/9-14-*	14	19/27	2.88	9.45	0.097 - 0.103	2.46 - 2.62	16.4	24.4
M22759/9-12-*	12	19/25	1.81	5.94	0.116 - 0.124	2.95 - 3.15	25.3	37.6
M22759/9-10-*	10	37/26	1.19	3.90	0.137 - 0.145	3.48 - 3.68	38.2	56.8
M22759/9-8-*	8	133/29	0.658	2.16	0.202 - 0.212	5.13 - 5.38	68.8	102.4

** MIL-DTL-27500 Basic Wire Specification: LE (see Table I page 97)

MIL-DTL-22759/10 *** (SAE-AS22759)



CONDUCTOR: Stranded nickel-plated copper. TEMPERATURE: -55° C to 260° C.
VOLTAGE: 1000 V. INSULATION: PTFE.
USES: Wire where resistance to high temperatures and high reliability are required. For use where smoke emission, overload stability, and/or flammability may be a problem.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ (Ohms / 1000 ft) km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
M22759/10-28-*	28	7/36	67.9	223	0.041 - 0.045	1.04 - 1.14	1.90	2.83
M22759/10-26-*	26	19/38	42.2	138	0.046 - 0.050	1.17 - 1.27	2.57	3.82
M22759/10-24-*	24	19/36	25.9	85.0	0.051 - 0.055	1.30 - 1.40	3.33	4.96
M22759/10-22-*	22	19/34	16.0	52.5	0.058 - 0.062	1.47 - 1.57	4.60	6.84
M22759/10-20-*	20	19/32	9.77	32.1	0.066 - 0.070	1.68 - 1.78	6.40	9.52
M22759/10-18-*	18	19/30	6.10	20.0	0.076 - 0.080	1.93 - 2.03	9.10	13.5
M22759/10-16-*	16	19/29	4.76	15.6	0.083 - 0.087	2.11 - 2.21	11.0	16.4
M22759/10-14-*	14	19/27	3.00	9.84	0.097 - 0.103	2.46 - 2.62	16.4	24.4
M22759/10-12-*	12	19/25	1.89	6.20	0.116 - 0.124	2.95 - 3.15	25.3	37.6
M22759/10-10-*	10	37/26	1.24	4.07	0.137 - 0.145	3.48 - 3.68	38.2	56.8
M22759/10-8-*	8	133/29	0.694	2.28	0.202 - 0.212	5.13 - 5.38	68.8	102

*** MIL-DTL-27500 Basic Wire Specification: LH (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

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



CONDUCTOR: Stranded silver-plated copper. TEMPERATURE: -55° C to 200° C.
VOLTAGE: 600 V. INSULATION: PTFE.
USES: Wire where resistance to high temperatures and high reliability are required. For use where smoke emission, overload stability, and/or flammability may be a problem.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/11-28-*	28	7/36	63.8	209	0.031 - 0.035	0.787 - 0.889	1.36	2.02
M22759/11-26-*	26	19/38	38.4	126	0.036 - 0.040	0.914 - 1.02	1.90	2.83
M22759/11-24-*	24	19/36	24.3	79.7	0.041 - 0.045	1.04 - 1.14	2.58	3.84
M22759/11-22-*	22	19/34	15.1	49.5	0.047 - 0.051	1.19 - 1.30	3.72	5.54
M22759/11-20-*	20	19/32	9.19	30.2	0.056 - 0.060	1.42 - 1.52	5.43	8.08
M22759/11-18-*	18	19/30	5.79	19.0	0.066 - 0.070	1.68 - 1.78	8.14	12.1
M22759/11-16-*	16	19/29	4.52	14.8	0.073 - 0.077	1.85 - 1.96	10.0	14.9
M22759/11-14-*	14	19/27	2.88	9.45	0.088 - 0.092	2.24 - 2.34	15.1	22.5
M22759/11-12-*	12	19/25	1.81	5.94	0.108 - 0.114	2.74 - 2.90	24.1	35.9
M22759/11-10-*	10	37/26	1.19	3.90	0.135 - 0.143	3.43 - 3.63	37.8	56.2
M22759/11-8-*	8	133/29	0.658	2.16	0.198 - 0.206	5.03 - 5.23	65.5	97.5

** MIL-DTL-27500 Basic Wire Specification: RC (see Table I page 97)

MIL-DTL-22759/12 *** (SAE-AS22759)



CONDUCTOR: Stranded nickel-plated copper. TEMPERATURE: -55° C to 260° C.
VOLTAGE: 600 V. INSULATION: PTFE.
USES: Wire where resistance to high temperatures and high reliability are required. For use where smoke emission, overload stability, and/or flammability may be a problem.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/12-28-*	28	7/36	67.9	223	0.031 - 0.035	0.787 - 0.889	1.36	2.02
M22759/12-26-*	26	19/38	42.2	138	0.036 - 0.040	0.914 - 1.02	1.90	2.83
M22759/12-24-*	24	19/36	25.9	85.0	0.041 - 0.045	1.04 - 1.14	2.58	3.84
M22759/12-22-*	22	19/34	16.0	52.5	0.047 - 0.051	1.19 - 1.30	3.72	5.54
M22759/12-20-*	20	19/32	9.77	32.1	0.056 - 0.060	1.42 - 1.52	5.43	8.08
M22759/12-18-*	18	19/30	6.10	20.0	0.066 - 0.070	1.68 - 1.78	8.14	12.1
M22759/12-16-*	16	19/29	4.76	15.6	0.073 - 0.077	1.85 - 1.96	10.0	14.9
M22759/12-14-*	14	19/27	3.00	9.84	0.088 - 0.092	2.24 - 2.34	15.6	23.2
M22759/12-12-*	12	19/25	1.89	6.20	0.108 - 0.114	2.74 - 2.90	24.4	36.3
M22759/12-10-*	10	37/26	1.24	4.07	0.135 - 0.143	3.43 - 3.63	39.0	58.0
M22759/12-8-*	8	133/29	0.694	2.28	0.200 - 0.208	5.08 - 5.28	67.0	99.7

*** MIL-DTL-27500 Basic Wire Specification: RE (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

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



CONDUCTOR: Stranded tinned copper.

VOLTAGE: 600 V.

USES: Rugged with very good dielectric properties, medium weight. For use under conditions requiring very good thermal/cryogenic performance. ETFE is considered to be "self-extinguishing" and/or "non-burning" in both horizontal and vertical flammability tests.

TEMPERATURE: -55° C to 150° C.

INSULATION: ETFE.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight	
			(Ohms / 1000 ft)	(Ohms / km)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1090-30	24	19/36	26.2	86.0	0.043 - 0.047	1.09 - 1.19	2.57	3.82
1090-35	22	19/34	16.2	53.1	0.050 - 0.054	1.27 - 1.37	3.68	5.48
1090-40	20	19/32	9.88	32.4	0.058 - 0.062	1.47 - 1.57	5.36	7.98
1090-45	18	19/30	6.23	20.4	0.069 - 0.073	1.75 - 1.85	7.89	11.7
1090-50	16	19/29	4.81	15.8	0.077 - 0.081	1.96 - 2.06	9.95	14.8
1090-55	14	19/27	3.06	10.0	0.091 - 0.095	2.31 - 2.41	14.9	22.2
1090-60	12	37/28	2.02	6.63	0.111 - 0.117	2.82 - 2.97	22.6	33.6
1090-65	10	37/26	1.26	4.13	0.136 - 0.142	3.45 - 3.61	35.1	52.2
1090-70	8	133/29	0.701	2.30	0.196 - 0.202	4.98 - 5.13	63.5	94.5
1090-75	6	133/27	0.445	1.46	0.247 - 0.253	6.27 - 6.43	99.9	149
1090-80	4	133/25	0.280	0.92	0.308 - 0.316	7.82 - 8.03	157	234
1090-85	2	665/30	0.183	0.60	0.384 - 0.392	9.75 - 9.96	245	365
1090-90	1	817/30	0.149	0.49	0.426 - 0.436	10.8 - 11.1	314	467
1090-95	1/0	1,045/30	0.116	0.38	0.473 - 0.485	12.0 - 12.3	391	582
1090-100	2/0	1,330/30	0.091	0.30	0.539 - 0.553	13.7 - 14.0	504	750

* MIL-DTL-27500 Basic Wire Specification: TE (see Table I page 97)

MIL-DTL-22759/17** (SAE-AS22759)



CONDUCTOR: Stranded silver-plated high strength copper alloy.

VOLTAGE: 600 V.

USES: Rugged with very good dielectric properties, lightweight. For use under conditions requiring very good thermal/cryogenic performance. ETFE is considered to be "self-extinguishing" and/or "non-burning" in both horizontal and vertical flammability tests.

TEMPERATURE: -55° C to 150° C.

INSULATION: ETFE.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight	
			(Ohms / 1000 ft)	(Ohms / km)	(in)	(mm)	(lbs / 1000 ft)	(kg / km)
1090-25A	26	19/38	44.8	147.0	0.038 - 0.042	0.97 - 1.07	1.67	2.48
1090-30A	24	19/36	28.4	93.2	0.043 - 0.047	1.09 - 1.19	2.32	3.45
1090-35A	22	19/34	17.5	57.4	0.050 - 0.054	1.27 - 1.37	3.40	5.06
1090-40A	20	19/32	10.7	35.1	0.058 - 0.062	1.47 - 1.57	4.96	7.4

** MIL-DTL-27500 Basic Wire Specification: TF (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/18* (SAE-AS22759)



CONDUCTOR: Stranded tinned copper.
VOLTAGE: 600 V.

TEMPERATURE: -55° C to 150° C.
INSULATION: ETFE.

USES: Rugged with very good dielectric properties, lightweight. For use under conditions requiring very good thermal/cryogenic performance. ETFE is considered to be "self-extinguishing" and/or "non-burning" in both horizontal and vertical flammability tests.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight	
			(Ohms/ 1000 ft)	(Ohms/ km)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1091-3	26	19/38	41.3	135	0.030 - 0.034	0.762 - 0.864	1.52	2.26
1091-5	24	19/36	26.2	86.0	0.034 - 0.038	0.864 - 0.965	2.12	3.15
1091-10	22	19/34	16.2	53.1	0.041 - 0.045	1.04 - 1.14	3.16	4.70
1091-15	20	19/32	9.88	32.4	0.049 - 0.053	1.24 - 1.35	4.76	7.08
1091-20	18	19/30	6.23	20.4	0.059 - 0.063	1.50 - 1.60	7.10	10.6
1091-25	16	19/29	4.81	15.8	0.068 - 0.072	1.73 - 1.83	9.14	13.6
1091-30	14	19/27	3.06	10.0	0.083 - 0.087	2.11 - 2.21	14.1	21.0
1091-45	12	37/28	2.02	6.63	0.104 - 0.110	2.64 - 2.79	21.6	32.1
1091-50	10	37/26	1.26	4.13	0.131 - 0.137	3.33 - 3.48	34.1	50.7

* MIL-DTL-27500 Basic Wire Specification: TG (see Table I page 97)

MIL-DTL-22759/19** (SAE-AS22759)



CONDUCTOR: Stranded silver-plated high strength copper alloy.
VOLTAGE: 600 V.

TEMPERATURE: -55° C to 150° C.
INSULATION: ETFE.

USES: Rugged with very good dielectric properties, lightweight. For use under conditions requiring very good thermal/cryogenic performance. ETFE is considered to be "self-extinguishing" and/or "non-burning" in both horizontal and vertical flammability tests.

Catalog No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight	
			(Ohms/ 1000 ft)	(Ohms/ km)	(in)	(mm)	(lbs / 1000 ft)	(kgs / km)
1091-3A	26	19/38	44.8	147	0.030 - 0.034	0.762 - 0.864	1.36	2.02
1091-5A	24	19/36	28.4	93.2	0.034 - 0.038	0.864 - 0.965	1.92	2.86
1091-10A	22	19/34	17.5	57.4	0.041 - 0.045	1.04 - 1.14	2.87	4.27
1091-15A	20	19/32	120.70	396.0	0.049 - 0.053	1.24 - 1.35	4.45	6.62

** MIL-DTL-27500 Basic Wire Specification: TH (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/20 ** (SAE-AS22759)



CONDUCTOR: Stranded silver-plated high strength copper alloy. TEMPERATURE: -55° C to 200° C.
VOLTAGE: 1000 V. INSULATION: PTFE.
USES: Wire where resistance to high temperatures, high breaking strength, high reliability, and flexibility are required. For use where smoke emission, overload stability, and/or flammability may be a problem.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Minimum Breaking Strength		Weight	
			(Ohms / 1000 ft)	(Ohms / km)	(in)	(mm)	(lbs)	(kg)	(lbs / 1000 ft)	(kgs / km)
M22759/20-28*	28	7/36	74.4	244	0.041 - 0.045	1.04 - 1.14	8.16	3.70	1.91	2.84
M22759/20-26*	26	19/38	44.8	147	0.046 - 0.050	1.17 - 1.27	14.2	6.44	2.57	3.82
M22759/20-24*	24	19/36	28.4	93.2	0.051 - 0.055	1.30 - 1.40	22.4	10.2	3.35	4.98
M22759/20-22*	22	19/34	17.5	57.4	0.058 - 0.062	1.47 - 1.57	35.8	16.2	4.59	6.83
M22759/20-20*	20	19/32	10.7	35.1	0.066 - 0.070	1.68 - 1.78	58.1	26.4	6.41	9.54

** MIL-DTL-27500 Basic Wire Specification: TK (see Table I page 97)

MIL-DTL-22759/21 *** (SAE-AS22759)



CONDUCTOR: Stranded nickel-plated high strength copper alloy. TEMPERATURE: -55° C to 260° C.
VOLTAGE: 1000 V. INSULATION: PTFE.
USES: Wire where resistance to high temperatures, high breaking strength, high reliability, and flexibility are required. For use where smoke emission, overload stability, and/or flammability may be a problem.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Minimum Breaking Strength		Weight	
			(Ohms / 1000 ft)	(Ohms / km)	(in)	(mm)	(lbs)	(kg)	(lbs / 1000 ft)	(kgs / km)
M22759/21-28*	28	7/36	79.0	259	0.041 - 0.045	1.04 - 1.14	8.16	3.70	1.93	2.87
M22759/21-26*	26	19/38	49.4	162	0.046 - 0.050	1.17 - 1.27	14.2	6.44	2.60	3.87
M22759/21-24*	24	19/36	30.1	98.8	0.051 - 0.055	1.30 - 1.40	22.4	10.2	3.38	5.03
M22759/21-22*	22	19/34	18.6	61.0	0.058 - 0.062	1.47 - 1.57	35.8	16.2	4.61	6.86
M22759/21-20*	20	19/32	11.4	37.4	0.066 - 0.070	1.68 - 1.78	58.1	26.4	6.43	9.57

*** MIL-DTL-27500 Basic Wire Specification: TL (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/22** (SAE-AS22759)



CONDUCTOR: Stranded silver-plated high strength copper alloy.

TEMPERATURE: -55° C to 200° C.

VOLTAGE: 600 V.

INSULATION: PTFE.

USES: Wire where resistance to high temperatures, high breaking strength, high reliability, and flexibility are required. For use where smoke emission, overload stability, and/or flammability may be a problem.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Minimum Breaking Strength (lbs) (kg)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/22-28*	28	7/36	74.4	244	0.031 - 0.035	0.787 - 0.889	8.16	3.70	1.32	1.96
M22759/22-26*	26	19/38	44.8	147	0.036 - 0.040	0.914 - 1.02	14.2	6.44	1.91	2.84
M22759/22-24*	24	19/36	28.4	93.2	0.041 - 0.045	1.04 - 1.14	22.4	10.2	2.61	3.88
M22759/22-22*	22	19/34	17.5	57.4	0.047 - 0.051	1.19 - 1.30	35.8	16.2	3.68	5.48
M22759/22-20*	20	19/32	10.7	35.1	0.056 - 0.060	1.42 - 1.52	58.1	26.4	5.38	8.01

** MIL-DTL-27500 Basic Wire Specification: TM (see Table I page 97)

MIL-DTL-22759/23*** (SAE-AS22759)



CONDUCTOR: Stranded nickel-plated high strength copper alloy.

TEMPERATURE: -55° C to 260° C.

VOLTAGE: 600 V.

INSULATION: PTFE.

USES: Wire where resistance to high temperatures, high breaking strength, high reliability, and flexibility are required. For use where smoke emission, overload stability, and/or flammability may be a problem.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Minimum Breaking Strength (lbs) (kg)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/23-28*	28	7/36	79.0	259	0.031 - 0.035	0.787 - 0.889	8.16	3.70	1.34	1.99
M22759/23-26*	26	19/38	49.4	162	0.036 - 0.040	0.914 - 1.02	14.2	6.44	1.92	2.86
M22759/23-24*	24	19/36	30.1	98.8	0.041 - 0.045	1.04 - 1.14	22.4	10.2	2.63	3.91
M22759/23-22*	22	19/34	18.6	61.0	0.047 - 0.051	1.19 - 1.30	35.8	16.2	3.73	5.55
M22759/23-20*	20	19/32	11.4	37.4	0.056 - 0.060	1.42 - 1.52	58.1	26.4	5.44	8.09

*** MIL-DTL-27500 Basic Wire Specification: TN (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/32 ** (SAE-AS22759)



CONDUCTOR: Stranded tinned copper. VOLTAGE: 600 V.
INSULATION: 150° C, fluoropolymer, cross-linked modified ETFE single insulation, lightweight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/32-30-*	30	7/38	108.4	355.6	0.022 - 0.026	0.559 - 0.660	0.66	0.98
M22759/32-28-*	28	7/36	68.6	225	0.025 - 0.029	0.635 - 0.737	0.91	1.4
M22759/32-26-*	26	19/38	41.3	135	0.030 - 0.034	0.762 - 0.864	1.4	2.1
M22759/32-24-*	24	19/36	26.2	86.0	0.035 - 0.039	0.889 - 0.991	2.0	3.0
M22759/32-22-*	22	19/34	16.2	53.1	0.041 - 0.045	1.04 - 1.14	2.8	4.2
M22759/32-20-*	20	19/32	9.88	32.4	0.048 - 0.052	1.22 - 1.32	4.3	6.4
M22759/32-18-*	18	19/30	6.23	20.4	0.058 - 0.062	1.47 - 1.57	6.5	9.7
M22759/32-16-*	16	19/29	4.81	15.8	0.066 - 0.070	1.68 - 1.78	8.3	12
M22759/32-14-*	14	19/27	3.06	10.0	0.082 - 0.088	2.08 - 2.24	13.0	19.3
M22759/32-12-*	12	37/28	2.02	6.63	0.100 - 0.106	2.54 - 2.69	19.7	29.3

** MIL-DTL-27500 Basic Wire Specification: SB (see Table I page 97)

MIL-DTL-22759/33 *** (SAE-AS22759)



CONDUCTOR: Stranded silver-coated high strength copper alloy. VOLTAGE: 600 V.
INSULATION: 200° C, fluoropolymer, cross-linked modified ETFE single insulation, lightweight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/33-30-*	30	7/38	117.4	385.2	0.022 - 0.026	0.559 - 0.660	0.66	0.98
M22759/33-28-*	28	7/36	74.4	244	0.025 - 0.029	0.635 - 0.737	0.91	1.4
M22759/33-26-*	26	19/38	44.8	147	0.030 - 0.034	0.762 - 0.864	1.4	2.1
M22759/33-24-*	24	19/36	28.4	93.2	0.035 - 0.039	0.889 - 0.991	2.0	3.0
M22759/33-22-*	22	19/34	17.5	57.4	0.041 - 0.045	1.04 - 1.14	2.9	4.3
M22759/33-20-*	20	19/32	10.7	35.1	0.048 - 0.052	1.22 - 1.32	4.4	6.5

*** MIL-DTL-27500 Basic Wire Specification: SC (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/34 ** (SAE-AS22759)



CONDUCTOR: Stranded tinned copper.

VOLTAGE: 600 V.

INSULATION: 150° C, fluoropolymer, cross-linked modified ETFE dual insulation, normal weight. 2 AWG and larger, aromatic polyamide braid treated to prevent fraying.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/34-24-*	24	19/36	26.2	86.0	0.043 - 0.047	1.09 - 1.19	2.3	3.4
M22759/34-22-*	22	19/34	16.2	53.1	0.048 - 0.052	1.22 - 1.32	3.2	4.8
M22759/34-20-*	20	19/32	9.88	32.4	0.056 - 0.060	1.42 - 1.52	4.7	7.0
M22759/34-18-*	18	19/30	6.23	20.4	0.067 - 0.073	1.70 - 1.85	7.2	10.7
M22759/34-16-*	16	19/29	4.81	15.8	0.074 - 0.080	1.88 - 2.03	9.0	13.4
M22759/34-14-*	14	19/27	3.06	10.0	0.091 - 0.097	2.31 - 2.46	13.8	20.5
M22759/34-12-*	12	37/28	2.02	6.63	0.108 - 0.114	2.74 - 2.90	20.5	30.5
M22759/34-10-*	10	37/26	1.26	4.13	0.130 - 0.138	3.30 - 3.51	32.4	48.2
M22759/34-8-*	8	133/29	0.701	2.30	0.187 - 0.203	4.75 - 5.16	60.3	89.7
M22759/34-6-*	6	133/27	0.445	1.46	0.231 - 0.251	5.87 - 6.38	94.5	141
M22759/34-4-*	4	133/25	0.280	0.919	0.300 - 0.320	7.62 - 8.13	150	223
M22759/34-2-*	2	665/30	0.183	0.600	0.389 - 0.421	9.88 - 10.7	239	356
M22759/34-1-*	1	817/30	0.149	0.489	0.429 - 0.461	10.9 - 11.7	290	432
M22759/34-01-*	1/0	1,045/30	0.116	0.381	0.469 - 0.501	11.9 - 12.7	377	561
M22759/34-02-*	2/0	1,330/30	0.091	0.299	0.529 - 0.561	13.4 - 14.2	487	725

** MIL-DTL-27500 Basic Wire Specification: SD (see Table I page 97)

MIL-DTL-22759/35 *** (SAE-AS22759)



CONDUCTOR: Stranded silver-coated high strength copper alloy.

VOLTAGE: 600 V.

INSULATION: 200° C, fluoropolymer, cross-linked modified ETFE dual insulation, normal weight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/35-26-*	26	19/38	44.8	147	0.038 - 0.042	0.97 - 1.07	1.7	2.5
M22759/35-24-*	24	19/36	28.4	93.2	0.043 - 0.047	1.09 - 1.19	2.3	3.4
M22759/35-22-*	22	19/34	17.5	57.4	0.048 - 0.052	1.22 - 1.32	3.3	4.9
M22759/35-20-*	20	19/32	10.7	35.1	0.056 - 0.060	1.42 - 1.52	4.8	7.1

*** MIL-DTL-27500 Basic Wire Specification: SE (see Table I page 97)

*The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/41 ** (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated copper. VOLTAGE: 600 V.
INSULATION: 200° C, fluoropolymer, cross-linked modified ETFE dual insulation, normal weight.
2 AWG and larger, aromatic polyamide braid treated to prevent fraying.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/41-26-*	26	19/38	42.2	138	0.038 - 0.042	0.965 - 1.07	1.7	2.5
M22759/41-24-*	24	19/36	25.9	85.0	0.043 - 0.047	1.09 - 1.19	2.3	3.4
M22759/41-22-*	22	19/34	16.0	52.5	0.048 - 0.052	1.22 - 1.32	3.2	4.8
M22759/41-20-*	20	19/32	9.77	32.1	0.056 - 0.060	1.42 - 1.52	4.7	7.0
M22759/41-18-*	18	19/30	6.10	20.0	0.067 - 0.073	1.70 - 1.85	7.2	11
M22759/41-16-*	16	19/29	4.76	15.6	0.074 - 0.080	1.88 - 2.03	9.0	13
M22759/41-14-*	14	19/27	3.00	9.84	0.091 - 0.097	2.31 - 2.46	13.8	20.5
M22759/41-12-*	12	37/28	1.98	6.50	0.108 - 0.114	2.74 - 2.90	20.5	30.5
M22759/41-10-*	10	37/26	1.24	4.07	0.130 - 0.138	3.30 - 3.51	32.4	48.2
M22759/41-8-*	8	133/29	0.694	2.28	0.187 - 0.203	4.75 - 5.16	64.2	95.5
M22759/41-6-*	6	133/27	0.436	1.43	0.231 - 0.251	5.87 - 6.38	96.8	144
M22759/41-4-*	4	133/25	0.275	0.902	0.300 - 0.320	7.62 - 8.13	163	243
M22759/41-2-*	2	665/30	0.177	0.581	0.389 - 0.421	9.88 - 10.7	246	366
M22759/41-1-*	1	817/30	0.144	0.472	0.429 - 0.461	10.9 - 11.7	314	467
M22759/41-01-*	1/0	1,045/30	0.113	0.371	0.469 - 0.501	11.9 - 12.7	421	626
M22759/41-02-*	2/0	1,330/30	0.089	0.292	0.529 - 0.561	13.4 - 14.2	518	771

** MIL-DTL-27500 Basic Wire Specification: SM (see Table I page 97)

MIL-DTL-22759/42 *** (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated high strength copper alloy. VOLTAGE: 600 V.
INSULATION: 200° C, fluoropolymer, cross-linked modified ETFE dual insulation, normal weight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/42-26-*	26	19/38	49.4	162	0.038 - 0.042	0.965 - 1.07	1.7	2.5
M22759/42-24-*	24	19/36	30.1	98.8	0.043 - 0.047	1.09 - 1.19	2.3	3.4
M22759/42-22-*	22	19/34	18.6	61.0	0.048 - 0.052	1.22 - 1.32	3.3	4.9
M22759/42-20-*	20	19/32	11.4	37.4	0.056 - 0.060	1.42 - 1.52	4.8	7.1

*** MIL-DTL-27500 Basic Wire Specification: SN (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/43 ** (SAE-AS22759)



CONDUCTOR: Stranded silver-coated copper.

VOLTAGE: 600 V.

INSULATION: 200° C, fluoropolymer, cross-linked modified ETFE dual insulation, normal weight. 2 AWG and larger, aromatic polyamide braid treated to prevent fraying.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/43-26-*	26	19/38	38.4	126	0.038 - 0.042	0.965 - 1.07	1.7	2.5
M22759/43-24-*	24	19/36	24.3	79.7	0.043 - 0.047	1.09 - 1.19	2.3	3.4
M22759/43-22-*	22	19/34	15.1	49.5	0.048 - 0.052	1.22 - 1.32	3.2	4.8
M22759/43-20-*	20	19/32	9.19	30.2	0.056 - 0.060	1.42 - 1.52	4.7	7.0
M22759/43-18-*	18	19/30	5.79	19.0	0.067 - 0.073	1.70 - 1.85	7.2	11
M22759/43-16-*	16	19/29	4.52	14.8	0.074 - 0.080	1.88 - 2.03	9.0	13
M22759/43-14-*	14	19/27	2.88	9.45	0.091 - 0.097	2.31 - 2.46	13.8	20.5
M22759/43-12-*	12	37/28	1.90	6.23	0.108 - 0.114	2.74 - 2.90	20.5	30.5
M22759/43-10-*	10	37/26	1.19	3.90	0.130 - 0.138	3.30 - 3.51	32.4	48.2
M22759/43-8-*	8	133/29	0.658	2.16	0.187 - 0.203	4.75 - 5.16	61.9	92.1
M22759/43-6-*	6	133/27	0.418	1.37	0.231 - 0.251	5.87 - 6.38	94.5	141
M22759/43-4-*	4	133/25	0.264	0.866	0.300 - 0.320	7.62 - 8.13	158	235
M22759/43-2-*	2	665/30	0.170	0.558	0.389 - 0.421	9.88 - 10.7	239	356
M22759/43-1-*	1	817/30	0.139	0.456	0.429 - 0.461	10.9 - 11.7	305	454
M22759/43-01-*	1/0	1,045/30	0.108	0.354	0.469 - 0.501	11.9 - 12.7	385	573
M22759/43-02--*	2/0	1,330/30	0.085	0.279	0.529 - 0.561	13.4 - 14.2	487	725

** MIL-DTL-27500 Basic Wire Specification: SP (see Table I page 97)

MIL-DTL-22759/44 *** (SAE-AS22759)



CONDUCTOR: Stranded silver-coated copper.

VOLTAGE: 600 V.

INSULATION: 200° C, fluoropolymer, cross-linked modified ETFE single insulation, lightweight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/44-28-*	28	7/36	63.8	209	0.025 - 0.029	0.635 - 0.737	0.91	1.4
M22759/44-26-*	26	19/38	38.4	126	0.030 - 0.034	0.762 - 0.864	1.4	2.1
M22759/44-24-*	24	19/36	24.3	79.7	0.035 - 0.039	0.889 - 0.991	2.0	3.0
M22759/44-22-*	22	19/34	15.1	49.5	0.041 - 0.045	1.04 - 1.14	2.8	4.2
M22759/44-20-*	20	19/32	9.19	30.2	0.048 - 0.052	1.22 - 1.32	4.3	6.4
M22759/44-18--*	18	19/30	5.79	19.0	0.058 - 0.062	1.47 - 1.57	6.5	9.7
M22759/44-16-*	16	19/29	4.52	14.8	0.066 - 0.070	1.68 - 1.78	8.3	12
M22759/44-14-*	14	19/27	2.88	9.45	0.082 - 0.088	2.08 - 2.24	13.0	19.3
M22759/44-12-*	12	37/28	1.90	6.23	0.100 - 0.106	2.54 - 2.69	19.7	29.3

*** MIL-DTL-27500 Basic Wire Specification: SR (see Table I page 97)

*The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/45 ** (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated copper.
INSULATION: 200° C, fluoropolymer, cross-linked modified ETFE single insulation, lightweight.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)		
M22759/45-28-*	28	7/36	67.9	223	0.025 - 0.029	0.635 - 0.737	0.91	1.4
M22759/45-26-*	26	19/38	42.2	138	0.030 - 0.034	0.762 - 0.864	1.4	2.1
M22759/45-24-*	24	19/36	25.9	85.0	0.035 - 0.039	0.889 - 0.991	2.0	3.0
M22759/45-22-*	22	19/34	16.0	52.5	0.041 - 0.045	1.04 - 1.14	2.8	4.2
M22759/45-20-*	20	19/32	9.77	32.1	0.048 - 0.052	1.22 - 1.32	4.3	6.4
M22759/45-18-*	18	19/30	6.10	20.0	0.058 - 0.062	1.47 - 1.57	6.5	9.7
M22759/45-16-*	16	19/29	4.76	15.6	0.066 - 0.070	1.68 - 1.78	8.3	12
M22759/45-14-*	14	19/27	3.00	9.84	0.082 - 0.088	2.08 - 2.24	13.0	19.3
M22759/45-12-*	12	37/28	1.98	6.50	0.100 - 0.106	2.54 - 2.69	19.7	29.3

** MIL-DTL-27500 Basic Wire Specification: SS (see Table I page 97)

MIL-DTL-22759/46 *** (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated high strength copper alloy.
INSULATION: 200° C, fluoropolymer, cross-linked modified ETFE single insulation, lightweight.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)		
M22759/46-28-*	28	7/36	79.0	259	0.025 - 0.029	0.635 - 0.737	0.91	1.4
M22759/46-26-*	26	19/38	49.4	162	0.030 - 0.034	0.762 - 0.864	1.4	2.1
M22759/46-24-*	24	19/36	30.1	98.8	0.035 - 0.039	0.889 - 0.991	2.0	3.0
M22759/46-22-*	22	19/34	18.6	61.0	0.041 - 0.045	1.04 - 1.14	2.9	4.3
M22759/46-20-*	20	19/32	11.4	37.4	0.048 - 0.052	1.22 - 1.32	4.4	6.5

*** MIL-DTL-27500 Basic Wire Specification: ST (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/80A ** (SAE-AS22759)



CONDUCTOR: Stranded tin-coated copper.
INSULATION: 150° C, composite tape (FP/polyimide/FP tape) and FP tape, lightweight.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/80-26-*	26	19/38	41.3	135	0.030 - 0.034	0.762 - 0.864	1.43	2.13
M22759/80-24-*	24	19/36	26.2	86.0	0.034 - 0.038	0.864 - 0.965	1.93	2.87
M22759/80-22-*	22	19/34	16.2	53.1	0.040 - 0.043	1.02 - 1.09	2.85	4.24
M22759/80-20-*	20	19/32	9.88	32.4	0.048 - 0.051	1.22 - 1.30	4.38	6.52
M22759/80-18-*	18	19/30	6.23	20.4	0.056 - 0.060	1.42 - 1.52	6.60	9.82
M22759/80-16-*	16	19/29	4.81	15.8	0.063 - 0.067	1.60 - 1.70	8.30	12.4
M22759/80-14-*	14	19/27	3.06	10.0	0.076 - 0.080	1.93 - 2.03	12.6	18.7
M22759/80-12-*	12	37/28	2.02	6.63	0.096 - 0.100	2.44 - 2.54	19.6	29.2
M22759/80-10-*	10	37/26	1.26	4.13	0.119 - 0.123	3.02 - 3.12	30.6	45.5

** MIL-DTL-27500 Basic Wire Specification: WB (see Table I page 97)

MIL-DTL-22759/81A *** (SAE-AS22759)



CONDUCTOR: Stranded silver-coated high strength copper alloy (26 AWG is ultrahigh strength copper alloy).
INSULATION: 200° C, composite tape (FP/polyimide/FP tape) and FP tape, lightweight.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/81-26-*	26	19/38	56.4	185	0.030 - 0.034	0.762 - 0.864	1.43	2.13
M22759/81-24-*	24	19/36	28.4	93.2	0.034 - 0.038	0.864 - 0.965	1.93	2.87
M22759/81-22-*	22	19/34	17.5	57.4	0.040 - 0.043	1.02 - 1.09	2.85	4.24
M22759/81-20-*	20	19/32	10.7	35.1	0.048 - 0.051	1.22 - 1.30	4.38	6.52

*** MIL-DTL-27500 Basic Wire Specification: WC (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/82A *** (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated high strength copper alloy (26 AWG is ultrahigh strength copper alloy).
INSULATION: 260° C, composite tape (FP/polyimide/FP tape) and FP tape, lightweight.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms/ km)	(in)	(mm)		
M22759/82-26-*	26	19/38	58.4	192	0.030 - 0.034	0.762 - 0.864	1.43	2.13
M22759/82-24-*	24	19/36	30.1	98.8	0.034 - 0.038	0.864 - 0.965	1.93	2.87
M22759/82-22-*	22	19/34	18.6	61.0	0.040 - 0.043	1.02 - 1.09	2.85	4.24
M22759/82-20-*	20	19/32	11.4	37.4	0.048 - 0.051	1.22 - 1.30	4.38	6.52

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

*** MIL-DTL-27500 Basic Wire Specification: WE (see Table I page 97)

MIL-DTL-22759/83A **** (SAE-AS22759)



CONDUCTOR: Stranded silver-coated copper.
INSULATION: 200° C, FP tape, composite tape (FP/polyimide/FP tape), FP tape, FP tape, and aromatic polyamide braid treated to prevent fraying, normal weight.
COLOR: Preferred color is dark green with the color designator 5D. White is an acceptable alternative with a color designator of 9.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms/ km)	(in)	(mm)		
M22759/83-2-**-	2	665/30	0.170	0.558	0.360 - 0.380	9.14 - 9.65	227.0	337.8
M22759/83-1-**-	1	817/30	0.139	0.456	0.400 - 0.420	10.2 - 10.7	295.0	439.0
M22759/83-01-**-	1/0	1,045/30	0.108	0.354	0.442 - 0.462	11.2 - 11.7	351.0	522.3
M22759/83-02-**-	2/0	1,330/30	0.085	0.279	0.498 - 0.528	12.6 - 13.4	432.0	642.8
M22759/83-03-**-	3/0	1,665/30	0.068	0.223	0.554 - 0.584	14.1 - 14.8	542.0	806.5
M22759/83-04-**-	4/0	2,109/30	0.054	0.177	0.615 - 0.655	15.6 - 16.6	689.0	1,025.2

** The asterisks in the part number columns are to be replaced by numeric color code designations of either 5D (green) or 9 (white).

**** MIL-DTL-27500 Basic Wire Specification: WF (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/84A ** (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated copper.
 INSULATION: 260° C, FP tape, composite tape (FP/polyimide/FP tape), FP tape, FP tape, and aromatic polyamide braid treated to prevent fraying, normal weight.
 COLOR: Preferred color is dark green with the color designator 5D. White is an acceptable alternative with a color designator of 9.
 VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)		
M22759/84-2-*	2	665/30	0.177	0.581	0.360 - 0.380	9.14 - 9.65	227.0	337.8
M22759/84-1-*	1	817/30	0.144	0.472	0.400 - 0.420	10.2 - 10.7	295.0	439.0
M22759/84-01-*	1/0	1,045/30	0.113	0.371	0.442 - 0.462	11.2 - 11.7	351.0	522.3
M22759/84-02-*	2/0	1,330/30	0.089	0.292	0.498 - 0.528	12.6 - 13.4	432.0	642.8
M22759/84-03-*	3/0	1,665/30	0.071	0.233	0.554 - 0.584	14.1 - 14.8	542.0	806.5
M22759/84-04-*	4/0	2,109/30	0.056	0.184	0.615 - 0.655	15.6 - 16.6	689.0	1,025

** MIL-DTL-27500 Basic Wire Specification: WG (see Table I page 97)

MIL-DTL-22759/85A *** (SAE-AS22759)



CONDUCTOR: Stranded tin-coated copper.
 INSULATION: 150° C, FP tape, composite tape (FP/polyimide/FP tape), FP tape, FP tape, and aromatic polyamide braid treated to prevent fraying, normal weight.
 COLOR: Preferred color is dark green with the color designator 5D. White is an acceptable alternative with a color designator of 9.
 VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)		
M22759/85-2-*	2	665/30	0.183	0.600	0.360 - 0.380	9.14 - 9.65	227.0	337.8
M22759/85-1-*	1	817/30	0.149	0.489	0.400 - 0.420	10.2 - 10.7	295.0	439.0
M22759/85-01-*	1/0	1,045/30	0.116	0.381	0.442 - 0.462	11.2 - 11.7	351.0	522.3
M22759/85-02-*	2/0	1,330/30	0.091	0.299	0.498 - 0.528	12.6 - 13.4	432.0	642.8
M22759/85-03-*	3/0	1,665/30	0.071	0.233	0.554 - 0.584	14.1 - 14.8	542.0	806.5
M22759/85-04-*	4/0	2,109/30	0.056	0.184	0.615 - 0.655	15.6 - 16.6	689.0	1,025.2

*** MIL-DTL-27500 Basic Wire Specification: WH (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations of either 5D (green) or 9 (white).

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/86A ** (SAE-AS22759)



CONDUCTOR: Stranded silver-coated copper.
 INSULATION: 200° C, for 26 AWG through 10 AWG, composite tape (FP/polyimide/FP tape) and FP tape; for 8 AWG through 6 AWG, FP tape, composite tape (FP/polyimide/FP tape), and FP tape; for 4 AWG through 4/0 AWG, FP tape, composite tape (FP/polyimide/FP tape), FP tape, and FP tape, normal weight.
 VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)		
M22759/86-26-*	26	19/38	38.4	126	0.033 - 0.037	0.838 - 0.940	1.55	2.31
M22759/86-24-*	24	19/36	24.3	79.7	0.038 - 0.042	0.965 - 1.067	2.20	3.27
M22759/86-22-*	22	19/34	15.1	49.5	0.043 - 0.047	1.09 - 1.19	3.00	4.46
M22759/86-20-*	20	19/32	9.19	30.2	0.051 - 0.055	1.30 - 1.40	4.55	6.77
M22759/86-18-*	18	19/30	5.79	19.0	0.061 - 0.065	1.55 - 1.65	6.70	9.97
M22759/86-16-*	16	19/29	4.52	14.8	0.068 - 0.073	1.73 - 1.85	8.60	12.8
M22759/86-14-*	14	19/27	2.88	9.45	0.081 - 0.086	2.06 - 2.18	12.95	19.27
M22759/86-12-*	12	37/28	1.90	6.23	0.100 - 0.105	2.54 - 2.67	20.1	29.9
M22759/86-10-*	10	37/26	1.19	3.90	0.122 - 0.127	2.54 - 3.23	31.4	46.7
M22759/86-8-*	8	133/29	0.658	2.16	0.180 - 0.188	4.57 - 4.78	57.6	85.7
M22759/86-6-*	6	133/27	0.418	1.37	0.219 - 0.229	5.56 - 5.82	88.3	131
M22759/86-4-*	4	133/25	0.264	0.866	0.276 - 0.288	7.01 - 7.32	143.0	212.8
M22759/86-2-*	2	665/30	0.170	0.558	0.344 - 0.364	8.74 - 9.25	223.0	331.8
M22759/86-1-*	1	817/30	0.139	0.456	0.388 - 0.408	9.86 - 10.4	289.0	430.0
M22759/86-01-*	1/0	1,045/30	0.108	0.354	0.420 - 0.450	10.7 - 11.4	345.0	513.4
M22759/86-02-*	2/0	1,330/30	0.085	0.279	0.475 - 0.505	12.1 - 12.8	432.0	642.8
M22759/86-03-*	3/0	1,665/30	0.068	0.223	0.530 - 0.560	13.5 - 14.2	542.0	806.5
M22759/86-04-*	4/0	2,109/30	0.054	0.177	0.590 - 0.630	15.0 - 16.0	681.0	1,013

** MIL-DTL-27500 Basic Wire Specification: WJ (see Table I page 97)

* The asterisks in the part number column are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/87A ** (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated copper.
 INSULATION: 260° C, for 26 AWG through 10 AWG, composite tape (FP/polyimide/FP tape) and FP tape; for 8 AWG through 6 AWG, FP tape, composite tape (FP/polyimide/FP tape), and FP tape; for 4 AWG through 4/0 AWG, FP tape, composite tape (FP/polyimide/FP tape), FP tape, and FP tape, normal weight.
 VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/87-26-*	26	19/38	42.4	139	0.033 - 0.037	0.838 - 0.940	1.55	2.31
M22759/87-24-*	24	19/36	25.9	85.0	0.038 - 0.042	0.965 - 1.07	2.15	3.20
M22759/87-22-*	22	19/34	16.0	52.5	0.043 - 0.047	1.09 - 1.19	3.00	4.46
M22759/87-20-*	20	19/32	9.77	32.1	0.051 - 0.055	1.30 - 1.40	4.55	6.77
M22759/87-18-*	18	19/30	6.10	20.0	0.061 - 0.065	1.55 - 1.65	6.70	9.97
M22759/87-16-*	16	19/29	4.76	15.6	0.068 - 0.073	1.73 - 1.85	8.60	12.8
M22759/87-14-*	14	19/27	3.00	9.84	0.081 - 0.086	2.06 - 2.18	12.95	19.27
M22759/87-12-*	12	37/28	1.98	6.50	0.100 - 0.105	2.54 - 2.67	20.1	29.9
M22759/87-10-*	10	37/26	1.24	4.07	0.122 - 0.127	3.10 - 3.23	31.4	46.7
M22759/87-8-*	8	133/29	0.694	2.28	0.180 - 0.188	4.57 - 4.78	57.6	85.7
M22759/87-6-*	6	133/27	0.436	1.43	0.219 - 0.229	5.56 - 5.82	88.3	131
M22759/87-4-*	4	133/25	0.275	0.902	0.276 - 0.288	7.01 - 7.32	143.0	212.8
M22759/87-2-*	2	665/30	0.177	0.581	0.344 - 0.364	8.74 - 9.25	220.0	327.4
M22759/87-1-*	1	817/30	0.144	0.472	0.388 - 0.408	9.86 - 10.4	289.0	430.0
M22759/87-01-*	1/0	1,045/30	0.113	0.371	0.420 - 0.450	10.7 - 11.4	345.0	513.4
M22759/87-02-*	2/0	1,330/30	0.089	0.292	0.475 - 0.505	12.1 - 12.8	432.0	642.8
M22759/87-03-*	3/0	1,665/30	0.071	0.233	0.530 - 0.560	13.5 - 14.2	542.0	806.5
M22759/87-04-*	4/0	2,109/30	0.056	0.184	0.590 - 0.630	15.0 - 16.0	681.0	1,013

** MIL-DTL-27500 Basic Wire Specification: WK (see Table I page 97)

* The asterisks in the part number column are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/88A ** (SAE-AS22759)



CONDUCTOR: Stranded tin-coated copper.
 INSULATION: 150° C, for 26 AWG through 10 AWG, composite tape (FP/polyimide/FP tape) and FP tape; for 8 AWG through 6 AWG, FP tape, composite tape (FP/polyimide/FP tape), and FP tape; for 4 AWG through 4/0 AWG, FP tape, composite tape (FP/polyimide/FP tape), FP tape, and FP tape, normal weight.
 VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)		
M22759/88-26-*	26	19/38	41.3	135	0.033 - 0.037	0.838 - 0.940	1.55	2.31
M22759/88-24-*	24	19/36	26.2	86.0	0.038 - 0.042	0.965 - 1.07	2.15	3.20
M22759/88-22-*	22	19/34	16.2	53.1	0.043 - 0.047	1.09 - 1.19	3.00	4.46
M22759/88-20-*	20	19/32	9.88	32.4	0.051 - 0.055	1.30 - 1.40	4.55	6.77
M22759/88-18-*	18	19/30	6.23	20.4	0.061 - 0.065	1.55 - 1.65	6.70	9.97
M22759/88-16-*	16	19/29	4.81	15.8	0.068 - 0.073	1.73 - 1.85	8.60	12.8
M22759/88-14-*	14	19/27	3.06	10.0	0.081 - 0.086	2.06 - 2.18	12.95	19.27
M22759/88-12-*	12	37/28	2.02	6.63	0.100 - 0.105	2.54 - 2.67	20.1	29.9
M22759/88-10-*	10	37/26	1.26	4.13	0.122 - 0.127	3.10 - 3.23	31.4	46.7
M22759/88-8-*	8	133/29	0.701	2.30	0.180 - 0.188	4.57 - 4.78	57.6	85.7
M22759/88-6-*	6	133/27	0.445	1.46	0.219 - 0.229	5.56 - 5.82	88.3	131
M22759/88-4-*	4	133/25	0.280	0.919	0.276 - 0.288	7.01 - 7.32	143.0	212.8
M22759/88-2-*	2	665/30	0.183	0.600	0.344 - 0.364	8.74 - 9.25	220.0	327.4
M22759/88-1-*	1	817/30	0.149	0.489	0.388 - 0.408	9.86 - 10.4	289.0	430.0
M22759/88-01-*	1/0	1,045/30	0.116	0.381	0.420 - 0.450	10.7 - 11.4	345.0	513.4
M22759/88-02-*	2/0	1,330/30	0.091	0.299	0.475 - 0.505	12.1 - 12.8	432.0	642.8
M22759/88-03-*	3/0	1,665/30	0.071	0.233	0.530 - 0.560	13.5 - 14.2	542.0	806.5
M22759/88-04-*	4/0	2,109/30	0.056	0.184	0.590 - 0.630	15.0 - 16.0	681.0	1,013

** MIL-DTL-27500 Basic Wire Specification: WL (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/89A ** (SAE-AS22759)



CONDUCTOR: Stranded silver-coated high strength copper alloy (26 AWG is ultrahigh strength copper alloy).
INSULATION: 200° C, composite tape (FP/polyimide/FP tape) and FP tape, normal weight.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/89-26-*	26	19/38	56.4	185	0.033 - 0.037	0.838 - 0.940	1.55	2.31
M22759/89-24-*	24	19/36	28.4	93.2	0.038 - 0.042	0.965 - 1.07	2.15	3.20
M22759/89-22-*	22	19/34	17.5	57.4	0.043 - 0.047	1.09 - 1.19	3.00	4.46
M22759/89-20-*	20	19/32	10.7	35.1	0.051 - 0.055	1.30 - 1.40	4.55	6.77

** MIL-DTL-27500 Basic Wire Specification: WM (see Table I page 97)

MIL-DTL-22759/90A *** (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated high strength copper alloy (26 AWG is ultrahigh strength copper alloy).
INSULATION: 260° C, composite tape (FP/polyimide/FP tape) and FP tape, normal weight.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M22759/90-26-*	26	19/38	58.4	192	0.033 - 0.037	0.838 - 0.940	1.55	2.31
M22759/90-24-*	24	19/36	30.1	98.8	0.038 - 0.042	0.965 - 1.07	2.15	3.20
M22759/90-22-*	22	19/34	18.6	61.0	0.043 - 0.047	1.09 - 1.19	3.00	4.46
M22759/90-20-*	20	19/32	11.4	37.4	0.051 - 0.055	1.30 - 1.40	4.55	6.77

*** MIL-DTL-27500 Basic Wire Specification: WN (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/91A** (SAE-AS22759)



CONDUCTOR: Stranded silver-coated copper.
INSULATION: 200° C, composite tape (FP/polyimide/FP tape) and FP tape, lightweight.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)		
M22759/91-26-*	26	19/38	38.4	126	0.030 - 0.034	0.762 - 0.864	1.43	2.13
M22759/91-24-*	24	19/36	24.3	79.7	0.034 - 0.038	0.864 - 0.965	1.93	2.87
M22759/91-22-*	22	19/34	15.1	49.5	0.040 - 0.043	1.02 - 1.09	2.85	4.24
M22759/91-20-*	20	19/32	9.19	30.2	0.048 - 0.051	1.22 - 1.30	4.38	6.52
M22759/91-18-*	18	19/30	5.79	19.0	0.056 - 0.060	1.42 - 1.52	6.60	9.82
M22759/91-16-*	16	19/29	4.52	14.8	0.063 - 0.067	1.60 - 1.70	8.30	12.4
M22759/91-14-*	14	19/27	2.88	9.45	0.076 - 0.080	1.93 - 2.03	12.6	18.7
M22759/91-12-*	12	37/28	1.90	6.23	0.096 - 0.100	2.44 - 2.54	19.6	29.2
M22759/91-10-*	10	37/26	1.19	3.90	0.119 - 0.123	3.02 - 3.12	30.6	45.5

** MIL-DTL-27500 Basic Wire Specification: WP (see Table I page 97)

MIL-DTL-22759/92A*** (SAE-AS22759)



CONDUCTOR: Stranded nickel-coated copper.
INSULATION: 260° C, composite tape (FP/polyimide/FP tape) and FP tape, lightweight.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms / km)	(in)	(mm)		
M22759/92-26-*	26	19/38	42.2	138	0.030 - 0.034	0.762 - 0.864	1.43	2.13
M22759/92-24-*	24	19/36	25.9	85.0	0.034 - 0.038	0.864 - 0.965	1.93	2.87
M22759/92-22-*	22	19/34	16.0	52.5	0.040 - 0.043	1.02 - 1.09	2.85	4.24
M22759/92-20-*	20	19/32	9.77	32.1	0.048 - 0.051	1.22 - 1.30	4.38	6.52
M22759/92-18-*	18	19/30	6.10	20.0	0.056 - 0.060	1.42 - 1.52	6.60	9.82
M22759/92-16-*	16	19/29	4.76	15.6	0.063 - 0.067	1.60 - 1.70	8.30	12.4
M22759/92-14-*	14	19/27	3.00	9.84	0.076 - 0.080	1.93 - 2.03	12.6	18.7
M22759/92-12-*	12	37/28	1.98	6.50	0.096 - 0.100	2.44 - 2.54	19.6	29.2
M22759/92-10-*	10	37/26	1.24	4.07	0.119 - 0.123	3.02 - 3.12	30.6	45.5

*** MIL-DTL-27500 Basic Wire Specification: WR (see Table I page 97)

* The asterisks in the part number column are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-81044/9 ** (SAE AS81044) Medium Weight Wall



CONDUCTOR: Stranded tin-coated copper.
INSULATION: 150° C, cross-linked extruded polyalkalene.
JACKET: Cross-linked extruded polyvinylidene fluoride.
VOLTAGE: 600 V.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M81044/9-24-*	24	19/36	26.2	86.0	0.052 - 0.056	1.32 - 1.42	2.70	4.02
M81044/9-22-*	22	19/34	16.2	53.1	0.059 - 0.065	1.50 - 1.65	3.90	5.80
M81044/9-20-*	20	19/32	9.88	32.4	0.067 - 0.073	1.70 - 1.85	5.50	8.18
M81044/9-18-*	18	19/30	6.23	20.4	0.077 - 0.083	1.96 - 2.11	8.00	11.9
M81044/9-16-*	16	19/29	4.81	15.8	0.085 - 0.093	2.16 - 2.36	10.1	15.0
M81044/9-14-*	14	19/27	3.06	10.0	0.104 - 0.112	2.64 - 2.84	15.5	23.1
M81044/9-12-*	12	37/28	2.02	6.63	0.122 - 0.130	3.10 - 3.30	23.0	34.2
M81044/9-10-*	10	37/26	1.26	4.13	0.150 - 0.160	3.81 - 4.06	35.7	53.2
M81044/9-8-*	8	133/29	0.701	2.30	0.208 - 0.220	5.28 - 5.59	62.8	93.4
M81044/9-6-*	6	133/27	0.445	1.46	0.257 - 0.271	6.53 - 6.88	99.3	148
M81044/9-4-*	4	133/25	0.280	0.919	0.312 - 0.328	7.92 - 8.33	153	228
M81044/9-2-*	2	665/30	0.183	0.600	0.388 - 0.412	9.86 - 10.5	247	368
M81044/9-0-*	1/0	1,045/30	0.116	0.381	0.474 - 0.506	12.0 - 12.9	377	561

** MIL-DTL-27500 Basic Wire Specification: MH (see Table I page 97)

* The asterisks in the part number column are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-81044/12 ** (SAE AS81044)

Lightweight Wall

CONDUCTOR: Stranded tin-coated copper.
INSULATION: 150° C, cross-linked extruded polyalkalene.
JACKET: Cross-linked extruded polyvinylidene fluoride.
VOLTAGE: 600 V.



Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms/ km)	(in)	(mm)		
M81044/12-30-*	30	7/38	108.4	355.6	0.025 - 0.029	0.635 - 0.737	0.71	1.1
M81044/12-28-*	28	7/36	68.6	225	0.028 - 0.032	0.711 - 0.813	0.96	1.4
M81044/12-26-*	26	19/38	41.3	135	0.032 - 0.036	0.813 - 0.914	1.40	2.08
M81044/12-24-*	24	19/36	26.2	86.0	0.038 - 0.042	0.965 - 1.07	2.10	3.12
M81044/12-22-*	22	19/34	16.2	53.1	0.045 - 0.049	1.14 - 1.24	3.10	4.61
M81044/12-20-*	20	19/32	9.88	32.4	0.053 - 0.057	1.35 - 1.45	4.60	6.84
M81044/12-18-*	18	19/30	6.23	20.4	0.063 - 0.067	1.60 - 1.70	7.00	10.4
M81044/12-16-*	16	19/29	4.81	15.8	0.069 - 0.075	1.75 - 1.91	8.90	13.2
M81044/12-14-*	14	19/27	3.06	10.0	0.085 - 0.093	2.16 - 2.36	13.9	20.7
M81044/12-12-*	12	37/28	2.02	6.63	0.104 - 0.112	2.64 - 2.84	21.7	32.3

** MIL-DTL-27500 Basic Wire Specification: ML (see Table I page 97)

MIL-DTL-81044/13 *** (SAE AS81044)

Lightweight Wall

CONDUCTOR: Stranded silver-coated high strength copper alloy.
INSULATION: 150° C, cross-linked extruded polyalkalene.
JACKET: Cross-linked extruded polyvinylidene fluoride.
VOLTAGE: 600 V.



Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F)		Diameter (minimum - maximum)		Weight (lbs / (kgs / 1000 ft) km)	
			(Ohms/ 1000 ft)	(Ohms/ km)	(in)	(mm)		
M81044/13-30-*	30	7/38	117.4	385.2	0.025 - 0.029	0.635 - 0.737	0.71	1.1
M81044/13-28-*	28	7/36	74.4	244	0.028 - 0.032	0.711 - 0.813	0.96	1.4
M81044/13-26-*	26	19/38	44.8	147	0.032 - 0.036	0.813 - 0.914	1.4	2.1
M81044/13-24-*	24	19/36	28.4	93.2	0.038 - 0.042	0.965 - 1.07	2.1	3.1
M81044/13-22-*	22	19/34	17.5	57.4	0.045 - 0.049	1.14 - 1.24	3.1	4.6
M81044/13-20-*	20	19/32	10.7	35.1	0.053 - 0.057	1.35 - 1.45	4.6	6.8

*** MIL-DTL-27500 Basic Wire Specification: MM (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-81381/7**



CONDUCTOR: Stranded silver-coated copper. VOLTAGE: 600 V.

INSULATION: -65° C to 200° C, polyimide / FEP laminated tapes, modified aromatic polyimide resin coating 0.0005" minimum, lightweight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M81381/7-26-*	26	19/38	38.4	126	0.031 - 0.034	0.787 - 0.864	1.3	1.9
M81381/7-24-*	24	19/36	24.3	79.7	0.034 - 0.037	0.864 - 0.940	1.9	2.8
M81381/7-22-*	22	19/34	15.1	49.5	0.041 - 0.044	1.04 - 1.12	2.8	4.2
M81381/7-20-*	20	19/32	9.19	30.2	0.049 - 0.052	1.24 - 1.32	4.3	6.4
M81381/7-18-*	18	19/30	5.79	19.0	0.059 - 0.062	1.50 - 1.57	6.5	9.7
M81381/7-16-*	16	19/29	4.52	14.8	0.065 - 0.068	1.65 - 1.73	8.3	12
M81381/7-14-*	14	19/27	2.88	9.45	0.078 - 0.082	1.98 - 2.08	12.7	18.9
M81381/7-12-*	12	37/28	1.90	6.23	0.097 - 0.101	2.46 - 2.57	19.4	28.9
M81381/7-10-*	10	37/26	1.19	3.90	0.120 - 0.124	3.05 - 3.15	30.3	45.1

** MIL-DTL-27500 Basic Wire Specification: MR (see Table I page 97)

MIL-DTL-81381/8***



CONDUCTOR: Stranded nickel-coated copper. VOLTAGE: 600 V.

INSULATION: -65° C to 200° C, polyimide / FEP laminated tapes, modified aromatic polyimide resin coating 0.0005" minimum, lightweight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M81381/8-26-*	26	19/38	42.2	138	0.031 - 0.034	0.787 - 0.864	1.4	2.1
M81381/8-24-*	24	19/36	25.9	85.0	0.034 - 0.037	0.864 - 0.940	2.0	3.0
M81381/8-22-*	22	19/34	16.0	52.5	0.041 - 0.044	1.04 - 1.12	3.0	4.5
M81381/8-20-*	20	19/32	9.77	32.1	0.049 - 0.052	1.24 - 1.32	4.5	6.7
M81381/8-18-*	18	19/30	6.10	20.0	0.059 - 0.062	1.50 - 1.57	6.8	10
M81381/8-16-*	16	19/29	4.76	15.6	0.065 - 0.068	1.65 - 1.73	8.5	13
M81381/8-14-*	14	19/27	3.00	9.84	0.078 - 0.082	1.98 - 2.08	13.2	19.6
M81381/8-12-*	12	37/28	1.98	6.50	0.097 - 0.101	2.46 - 2.57	20.2	30.1
M81381/8-10-*	10	37/26	1.24	4.07	0.120 - 0.124	3.05 - 3.15	31.7	47.2

*** MIL-DTL-27500 Basic Wire Specification: MS (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21, except that opaque dark yellow as defined in MIL-DTL-81381 shall be designated by the letter "N" and unpigmented polyimide resin coating shall be designated by the letter "C".

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-81381/9**



CONDUCTOR: Stranded silver-coated high strength copper.

VOLTAGE: 600 V.

INSULATION: -65° C to 200° C, polyimide / FEP laminated tapes, modified aromatic polyimide resin coating 0.0005" minimum, lightweight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms/ km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M81381/9-30-*	30	7/38	117.4	385.2	0.023 - 0.026	0.584 - 0.660	0.6	0.9
M81381/9-28-*	28	7/36	74.4	244	0.026 - 0.029	0.660 - 0.737	0.9	1
M81381/9-26-*	26	19/38	44.8	147	0.031 - 0.034	0.787 - 0.864	1.3	1.9
M81381/9-24-*	24	19/36	28.4	93.2	0.034 - 0.037	0.864 - 0.940	1.9	2.8
M81381/9-22-*	22	19/34	17.5	57.4	0.041 - 0.044	1.04 - 1.12	2.9	4.3
M81381/9-20-*	20	19/32	10.7	35.1	0.049 - 0.052	1.24 - 1.32	4.4	6.5

** MIL-DTL-27500 Basic Wire Specification: MT (see Table I page 97)

MIL-DTL-81381/11***



CONDUCTOR: Stranded silver-coated copper.

VOLTAGE: 600 V.

INSULATION: -65° C to 200° C, polyimide / FEP laminated tapes, wrapped and heat sealed. Modified aromatic polyimide resin topcoat applied for sizes 10 AWG and smaller. Bright aromatic polyamide braid with clear finisher coating used for 8 AWG and larger, medium weight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms/ km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M81381/11-24-*	24	19/36	24.3	79.7	0.040 - 0.044	1.02 - 1.12	2.1	3.1
M81381/11-22-*	22	19/34	15.1	49.5	0.045 - 0.049	1.14 - 1.24	3.0	4.5
M81381/11-20-*	20	19/32	9.19	30.2	0.053 - 0.057	1.35 - 1.45	4.6	6.8
M81381/11-18-*	18	19/30	5.79	19.0	0.063 - 0.067	1.60 - 1.70	7.0	10
M81381/11-16-*	16	19/29	4.52	14.8	0.068 - 0.073	1.73 - 1.85	8.7	13
M81381/11-14-*	14	19/27	2.88	9.45	0.081 - 0.086	2.06 - 2.18	13.2	19.6
M81381/11-12-*	12	37/28	1.90	6.23	0.100 - 0.105	2.54 - 2.67	20.2	30.1
M81381/11-10-*	10	37/26	1.19	3.90	0.122 - 0.127	3.10 - 3.23	31.1	46.3
M81381/11-8-*	8	133/29	0.658	2.16	0.188 - 0.206	4.78 - 5.23	61.8	92.0
M81381/11-6-*	6	133/27	0.418	1.37	0.228 - 0.251	5.79 - 6.38	95.1	142
M81381/11-4-*	4	133/25	0.264	0.866	0.280 - 0.306	7.11 - 7.77	148	220
M81381/11-2-*	2	665/30	0.170	0.558	0.350 - 0.378	8.89 - 9.60	235	350

*** MIL-DTL-27500 Basic Wire Specification: MW (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21, except that opaque dark yellow as defined in MIL-DTL-81381 shall be designated by the letter "N" and unpigmented polyimide resin coating shall be designated by the letter "C".

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-81381/12**



CONDUCTOR: Stranded nickel-coated copper. VOLTAGE: 600 V.

INSULATION: -65° C to 200° C, polyimide / FEP laminated tapes, wrapped and heat sealed. Modified aromatic polyimide resin topcoat applied for sizes 10 AWG and smaller. Bright aromatic polyamide braid with clear finisher coating used for 8 AWG and larger, medium weight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M81381/12-24-*	24	19/36	25.9	85.0	0.040 - 0.045	1.02 - 1.14	2.2	3.3
M81381/12-22-*	22	19/34	16.0	52.5	0.045 - 0.050	1.14 - 1.27	3.2	4.8
M81381/12-20-*	20	19/32	9.77	32.1	0.053 - 0.058	1.35 - 1.47	4.8	7.1
M81381/12-18-*	18	19/30	6.10	20.0	0.063 - 0.068	1.60 - 1.73	7.2	11
M81381/12-16-*	16	19/29	4.76	15.6	0.068 - 0.074	1.73 - 1.88	9.0	13
M81381/12-14-*	14	19/27	3.00	9.84	0.081 - 0.087	2.06 - 2.21	13.8	20.5
M81381/12-12-*	12	37/28	1.98	6.50	0.100 - 0.107	2.54 - 2.72	20.9	31.1
M81381/12-10-*	10	37/26	1.24	4.07	0.122 - 0.129	3.10 - 3.28	32.4	48.2
M81381/12-8-*	8	133/29	0.694	2.28	0.188 - 0.206	4.78 - 5.23	61.8	92.0
M81381/12-6-*	6	133/27	0.436	1.43	0.228 - 0.251	5.79 - 6.38	95.1	142
M81381/12-4-*	4	133/25	0.275	0.902	0.280 - 0.306	7.11 - 7.77	148	220
M81381/12-2-*	2	665/30	0.177	0.581	0.350 - 0.378	8.89 - 9.60	235	350

** MIL-DTL-27500 Basic Wire Specification: MY (see Table I page 97)

MIL-DTL-81381/13***



CONDUCTOR: Stranded silver-coated high strength copper alloy. VOLTAGE: 600 V.

INSULATION: -65° C to 200° C, polyimide / FEP laminated tapes, modified aromatic polyimide resin coating 0.0005" minimum, medium weight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M81381/13-28-*	28	7/36	74.4	244	0.031 - 0.035	0.79 - 0.89	1.2	1.8
M81381/13-26-*	26	19/38	44.8	147	0.036 - 0.040	0.91 - 1.02	1.5	2.2
M81381/13-24-*	24	19/36	28.4	93.2	0.041 - 0.045	1.04 - 1.14	2.2	3.3
M81381/13-22-*	22	19/34	17.5	57.4	0.047 - 0.051	1.19 - 1.30	3.1	4.6
M81381/13-20-*	20	19/32	10.7	35.1	0.055 - 0.059	1.40 - 1.50	4.8	7.1

*** MIL-DTL-27500 Basic Wire Specification: NA (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21, except that opaque dark yellow as defined in MIL-DTL-81381 shall be designated by the letter "N" and unpigmented polyimide resin coating shall be designated by the letter "C".

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-81381/17**



CONDUCTOR: Stranded silver-coated copper. VOLTAGE: 600 V.
 INSULATION: -65° C to 200° C, polyimide / FEP laminated tapes, modified aromatic polyimide resin coating 0.001" minimum, lightweight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ (Ohms / 1000 ft) km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
M81381/17-26-*	26	19/38	38.4	126	0.028 - 0.030	0.711 - 0.762	1.2	1.8
M81381/17-24-*	24	19/36	24.3	79.7	0.032 - 0.035	0.813 - 0.889	1.8	2.7
M81381/17-22-*	22	19/34	15.1	49.5	0.038 - 0.041	0.965 - 1.04	2.7	4.0
M81381/17-20-*	20	19/32	9.19	30.2	0.046 - 0.049	1.168 - 1.24	4.2	6.2
M81381/17-18-*	18	19/30	5.79	19.0	0.055 - 0.058	1.40 - 1.47	6.4	9.5
M81381/17-16-*	16	19/29	4.52	14.8	0.062 - 0.065	1.57 - 1.65	8.0	12
M81381/17-14-*	14	19/27	2.88	9.45	0.075 - 0.078	1.91 - 1.98	12.5	18.6
M81381/17-12-*	12	37/28	1.90	6.23	0.094 - 0.098	2.39 - 2.49	19.2	28.6

** MIL-DTL-27500 Basic Wire Specification: NE (see Table I page 97)

MIL-DTL-81381/21***



CONDUCTOR: Stranded tin-coated copper. VOLTAGE: 600 V.
 INSULATION: -65° C to 200° C, polyimide / FEP laminated tapes, modified aromatic polyimide resin coating 0.0005" minimum, lightweight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ (Ohms / 1000 ft) km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / (kgs / 1000 ft) km)	
M81381/21-26-*	26	19/38	41.3	135	0.030 - 0.034	0.762 - 0.864	1.3	1.9
M81381/21-24-*	24	19/36	26.2	86.0	0.034 - 0.038	0.864 - 0.965	2.0	3.0
M81381/21-22-*	22	19/34	16.2	53.1	0.041 - 0.045	1.04 - 1.14	3.0	4.5
M81381/21-20-*	20	19/32	9.88	32.4	0.048 - 0.053	1.22 - 1.35	4.4	6.5
M81381/21-18-*	18	19/30	6.23	20.4	0.058 - 0.063	1.47 - 1.60	6.6	9.8
M81381/21-16-*	16	19/29	4.81	15.8	0.064 - 0.069	1.63 - 1.75	8.4	12
M81381/21-14-*	14	19/27	3.06	10.0	0.077 - 0.083	1.96 - 2.11	12.8	19.0
M81381/21-12-*	12	37/28	2.02	6.63	0.097 - 0.102	2.46 - 2.59	20.7	30.9
M81381/21-10-*	10	37/26	1.26	4.13	0.120 - 0.125	3.05 - 3.18	32.4	48.2

*** MIL-DTL-27500 Basic Wire Specification: NK (see Table I page 97)

* The asterisks in the part number columns are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21, except that opaque dark yellow as defined in MIL-DTL-81381 shall be designated by the letter "N" and unpigmented polyimide resin coating shall be designated by the letter "C".

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-81381/22**



CONDUCTOR: Stranded tin-coated copper.

VOLTAGE: 600 V.

INSULATION: -65° C to 150° C, polyimide / FEP laminated tapes, wrapped and heat sealed. Modified aromatic polyimide resin topcoat applied for sizes 10 AWG and smaller. Bright aromatic polyamide braid with clear finisher coating used for 8 AWG and larger, medium weight.

Military Part No.	AWG Size	Stranding	Max Resistance @ 20°C (@68°F) (Ohms/ 1000 ft) (Ohms / km)		Diameter (minimum - maximum) (in) (mm)		Weight (lbs / 1000 ft) (kgs / km)	
M81381/22-24-*	24	19/36	26.2	86.0	0.040 - 0.044	1.02 - 1.12	2.2	3.3
M81381/22-22-*	22	19/34	16.2	53.1	0.045 - 0.049	1.14 - 1.24	3.2	4.8
M81381/22-20-*	20	19/32	9.88	32.4	0.053 - 0.058	1.35 - 1.47	4.7	7.0
M81381/22-18-*	18	19/30	6.23	20.4	0.063 - 0.068	1.60 - 1.73	7.0	10
M81381/22-16-*	16	19/29	4.81	15.8	0.068 - 0.074	1.73 - 1.88	8.7	13
M81381/22-14-*	14	19/27	3.06	10.0	0.081 - 0.089	2.06 - 2.26	13.3	19.8
M81381/22-12-*	12	37/28	2.02	6.63	0.100 - 0.107	2.54 - 2.72	20.4	30.4
M81381/22-10-*	10	37/26	1.26	4.13	0.122 - 0.130	3.10 - 3.30	31.5	46.9
M81381/22-8-*	8	133/29	0.701	2.30	0.188 - 0.206	4.78 - 5.23	61.8	92.0
M81381/22-6-*	6	133/27	0.445	1.46	0.228 - 0.251	5.79 - 6.38	95.1	142
M81381/22-4-*	4	133/25	0.280	0.919	0.280 - 0.306	7.11 - 7.77	148	220
M81381/22-2-*	2	665/30	0.183	0.600	0.350 - 0.378	8.89 - 9.60	235	350
M81381/22-01-*	1/0	1,045/30	0.116	0.381	0.425 - 0.461	10.8 - 11.7	374	557
M81381/22-02-*	2/0	1,330/30	0.091	0.299	0.478 - 0.518	12.1 - 13.2	470	699

* The asterisks in the part number column are to be replaced by numeric color code designations in accordance with MIL-STD-681D as shown in Color Code Chart No. 6 on page 21, except that opaque dark yellow as defined in MIL-DTL-81381 shall be designated by the letter "N" and unpigmented polyimide resin coating shall be designated by the letter "C".

** MIL-DTL-27500 Basic Wire Specification: NL (see Table I page 97)

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



MIL-DTL-27500 (NEMA WC27500) Cable Designation

All MIL-DTL-27500 cables are designated by a combination of digits and letters (not to exceed 16) which indicates the exact construction of each cable. Please note the following example of a MIL-DTL-27500 cable.

Cable Description: M27500A 22 SB 3 T 23

(1) (2) (3) (4) (5) (6) (7)

Classification: The cable will be of the following types and will be furnished in the basic wire size, type, number of wires, and shield and jacket styles, as specified.

- Unjacketed: 2 to 15 color coded wires, spirally laid without an overall outer jacket.
- Jacketed: 2 to 15 color coded wires, spirally laid with an overall outer jacket.
- Shielded: A single wire, or 2 to 15 color coded wires spirally laid, with one or two overall shields.
- Shielded and Jacketed: A single wire, or 2 to 15 color coded wires spirally laid, with one or two shields and one or two jackets.

Specification Number (1): All cables will carry this prefix.

Identification Method (2):

When 85% minimum shield coverage is required:

- "-" designates the preferred identification method (white wire with colored stripes) using Table IIIA;
- "F" designates the preferred identification method (white wire with colored stripes) using Table IIIB;
- "A" designates optional identification method A (solid colored wires) using Table IIIA;
- "G" designates optional identification method A (solid colored wires) using Table IIIB;
- "B" designates optional identification method B using Table IIIC;
- "K" designates optional identification method C;
- "L" designates optional identification method D (see mil spec for band marking specification).

When 90% minimum shield coverage is required:

- "C" designates the preferred identification method (white wire with colored stripes) using Table IIIA;
- "H" designates the preferred identification method (white wire with colored stripes) using Table IIIB;
- "D" designates optional identification method A (solid colored wires) using Table IIIA;
- "J" designates optional identification method A (solid colored wires) using Table IIIB;
- "E" designates optional identification method B using Table IIIC;
- "M" designates optional identification method C;
- "N" designates optional identification method D (see mil spec for band marking specification).

Conductor Size (3): This position identifies the wire size. Wire size depends upon the basic wire specification (see 4).

Basic Wire Specification (4): The component wires are identified by a one or two letter code. A listing of the basic wire specifications can be found in Table I.

Number of Conductors (5): M27500 currently specifies from 1 to 15 conductors for shielded or shielded and jacketed cables, and from 2 to 15 for unshielded unjacketed or unshielded jacketed cables. Cables with 10 to 15 conductors are limited to 12 AWG and smaller.

Shield (6): The specific shield style and material are designated by a single letter code and are detailed in Table I A.

Jacket (7): Cable jacketing materials are specified by a two digit code and are detailed in Table I B.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Table I - Basic Wire Specifications

A	MIL-DTL-5086/1 ^{1,2}	CA	MIL-DTL-22759/13	SP	MIL-DTL-22759/43	MF	MIL-DTL-81044/7
B	MIL-DTL-5086/2 ^{1,2}	CB	MIL-DTL-22759/14	SR	MIL-DTL-22759/44	MG	MIL-DTL-81044/8 ²
C	MIL-DTL-5086/3 ⁴	CC	MIL-DTL-22759/15	SS	MIL-DTL-22759/45	MH	MIL-DTL-81044/9
P	MIL-DTL-5086/4 ⁴	TE	MIL-DTL-22759/16	ST	MIL-DTL-22759/46	MJ	MIL-DTL-81044/10
AA	MIL-DTL-5086/5 ⁴	TF	MIL-DTL-22759/17	WB	MIL-DTL-22759/80 ³	MK	MIL-DTL-81044/11 ²
AB	MIL-DTL-5086/6 ⁴	TG	MIL-DTL-22759/18	WC	MIL-DTL-22759/81 ³	ML	MIL-DTL-81044/12
AD	MIL-DTL-5086/7 ⁴	TH	MIL-DTL-22759/19	WE	MIL-DTL-22759/82 ³	MM	MIL-DTL-81044/13
H	MIL-DTL-8777, MS 25471	TK	MIL-DTL-22759/20	WF	MIL-DTL-22759/83 ³	MR	MIL-DTL-81381/7 ³
F	MIL-DTL-8777, MS 27110	TL	MIL-DTL-22759/21	WG	MIL-DTL-22759/84 ³	MS	MIL-DTL-81381/8 ³
EA	MIL-DTL-22759/1	TM	MIL-DTL-22759/22	WH	MIL-DTL-22759/85 ³	MT	MIL-DTL-81381/9 ³
E	MIL-DTL-22759/2	TN	MIL-DTL-22759/23	WJ	MIL-DTL-22759/86 ³	MV	MIL-DTL-81381/10 ³
RA	MIL-DTL-22759/3	JB	MIL-DTL-22759/28	WK	MIL-DTL-22759/87 ³	MW	MIL-DTL-81381/11 ³
RB	MIL-DTL-22759/4	JC	MIL-DTL-22759/29	WL	MIL-DTL-22759/88 ³	MY	MIL-DTL-81381/12 ³
VA	MIL-DTL-22759/5	JD	MIL-DTL-22759/30	WM	MIL-DTL-22759/89 ³	NA	MIL-DTL-81381/13 ³
WA	MIL-DTL-22759/6	JE	MIL-DTL-22759/31	WN	MIL-DTL-22759/90 ³	NB	MIL-DTL-81381/14 ³
SA	MIL-DTL-22759/7	SB	MIL-DTL-22759/32	WP	MIL-DTL-22759/91 ³	NE	MIL-DTL-81381/17 ³
TA	MIL-DTL-22759/8	SC	MIL-DTL-22759/33	WR	MIL-DTL-22759/92 ³	NF	MIL-DTL-81381/18 ³
LE	MIL-DTL-22759/9	SD	MIL-DTL-22759/34	JA	MIL-DTL-25038/1	NG	MIL-DTL-81381/19 ³
LH	MIL-DTL-22759/10	SE	MIL-DTL-22759/35	JF	MIL-DTL-25038/3	NH	MIL-DTL-81381/20 ³
RC	MIL-DTL-22759/11	SM	MIL-DTL-22759/41	MD	MIL-DTL-81044/5 ²	NK	MIL-DTL-81381/21 ³
RE	MIL-DTL-22759/12	SN	MIL-DTL-22759/42	ME	MIL-DTL-81044/6	NL	MIL-DTL-81381/22 ³

¹ Not for use in aerospace applications.

² Inactive for new design.

³ Not for Naval Air Systems Command usage.

⁴ No longer manufactured (no QPL).

Table I A - Shield Material

Letter Code		Description	Maximum temperature limit for shield material	
Single Shield	Double Shield		°C	°F
U	---	No shield	N/A	N/A
T	V	Round, tin-coated copper	150	302
S	W	Round, silver-coated copper	200	392
N	Y	Round, nickel-coated copper	260	500
F	Z	Round, stainless steel	400	752
C	R	Round, heavy nickel-coated copper	400	752
M	K	Round, silver-coated high strength copper alloy	200	392
P	L	Round, nickel-coated high strength copper alloy	260	500
G	A	Flat, silver-coated copper	200	392
H	B	Flat, silver-coated high strength copper alloy	200	392
*	#	Flat, nickel-coated copper	260	500
J	D	Flat, tin-coated copper	150	302
E	X	Flat, nickel-coated high strength copper alloy	260	500
I	Q	Flat, nickel-chromium alloy	400	752

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Table I B - Jacket Material and Color

Numeric Code		Description	Temperature Limit for Jacket Material	
Single Jacket	Double Jacket		°C	°F
00	00	No jacket	N/A	N/A
01	51 ¹	Extruded white polyvinylchloride (PVC)	90	194
02 ²	52 ²	Extruded clear polyamide in accordance with ASTM-D-4066	105	221
03	53	White polyamide braid impregnated with clear polyamide finisher over a polyester tape	105	221
04	54	Polyester braid impregnated with high temperature finishers over polyester tape	150	302
05	55	Extruded clear fluorinated ethylene propylene (FEP)	200	392
06	56	Extruded or taped and heat sealed white polytetrafluoroethylene (PTFE)	260	500
07	57	White polytetrafluoroethylene (PTFE) treated glass braid impregnated and coated with polytetrafluoroethylene finisher over presintered polytetrafluoroethylene tape	260	500
08 ³	58 ³	Cross-linked white extruded polyvinylidene fluoride (PVDF) ²	150	302
09	59	Extruded white fluorinated ethylene propylene (FEP)	200	392
10 ³	60 ³	Extruded clear polyvinylidene fluoride (PVDF) ²	125	257
11 ⁴	61 ⁴	Tape of natural polyimide combined with clear fluorinated ethylene propylene (FEP) wrapped and heat sealed with (FEP) outer surface	200	392
12 ⁴	62 ⁴	Tape of natural polyimide combined with fluorinated ethylene propylene (FEP) wrapped and heat sealed with polyimide outer surface	200	392
14	64	Extruded white ethylene-tetrafluoroethylene copolymer (ETFE)	150	302
15	65	Extruded clear ethylene-tetrafluoroethylene copolymer (ETFE)	150	302
16	66	Braid of aromatic polyamide with high temperature finisher over presintered polytetrafluoroethylene (PTFE) tape	200	392
17 ⁵	67 ⁵	Extruded white ethylene chlorotrifluoroethylene (ECTFE)	150	302
18 ⁵	68 ⁵	Extruded clear ethylene chlorotrifluoroethylene (ECTFE)	150	302
20	70	Extruded white perfluoroalkoxy (PFA)	260	500
21	71	Extruded clear perfluoroalkoxy (PFA)	260	500
22	72	Tape of polyimide combined with clear fluorinated ethylene propylene (FEP) wrapped and heat sealed with opaque polyimide outer surface	200	392
23	73	Extruded white cross-linked modified ethylene-tetrafluoroethylene copolymer (XLETFE)	200	392
24	74	Tape layer of white polytetrafluoroethylene (PTFE) wrapped over a tape layer of natural polyimide combined with FEP and heat sealed	200	392

¹ Polyvinylchloride (PVC) materials shall not be used for aerospace applications.

² Jacket material 02/52 is not to be used for cables having a diameter of 0.251 in (6.38 mm) or greater.

³ Jacket materials 08, 10, 58, and 60 are not to be used for cables having a diameter of 0.401 in (10.19 mm) or greater.

⁴ Not for Naval Air Systems Command usage.

⁵ Inactive for new design.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Table II - Allowable Shield and Jacket Materials for Each Basic Type Wire

Basic Wire Specification	Cable Type					
	Shielded		Jacketed		Shielded and Jacketed	
	Shield Material ¹	Jacket Material	Shield Material	Jacket Material	Shield Material ¹	Jacket Material
MIL-DTL-5086	T	00	Unshielded	01, 02, 03, 10	T	01, 02, 03, 10
MIL-DTL-8777	S	00	Unshielded	4	S	4
MIL-DTL-22759 slash sheets 1-12, 20-23, 28-31	T, S, N	00	Unshielded	04, 05, 06, 07, 09, 14-18, 20, 21	T, S, N	04, 05, 06, 07, 09, 14-18, 20, 21
MIL-DTL-22759 slash sheets 13-19	T, S, N	00	Unshielded	04, 05, 09, 14-18, 20, 21	T, S, N	04, 05, 09, 14-18, 20, 21
MIL-DTL-22759 slash sheets 32-35, 41-46	T, S, N	00	Unshielded	04, 05, 08, 09, 14-18, 20, 21, 23, 24	T, S, N	04, 05, 08, 09, 14-18, 20, 21, 23, 24
MIL-DTL-22759 slash sheets 80-92	T, S, N	00	Unshielded	04, 05, 06, 07, 09, 11, 12, 14-18, 20, 21, 22, 24	T, S, N	04, 05, 06, 07, 09, 11, 12, 14-18, 20, 21, 22, 24
MIL-DTL-25038/1 & /3	F, C	00	Unshielded	06, 07	F, C	06, 07
MIL-DTL-81044	T, S	00	Unshielded	04, 08, 09, 14, 16, 23	T, S	04, 08, 09, 14, 16, 23
MIL-DTL-81381	T, S, N	00	Unshielded	05, 09, 11, 12, 22	T, S, N	05, 09, 11, 12, 22

See Table I A and Table I B for jacket material cross-reference.

¹ T = Tin, S = Silver, N = Nickel, F = Stainless steel, C = Heavy coated nickel

Table III C - Color of Insulation for Identification of Wire Sizes
in accordance with MIL-STD-686

Wire Size	26 ¹	24	22	20	18	16	14	12	10	8	6	4	2	1	1/0	2/0
Insulation Color (solid)	Black	Blue	Green	Red	White ²	Blue	Green	Yellow	Brown	Red	Blue	Yellow	Red	White	Blue	Green

¹ 26 AWG is inactive for new design.

² For MIL-DTL-81381 basic wire, the insulation color may be opaque dark yellow or unpigmented polyimide resin color.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Table III A - Circuit Identification Colors for Basic Wires in Cable
in accordance with MIL-DTL-22759, MIL-DTL-25038, MIL-DTL-81044, or MIL-DTL-81381

No. of Wires in Cable	Wire Number														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Basic (white)														
2	White ¹	Blue													
3	White ¹	Blue	Orange												
4	White ¹	Blue	Orange	Green											
5	White ¹	Blue	Orange	Green	Red										
6	White ¹	Blue	Orange	Green	Red	Black									
7	White ¹	Blue	Orange	Green	Red	Black	Yellow ²								
8	White ¹	Blue	Orange	Green	Red	Black	Yellow ²	Violet							
9	White ¹	Blue	Orange	Green	Red	Black	Yellow ²	Violet	Gray						
10	White ¹	Blue	Orange	Green	Red	Black	Yellow ²	Violet	Gray	Brown ³					
11 ⁴	White ¹	Blue	Orange	Green	Red	Black	Yellow ²	Violet	Gray	Brown ³	Blue/Blue				
12 ⁴	White ¹	Blue	Orange	Green	Red	Black	Yellow ²	Violet	Gray	Brown ³	Blue/Blue	Orange/Orange			
13 ⁴	White ¹	Blue	Orange	Green	Red	Black	Yellow ²	Violet	Gray	Brown ³	Blue/Blue	Orange/Orange	Green/Green		
14 ⁴	White ¹	Blue	Orange	Green	Red	Black	Yellow ²	Violet	Gray	Brown ³	Blue/Blue	Orange/Orange	Green/Green	Red/Red	
15 ⁴	White ¹	Blue	Orange	Green	Red	Black	Yellow ²	Violet	Gray	Brown ³	Blue/Blue	Orange/Orange	Green/Green	Red/Red	Black/Black

¹ Except where preferred color on basic wire specification sheet is not white.

² Where basic wire is MIL-DTL-81381, a brown helical stripe shall be used.

³ Where basic wire is MIL-DTL-81381, a brown and white helical stripes shall be used.

⁴ For cables having more than 10 conductors, the wires shall be a white base identified by double color tracers as indicated.

Table III B - Circuit Identification Colors for Basic Wires in Cable
in accordance with MIL-DTL-5086 ¹, MIL-DTL-8777, MIL-DTL-22759, MIL-DTL-25038, MIL-DTL-81044, or MIL-DTL-81381

No. of Wires in Cable	Identification Colors for Respective Wires in Cable
1	Basic (white)
2	Red, blue
3	Red, blue, yellow
4	Red, blue, yellow, green
5	Red, blue, yellow, green, basic
6	Red, blue, yellow, green, basic, black
7	Red, blue, yellow, green, basic, black, brown
8	Red, blue, yellow, green, basic, black, brown, orange
9	Red, blue, yellow, green, basic, black, brown, orange, violet
10	Red, blue, yellow, green, basic, black, brown, orange, violet, gray
11	Red, blue, yellow, green, basic, black, brown, orange, violet, gray, red/white ²
12	Red, blue, yellow, green, basic, black, brown, orange, violet, gray, red/white ² , blue/white ²
13	Red, blue, yellow, green, basic, black, brown, orange, violet, gray, red/white ² , blue/white ² , yellow/white ²
14	Red, blue, yellow, green, basic, black, brown, orange, violet, gray, red/white ² , blue/white ² , yellow/white ² , green/white ²
15	Red, blue, yellow, green, basic, black, brown, orange, violet, gray, red/white ² , blue/white ² , yellow/white ² , green/white ² , black/white

¹ Inactive for new design for MIL-DTL-5086.

² Color designation indicates a solid color with stripe, e.g., red/white - solid red insulation with a white stripe.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



COAXIAL CABLE

THEORY AND APPLICATION

Transmission of electrical signals over wire lines requires the use of two conductors to complete the circuit. One we call the "go" wire; the other is the "return" wire.

For the purpose of explaining coaxial cable, let's examine a telephone installation using conventional wire. The wires are paired on telephone poles; one pair is used for each telephone circuit. On some circuits, only the "go" wire is mounted on the pole and the earth itself is used as the "return". Sometimes the pairs of wires for telephone circuits are bundled together in groups of up to 1,800 pairs (3,600 separate wires) and are then jacketed to form a "multi-pair cable".

In all of these arrangements the wires carrying the very delicate electrical currents conveying the telephone conversation are exposed to external interference. Lightning, although it may not strike the wires directly, will cause static. Wet weather can cause leakage across insulators, giving a "frying" noise in your telephone receiver, and faults on power transmission lines can cause pops and loud hums that interfere with the conversation. The proximity of other wire pairs carrying conversations to your pair, particularly in multi-pair cables, may cause you to faintly hear another conversation in the background. This is called "cross talk".

There are two other problems related to the use of the conventional pair of wires for communication. One is that this type of circuit has a high "attenuation", that is, the signals get weaker as they travel along the wires and on a long-distance line, amplifiers are necessary to boost the conversation every few miles so that the conversation will not get lost below the line noise.

The other problem, and economically the most important, is that of "bandwidth". A telephone conversation can just satisfactorily be carried on if the circuit transmits audible tones in the range from about 300 hertz (Hz) to about 2,500 Hz, a total "band" of 2,200 Hz. It is possible to carry more than one conversation simultaneously on a pair of wires by "frequency

multiplexing" the conversations.

One conversation will occupy frequencies of 300 to 2,500 Hz, the next from 3,000 to 5,200, the next from 5,700 to 7,900, and so on. Each conversation requires 2,200 Hz and there is a "guard band" of at least 500 Hz between each conversation to prevent their mixing. Each of these signals is reconverted at the receiving end of the line to the 300 to 2,500 Hz range before they appear at a telephone receiver. We can not keep adding to the number of conversations that a pair of wires can carry simultaneously because of the relatively low upper limit of frequency that this system of conventional wires can transmit. Coaxial cable was developed to alleviate the foregoing problems.

In coaxial cable, the "go" wire is the center conductor, some form of copper wire, solid or stranded, of comparatively small diameter, around which is a very heavy insulation - the dielectric. But the "return" wire is no longer another identical wire. Instead it is in the form of a copper tube completely surrounding the "go" wire and dielectric, and concentric with it; hence, the term "coaxial". Thus, no external interference can affect your conversation (in the case of telephone usage) because it is carried by currents completely shielded from external effects by the tubular "return" conductor. Effects of weather are also excluded.

Coaxial cable has an extremely broad bandwidth; it will transmit signals from zero frequency (direct current) up to many millions of hertz. Literally, hundreds of conversations (or messages) can be frequency multiplexed and transmitted simultaneously over a single coaxial cable, or a television program occupying about 3,500,000 Hz can be transmitted simultaneously with hundreds of phone conversations.

Coaxial cable, since it has a low attenuation, does not need as many amplifiers as when using conventional wire. Those that are required are relatively inexpensive as they simultaneously boost all the hundreds of signals on the cable.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Besides its importance in the telephone industry, all the major manufacturers of radio, television, radar, navigation aids, fire control, aircraft, shipbuilding, underwater sound, and many other types of transmitting equipment use coaxial cable. The cable TV and closed circuit TV systems use miles of this type cable. Sophisticated cable TV systems, for example, use a large diameter single or double shielded cable as a main transmission line, with tap-offs of smaller sizes for a secondary lead-in; a third size, even smaller, carries the televised signal directly into the receiver.

The uses of coaxial cable extend to any application in which signal loss and attenuation must be kept to a minimum, or in which the elimination of outside interference is important. Another application is its utilization in various systems of instrumentation. Combining many coaxial cables under one jacket to form an integral unit is used in the computerized instrumentation field.

PTFE (polytetrafluoroethylene) insulated high temperature coaxial cable is used by aircraft and missile manufacturers, in high temperature applications, and in products where protection is desired against strong alkalis and acids or other highly corrosive fluids.

How are coaxial cables identified? Only cables made strictly to U.S. Government specifications can be marked with the RG legend. The meanings of the abbreviations of this legend are as follows:

- R - RADIO FREQUENCY**
- G - GOVERNMENT**
- 8 - Is the number assigned to the Government approval**
- /U - A universal specification**

If the letters A, B, or C appear before the /, it means a specification modification or revision. For example - RG 8/U is superseded by RG 8A/U but both types are still being used.

Types not marked RG are primarily intended for use where the application is not met by some government type. There are many other types of cables designed for specific applications. These are identified in various ways by each individual manufacturer.

DEFINITIONS

1. **ATTENUATION** - Attenuation is loss of power or signal expressed in decibels; it is commonly written and spoken of as dB/100 ft. *at a specific frequency*. An example is RG 8A/U which has a loss of 5.5 dB/100 ft. at 400 MHz.

2. **FREQUENCY** - Frequency is the term designating the number of reverses or cycles in the flow of alternating current (AC) in one second. For example, the frequency of AC commonly used in the U.S. is 60 hertz and is usually shown as 60 Hz. Broadcast stations operate at frequencies of thousands of cycles per second and their frequencies are called kilohertz (kHz). Your AM radio dial represents frequencies in kilohertz (kHz). High frequencies are in millions of cycles per second and are called megahertz (MHz). TV is broadcast in the MHz range.

3. **IMPEDANCE** - Impedance is a term expressing the ratio of voltage to current in a cable of infinite length. In the case of coaxial cables, impedance is expressed in terms of "ohms impedance". The coaxial cables generally fall into three main classes; 50 ohms, 75 ohms, and 95 ohms.

An example of each class is:

- RG 8A/U 50 ohms impedance
- RG 11A/U 75 ohms impedance
- RG 22B/U 95 ohms impedance

4. **CAPACITANCE (CAPACITY)** - Capacitance or capacity is the property of a system of conductors and dielectrics which permits the storage of electricity when a potential or voltage difference exists between the two conductors. A capacity value is expressed in farads. When we deal with coaxial cable, the capacity ranges we have are very small and are expressed in picofarads (pF). Capacity is the major factor governing impedance. Examples of cables with typical impedances have capacity as follows:

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG or M17/	Cable Impedance (ohms)	Dielectric Type	Capacitance (pF / ft)
RG 8A/U	50	PE	29.5
RG 231A/U	50	Foam PE	25.0
RG 188A/U	50	Solid TFE	29.0
M17/6	75	PE	20.6
RG 306A/U	75	Foam PE	16.5
RG 140	75	Solid TFE	21.0
M17/90	93	Air space PE	1 3 . 5
M17/56	95	PE	1 7 . 0
M17/95	95	Solid PTFE	15.4
RG 24A/U	125	PE	12.0
RG 114A/U	185	Air space PE	6.5

5. VELOCITY OF PROPAGATION - Velocity of propagation, commonly called velocity, is the ratio of the speed of the flow of an electric current in an insulated cable to the speed of light. All insulated cables have this ratio and it is expressed in a percentage. In the case of coaxial cables with polyethylene dielectric, this ratio is in the range of 65% - 66%.

In selecting coaxial cable, we must carefully consider not only design criteria, but use and application. Selection of materials in relation to overall design considerations is tabulated in Tables 1 through 4, below:

	INNER CONDUCTORS					
	SOFT BARE COPPER	TINNED SOFT COPPER	SILVER- PLATED COPPER	NICKEL- PLATED COPPER	TINNED- CADIMUM BRONZE	COPPER- WELD®
Maximum operating temperature °C	200	150	200	250	150	200
Resistivity at 20°C, ohms - circular mil / ft.	10.371	11.133	10.371	12.5	11.92	25.928
Average tensile strength psi (1,000)	37	37	37.5	37.5	45	130
Flexibility	excellent	excellent	excellent	excellent	good	good
Remarks	most popular - for extra flexibility use stranded	for added resistance to oxidation and easy solderability, best for low frequency application	elevated temperature use in aircraft, missile, and electronics, easy solderability	extra high temperature use	high tensile strength with flexibility	extra high tensile strength

TABLE 1 - Inner Conductors

Copperweld® is a trademark of the Copperweld Steel Company.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



	OUTER CONDUCTORS				
	SOFT BARE COPPER	TINNED SOFT COPPER	SILVER- PLATED COPPER	ALUMINUM TUBE	COPPER TUBE
Maximum operating temperature °C	200	150	200	-	-
Flexibility	excellent	excellent	excellent	poor	poor
Remarks	most popular in braid, minimum .004" to .010", add second shield to improve flexibility	most popular in braid, minimum .004" to .010", add second shield to improve flexibility, better for low frequency	most popular in braid, minimum .004" to .010", add second shield to improve flexibility, for high temperature	for high tensile and crushing loads and lower attenuation	for high tensile strength and crushing loads

TABLE 2 - Outer Conductors

	PRIMARY DIELECTRICS				
	POLYETHYLENE (PE)	FOAMED POLYETHYLENE (PE)	Fluorinated Ethylene Propylene (FEP)	Poly Tetrafluoroethylene (PTFE)	BUTYL RUBBER
Operating temperature range °C	-65 to 80	-65 to 80	-65 to 200	-65 to 260	-40 to 80
Average tensile strength psi (1,000)	1.9	2.2	3.6	2.7	1.1
Flexibility	good	good	excellent	good	excellent
Cut-thru resistance	good	poor	good	fair	excellent
Water resistance	excellent	poor	excellent	excellent	good
Resistance to organic solvents	poor	poor	excellent	excellent	good
Resistance to acids and alkalies	excellent	excellent	excellent	excellent	good
Remarks	for use under 80°C maximum	for use under 80°C maximum	for high temperature use to 200°C	for high temperature use to 260°C	for pulse cables and extreme flexibility

TABLE 3 - Primary Dielectrics

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

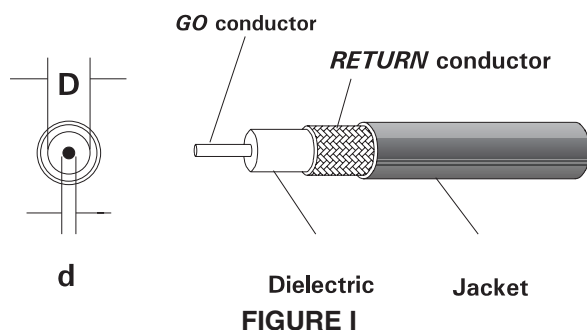
PROTECTIVE COVERINGS:

Unprotected copper or aluminum tubes are utilized for the jacket both indoors and outdoors in dry locations or in aerial installations. Where there may be corrosive influences such as moist locations, electrolytic action, etc., a covering of "carbon black loaded" polyethylene or other protective covering is used.

	JACKETS					
	POLYETHYLENE	Tetrafluoroethylene (TFE)	Fluorinated Ethylene Propylene (FEP)	PVC	NEOPRENE®	GLASS BRAID
Maximum operating temperature °C	80	260	200	105	90	260
Average tensile strength psi (1,000)	1.9	3.5	2.7	2.5	3.2	-
Flexibility	good	good	good	good	excellent	excellent
Resistance to organic solvents	poor	excellent	excellent	poor	good	excellent
Resistance to acids and alkalis	excellent	excellent	excellent	fair	good	excellent
Abrasion resistance	good	excellent	excellent	good	excellent	poor
Flame resistance	slow burn	nonflammable	nonflammable	self-extinguishing	self-extinguishing	nonflammable
Remarks	for added resistance to weathering	to mate with high temperature dielectric	to mate with high temperature dielectric	most widely used	to mate with Butyl dielectric	to mate with high temperature dielectric

TABLE 4 - Jackets

The design formula for characteristic impedance of a single coaxial line is:



$$Z_0 = (138 / \sqrt{E}) \times \log_{10} (D / d)$$

where:

Z_0 = Characteristic impedance

E = Dielectric constant (air is 1.0), see Table 5.

D = Inside diameter of the "return" (outer) conductor (conductive metal tube or one or more braids), see Figure 1.

d = Outside diameter of the "go" (inner) conductor, see Figure 1.

Dielectric Material	Dielectric Constant (E)	Power Factor (p)
Air	1.00	
Polyethylene - cellular foam (PE)	1.40 - 2.10	0.0003
Polyethylene - solid (PE)	2.3	0.0003
Poly Tetrafluoroethylene (PTFE)	2.1	0.0002
Cellular Poly Tetrafluoroethylene (PTFE)	1.4	0.0002
Fluorinated Ethylene Propylene (FEP)	2.1	0.0007
Cellular Fluorinated Ethylene Propylene (FEP)	1.5	0.0007
Butyl rubber	3.1	-
Silicone rubber	2.08 - 3.50	0.007 - 0.01

TABLE 5 - Dielectric Properties

Neoprene® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Another important key to the selection of coaxial cable is the required attenuation. The formula for theoretical calculation of attenuation (A) is the attenuation due to conductors plus attenuation due to the dielectric:

$$A = 4.35 (R_t / Z_0) + 2\sqrt{E} 78 \text{ pF} \\ = \text{dB per 100 ft.}$$

Where

R_t = Total line resistance ohms per 1000 ft.

R_t = $0.1 (1/d + 1/\sqrt{F D})$
(for single copper line)

p = Power factor of dielectric

F = Frequency in megahertz (MHz)

As can readily be seen, attenuation would increase as the frequency increases. In a perfect cable, the pattern of increasing attenuation would be exact and regular. However, on the practical side, this is difficult to achieve and for that reason, tolerances are specified. The military RG specifications spell out in detail the tolerances permitted on various electrical characteristics. Perfect design is based first on the ability to obtain theoretically perfect cable. As with all manufacturing, this is not too practical. Therefore, the physical tolerances to which cable can be manufactured should be considered as much a part of design as the empirical formulas. These tolerances vary from cable to cable, dependent upon the physical size of the cable and the dielectric material used in its manufacture. Since the manufacture of coaxial cable is a "continuous" type manufacturing process, rather than a "batch" type, there are variations encountered. To ensure that there is no place in the cable which might cause a high attenuation, the cable can be "swept" at various frequencies, particularly those frequencies at or near the expected use of the cable.

If we examine the basic Z_0 formula, it becomes quite evident that a difference in the D of only a few thousandths of an inch would significantly affect the impedance and in the 50 ohms group of miniature cables, tolerances become even more important. Even after perfect design, there still remains the practical installation and use to which the cable will

be subjected. The power rating, as well as other characteristics, will be affected by use factors such as flexing, bending (particularly into a radius smaller than 20 times its own diameter), and variations in atmospheric pressure (high altitude).

The overall size of cable as related to the dielectric used will be strongly influenced by the important requirement of operating voltage. Power rating, which is one of the important considerations in design, is significantly influenced by the value D/d. This is the governing ratio assuming matched lines and optimum 40° C ambient temperature.

Conductor temperatures of polyethylene dielectric coaxial cable are operated between 65° C and a maximum of 80° C. To give you an idea what happens to power in relation to ambient and conductor temperature, note Figure II. To calculate a more accurate power rating, we must obviously consider both ambient and conductor temperature. Figure III shows power ratings of some preferred cables at 40° C ambient and 80° C conductor temperature. If the cable is expected to be used above 40° C ambient, we should de rate accordingly. Taking RG 17 as an example, it has an approximate power rating of 930 watts at 500 MHz. If ambient is expected to be 50° C, we must de rate to 75%, giving us a power rating of 700 watts.

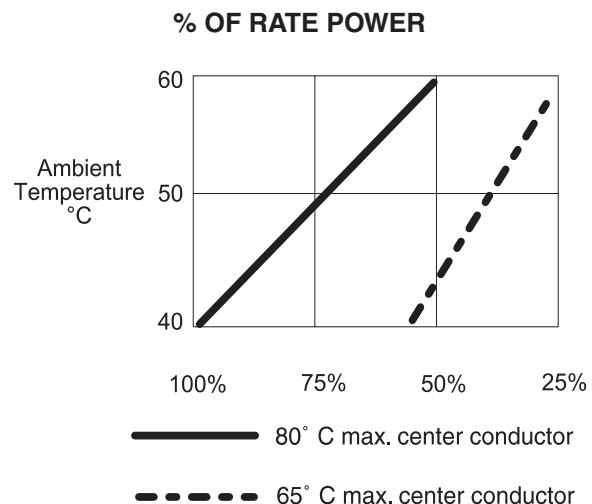


FIGURE II

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

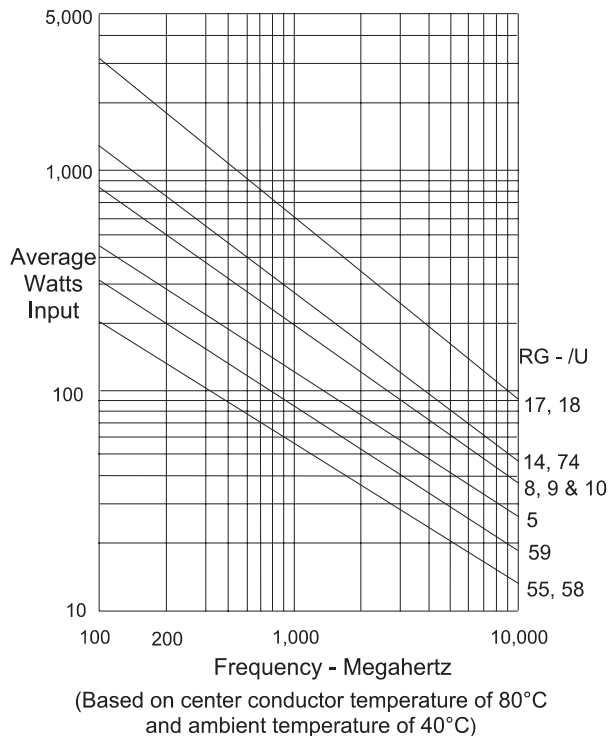


FIGURE III

Another very important consideration related not only to power but to attenuation is VSWR. VSWR is Voltage Standing Wave Ratio. This is the ratio of the voltage maximum to voltage minimum existing on a coaxial cable. It occurs when there is discontinuity or mismatch to the cable (e.g., do not use 50 ohms load for 75 ohms system). This variation from the theoretically ideal causes a reflection of the incident wave. The reflected wave and incident wave produce a standing wave. For maximum energy transfer, the importance of this relationship becomes most apparent. In many systems, a VSWR of 1.3 maximum can be tolerated but the lower the VSWR, the better becomes the finished system. Figure IV shows what happens when VSWR goes above 1.0. When VSWR increases, attenuation increases. The difficulty in obtaining a low VSWR is readily seen when one realizes the actual VSWR of any component is apt to be better than the overall VSWR measured. If we could get ideally perfectly matched connectors and also make an ideally perfect termination, we could approach the ideal VSWR (assuming ideal cabling).

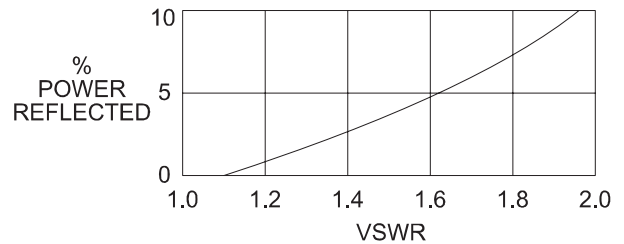


FIGURE IV

In addition to the RG types of coaxial cables, a complete list of which is shown on the pages which follow in this Technical Handbook and Catalog, there have been introduced many other types of RF transmission lines. One of the most popular commercial types is a group using foamed or cellular type dielectric. These type cables generally follow the characteristics of RG cables in the numbers 8, 11, 58, and 59. By using a unique method of manufacturing, air is introduced into the dielectric creating a dielectric very much like a sponge. This has a decided advantage over the solid dielectric in that a much better attenuation is achieved. However, the process of manufacturing is difficult to control and also there may be changes as the cable ages or is flexed, causing an increase in attenuation.

Another commercial group is the "air spaced" type. Various manufacturers market these transmission lines under various trade names. Essentially, they consist of the necessary "go" conductor around which is wound a helical vehicle to hold the "go" conductor in place. Generally the outer or "return" conductor is a solid sheath of copper or aluminum sometimes covered with polyethylene for mechanical protection and also for direct burial protection. The finished product shows a reliable, uniform, low loss cable. The popularity of these cables is gradually increasing due to their reliability and their rugged construction. They have advantages sought by the commercial users of transmission lines, the cable TV industry and also certain military system installations requiring exceptionally long life. Their advantages are: Little possibility of change in electrical characteristics due to aging; reduced maintenance costs; and uniformity resulting in good VSWR over the entire frequency range.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



MANUFACTURING

The group of RG cables known as semi-solid dielectric cables, such as RG 62/U, RG 71/U, and RG 63/U, have one thing in common. They have a center conductor around which a polyethylene thread is helically wound and then over the thread, a polyethylene dielectric is extruded. In this respect all of the various groups are the same in basic design and construction up to the braid stage. We will discuss the above group since they are the more difficult to manufacture.

The "go" conductor used in the RG 62/U and RG 71/U groups is a copper-clad steel core wire, "Copperweld®". Copperweld® is made by a carefully controlled process wherein a thick copper covering is inseparably welded to a high strength steel core. In the case of RG 62/U and RG 71/U, the "go" conductor is 22 gauge with a nominal diameter of 0.0253". Since high frequency currents travel mainly in the outer skin of an electrical conductor, the Copperweld® is used in these cables to provide the unique combination of high strength along with electrical conductance.

The originality of such a design exhibits the complexity of choice involved in selecting conductors for coaxial cable. Table 1 lists some major characteristics of various conductors in popular use today. Use and application of the finished cable must not be slighted in the final design criteria.

The manufacturing process of RG 62/U or RG 71/U groups requires several operations. In the first operation, the polyethylene thread is spiraled around the conductor.

In the second operation, the dielectric is extruded over the conductor and spiraled thread. In this operation, there is a possibility of breakage of the conductor due to the fact that the spiraled thread is not always even in diameter and it may cause a jam in the extruder tip. This jam will cause a momentary stoppage and the resulting jerk may cause breakage. The extruded insulation is "spark tested" as part of the extrusion operation to make sure there are no voids or holes in the dielectric. (The inner conductor is at ground potential.) Any pinhole in the dielectric will result in a spark failure, which is recorded as to location and

reel number so that it may be cut out before passing through remaining operations.

The next operation is braiding. The extruded core is braided with one or two shields as required by the specification. During this operation, and all remaining operations, the cable is under constant tension. Following the braiding operation, the cable receives an extruded jacket. Again, the cable passes through a chain electrode at high potential to detect any jacket deficiencies. (The braid in this case is at ground potential.)

When the dielectric of polyethylene coaxial cable (whether it is solid or semi-solid) is extruded, strains develop in the material. In theory, these strains are reduced by the use of hot water in the cooling trough. As the dielectric is run through the cooling trough, it runs through very hot water to cool water in graduated steps; therefore, most of the strain should have been relieved. The remaining operations all keep this first extrusion under tension, so that any strains which might have been retained from the extrusion operation have little opportunity to be relieved. When the cable is unreeled, this releases strains if any are present and there could be a conductor movement disproportionate to dielectric movement which might show up only in localized areas. To detect this possible trouble area, the "sweep test" may be used.

As is seen from the preceding explanation, there are possible problems arising in the manufacture of coaxial cable. Some physical problems may lead to electronic problems. For these reasons, manufacturers are constantly improving process controls so that the finished cable will meet the highest standards.

The manufacture of coaxial cable is an exacting process and the very sophisticated application to which it is put, demands the highest quality.

Coaxial cable is probably the most versatile type of cable in existence today. Its development was one of the truly great milestones in the science of long-distance communication as well as transmission of highly complex signals within a relatively simple cable.

Copperweld® is a trademark of Copperweld Steel Company.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-17 Cable Descriptions

M17/ Number	Catalog No.	Nom. Imp. (Ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Cond. (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (kgs / 100ft) 100m)		Remarks
M17/2 RG6	507-6	75	22.0	72.2	PE	0.0285 CCS	PVC-IIA	SC , BC	0.332	8.43	8.2	12	Inactive for new design See M17/180-00001
M17/6 RG11	507-11	75	22.0	72.2	PE	0.0477 7/0.0159 TC	PVC-IIA	BC	0.405	10.3	9.8	15	1,000 MHz maximum
M17/6 RG12	507-12	75	22.0	72.2	PE	0.0477 7/0.0159 TC	PVC-IIA w/armor	BC	0.475	12.1	14.4	21.4	Armored M17/6-RG11
M17/15 RG22	507-22	95	18.4	60.4	PE 2 cores	2 cond. 0.0456 7/0.0152 BC	PVC-IIA	2 TC	0.420	10.7	13.0	19.3	Balanced line, 200 MHz maximum. Inactive see M17/182-00001 unarmored
M17/15 RG111	507-111	95	18.4	60.4	PE 2 cores	2 cond. 0.0456 7/0.0152 BC	PVC-IIA w/armor	2 TC	0.490	12.4	14.6	21.7	Armored M17/15-RG22 See M17/182-00002 armored
M17/16 RG23	507-23	125	13.0	42.7	PE 2 cores	2 cond. 0.0855 7/0.0285 BC	PVC-IIA	2 indiv. inner, common outer BC	0.650 x 0.945	16.5 x 24.0	53.0	78.9	Dual coaxial balanced line, 1,000 MHz maximum CANCELED
M17/16 RG24	507-24	125	13.0	42.7	PE 2 cores	2 cond. 0.0855 7/0.0285 BC	PVC-IIA w/armor	2 indiv. inner, common outer BC	0.735 x 1.034	18.7 x 26.26	73.0	109	Armored M17/16-RG23 CANCELED
M17/19 RG 25	507-25	48	50.0	164	Rubber-E	0.0585 19/0.0117 TC	Rubber-IV	2 TC	0.505	12.8	22.5	33.5	CANCELED
M17/21 RG26	507-26	48	55.0	180	Rubber-E	0.0585 19/0.0117 TC	Rubber-IV w/armor	TC	0.505	12.8	21.0	31.2	Coaxial, pulse, 1 MHz maximum CANCELED
M17/22 RG27	507-27	48	55.0	180	Rubber-D	0.0925 19/0.0185 TC	Rubber-IV w/armor	TC	0.670	17.0	33.0	49.1	Coaxial, pulse, 1 MHz maximum CANCELED
M17/22 - 00001		48	55.0	180	Rubber-D	0.0925 19/0.0185 TC	Rubber-IV	TC	0.595	15.1	33.0	49.1	CANCELED
M17/23 RG28	507-28	48	50.0	164	Rubber-D	0.0925 19/0.0185 TC	Rubber-IV	TC, GS	0.735	18.7	40.0	59.5	Triaxial, pulse, 1 MHz maximum CANCELED
M17/24 RG34	507-34	75	22.0	72.2	PE	0.0747 7/0.0249 BC	PVC-IIA	BC	0.630	16.0	23.1	34.4	1,000 MHz maximum CANCELED
M17/28 RG58	507-58	50	32.2	106	PE	0.0355 19/0.0072 TC	PVC-IIA	TC	0.195	4.95	2.6	3.9	Inactive for new design See M17/183-00001
M17/29 RG59	507-59	75	22.0	72.2	PE	0.0226 CCS	PVC-IIA	BC	0.242	6.15	3.5	5.2	1,000 MHz maximum See M17/184-00001
M17/30 RG62	507-62	93	14.5	47.6	Air space PE	0.0253 CCS	PVC-IIA	BC	0.242	6.15	3.8	5.7	Inactive for new design See M17/185-00001
M17/31 RG63	507-63	125	11.0	36.1	Air space PE	0.0253 CCS	PVC-IIA	BC	0.405	10.3	8.8	13	1,000 MHz maximum
M17/31 RG79	507-79	125	11.0	36.1	Air space PE	0.0253 CCS	PVC-IIA w/armor	BC	0.475	12.1	13.8	20.5	Armored M17/31-RG63
M17/33 RG64	507-64	48	55.0	180	Rubber-E	0.0585 19/0.0117 TC	Rubber-IV	2 TC	0.460	11.7	22.0	32.7	CANCELED
M17/34 RG65	507-65	950	48.0	157	PE	0.0080 0.1280 dia. Helix	PVC-IIA	BC	0.405	10.3	11.0	16.4	Coaxial, time delay, 5 MHz maximum CANCELED
M17/45 RG108	507-108	78	24.5	80.4	PE	2 cond. 0.0378 7/0.0126 TC	PVC-IIA	TC	0.235	5.97	29.0	43.2	Inactive for new design See M17/186-00001
M17/47 RG114	507-114	185	6.8	22.3	Air space PE	0.007 CCS	PVC-IIA	BC	0.405	10.3	8.9	13	1,000 MHz maximum
M17/52 RG119	507-119	50	29.3	96.1	PTFE	0.1019 BC	FG braid-V	2 BC	0.465	11.8	22.8	33.9	Swept attn. and SRL from 50 to 3,000 MHz

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Catalog No.	Nom. Imp. (Ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Cond. (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / 100ft) (kgs / 100m)		Remarks
M17/52 RG120	507-120	50	29.3	96.1	PTFE	0.1019 BC	FG braid-V w/Armor	2 BC	0.525	13.3	28.6	42.6	Armored M17/52-RG119
M17/54 RG122	507-122	50	30.8	101	PE	0.0308 27/0.005 TC	PVC-IIA	TC	0.160	4.06	2.0	3.0	Inactive for new design See M17/187-00001
M17/56 RG130	507-130	95	19.0	62.3	PE	2 cond. 0.0855 7/0.0285 BC	PVC-IIA	TC	0.625	15.9	30.0	44.6	200 MHz maximum CANCELED
M17/56 RG131	507-131	95	19.0	62.3	PE	2 cond. 0.0855 7/0.0285 BC	PVC-IIA w/Armor	TC	0.710	18.0	40.0	59.5	Armored M17/56-RG130 CANCELED
M17/60 RG142	507-142	50	29.3	96.1	PTFE	0.0370 SCCS	FEP-IX	2 SC	0.195	4.95	4.3	6.4	Swept attn. and SRL from 50 to 8,000 MHz
M17/62 RG144	507-144	75	22.0	72.2	PTFE	0.0525 7/0.0175 SCCS	FG braid-V	SC	0.410	10.4	14.0	20.8	3,000 MHz maximum
M17/64 RG35	507-35	75	22.0	72.2	PE	0.1045 BC	PVC-IIA w/Armor	BC	0.945	24.0	54.5	81.1	Armored M17/64-RG164
M17/64 RG164	507-164	75	22.0	72.2	PE	0.1045 BC	PVC-IIA	BC	0.870	22.1	50.5	75.1	1,000 MHz maximum
M17/65 RG165	507-165	50	29.3	96.1	PTFE	0.094 7/0.0315 SC	FG Braid-V	SC	0.410	10.4	14.2	21.1	Swept attn. and SRL from 50 to 3,000 MHz
M17/65 RG166	507-166	50	29.3	96.1	PTFE	0.094 7/0.0315 SC	FG Braid-V w/Armor	SC	0.470	11.9	18.9	28.1	Armored M17/65-RG165
M17/67 RG177	507-177	50	32.2	106	PE	0.195 BC	PVC-IIA	2 SC	0.895	22.7	59.5	88.5	Swept attn. and SRL from 50 to 5,600 MHz
M17/72 RG211	507-211	50	29.3	96.1	PTFE	0.192 BC	FG Braid-V	BC	0.730	18.5	51.6	76.8	Inactive for new design
M17/73 RG212	507-212	50	30.8	101	PE	0.0556 SC	PVC-IIA	2 SC	0.332	8.43	9.3	14	Inactive for new design See M17/188-00001
M17/74 RG213	507-213	50	30.8	101	PE	0.0888 7/0.0296 BC	PVC-IIA	BC	0.405	10.3	12.0	17.9	Inactive for new design See M17/189-00001
M17/74 RG215	507-215	50	30.8	101	PE	0.0888 7/0.0296 BC	PVC-IIA w/Armor	BC	0.475	12.1	16.0	23.8	Inactive for new design See M17/189-00002
M17/75 RG214	507-214	50	32.2	106	PE	0.0888 7/0.0296 SC	PVC-IIA	2 SC	0.425	10.8	13.0	19.3	Swept attn. and SRL from 50 to 11,000 MHz
M17/75 RG365	507-365	50	32.2	106	PE	0.0888 7/0.0296 SC	TPE	2 SC	0.425	10.8	13.0	19.3	M17/75-RG214 with extended low temp. range
M17/77 RG216	507-216	75	22.0	72.2	PE	0.0477 7/0.0159 TC	PVC-IIA	2 BC	0.425	10.8	12.4	18.5	Inactive for new design See M17/191-00001
M17/78 RG217	507-217	50	32.2	106	PE	0.106 BC	PVC-IIA	2 BC	0.545	13.8	22.5	33.5	Swept attn. and SRL from 50 to 3,000 MHz
M17/78 - 00001	507-217	50	32.2	106	PE	0.106 BC	PVC-IIA	2 BC	0.545	13.8	22.5	33.5	Temperature stabilized
M17/79 RG218	507-218	50	32.2	106	PE	0.195 BC	PVC-IIA	BC	0.870	22.1	57.5	85.6	Inactive for new design See M17/193-00001
M17/79 RG219	507-219	50	32.2	106	PE	0.195 BC	PVC-IIA w/Armor	BC	0.945	24.0	63.5	94.5	Inactive for new design See M17/193-00002
M17/81- 00001		50	31.4	103	PE	0.260 BC	PVC-IIA	BC	1.120	28.4	58.5	87.0	1,000 MHz maximum
M17/81- 00002		50	31.4	103	PE	0.260 BC	PVC-IIA w/Armor	BC	1.195	30.4	58.5	87.0	Armored M17/81-00001
M17/84 RG223	507-223	50	30.8	101	PE	0.035 SC	PVC-IIA	2 SC	0.212	5.4	3.6	5.4	Inactive for new design See M17/194-00001
M17/86 - 00001		50	32.4	106	PTFE	0.0936 SC 7/0.0312	FG braid-V	2 SC	0.430	10.9	19.5	29.0	Supersedes RG-225/U
M17/86 - 00002		50	32.4	106	PTFE	0.0936 SC 7/0.0312	FG braid-V w/armor	2 SC	0.490 max.	12.4 max.	19.5	29.0	Armored M17/86-00001
M17/87- 00001		50	31.7	104	Taped PTFE	0.117 SC 19/0.0234	FG braid-V	2 BC	0.500	12.7	44.8	66.7	Supersedes RG-226/U

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Catalog No.	Nom. Imp. (Ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Cond. (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (kgs / 100ft) 100m)		Remarks
M17/90 RG71	507-71	93	14.5	47.6	Air- space PE	0.0253 CCS	PE-III A	2 TC	0.245	6.22	5.0	7.4	1,000 MHz maximum
M17/92 RG115	507-115	50	32.0	105	Taped PTFE	0.0840 7/0.0280 SC	FG Braid-V	2 SC	0.415	10.5	18.5	27.5	Inactive for new design
M17/92 - 00001		50	32.0	105	Taped PTFE	0.0840 7/0.0280 SC	FEP-IX	2 SC	0.344	8.74	18.5	27.5	Inactive for new design
M17/93 RG178	507-178	50	32.0	105	PTFE	0.0120 7/0.0040 SCCS	FEP-IX	SC	0.071	1.80	0.625	0.930	Swept attn. and SRL from 50 to 3,000 MHz
M17/93 - 00001		50	32.0	105	PTFE	0.0120 7/0.0040 SCCS	PFA-XIII	SC	0.071	1.80	0.625	0.930	M17/93-RG178 with extended high temperature range
M17/94 RG179	507-179	75	23.0	75.5	PTFE	0.0120 7/0.0040 SCCS	FEP-IX	SC	0.100	2.54	1.08	1.61	3,000 MHz maximum
M17/95 RG180	507-180	95	15.4	50.5	PTFE	0.0120 7/0.0040 SCCS	FEP-IX	SC	0.141	3.58	1.98	2.95	3,000 MHz maximum
M17/96 RG209	507-209	50	26.5	86.9	Taped PTFE	0.190 19/0.0378 SC	FG-SR	2 SC	0.700	17.8	43.2	64.3	CANCELED
M17/97 RG210	507-210	93	14.5	47.6	Air- space PTFE	0.0253 SCCS	FG Braid-V	SC	0.242	6.15	5.0	7.4	3,000 MHz maximum
M17/100 RG133	507-133	95	16.2	53.2	PE	0.0253 BC	PVC-II A	BC	0.405	10.3	9.5	14	CANCELED
M17/109 RG301	507-301	50	32.0	105	PTFE	0.0609 7/0.0203 HR	FEP-IX	NC resistance	0.245	6.22	6.8	10	Inactive for new design
M17/110 RG302	507-302	75	22.0	72.2	PTFE	0.0253 SCCS	FEP-IX	SC	0.202	5.13	4.0	6.0	3,000 MHz maximum
M17/111 RG303	507-303	50	29.3	96.1	PTFE	0.037 SCCS	FEP-IX	SC	0.170	4.32	3.1	4.6	Swept attn. and SRL from 50 to 3,000 MHz
M17/112 RG304	507-304	50	32.0	105	PTFE	0.0590 SCCS	FEP-IX	2 SC	0.280	7.11	4.5	6.7	Swept attn. and SRL from 50 to 8,000 MHz
M17/113 RG316	507-316	50	32.0	105	PTFE	0.0201 7/0.0067 SCCS	FEP-IX	SC	0.098	2.49	1.22	1.82	Swept attn. and SRL from 50 to 3,000 MHz
M17/116 RG307	507-307	75	19.7	64.6	Foam PE	0.0290 19/0.0058 SC	PE-III A	2 SC Interlayer	0.265	6.73	8.0	12	Triaxial 1,000 MHz maximum
M17/119 RG174	507-174	50	32.2	106	PE	0.0189 7/0.0063 CCS	PVC-II A	TC	0.110	2.79	0.95	1.4	Inactive for new design See M17/196-00001
M17/124 RG328	507-328	25	85.0	279	Rubber	0.485 TC braid	Neoprene®	TC, GS, TC Interlayer	1.460	37.08	160.0	238.1	CANCELED
M17/125 RG329	507-329	50	50.0	164	Rubber	0.0585 19/0.0117 TC	Neoprene®	TC, GS, TC Interlayer	0.700	17.8	38.0	56.5	1,000 MHz maximum
M17/126 RG391	507-391	72	23.0	75.5	PE	0.0477 7/0.0159 TC	PVC-II A	TC	0.405	10.3	10.0	14.9	1,000 MHz maximum
M17/126 RG392	507-392	72	23.0	75.5	PE	0.0477 7/0.0159 TC	PVC-II A w/Armor	TC	0.475	12.1	12.5	18.6	Armored M17/126-RG391
M17/127 RG393	507-393	50	32.0	105	PTFE	0.094 7/0.0312 SC	FEP-IX	2 SC	0.390	9.91	17.5	26.0	Swept attn. and SRL from 50 to 11,000 MHz
M17/128 RG400	507-400	50	32.0	105	PTFE	0.0384 19/0.008 SC	FEP-IX	2 SC	0.195	4.95	5.0	7.4	Swept attn. and SRL from 50 to 12,400 MHz
M17/129 RG401	507-401	50	29.6	97.1	PTFE	0.0641 SC	None	BC Tube	0.250	6.35	10.5	15.6	Swept attn. and SRL from 400 to 18,000 MHz
M17/129 - 00001		50	29.6	97.1	PTFE	0.0641 SC	None	TC Tube	0.250	6.35	10.6	15.8	Tin plated M17/129-RG401
M17/130 RG402	507-402	50	29.9	98.1	PTFE	0.0362 SCCS	None	BC Tube	0.141	3.58	3.44	5.12	Swept attn. and SRL from 500 to 20,000 MHz
M17/130 - 00001		50	29.9	98.1	PTFE	0.0362 SCCS	None	TC Tube	0.141	3.58	3.51	5.22	Tin plated M17/130-RG402

Neoprene® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Catalog No.	Nom. Imp. (Ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Cond. (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (kgs / 100ft) 100m)		Remarks
M17/130 - 00002		50	29.9	98.1	PTFE	0.0362 NCCCS	None	BC Tube	0.141	3.58	3.44	5.12	Swept attn. and SRL from 500 to 20,000 MHz
M17/130 - 00003		50	29.9	98.1	PTFE	0.0362 NCCCS	None	TC Tube	0.141	3.58	3.51	5.22	Tin plated M17/130-00002
M17/130 - 00004		50	29.9	98.1	PTFE	0.0362 SCCS	None	BC Tube	0.141	3.58	3.44	5.12	Swept attn. and SRL from 500 to 20,000 MHz
M17/130 - 00005		50	29.9	98.1	PTFE	0.0362 SCCS	None	TC Tube	0.141	3.58	3.51	5.22	Tin plated M17/130-00004
M17/130 - 00006		50	29.9	98.1	PTFE	0.0362 NCCCS	None	BC Tube	0.141	3.58	3.44	5.12	Swept attn. and SRL from 500 to 20,000 MHz
M17/130 - 00007		50	29.9	98.1	PTFE	0.0362 NCCCS	None	TC Tube	0.141	3.58	3.51	5.22	Tin plated M17/130-00006
M17/130 - 00008		50	29.4	96.5	PTFE	0.0362 SCCS	None	AL Tube	0.141	3.58	1.88	2.80	
M17/130 - 00009		50	29.4	96.5	PTFE	0.0362 SCCS	None	AL Tube	0.141	3.58	2.05	3.05	Tin Plated M17/130-00008
M17/130 - 00010		50	29.4	96.5	PTFE	0.0362 NCCCS	None	AL Tube	0.141	3.58	1.88	2.80	
M17/130 - 00011		50	29.4	96.5	PTFE	0.0362 NCCCS	None	AL Tube	0.141	3.58	2.05	3.05	Tin Plated M17/130-00010
M17/130 - 00012		50	29.4	96.5	PTFE	0.0362 SCCS	None	SC Tube	0.141	3.58	3.51	5.22	Silver Plated M17/130-00004
M17/130 - 00013		50	29.4	96.5	PTFE	0.0362 NCCCS	None	SC Tube	0.141	3.58	3.51	5.22	Silver Plated M17/130-00006
M17/130 - 00014		50	29.4	96.5	PTFE	0.0362 SCCS	None	TC Tube	0.141	3.58	3.51	5.22	
M17/130 - 00015		50	29.4	96.5	PTFE	0.0362 CS	None	TC Tube	0.141	3.58	3.51	5.22	
M17/131 RG403	507-403	50	30.2	99.1	PTFE	0.012 SCCS 7/0.004	FEP-IX	2 SC FEP Interlayer	0.104	2.64	1.65	2.46	Triaxial, swept attn. and SRL from 50 to 10,000 MHz
M17/132 RG404	507-404	50	31.5	103	PTFE	0.012 SCCS 7/0.004	FEP-IX	SC	0.071	1.80	1.65	2.46	Supedseded by M17/132-00001
M17/132 - 00001		50	32.0	105	PTFE	0.012 SCCS 7/0.004	FEP-IX	SC	0.073	1.85	1.65	2.46	1,000 MHz maximum
M17/133 RG405	507-405	50	32.0	105	PTFE	0.0201 SCCS	None	BC Tube	0.0865	2.20	1.53	2.28	Swept attn. and SRL from 500 to 20,000 MHz
M17/133 - 00001		50	32.0	105	PTFE	0.0201 SCCS	None	TC Tube	0.0865	2.197	1.58	2.35	Tin plated M17/133-RG405
M17/133 - 00002		50	32.0	105	PTFE	0.0201 SC	None	BC Tube	0.0865	2.197	1.52	2.26	Swept attn. and SRL from 500 to 20,000 MHz
M17/133 - 00003		50	32.0	105	PTFE	0.0201 SC	None	TC Tube	0.0865	2.197	1.57	2.34	Tin plated M17/133-00002
M17/133 - 00004		50	32.0	105	PTFE	0.0201 NCCCS	None	BC Tube	0.0860	2.184	1.54	2.29	Swept attn. and SRL from 500 to 20,000 MHz
M17/133 - 00005		50	32.0	105	PTFE	0.0201 NCCCS	None	TC Tube	0.0860	2.184	1.59	2.37	Tin plated M17/133-00004
M17/133 - 00006		50	32.0	105	PTFE	0.0201 SCCS	None	BC Tube	0.0865	2.197	1.53	2.28	Swept attn. and SRL from 500 to 20,000 MHz
M17/133 - 00007		50	32.0	105	PTFE	0.0201 SCCS	None	TC Tube	0.0865	2.197	1.58	2.35	Tin plated M17/133-00006
M17/133 - 00008		50	32.0	105	PTFE	0.0201 SC	None	BC Tube	0.0865	2.197	1.52	2.26	Swept attn. and SRL from 500 to 20,000 MHz
M17/133 - 00009		50	32.0	105	PTFE	0.0201 SC	None	TC Tube	0.0865	2.197	1.57	2.34	Tin plated M17/133-00008
M17/133 - 00010		50	32.0	105	PTFE	0.0201 NCCCS	None	BC Tube	0.0860	2.184	1.54	2.29	Swept attn. and SRL from 500 to 20,000 MHz
M17/133 - 00011		50	32.0	105	PTFE	0.0201 NCCCS	None	TC tube	0.0865	2.197	1.59	2.37	Tin-plated M17/133-00010
M17/133 - 00012		50	32.0	105	PTFE	0.0201 SCCS	None	BC tube	0.0865	2.197	0.75	1.1	

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Catalog No.	Nom. Imp. (Ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Cond. (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (kgs / 100ft) 100m)		Remarks
M17/133 - 00013		50	32.0	105	PTFE	0.0201 SCCS	None	TC tube	0.0865	2.197	0.8	1	Tin-plated M17/135-00012
M17/133 - 00014		50	32.0	105	PTFE	0.0201 NCCCS	None	BC tube	0.0865	2.197	0.75	1.1	
M17/133 - 00015		50	32.0	105	PTFE	0.0201 NCCCS	None	TC tube	0.0865	2.197	0.8	1	Tin-plated M17/133-00014
M17/133 - 00016		50	32.0	105	PTFE	0.0201 SCCS	None	SPC tube	0.0865	2.197	1.58	2.35	
M17/133 - 00017		50	32.0	105	PTFE	0.0201 NCCCS	None	SPC tube	0.0865	2.197	1.58	2.35	Silver plated M17/133-00010
M17/133 - 00018		50	29.9	98.1	PTFE	0.0201 SC	None	TC tube	0.0865	2.197	1.57	2.34	
M17/134 - 00001		50	32.2	106	PE	0.033 SC	PE-III A	2 SC PE interlayer	0.245	6.22	4.5	6.7	Water blocked triaxial, swept attn. and SRL from 50 to 3,000 MHz
M17/134 - 00002		50	32.2	106	PE	0.033 SC	PE-III A	2 SC PE interlayer	0.245	6.22	4.5	6.7	Non-water blocked M17/134-00001
M17/134 - 00003		50	32.2	106	PE	0.033 SC	XL polyolefin	2 SC PE interlayer	0.245	6.22	5.0	7.4	Water blocked
M17/134 - 00004		50	32.2	106	PE	0.033 SC	XL polyolefin	2 SC PE interlayer	0.245	6.22	5.0	7.4	Non-water blocked M17/134-00003
M17/135 - 00001		50	32.0	105	PE	0.089 SC 7/0.0296	PU	2 SC PE interlayer	0.500	12.7	16.0	23.8	Water blocked triaxial, swept attn. and SRL from 50 to 3,000 MHz
M17/135 - 00002		50	32.0	105	PE	0.089 SC 7/0.0296	PU	2 SC PE interlayer	0.500	12.7	16.0	23.8	Non-water blocked M17/134-00001
M17/135 - 00003		50	32.0	105	PE	0.081 SC	PE	2 SC PE interlayer	0.500	12.7	18.5	27.5	Water blocked
M17/135 - 00004		50	32.0	105	PE	0.081 SC	PE	2 SC PE interlayer	0.500	12.7	18.5	27.5	Non-water blocked M17/135-00003
M17/135 - 00005		50	32.0	105	PE	0.081 SC	XL polyolefin	2 SC PE interlayer	0.500	12.7	18.5	27.5	Water blocked
M17/135 - 00006		50	32.0	105	PE	0.081 SC	XL polyolefin	2 SC PE interlayer	0.500	12.7	18.5	27.5	Non-water blocked M17/135-00005
M17/136 - 00001		75	22.0	72.2	PTFE	0.012 SCCS 7/0.004	PFA-XIII	SC	0.100	2.54	1.2	1.8	
M17/137 - 00001		95	15.4	50.5	PTFE	0.012 SCCS 7/0.004	PFA-XIII	SC	0.141	3.58	2.0	3.0	
M17/138 - 00001		50	32.0	105	PTFE	0.0201 SCCS 7/0.0067	PFA-XIII	SC	0.098	2.49	1.22	1.82	Swept attn. and SRL from 50 to 3,000 MHz
M17/139 - 00001		95	15.4	50.5	PTFE	0.012 SCBerC 7/0.004	PFA-XIII	SC Cad Br	0.141	3.58	178	265	Use up to 3,000 MHz maximum
M17/140 - 00001		50	29.3	96.1	PTFE	0.012 SCCS 7/0.004	PFA-XIII	SC	0.071	1.80	0.625	0.930	CANCELED use M17/93
M17/151 - 00001		50	32.0	105	PTFE	0.0113 SCCS	None	BC tube	0.047	1.19	4.5	6.7	Swept attn. and SRL from 500 to 20,000 MHz
M17/151 - 00002		50	32.0	105	PTFE	0.0113 SCCS	None	TC tube	0.047	1.19	4.8	7.1	Tin-plated M17/151- 00001
M17/152 - 00001		50	32.0	105	PTFE	0.0201 SCCS 7/0.0067	FEP-IX	2 SC	0.114	2.90	1.85	2.75	Swept attn. and SRL from 500 to 12,400 MHz
M17/153 - 00001		50	32.2	106	PE	0.0189 CCS 7/0.0063	PVC-II A	2 SC	0.114	2.90	3.0	4.5	CANCELED Use M17/152-00001
M17/154 - 00001		50	32.0	105	PTFE	0.008 SCCS	None	BC Tube	0.034	0.86	0.26	0.39	
M17/154 - 00002		50	32.0	105	PTFE	0.008 SCCS	None	TC Tube	0.034	0.86	0.28	0.42	Tin-plated M17/154-00001
M17/155 - 00001		50	30.8	101	PE	0.0355 TC 19/0.0072	PVC-II A	TC	0.195	4.95	3.1	4.6	Inactive for new design Use M17/197-00001

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Catalog No.	Nom. Imp. (Ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Cond. (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (kgs / 100ft) 100m)		Remarks
M17/156 - 00001		50	29.3	96.1	PTFE	0.1019 BC	2 FG Braid-V	2 BC	0.465	11.8	24.0	35.7	
M17/157 - 00001		50	30.8	101	PE	0.0308 TC 27/0.005	PVC-IIA	TC	0.160	4.06	2.4	3.6	Inactive for new design Use M17/198-00001
M17/158 - 00001		50	29.3	96.1	PTFE	0.037 SCCS	FEP-IX	2 SC	0.195	4.95	5.6	8.3	Unswept M17/60-RG142 Use below 400 MHz
M17/159 - 00001		50	29.3	96.1	PTFE	0.094 SC 7/0.0315	2 FG Braid-V	SC	0.410	10.4	21.8	32.4	Unswept M17/65-RG165 Use below 400 MHz
M17/160 - 00001		50	32.2	106	PE	0.195 BC	PVC-IIA	2 SC	0.895	22.7	59.5	88.5	Unswept M17/67-RG177 Use below 400 MHz
M17/161 - 00001		50	29.3	96.1	PTFE	0.192 BC	2 FG braid-V	BC	0.730	18.5	65.0	96.7	Inactive for new design
M17/161 - 00002		50	29.3	96.1	PTFE	0.192 BC	2 FG braid-V w/armor	BC	0.795	20.2	65.0	96.7	Inactive for new design
M17/162 - 00001		50	32.2	106	PE	0.0556 SC	PVC-IIA	2 SC	0.332	8.43	8.9	13	Inactive for new design Use M17/199-00001
M17/163 - 00001		50	30.8	101	PE	0.0888 BC 7/0.0296	PVC-IIA	BC	0.405	10.3	12.5	18.6	Unswept M17/74-RG213 Use below 400 MHz
M17/164 - 00001		50	32.2	106	PE	0.0888 SC 7/0.0296	PVC-IIA	2 SC	0.425	10.8	14.0	20.8	Unswept M17/75-RG214 Use below 400 MHz
M17/164 - 00002		50	32.2	106	PE	0.0888 SC 7/0.0296	TPE	2 SC	0.425	10.8	14.0	20.8	Unswept M17/75-RG365 Use below 400 MHz
M17/165 - 00001		50	30.8	101	PE	0.106 BC	PVC-IIA	2 BC	0.545	13.8	26.5	39.4	Unswept M17/78-RG217 Use below 400 MHz
M17/165 - 00002		50	30.8	101	PE	0.106 BC	PVC-IIA w/armor	2 BC	0.615	15.6	26.5	39.4	Inactive for new design
M17/166 - 00001		50	32.2	106	PE	0.195 BC	PVC-IIA	BC	0.870	22.1	57.5	85.6	Unswept M17/79-RG218 Use below 400 MHz
M17/167 - 00001		50	32.2	106	PE	0.035 SC	PVC-IIA	2 SC	0.212	5.38	4.1	6.1	Inactive for new design Use M17/200-00001
M17/168 - 00001		50	32.0	105	Taped PTFE	0.084 SC 7/0.028	3 FG braid-V	2 SC	0.415	10.5	18.5	27.5	Unswept M17/92-RG115 Use below 400 MHz
M17/168 - 00002		50	32.0	105	Taped PTFE	0.084 SC 7/0.028	FEP-IX	2 SC	0.344	8.74	18.5	27.5	FEP jacketed M17/92-RG115
M17/169 - 00001		50	32.0	105	PTFE	0.012 SCCS 7/0.004	FEP-IX	SC	0.071	1.80	0.63	0.94	Unswept M17/93-RG178 Use below 400 MHz
M17/170 - 00001		50	29.3	96.1	PTFE	0.037 SCCS	FEP-IX	SC	0.170	4.32	3.9	5.8	Unswept M17/111-RG303 Use below 400 MHz
M17/171 - 00001		50	32.0	105	PTFE	0.059 SCCS	FEP-IX	2 SC	0.280	7.11	9.24	13.7	
M17/172 - 00001		50	32.0	105	PTFE	0.0201 SCCS 7/0.0067	FEP-IX	SC	0.098	2.49	1.15	1.71	Unswept M17/113-RG316 Use below 400 MHz
M17/173 - 00001		50	30.8	101	PE	0.0189 CCS 7/0.0063	PVC-IIA	TC	0.110	2.79	0.95	1.4	Unswept M17/119-RG174 Use below 400 MHz
M17/174 - 00001		50	32.0	105	PTFE	0.094 SC 7/0.0312	FEP-IX	2 SC	0.390	9.91	17.5	26.0	Unswept M17/127-RG393 Use below 400 MHz
M17/175 - 00001		50	32.0	105	PTFE	0.0384 SC 19/0.008	FEP-IX	2 SC	0.195	4.95	5.0	7.4	Unswept M17/128-RG400 Use below 400 MHz
M17/176 - 00002		77	24.0	78.7	2 PTFE	2 cond. 0.023 19/0.005 SCHSCA	PFA-XIII	SCHSCA	0.129	3.28	1.8	2.7	Use up to 10 MHz maximum
M17/176 - 00003		77	24.0	78.7	2 ECTE or ETFE foam	2 cond. 0.023 19/0.005 SCHSCA	PFA , FEP, ETFE, or ECTFE	SCHSCA	0.125	3.18	1.6	2.4	Use up to 10 MHz maximum
M17/177 - 00001		95	17.4	57.1	PTFE	0.012 SCCS 7/0.004	2 FEP-IX	2 SC	0.184	4.67	3.4	5.1	Use up to 3,000 MHz maximum
M17/178 - 00001		95	17.4	57.1	PTFE	0.012 SCCS 7/0.004	Inner FEP-IX, outer polyester braid	SC, NC, CPC Tape, NC	0.270	6.86	6.0	8.9	

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Catalog No.	Nom. Imp. (Ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Cond. (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (kgs / 100ft) 100m)		Remarks
M17/179 - 00001		75	23.0	75.5	PTFE	0.012 SCCS 7/0.004	Inner FEP- IX, outer polyester braid	SC, NC, CPC tape, NC	0.195	4.95	3.65	5.43	Use up to 3,000 MHz maximum
M17/180 - 00001		75	22.0	72.2	PE	0.0285 CCS	XL polyolefin	1 SC 1 BC AL/MY	0.332	8.43	9.2	14	Non Halogen, low smoke M17/2-RG6
M17/181 - 00001		75	22.0	72.2	PE	0.0477 7/0.0159 TC	XL polyolefin	BC AL/MY	0.405	10.3	10.8	16.1	Non Halogen, low smoke M17/6-RG11
M17/181 - 00002		75	22.0	72.2	PE	0.0477 7/0.0159 TC	XL polyolefin w/armor	BC AL/MY	0.475 max.	12.1 max.	13.2	19.6	Non Halogen, low smoke M17/6-RG12
M17/182 - 00001		95	17.4	57.1	PE	2 cond. 0.0456 7/0.0152 BC	XL polyolefin	2 TC AL/MY	0.420	10.7	14.2	21.1	Non Halogen, low smoke M17/15-RG22
M17/182 - 00002		95	17.4	57.1	PE	2 cond. 0.0456 7/0.0152 BC	XL polyolefin w/armor	2 TC AL/MY	0.490 max.	12.4 max.	16.9	25.1	Non Halogen, low smoke M17/15-RG111
M17/183 - 00001		50	32.2	106	PE	0.0355 19/0.0072 TC	XL polyolefin	TC AL/MY	0.195	4.95	3.0	4.5	Non Halogen, low smoke M17/28-RG58
M17/184 - 00001		75	22.0	72.2	PE	0.0226 CCS	XL polyolefin	BC AL/MY	0.242	6.15	4.3	6.4	Non Halogen, low smoke M17/29-RG59
M17/185 - 00001		93	14.5	47.6	Air space PE	0.0253 CCS	XL polyolefin	BC AL/MY	0.242	6.15	4.2	6.2	Non Halogen, low smoke M17/2-RG6
M17/186 - 00001		78	24.5	80.4	2 PE	2 cond. 0.0378 7/0.0126 TC	XL polyolefin	TC AL/MY	0.235	5.97	4.1	6.1	Non Halogen, low smoke M17/45-RG108
M17/187 - 00001		50	32.2	106	PE	0.0308 27/0.005 TC	XL polyolefin	TC AL/MY	0.160	4.06	2.3	3.4	Non Halogen, low smoke M17/54-RG122
M17/188 - 00001		50	32.2	106	PE	0.0556 SC	XL polyolefin	2 SC AL/MY	0.332	8.43	9.9	15	Non Halogen, low smoke M17/73-RG212
M17/189 - 00001		50	32.2	106	PE	0.0888 7/0.0296 BC	XL polyolefin	BC AL/MY	0.405	10.3	12.1	18.0	Non Halogen, low smoke M17/74-RG213
M17/189 - 00002		50	32.2	106	PE	0.0888 7/0.0296 BC	XL polyolefin w/armor	BC AL/MY	0.475	12.1	14.6	21.7	Non Halogen, low smoke M17/74-RG215
M17/190 - 00001		50	32.2	106	PE	0.0888 7/0.0296 SC	XL polyolefin	2 SC AL/MY	0.425	10.8	15.4	22.9	Non Halogen, low smoke M17/75-RG214
M17/191 - 00001		75	22.0	72.2	PE	0.0477 7/0.0159 TC	XL polyolefin	2 BC AL/MY	0.425	10.8	13.9	20.7	Non Halogen, low smoke M17/77-RG216
M17/192 - 00001		50	32.2	106	PE	0.106 BC	XL polyolefin	2 BC AL/MY	0.545	13.8	24.8	36.9	Non Halogen, low smoke M17/78-RG217
M17/192 - 00002		50	32.2	106	PE	0.106 BC	XL polyolefin	2 BC AL/MY	0.545	13.8	24.8	36.9	Temperature stabilization -280°C to + 65°C
M17/193 - 00001		50	32.2	106	PE	0.195 BC	XL polyolefin	BC AL/MY	0.870	22.1	52.1	77.5	Non Halogen, low smoke M17/79-RG218
M17/193 - 00002		50	32.2	106	PE	0.195 BC	XL polyolefin w/armor	BC AL/MY	0.945	24.0	57.1	85.0	Non Halogen, low smoke M17/79-RG219
M17/194 - 00001		50	32.2	106	PE	0.035 SC	XL polyolefin	2-SC AL/MY	0.212	5.38	4	6	Non-Halogen, low smoke M17/84-RG223
M17/195 - 00001		93	14.5	47.6	Air space PE	0.0253 CCS	XL polyolefin	BC, TC AL/MY	0.245	6.22	5.3	7.9	Non-Halogen, low smoke M17/90-RG71
M17/196 - 00001		50	32.2	106	PE	0.0189 7/0.0063 CCS	XL polyolefin	TC AL/MY	0.110	2.79	0.88	1.3	Non-Halogen, low smoke M17/119-RG174
M17/197 - 00001		50	32.2	106	PE	0.0355 19/0.0072 TC	XL polyolefin	TC AL/MY	0.195	4.95	3.1	4.6	Non-Halogen, low smoke M17/155-00001

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Catalog No.	Nom. Imp. (Ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Cond. (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / 100ft) (kgs / 100m)		Remarks
M17/198 - 00001		50	32.2	106	PE	0.308 27/0.005 TC	XL polyolefin	TC AL/MY	0.160	4.06	2.4	3.6	Non-Halogen, low smoke M17/157-00001
M17/199 - 00001		50	32.2	106	PE	0.0556 SC	XL polyolefin	2 SC AL/MY	0.332	8.43	10	15	Non-Halogen, low smoke M17/162-00001
M17/200 - 00001		50	32.2	106	PE	0.035 SC	XL polyolefin	2 SC AL/MY	0.212	5.38	4.4	6.5	Non-Halogen, low smoke M17/167-00001
M17/201 - 00001		77	30.0	98.4	XL modified ETFE	2-19/0.0050 SCHSCA	XL modified ETFE	TC	0.137	3.48	1.4	2.1	Twinaxial data bus
M17/201 - 00002		77	30.0	98.4	XL modified ETFE	2-19/0.0063 TC	XL modified ETFE	TC	0.165	4.19	2.2	3.3	Twinaxial data bus
M17/201 - 00003		77	30.0	98.4	XL modified ETFE	2-19/0.0050 SCHSCA	XL modified ETFE	TC	0.130	3.30	1.59	2.37	Twinaxial data bus
M17/202 - 00001		77	30.0	98.4	XL modified ETFE	2-19/0.0050 SCHSCA	XL modified ETFE	2 TC	0.147	3.73	2.6	3.9	Dual shield data bus
M17/203 - 00001		77	30.0	98.4	XL modified ETFE	0.025 2- 19/0.0050 SCHSCA	XL modified ETFE	2 TC Mumetal tape	0.161	4.09	2.9	4.3	Dual shield EMP harded data bus
M17/205 - 00018		50	27.0	88.6	Expanded PTFE tape	0.0298 SC	PFA- XIII	2 SC	0.120	3.05	1.5	2.2	Low loss, high temperature applications, test free 50 MHz to 18 GHz
M17/205 - 00050		50	27.0	88.6	Expanded PTFE tape	0.0298 SC	PFA- XIII	2 SC	0.120	3.05	1.5	2.2	Test Free 50 MHz to 50 GHz
M17/206 - 00018		50	32.0	105	PTFE	0.0365 SC	FEP- IX	2 SC interlayer	0.169	4.29	4.0	6.0	Test Free 50 MHz to 18 GHz
M17/206 - 00030		50	32.0	105	PTFE	0.0365 SC	FEP- IX	2 SC interlayer	0.169	4.29	4.0	6.0	Test Free 50 MHz to 30 GHz
M17/208 - 00001		185	7.2	24	Air space PE	0.007 CCS	XL Polyolefin	BC AL/MY	0.405	10.3	8.9	13	Non-Halogen, low smoke M17/47 - RG114
M17/209 - 00001		75	22.0	72.2	PE	0.1045 BC	XL Polyolefin	BC AL/MY	0.870	22.1	50.5	75.1	Use in new designs of M17/67
M17/209 - 00002		75	22.0	72.2	PE	0.1045 BC	XL Polyolefin w/armor	BC AL/MY	0.945	24.0	54.5	81.1	Armored M17/209-00001
M17/210 - 00001		50	32.2	106	PE	0.195 BC	XL Polyolefin	2 SC AL/MY	0.895	22.7	57.2	85.1	Use in new design of M17/67
M17/211 - 00001		72	23.0	75.5	SCPE PE SCPE	0.0477 7/0.0159 TC	XL Polyolefin	TC AL/MY	0.405	10.3	11.0	16.4	Use in new designs of M17/126
M17/211 - 00002		72	23.0	75.5	SCPE PE SCPE	0.0477 7/0.0159 TC	XL Polyolefin w/armor	TC AL/MY	0.475	12.1	13.5	20.1	Armored M17/211-00001
M17/212 - 00001		50	32.2	106	PE	0.195 BC	XL Polyolefin	2 SC AL/MY	0.895	22.7	57.2	85.1	Use in new designs of M17/160
M17/213 - 00001		50	32.2	106	PE	0.0888 7/0.0296 BC	XL Polyolefin	BC AL/MY	0.405	10.3	12.1	18.0	Use in new designs of M17/163
M17/214 - 00001		50	32.2	106	PE	0.0888 7/0.0296 SC	XL Polyolefin	2 SC AL/MY	0.425	10.8	15.4	22.9	Use in new designs of M17/164-00001
M17/215 - 00001		50	32.2	106	PE	0.106 BC	XL Polyolefin	2 BC AL/MY	0.545	13.8	24.8	36.9	Use in new designs of M17/165
M17/216 - 00001		50	32.2	106	PE	0.195 BC	XL Polyolefin	BC ALMY	0.870	22.1	52.1	77.5	Use in new designs of M17/166
M17/217 - 00001		50	32.2	106	PE	0.0189 7/.0063 CCS	XL Polyolefin	TC ALMY	0.110	2.8	1.0	1.5	Use in new designs of M17/173

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Catalog No.	Nom. Imp. (Ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Cond. (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / 100ft) (kgs / 100m)		Remarks
M17/218 - 00001		125	11.0	36.1	Air Space PE	0.0253 CCS	XL Polyolefin	BC ALMY	0.405	10.3	8.8	13.1	Non-Halogen, low smoke M17/31 - RG63
M17/218 - 00002		125	11.0	36.1	Air Space PE	0.0253 CCS	XL Polyolefin w/Armor	BC ALMY	0.475	12.1	13.8	20.5	Armored M17/218-00001
M17/220 - 00001		50	27.0	88.6	Foam PE	0.044 BC	XL Polyolefin	TC AL Tape	0.195	4.95	3.74	5.57	Non-Halogen, low smoke, low loss
M17/220 - 00002		50	27.0	88.6	Foam PE	0.044 BC	XL Polyolefin w/AL-Alloy armour	TC AL Tape	0.265	6.73	5.06	7.53	Armored M17/220-0001
M17/221 - 00001		50	27.0	88.6	Foam PE	0.056 BC	XL Polyolefin	TC AL Tape	0.242	6.15	5.06	7.53	Non-Halogen, low smoke, low loss
M17/221 - 00002		50	27.0	88.6	Foam PE	0.056 BC	XL Polyolefin w/AL-Alloy armour	TC AL Tape	0.312	7.92	6.62	9.85	Armored M17/221-0001
M17/222 - 00001		50	27.0	88.6	Foam PE	0.070 BC	XL Polyolefin	TC AL Tape	0.300	7.62	8.65	12.9	Non-Halogen, low smoke, low loss
M17/222 - 00002		50	27.0	88.6	Foam PE	0.070 BC	XL Polyolefin w/AL-Alloy armour	TC AL Tape	0.370	9.40	10.57	15.73	Armored M17/222-0001
M17/223 - 00001		50	27.0	88.6	Foam PE	Copper covered 0.108 AL	XL Polyolefin	TC AL Tape	0.405	10.3	11.44	17.02	Non-Halogen, low smoke, low loss
M17/223 - 00002		50	27.0	88.6	Foam PE	Copper covered 0.108 AL	XL Polyolefin w/AL-Alloy armour	TC AL Tape	0.475	12.1	13.96	20.77	Armored M17/223-0001
M17/224 - 00001		50	27.0	88.6	Foam PE	Copper covered 0.141 AL	XL Polyolefin	TC AL Tape	0.500	12.7	13.20	19.64	Non-Halogen, low smoke, low loss
M17/224 - 00002		50	27.0	88.6	Foam PE	Copper covered 0.141 AL	XL Polyolefin w/AL-Alloy armour	TC AL Tape	0.570	14.48	16.32	24.28	Armored M17/224-0001
M17/225 - 00001		50	27.0	88.6	Foam PE	Copper covered 0.175 AL	XL Polyolefin	TC AL Tape	0.590	14.99	16.83	25.04	Non-Halogen, low smoke, low loss
M17/225 - 00002		50	27.0	88.6	Foam PE	Copper covered 0.175 AL	XL Polyolefin w/AL-Alloy armour	TC AL Tape	0.665	16.9	20.40	30.36	Armored M17/225-0001
M17/226 - 00001		50	27.0	88.6	Foam PE	Bare Copper Tube 0.262	XL Polyolefin	TC AL Tape	0.870	22.1	37.50	55.80	Non-Halogen, low smoke, low loss
M17/226 - 00002		50	27.0	88.6	Foam PE	Bare Copper Tube 0.262	XL Polyolefin w/AL-Alloy armour	TC AL Tape	0.945	24.0	42.66	63.48	Armored M17/226-0001
M17/227 - 00001		50	27.0	88.6	Foam PE	Bare Copper Tube 0.349	XL Polyolefin	TC AL Tape	1.200	30.48	68.6	102	Non-Halogen, low smoke, low loss
M17/227 - 00002		50	27.0	88.6	Foam PE	Bare Copper Tube 0.349	XL Polyolefin w/AL-Alloy armour	TC AL Tape	1.300	33.02	75.8	113	Armored M17/227-0001
M17/228 - 00001		50	27.0	88.6	Foam PE	Bare Copper Tube 0.527	XL Polyolefin	TC AL Tape	1.670	42.42	102	152	Non-Halogen, low smoke, low loss
M17/228 - 00002		50	27.0	88.6	Foam PE	Bare Copper Tube 0.527	XL Polyolefin w/AL-Alloy armour	TC AL Tape	1.770	44.96	120	179	Armored M17/228-0001

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U Cable Descriptions

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft) (m)	Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in) (mm)	Weight (lbs / 100ft) (kgs / 100m)	Remarks
1					Waveguide					
2					Waveguide					
3					Waveguide			0.226 5.74		
4	507-4	50	30.0	98.4	PE	0.0320 BC	PVC-I	2 BC	0.226 5.74	2.5 3.7 Superseded by M17/28 - RG58
5	507-5	52.5	28.5	93.5	PE	0.0508 BC	PVC-I	2 BC	0.332 8.43	8.6 13 Superseded by M17/73 - RG212
5A	507-5A	50	30.8	101	PE	0.0508 S	PVC-II	2 S	0.328 8.33	8.3 12 Superseded by M17/73 - RG212
5B*	507-5B	50	30.8	101	PE	0.0508 S	PVC-IIA	2 S	0.338 8.59	8.7 13 Superseded by M17/73 - RG212
6	507-6	75	22.0	72.2	PE	0.0285 CW	PVC-II	BC-S	0.332 8.43	8.2 12 Superseded by M17/2 - RG6
6A*	507-6A	75	22.0	72.2	PE	0.0285 CW	PVC-IIA	BC-S	0.332 8.43	8.2 12 Superseded by M17/2 - RG6
7	507-7	95	12.5	41.0	Air space PE	0.0359 BC	PVC-I	BC	0.370 9.40	8.0 12 Superseded by M17/31 - RG63
8	507-8	52	29.5	96.8	PE	7/21 BC	PVC-I	BC	0.405 10.3	10.5 15.6 Superseded by M17/74 - RG213
8A*	507-8A	52	29.5	96.8	PE	7/21 BC	PVC-IIA	BC	0.405 10.3	10.3 15.3 Superseded by M17/74 - RG213
9	507-9	50	30.0	98.4	PE	7/21 S	PVC-II	BC-S	0.420 10.7	14.0 20.8 Superseded by M17/75 - RG214
9A	507-9A	50	30.0	98.4	PE	7/21 S	PVC-II	2 S	0.420 10.7	14.0 20.8 Superseded by M17/75 - RG214
9B*	507-9B	50	30.0	98.4	PE	7/21 S	PVC-IIA	2 S	0.420 10.7	14.0 20.8 Superseded by M17/75 - RG214
10	507-10	52	29.5	96.8	PE	7/21 BC	PVC-II w/armor	BC	0.475 12.1	14.6 21.7 Superseded by M17/74 - RG215
10A*	507-10A	52	29.5	96.8	PE	7/21 BC	PVC-IIA w/armor	BC	0.475 12.1	14.6 21.7 Superseded by M17/74 - RG215/U
11	507-11	75	22.0	72.2	PE	7/26 TC	PVC-I	BC	0.405 10.3	9.8 15 Superseded by M17/6 - RG11
11A*	507-11A	75	22.0	72.2	PE	7/26 TC	PVC-IIA	BC	0.405 10.3	9.8 15 Superseded by M17/6 - RG11
12	507-12	75	20.5	67.3	PE	7/26 TC	PVC-II w/armor	BC	0.475 12.1	14.4 21.4 Superseded by M17/6 - RG12
12A*	507-12A	75	20.5	67.3	PE	7/26 TC	PVC-IIA w/armor	BC	0.475 12.1	14.4 21.4 Superseded by M17/6 - RG12
13	507-13	74	20.5	67.3	PE	7/26 TC	PVC-I	2 BC	0.420 10.7	12.1 18.0 Superseded by M17/77 - RG216
13A*	507-13A	74	20.5	67.3	PE	7/26 TC	PVC-IIA	2 BC	0.420 10.7	12.1 18.0 Superseded by M17/77 - RG216
14	507-14	52	29.5	96.8	PE	0.1020 BC	PVC-II	2 BC	0.545 13.8	21.6 32.1 Superseded by M17/78 - RG217
14A*	507-14A	52	29.5	96.8	PE	0.1020 BC	PVC-IIA	2 BC	0.545 13.8	21.6 32.1 Superseded by M17/78 - RG217
15	507-15	76	20.0	65.6	PE	0.0571 CW	PVC-I	2 BC	0.545 13.8	19.6 29.2
16	507-16	52	29.5	96.8	PE	0.125 BC tube	PVC-I	BC	0.630 16.0	25.4 37.8
17	507-17	52	29.5	96.8	PE	0.188 BC	PVC-II	BC	0.879 22.3	46.3 68.9 Superseded by M17/79 - RG218
17A*	507-17A	52	29.5	96.8	PE	0.188 BC	PVC-IIA	BC	0.870 22.1	46.7 69.5 Superseded by M17/79 - RG218
17B	507-17B	52	29.5	96.8	PE	0.188 BC	PVC-IIA	2 S	0.940 23.9	47.0 69.9 CANCELED reassigned as RG177/U
18	507-18	52	29.5	96.8	PE	0.188 BC	PVC-IA w/armor	BC	0.945 24.0	58.5 87.1 Superseded by M17/79 - RG219
18A*	507-18A	52	29.5	96.8	PE	0.188 BC	PVC-IIA w/armor	BC	0.945 24.0	58.5 87.1 Superseded by M17/79 - RG219
19	507-19	52	29.5	96.8	PE	0.250 BC	PVC-II	BC	1.120 28.4	74.5 110.9 Superseded by M17/81-00001
19A*	507-19A	52	29.5	96.8	PE	0.250 BC	PVC-IIA	BC	1.120 28.4	74.0 110.1 Superseded by M17/81-00001
20	507-20	52	29.5	96.8	PE	0.250 BC	PVC-II w/armor	BC	1.195 30.4	92.5 137.7 Superseded by M17/81-00002

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / 100ft) (kgs / 100m)		Remarks
20A*	507-20A	52	29.6	97.1	PE	0.250 BC	PVC-IIA w/armor	BC	1.178	29.92	92.5	138	Superseded by M17/81-00002
21	507-21	53	29.0	95.1	PE	0.0508 N	PVC-II	2 S	0.332	8.43	8.3	12	Superseded by M17/162-00001
21A*	507-21A	53	29.0	95.1	PE	0.0508 N	PVC-IIA	2 S	0.332	8.43	8.4	13	Superseded by M17/162-00001
22	507-22	95	18.4	60.4	PE	2 cond. 7/0.0152 BC	PVC-IIA	2 TC	0.420	10.7	13.0	19.3	Balanced twin conductor Superseded by M17/15 - RG22
22A	507-22A	95	16.3	53.5	PE	2 cond. 7/0.0152 BC	PVC-IIA	2 TC	0.420	10.7	13.0	19.3	Balanced twin conductor Superseded by M17/15 - RG22
22B*	507-22B	95	16.3	53.5	PE	2 cond. 7/0.0152 BC	PVC-IIA	2 TC	0.420	10.7	13.0	19.3	Balanced twin conductor Superseded by M17/15 - RG22
23	507-23	125	13.0	42.7	PE	2 cond. 7/21 BC	PVC-I	2 BC	0.650 x 0.945	16.5 x 24.0	53.0	78.9	Superseded by M17/16 - RG23
23A*	507-23A	125	13.0	42.7	PE	2 cond. 7/21 BC	PVC-IIA	2 BC	0.650 x 0.945	16.5 x 24.0	53.0	78.9	Superseded by M17/16 - RG23
24	507-24	125	13.0	42.7	PE	2 cond. 7/21 BC	PVC-I w/armor	2 BC	0.735 x 1.034	18.7 x 26.3	73.0	109	Superseded by M17/16 - RG24
24A*	507-24A	125	13.0	42.7	PE	2 cond. 7/21 BC	PVC-IIA w/armor	2 BC	0.735 x 1.034	18.7 x 26.3	73.0	109	Superseded by M17/16 - RG24
25*	507-25	48	50.0	164	Rubber	19/0.0117 TC	Rubber-IV	2 TC	0.505	12.8	22.5	33.5	High voltage pulse cable Superseded by M17/19
25A*	507-25A	48	50.0	164	Rubber	19/0.0117 TC	Rubber-IV	2 TC	0.505	12.8	22.5	33.5	High voltage cable Superseded by M17/19
26*	507-26	48	50.0	164	Rubber	19/0.0117 TC	Rubber-IV w/armor	TC	0.525	13.3	21.0	31.3	Pulse cable, armored Superseded by M17/21
26A*	507-26A	48	50.0	164	Rubber	19/0.0117 TC	Rubber-IV w/armor	TC	0.505	12.8	21.0	31.3	Pulse cable, armored Superseded by M17/21
27	507-27	48	50.0	164	Rubber	19/0.0185 TC	PVC-II	TC	0.675	17.1	33.0	49.1	High voltage pulse cable Superseded by M17/22
27A*	507-27A	48	50.0	164	Rubber	19/0.0185 TC	Rubber-IV w/armor	TC	0.670	17.0	33.0	49.1	High voltage pulse cable Superseded by M17/22
28	507-28	50	50.0	164	Rubber	19/0.0185 TC	Rubber-IV	TC GS	0.805	20.4	40.0	59.5	Pulse cable Superseded by M17/23
28A	507-28A	50	50.0	164	Rubber	19/0.0185 TC	Rubber-IV w/armor	TC	0.805	20.4	40.0	59.5	Pulse cable 55°C use Superseded by M17/23
28B*	507-28B	48	50.0	164	Rubber	19/0.0185 TC	Rubber-IV	TC GS	0.750 max.	19.1 max.	37.0	55.1	Superseded by M17/23 - RG28
29	507-29	53.5	28.5	93.5	PE	0.0320 BC	PE-III	TC	0.184	4.67	2.2	3.3	Superseded by M17/28 - RG58
30	507-30	50	27.0	88.6	Copo.	7/26 BC	PVC-I	BC	0.250	6.35	4.4	6.5	Superseded by M17/73 - RG212
31	507-31	51	31.0	102	Copo.	7/21 BC	PVC-I	BC	0.405	10.3	10.6	15.8	Superseded by M17/74 - RG213
32	507-32	51	29.0	95.1	Copo.	7/21 BC	PVC-I w/armor	BC	0.465	11.8	14.1	21.0	Superseded by M17/74 - RG215
33	507-33	51	30.0	98.4	PE	0.1019 BC	Lead	None	0.470	11.9	39.0	58.0	
34	507-34	71	21.5	70.5	PE	7/21 BC	PVC-I	BC	0.625	15.9	22.9	34.1	Superseded by M17/24 - RG34
34A	507-34A	71	21.5	70.5	PE	7/0.0249 BC	PVC-IIA	BC	0.630	16.0	22.9	34.1	Superseded by M17/24 - RG34
34B*	507-34B	75	21.5	70.5	PE	7/0.0249 BC	PVC-IIA	BC	0.630	16.0	22.4	33.3	Superseded by M17/24 - RG34
35	507-35	75	22.0	72.2	PE	0.1144 BC	PVC-II w/armor	BC	0.945	24.0	54.5	81.1	Superseded by M17/64 - RG35
35A	507-35A	75	22.0	72.2	PE	0.1045 BC	PVC-IIA w/armor	BC	0.945	24.0	54.5	81.1	Superseded by M17/64 - RG35
35B*	507-35B	75	22.0	72.2	PE	0.1045 BC	PVC-IIA w/armor	BC	0.945 max.	24.0 max.	54.5	81.1	Superseded by M17/64 - RG35
36	507-36	69	22.0	72.2	PE	0.1620 BC	PVC-I	BC	1.180	29.97	80.5	120	Armored
37	507-37	52.5	38.0	125	Rubber-C	0.0320 TC	PE-III	TC	0.210	5.33	4.0	6.0	Superseded by RG58/U
38	507-38	52.5	38.0	125	Rubber-C	0.0453 TC	PE-III	2 TC	0.312	7.92	11.0	16.4	Superseded by RG5/U
39	507-39	72.5	28.6	93.8	Rubber-C	0.0253 TCW	PE-III	2 TC	0.312	7.92	10.0	14.9	Superseded by RG6/U, RG59/U

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / 100ft) (kgs / 100m)		Remarks
40	507-40	72.5	28.0	91.9	Rubber-C	0.0253 TCW	Rubber-IV	2 TC	0.420	10.7	15.0	22.3	Superseded by RG6/U
41	507-41	67.5	27.6	90.6	Rubber-C	16/30 TC	Rubber-IV	TC	0.425	10.8	15.0	22.3	
42	507-42	78.6	20.0	65.6	PE	0.0285 N	PVC-II	2 S	0.342	8.69	5.0	7.4	Superseded by M17/62-00001
43	507-43	95	17.6	57.7	Rubber-B	2 cond. 7/21 BC	PVC-I	BC	0.617	15.7	40.0	59.5	Superseded by M17/56 - RG131
44	507-44	Stub supported coaxial											
45	507-45	Stub supported coaxial											
46	507-46	Stub supported coaxial											
47	507-47	Stub supported coaxial											
48	507-48	Waveguide											
49	507-49	Waveguide											
50	507-50	Waveguide											
51	507-51	Waveguide											
52	507-52	Waveguide											
53	507-53	Waveguide											
54	507-54	58	27.0	88.6	PE	7/26 BC	PVC-I	BC	0.275	7.0	4.5	6.7	Superseded by M17/73 - RG212
54A	507-54A	58	26.5	86.9	PE	7/.0152 BC	PE-III	TC	0.250	6.4	4.1	6.1	Superseded by M17/73 - RG212
55	507-55	53.5	28.5	93.5	PE	0.320 BC	PE-III	2 TC	0.200	5.1	3.2	4.8	Superseded by M17/84 - RG223
55A	507-55A	50	28.5	93.5	PE	0.035 S	PVC-IIA	2 S	0.200	5.1	3.6	5.4	Superseded by M17/84 - RG223
55B*	507-55B	53	28.5	93.5	PE	0.032 S	PE-III	2 TC	0.200 max.	5.08 max.	3.6	5.4	Superseded by M17/84 - RG223
56	507-56	48	50.0	164	Rubber-C	19/.0117 BC	PVC-I	2 BC	0.535	13.6	24.3	36.2	Pulse cable W.E. KS 9351
57	507-57	95	17.0	55.8	PE	2 cond. 7/21 BC	PVC-I	TC	0.625	15.9	22.5	33.5	Superseded by M17/56 - RG130
57A*	507-57A	95	17.0	55.8	PE	2 cond. 7/21 BC	PVC-IIA	TC	0.625	15.9	22.5	33.5	Superseded by M17/56 - RG130
58	507-58	53.5	28.5	93.5	PE	0.0320 BC	PVC-I	TC	0.195	4.95	2.7	4.0	Superseded by M17/28 - RG58
58A	507-58A	50	32.2	106	PE	19/33 TC	PVC-I	TC	0.195	4.95	2.6	3.9	Superseded by M17/28 - RG58
58B	507-58B	53.5	28.5	93.5	PE	0.0320 BC	PVC-IIA	TC	0.195	4.95	2.6	3.9	Superseded by M17/28 - RG58
58C*	507-58C	50	32.2	106	PE	19/33 TC	PVC-IIA	TC	0.195	4.95	2.6	3.9	Swept superseded by M17/28 Unwept superseded by M17/155-00001
59	507-59	73	22.0	72.2	PE	0.0226 CW	PVC-II	BC	0.242	6.15	3.5	5.2	Superseded by M17/29 - RG59
59A	507-59A	75	22.0	72.2	PE	0.0226 CW	PVC-IIA	BC	0.242	6.15	3.5	5.2	Superseded by M17/29 - RG59
59B*	507-59B	75	22.0	72.2	PE	0.0226 CW	PVC-IIA	BC	0.242	6.15	3.5	5.2	Superseded by M17/29 - RG59
60	507-60	50	39.0	128.0	Rubber	0.0508 stranded BC	Rubber-IV	BC	0.425	10.8	15.0	22.3	Pulse cable
61	507-61	Special 500 ohm line											
62	507-62	93	14.5	47.6	Air space PE	0.0253 CW	PVC-IIA	BC	0.242	6.15	3.8	5.7	Superseded by M17/30 - RG62
62A*	507-62A	93	14.5	47.6	Air space PE	0.0253 CW	PVC-IIA	BC	0.242	6.15	3.8	5.7	Superseded by M17/30 - RG62
62B	507-62B	93	14.5	47.6	Air space PE	7/32 CW	PVC-IIA	BC	0.242	6.15	3.8	5.7	Superseded by M17/30 - RG62
63	507-63	125	11.0	36.1	Air space PE	0.0253 CW	PVC-IIA	BC	0.405	10.3	8.8	13	Superseded by M17/31 - RG63
63A	507-63A	125	11.0	36.1	Air space PE	0.0253 BC	PVC-IIA	BC	0.405	10.3	8.8	13	Superseded by M17/31 - RG63
63B*	507-63B	125	11.0	36.1	Air space PE	0.0253 CW	PVC-IIA	BC	0.405	10.3	8.8	13	Low capacitance air space Superseded by M17/31 - RG63
64*	507-64	48	50.0	164	Rubber-IV	19/0.0117 TC	Rubber-IV	2 TC	0.495	12.6	22.0	32.7	Pulse cable Superseded by M17/33

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (100ft) (kgs / 100m))		Remarks
64A*	507-64A	48	50.0	164	Rubber-IV	19/0.0117 TC	Rubber-IV	2 TC	0.475	12.1	20.5	30.5	Pulse cable Superseded by M17/33 - RG65
65	507-65	950	44.0	144	PE	0.0080 Formex F	PVC-I	BC	0.405	10.3	11.0	16.4	Delay cable high impedance video Superseded by M17/84 - RG65
65A*	507-65A	950	44.0	144	PE	0.0080 Formex F	PVC-IIA	BC	0.405	10.3	9.6	14	Delay cable high impedance video Superseded by M17/84 - RG65
66	507-66	Waveguide											
67	507-67	Waveguide											
68	507-68	Waveguide											
69	507-69	Waveguide											
70	507-70	Not assigned											
71	507-71	93	13.5	44.3	Air space PE	0.0253 CW	PVC-I	2 TC	0.245	6.22	5.0	7.4	Superseded by M17/90 - RG71
71A	507-71A	93	13.5	44.3	Air space PE	0.0253 CW	PE-III	2 TC	0.245	6.22	4.6	6.8	Superseded by M17/90 - RG71
71B*	507-71B	93	14.5 max.	47.6 max.	Air space PE	0.0253 CW	PE-IIIa	2 TC	0.250 max.	6.35 max.	4.6	6.8	Superseded by M17/90 - RG71
72	507-72	150	7.8	26	Air space PE	0.0253 CW	PVC-I	BC	0.630	16.0	16.9	25.1	Low capacitance
73	507-73	25	61.8	203	PE	0.0320 BC	None	2 BC	0.175	4.45	3.1	4.6	Low capacitance
74	507-74	52	29.6	97.1	PE	0.1020 BC	PVC-II w/armor	2 BC	0.603	15.3	31.0	46.1	Superseded by M17/65-00002
74A*	507-74A	52	29.6	97.1	PE	0.1020 BC	PVC-IIA w/armor	2 BC	0.603	15.3	31.0	46.1	Superseded by M17/65-00002
75	507-75	Waveguide											
76	507-76	Stub supported coaxial											
77A	507-77A	48	50.0	164	Rubber	19/0.0117 TC	PVC-IIA	2 TC	0.450	11.4	19.5	29.0	Pulse cable
78A	507-78A	48	50.0	164	Rubber	19/0.0117 TC	PVC-IIA	TC	0.420	10.7	14.9	22.2	Pulse cable
79	507-79	125	11.0	36.1	Air space PE	0.0253 CW	PVC-I w/armor	BC	0.475	12.1	13.8	20.5	Superseded by M17/31 - RG79
79A	507-79A	125	11.0 max.	36.1 max.	Air space PE	0.0253 CW	PVC-I w/armor	BC	0.475	12.1	13.6	20.2	Superseded by M17/31 - RG79
79B*	507-79B	125	11.0 max.	36.1 max.	Air space PE	0.0253 CW	PVC-IIA w/armor	BC	0.475	12.1	13.8	20.5	RG63B/U with armor Superseded by M17/31 - RG79
80	507-80	Bead supported coaxial											
81*	507-81	50	37.0	121	Mag. Ox.	0.0625 BC	None	BC tube	0.325	8.26	17.2	25.6	Semirigid high temperature
82*	507-82	50	36.0	118	Mag. Ox.	0.1250 BC	None	BC tube	0.750	19.1	69.8	104	Semirigid high temperature
83	507-83	35	44.0	144	PE	0.1020 BC	PVC-I	BC	0.405	10.3	12.0	17.9	CANCELED
84A*	507-84A	75	21.5	70.5	PE	0.1045 BC	PVC-IIA w/lead	BC	1.000	25.40	132.5	197.2	RG35B/U with lead jacket
85A*	507-85A	75	21.5	70.5	PE	0.1045 BC	PVC-IIA w/lead	BC	1.565	39.75	291.0	433.1	RG84/U with special armor
86*	507-86	200	7.8	26	PE	2 cond. 7/21 BC	None	None	0.650 x 0.300	16.5 x 7.62	10.0	14.9	Twin-lead
87	507-87	50	29.5	96.8	TFE	7/20 S	FG-V	BC & S	0.425	10.8	18.0	26.8	Superseded by M17/127 - RG393
87A*	507-87A	50	29.5	96.8	TFE	7/20 S	FG-V	2 S	0.425	10.8	18.0	26.8	Superseded by M17/127 - RG393
88*	507-88	48	50.0	164	Rubber	19/0.0117 TC	PVC-I	4 TC	0.515 max.	13.1 max.	21.1	31.4	High voltage pulse cable
88A*	507-88A	48	50.0	164	Rubber	19/0.0117 TC	PVC-IIA	4 TC	0.515 max.	13.1 max.	21.1	31.4	High voltage pulse cable
88B	507-88B	48	50.0	164	Rubber	19/0.0117 TC	Rubber-IV	4 TC	0.565	14.4	23.8	35.4	High voltage pulse cable
89	507-89	125	10.0	32.8	Air space PE	0.0253 CW	PVC-I	BC	0.632	16.1	20.0	29.8	Superseded by M17/31 - RG63

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft)	(m)	Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in)	(mm)	Weight (lbs / 100ft)	(kgs / 100m)	Remarks
90	507-90	50	30.8	101	PE	7/24 S	PVC-IIA	2 TC 1 GS	0.425	10.8	-	-	Carrier frequency communication
91	507-91	Waveguide											
92	507-92	46	-	-	SS TFE	0.375 BC	None	BC tube	-	-	-	-	TFE bead supported coaxial line
93	507-93	50	29.0	95.1	TFE tape	19/18 BC	FG-V	BC	0.710	18.0	47.5	70.7	Superseded by M17/72 - RG211
94*	507-94	50	29.0	95.1	TFE tape	19/23 S	FG-V	2 BC	0.445	11.3	27.0	40.2	Superseded by M17/87-00001
94A	507-94A	50	29.0	95.1	TFE tape	19/22 S	FG-V	2 BC	0.500	12.7	44.0	65.5	Superseded by M17/87-00001
95	507-95	Waveguide											
96	507-96	Waveguide											
97	507-97	Waveguide											
98	507-98	Waveguide											
99	507-99	Waveguide											
100	507-100	35	44.0	144	PE	19/0.0147 BC	PVC-I	BC	0.242	6.15	4.6	6.8	Use up to 1,000 MHz
101	507-101	75	-	-	Rubber	0.0641 BC	-	TC	0.588	14.9	-	-	
102	507-102	140	-	-	Rubber	2 cond. 0.0808 BC	-	TC	1.088	27.64	-	-	
103	507-103	Waveguide											
104	507-104	Waveguide											
105	507-105	Waveguide											
106	507-106	Waveguide											
107	507-107	Waveguide											
108	507-108	78	24.5	80.4	PE	2 cond. 7/28 TC	XL polyolefin	TC	0.235	5.97	4.1	6.1	Non-Halogen, low smoke M17/186-00001
108A*	507-108A	78	24.5	80.4	PE	2 cond. 7/28 TC	XL polyolefin	TC	0.235	5.97	4.1	6.1	Shielded twisted pair M17/186-00001
109	507-109	Waveguide											
110	507-110	Waveguide											
111	507-111	95	18.4	60.4	PE	2 cond. 7/0.0152 BC	PVC-II w/armor	2 TC	0.490	12.4	14.6	21.7	Superseded by M17/15 - RG111
111A*	507-111A	95	18.4	60.4	PE	2 cond. 7/0.0152 BC	PVC-IIA w/armor	2 TC	0.490	12.4	14.6	21.7	Superseded by M17/15 - RG111
112	507-112	Waveguide											
113	507-113	Waveguide											
114	507-114	185	6.8	22	Air space PE	0.0070 CW	PVC-IIA	BC	0.405	10.3	8.9	13	Superseded by M17/47 - RG114
114A*	507-114A	185	6.8	22	Air space PE	0.0070 CW	PVC-IIA	BC	0.405	10.3	8.9	13	Superseded by M17/47 - RG114
115*	507-115	50	32.0	105	TFE tape	7/21 S	FG-V	2 S	0.415	10.5	18.5	27.5	For use where expansion & contraction are problem. Superseded by M17/168-00001
115A*	507-115A	50	32.0	105	TFE tape	7/21 S	FG-V	2 S	0.415	10.5	18.5	27.5	Superseded by M17/168-00001
116*	507-116	50	29.5	96.8	TFE	7/20 S	FG-V w/armor	2 S	0.475	12.1	19.8	29.5	Superseded by M17/86-00002
117*	507-117	50	29.5	96.8	TFE	0.188 BC	FG-V	BC	0.730	18.5	64.1	95.4	Superseded by M17/72 - RG211
117A*	507-117A	50	29.5	96.8	TFE	0.188 BC	FG-V	BC	0.730	18.5	64.1	95.4	Superseded by M17/72 - RG211
118*	507-118	50	29.0	95.1	TFE	0.188 BC	FG-V w/armor	BC	0.780	19.8	68.2	101	Superseded by M17/161-00002

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (kgs / 100ft) 100m)		Remarks
118A*	507-118A	50	29.0	95.1	TFE	0.188 BC	FG-V w/armor	BC	0.780	19.8	68.2	101	Superseded by M17/161-00002
119*	507-119	50	29.3	96.1	TFE	0.102 BC	FG-V	2 BC	0.465	11.8	22.8	33.9	Superseded by M17/52 - RG119
120*	507-120	50	29.3	96.1	TFE	0.102 BC	FG-V w/armor	2 BC	0.523	13.3	28.6	42.6	Superseded by M17/52 - RG120
121	507-121	Waveguide											
122*	507-122	50	30.8	101	PE	27/36 TC	PVC-IIA	TC	0.160	4.06	2.0	3.0	Superseded by M17/54 - RG122 Superseded by M17/187-00001
123	507-123	Not assigned											
124	507-124	73	20.3	66.6	TFE tape	0.0253 TCW	FG-V	TC	0.240	6.10	21.0	31.3	Superseded by M17/110 - RG302
125	507-125	150	7.8	26	Air space PE	0.0159 CW	PVC-IIA	BC	0.600	15.2	18.0	26.8	Low capacitance
126*	507-126	50	29.0	95.1	TFE	7/24 HR	FG-V	HR	0.280	7.11	7.0	10	Superseded by M17/109 - RG301
128	507-128	50	-	-	SS TFE	0.644 BC	None	BC tube	1.625	41.28	-	-	TFE bead supported coaxial line
129	507-129	Flexible Waveguide											
130*	507-130	95	17.0	55.8	PE	2 cond. 7/21 BC	PVC-I	TC	0.625	15.9	30.0	44.6	RG 57A/U with twisted inner conductors flex. Superseded by M17/56 - RG130
131*	507-131	95	17.0	55.8	PE	2 cond. 7/21 BC	PVC-I w/armor	TC	0.710	18.0	40.0	59.5	RG 130/U with armor. Superseded by M17/56 - RG131
132	507-132	Waveguide											
133	507-133	95	16.2	53.1	PE	0.0285 BC	PVC-I	BC	0.405	10.3	9.4	14	Superseded by M17/100 - RG133
133A*	507-133A	95	16.2	53.1	PE	0.0253 BC	PVC-IIA	BC	0.405	10.3	9.4	14	NATO type NWR-7. Superseded by M17/100 - RG133
134	507-134	185	6.5	21	SS TFE	0.0126 BC	None	Brass	0.450	11.4	-	-	TFE bead supported coaxial line
135	507-135	Waveguide											
136	507-136	Waveguide											
137	507-137	Waveguide											
138	507-138	Waveguide											
139	507-139	Waveguide											
140*	507-140	75	21.0	68.9	TFE	0.0250 SCCS	FG-V	S	0.233	5.92	5.6	8.3	Superseded by M17/110 - RG302
141	507-141	50	29.4	96.5	TFE	0.0359 SCCS	FG-V	S	0.190	4.83	3.5	5.2	Similar to RG 58/U with TFE core Superseded by M17/111 - RG303
141A*	507-141A	50	29.4	96.5	TFE	0.0390 SCCS	FG-V	S	0.190	4.83	3.5	5.2	High temperature similar to RG58C/U Superseded by M17/111- RG303
142	507-142	50	29.3	96.1	TFE	0.0370 SCCS	FEP-IX	2 S	0.195	4.95	4.3	6.4	Superseded by M17/60 - RG142
142A*	507-142A	50	29.3	96.1	TFE	0.0370 SCCS	FEP-IX	2 S	0.195	4.95	4.3	6.4	Superseded by M17/60 - RG142
142B*	507-142B	50	29.3	96.1	TFE	0.0370 SCCS	FEP-IX	2 S	0.195	4.95	4.3	6.4	NATO type NWR-25 Superseded by M17/60 - RG142
143	507-143	50	29.4	96.5	TFE	0.0570 SCCS	FG-V	2 S	0.325	8.26	11.4	17.0	Superseded by M17/112 - RG304
143A*	507-143A	50	29.4	96.5	TFE	0.0590 SCCS	FG-V	2 S	0.325	8.26	10.9	16.2	Superseded by M17/112 - RG304
144*	507-144	75	22.0	72.2	TFE	7/25 SCCS	FG-V	S	0.410	10.4	14.0	20.8	Superseded by M17/62 - RG144
145	507-145	75	14.6	47.9	Air space PE	2 cond. 0.0720 BC	Lead-tar	BC tube	-	-	-	-	
146	507-146	190	6.0	20	Air space TFE	0.0070 CW	FG-V	BC	0.375	9.53	10.8	16.1	CANCELED
147	507-147	52	29.5	96.8	PE	0.250 BC	PVC-I w/armor	BC	1.938	49.23	-	-	Superseded by M17/81-00002

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft)	(m)	Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in)	(mm)	Weight (lbs / 100ft)	(kgs / 100m)	Remarks
148	507-148	52	29.5	96.8	PE	7/21 BC	PVC-I w/armor	BC	0.800	20.3	-	-	Superseded by M17/74 - RG213
149*	507-149	75	20.5	67.3	PE	7/26 TC	PVC-IIA	BC	0.405	10.3	10.0	14.9	Superseded by M17/126 - RG391
150*	507-150	75	20.5	67.3	PE	7/26 TC	PVC-IIA w/armor	BC	0.475	12.1	11.7	17.4	Superseded by M17/126 - RG392
151*	507-151	50	-	-	-	0.125 BC tube	None	BC tube	0.375	9.53	-	-	Bead supported coaxial line
152*	507-152	50	-	-	-	2.60 BC tube	None	BC tube	6.125	156	-	-	Bead supported coaxial line
153*	507-153	50	-	-	-	0.664 BC tube	None	BC tube	1.625	41.28	-	-	Bead supported coaxial line
154	507-154	50	-	-	-	1.315 BC tube	None	BC tube	3.125	79.38	-	-	Bead supported coaxial line
155	507-155	50	-	-	-	0.341 BC tube	None	BC tube	0.875	22.2	-	-	Bead supported coaxial line
156*	507-156	50	32.8	108	PE & conductive PE	7/21 TC	PVC-IIA	TC, GS, TC	0.540	13.7	21.1	31.4	Triaxial pulse cable
157*	507-157	50	38.0	125	PE & conductive PE	19/24 TC	PVC-IIA	TC, GS, TC	0.725	18.4	31.7	47.2	Triaxial pulse cable
158*	507-158	25	78.0	256	PE & conductive PE	37/21 TC	PVC-IIA	TC, GS, TC	0.725	18.4	38.0	56.6	Triaxial pulse cable
159	507-159	50	29.0	95.1	TFE tape	0.0320 S	FG-V	S	0.195	5.0	3.5	5.2	Superseded by M17/111 - RG303
160	507-160	125	12.0	39.4	PE	2 cond. 19/27 TC 2 cond. 19/27 BC	PVC-I	BC	1.055	26.80	-	-	Four conductor balanced line
160A	507-160A	125	12.0	39.4	PE	2 cond. 19/27 TC 2 cond. 19/27 BC	PVC-I	BC	1.055	26.80	-	-	Same as RG160/U except copper ribbon braid shield and mylar tape
161	507-161	70	20.9	68.6	TFE	7/38 SCB	nylon	S	0.082	2.1	1.5	2.2	Miniature
162	507-162	175	-	-	SS TFE	0.156 BC tube	None	BC tube	3.065	77.85	-	-	TFE bead supported coaxial line
163	507-163	Waveguide											
164*	507-164	75	22.0	72.2	PE	0.1045 BC	PVC-IIA	BC	0.870	22.1	50.5	75.2	Superseded by M17/64 - RG164
165*	507-165	50	29.3	96.1	TFE	7/20 S	FG-V	S	0.410	10.4	14.2	21.1	Superseded by M17/64 - RG165
166*	507-166	50	29.3	96.1	TFE	7/20 S	FG-V w/armor	S	0.470	11.9	18.9	28.1	Superseded by M17/64 - RG166
167	507-167	Waveguide											
168	507-168	Waveguide											
169	507-169	Waveguide											
170	507-170	Waveguide											
171	507-171	Waveguide											
172	507-172	Waveguide											
173	507-173	Waveguide											
174*	507-174	50	32.2	106	PE	7/34 CW	PVC-IIA	TC	0.110	2.79	0.85	1.3	Superseded by M17/119 - RG174
174A*	507-174A	50	30.8	101	PE	7/34 CW	PVC-IIA	TC	0.100	2.54	0.90	1.3	Swept superseded by M17/119 - RG174. Unswept superseded by M17/173-00001
175	507-175	Bead supported coaxial line											
176*	507-176	2240	49.0	161	PE	0.135 BC helix	PVC-I	BC	0.405	10.3	12.0	17.9	High impedance delay
177*	507-177	50	32.2	106	PE	0.195 BC	PVC-IIA	2 S	0.895	22.7	59.5	88.5	Superseded by M17/67 - RG177
178	507-178	50	32.0	105	TFE	7/38 SCW	FEP-IX	S	0.079 max.	2.01 max.	0.625	0.930	Superseded by M17/93 - RG178
178A*	507-178A	50	32.0	105	TFE	7/38 SCW	FEP-IX	S	0.075 max.	1.91 max.	0.625	0.930	Superseded by M17/93 - RG178
178B*	507-178B	50	32.0	105	TFE	7/38 SCW	FEP-IX	S	0.075 max.	1.91 max.	0.625	0.930	Swept superseded by M17/93 - RG178. Unswept superseded by M17/169-00001
179	507-179	75	23.0	75.5	TFE	7/38 SCCS	FEP-IX	S	0.100 max.	2.54 max.	1.08	1.61	Superseded by M17/94 - RG179
179A*	507-179A	75	23.0	75.5	TFE	7/38 SCCS	FEP-IX	S	0.105 max.	2.67 max.	1.08	1.61	Superseded by M17/94 - RG179

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft)	(m)	Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in)	(mm)	Weight (lbs / 100ft)	(kgs / 100m)	Remarks
179B*	507-179B	75	23.0	75.5	TFE	7/38 SCCS	FEP-IX	S	0.105 max.	2.67 max.	1.08	1.61	Superseded by M17/94 - RG179
180	507-180	95	15.4	50.5	TFE	7/38 SCCS	FEP-IX	S	0.141 max.	3.58 max.	1.98	2.95	Superseded by M17/95 - RG180
180A*	507-180A	95	15.4	50.5	TFE	7/38 SCCS	FEP-IX	S	0.145 max.	3.68 max.	1.98	2.95	Superseded by M17/95 - RG180
180B*	507-180B	95	15.4	50.5	TFE	7/38 SCCS	FEP-IX	S	0.145 max.	3.68 max.	1.98	2.95	Superseded by M17/95 - RG180
181*	507-181	125	12.0	39.4	PE	2 cond. 7/26 BC	PVC-IIA	BC	0.640	16.3	19.8	29.5	Balanced line
182	507-182	125 each	12.0 each	39.4 each	PE	2 cond. 19/0.0142 BC 2 cond. 19/0.0066 TC	PVC-IIA	2 BC	1.055	26.8	-	-	Dual Twinaxial
183	507-183	50	23.0	75.5	PS helix	0.0251 BC	None	AL tube	0.750	19.1	38.0	56.6	
184	507-184	Waveguide											
185	507-185	2000	-	-	Air space PE	0.0031 RIM helix	PVC-IIA	Magnet wire	0.282	7.16	-	-	Delay line cable
186	507-186	1000	-	-	SS PE	0.0080 TFE Magnet wire helix	PVC-IIA	Magnet wire	0.405	10.3	-	-	Delay line cable
187	507-187	75	19.5	64.0	TFE	7/38 SCCS	TFE	S	0.110 max.	2.79 max.	1.13	1.68	Superseded by M17/136-00001
187A*	507-187A	75	19.5	64.0	TFE	7/38 SCCS	TFE	S	0.110 max.	2.79 max.	1.13	1.68	Superseded by M17/136-00001
188*	507-188	50	29.0	95.1	TFE	7/0.0067 SCCS	TFE	S	0.110 max.	2.79 max.	1.11	1.65	Superseded by M17/138-00001
188A*	507-188A	50	29.0	95.1	TFE	7/0.0067 SCCS	TFE	S	0.110 max.	2.79 max.	1.11	1.65	Superseded by M17/138-00001
189	507-189	50	23.0	75.5	PS helix	0.251 BC	PE-IIIA	2 S	0.875	22.2	57.0	84.8	Partially air supported by cross-linked polystyrene use RG389
190*	507-190	50	50.0	164	Rubber	19/0.0117 TC	Neoprene® VIII	TC, GS, TC	0.700	17.8	35.3	52.5	Pulse cable
191*	507-191	25	85.0	279	Rubber	TC braid 0.485	Neoprene® VIII	TC, GS, TC	1.460	37.1	146.9	218.6	CANCELED
192	507-192	12.5	175.0	574.1	Butyl rubber	TC braid GS tube	Rubber	TC, GS, GS	2.165	55.0	-	-	Pulse cable
193	507-193	12.5	159.0	521.7	Silicone rubber	TC braid GW tube	Rubber	TC, GS, GS	2.165	55.0	-	-	Pulse cable
194	507-194	12.5	159.0	521.7	Silicone rubber	TC braid GW tube	Rubber w/AL armour	TC, GS, GS	2.01 max.	51.1 max.	-	-	Pulse cable
195*	507-195	95	15.0	49.2	TFE	7/38 SCCS	TFE	S	0.155 max.	3.94 max.	2.0	3.0	Superseded by M17/137-00001
195A*	507-195A	95	15.0	49.2	TFE	7/38 SCCS	TFE	S	0.155 max.	3.94 max.	2.0	3.0	Superseded by M17/137-00001
196*	507-196	50	28.5	93.5	TFE	7/38 SCCS	TFE	S	0.080 max.	2.03 max.	0.6	0.9	Superseded by M17/93-00001
196A*	507-196A	50	28.5	93.5	TFE	7/38 SCCS	TFE	S	0.080 max.	2.03 max.	0.6	0.9	Superseded by M17/93-00001
197	507-197	50	22.0	72.2	PS helix	0.300 BC	None	AL tube	0.875	22.2	50.0	74.4	Semirigid Mil-C-22931/2A
198	507-198	70	16.0	52.5	PS helix	0.114 BC	PE	AL tube	0.600	15.2	15.5	23.1	
199	507-199	70	16.0	52.5	PS helix	0.209 BC	PE	AL tube	1.015	25.8	44.5	66.2	
200	507-200	70	16.0	52.5	PS helix	0.403 BC	PE	AL tube	1.765	44.8	90.0	133.9	
201	507-201	Rigid waveguide											
202	507-202	Rigid waveguide											
203	507-203	Rigid waveguide											
204	507-204	Rigid waveguide											

* Covered by specification MIL-DTL-17

Neoprene® is a trademark of the DuPont de Nemours Co.

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft) (m)		Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (kgs / 100ft) 100m)		Remarks
205	507-205	Rigid waveguide											
206	507-206	Rigid waveguide											
207	507-207	Rigid waveguide											
208	507-208	Rigid waveguide				19/0.038 S							
209*	507-209	50	26.5	86.9	Air space TFE	19/0.0378 SC	Silicone rubber & FG	2 S	0.750 max.	19.1 max.	43.2	64.3	CANCELED
210*	507-210	93	14.5	47.6	Air space TFE	0.0253 BC	FG-V	S	0.242	6.15	5.0	7.4	Superseded by M17/97 - RG210
211*	507-211	50	29.3	96.1	TFE	0.190 BC	FG-V	BC	0.730	18.5	51.6	76.8	Superseded by M17/72 - RG211
211A*	507-211A	50	29.4	96.5	TFE	0.190 BC	FG-V	BC	0.730	18.5	45.0	67.0	Superseded by M17/72 - RG211
212*	507-212	50	30.8	101	PE	0.0556 SC	PVC-IIA	2 S	0.332	8.4	9.3	14	Superseded by M17/73 - RG212
213*	507-213	50	30.8	101	PE	7/0.0296 BC	PVC-IIA	BC	0.405	10.3	12.0	17.9	Superseded by M17/74 - RG213
214*	507-214	50	32.2	106	PE	7/0.0296 SC	PVC-IIA	2 S	0.425	10.8	12.6	18.8	Superseded by M17/75 - RG214
215*	507-215	50	30.8	101	PE	7/0.0296 BC	PVC-IIA w/ armor	BC	0.475	12.1	16.0	23.8	Superseded by M17/74 - RG215
216*	507-216	75	22.0	72.2	PE	7/26 TC	PVC-IIA	2 BC	0.425	10.8	11.4	17.0	Superseded by M17/77 - RG216
217*	507-217	50	32.2	106	PE	0.106 BC	PVC-IIA	2 BC	0.545	13.8	22.5	33.5	Superseded by M17/78 - RG217
218*	507-218	50	32.2	106	PE	0.195 BC	PVC-IIA	BC	0.870	22.1	57.5	85.6	Superseded by M17/79 - RG218
219*	507-219	50	32.2	106	PE	0.195 BC	PVC-IIA w/ armor	BC	0.945 max.	24.0 max.	63.5	94.5	Superseded by M17/79 - RG219
220*	507-220	50	30.8	101	PE	0.260 BC	PVC-IIA	BC	1.120	28.4	72.0	107	Formerly RG19A/U Superseded by M17/81-00001
221*	507-221	50	30.8	101	PE	0.260 BC	PVC-IIA w/ armor	BC	1.195	30.4	78.6	117	Formerly RG20A/U Superseded by M17/81-00002
222*	507-222	50	30.8	101	PE	0.0556 resistance	PVC-IIA	2 S	0.332	8.4	8.0	11.9	Formerly RG21A/U Superseded by M17/162-00001
223*	507-223	50	30.8	101	PE	0.035 S	PVC-IIA	2 S	0.212	5.4	3.6	5.4	Superseded by M17/84 - RG223
224*	507-224	50	30.8	101	PE	0.106 BC	PVC-IIA w/ armor	2 BC	0.615 max.	15.6 max.	23.0	34.2	Formerly RG74A/U Superseded by M17/165-00002
225*	507-225	50	29.4	96.5	TFE	7/0.0312 S	FG-V	2 S	0.430	10.9	18.0	26.8	Superseded by M17/127 - RG393
226*	507-226	50	29.4	96.5	Taped TFE	19/0.0254 S	FG-V	2 BC	0.500	12.7	44.5	66.2	Superseded by M17/87-00001
227*	507-227	50	29.4	96.5	TFE	7/0.0312 S	FG-V w/ armor	2 S	0.490 max.	12.4 max.	19.8	29.5	Superseded by M17/86-00002
228*	507-228	50	29.4	96.5	TFE	0.190 BC	FG-V w/ armor	BC	0.795 max.	20.2 max.	68.2	101.5	Superseded by M17/161-00002
228A*	507-228A	50	29.4	96.5	TFE	0.190 BC	FG-V w/ armor	BC	0.795 max.	20.2 max.	68.2	101.5	Formerly RG118A/U Superseded by M17/161-00002
229	507-229	50	29.4	96.5	TFE	7/20 S	FG-V	S	0.460	11.7	14.4	21.4	Superseded by M17/65 - RG166
230*	507-230	25	100.0	328.1	Rubber	37/21 TC	Rubber-IV	TC, GS, GS	0.740	18.8	-	-	Triaxial pulse cable
231	507-231	50	25.0	82.0	PE foam	0.162 BC tube	None	Al tube	0.500	12.7	15.2	22.6	Mil-C-23806/1A
231A	507-231A	50	25.0	82.0	PE foam	0.162 BC	None	Al tube	0.500	12.7	15.2	22.6	Mil-C-23806/1B
232	507-232	50	22.0	72.2	PE helix	0.300 BC	PE-IIIA	Al tube	1.015	25.78	58.0	86.3	Semirigid Mil-C-22931/2A
233	507-233	50	22.0	72.2	PS helix	BC tube	PE-IIIA	Al tube	1.765	44.83	108.0	160.7	Semirigid Mil-C-22931/3A
234	507-234	50	22.0	72.2	PS helix	BC tube	PE-IIIA	Al tube	3.295	83.69	311.0	462.8	Semirigid Mil-C-22931/4A
235*	507-235	50	29.5	96.8	TFE tape	7/21 S	Silicone rubber	2 S	0.470 max.	11.9 max.	16.0	23.8	Superseded by M17/168-00001
236	507-236	50	24.0	78.7	PS helix	0.162 BC	None	Al tube	0.500	12.7	16.5	24.6	Semirigid Mil-C-22931/1A
237	507-237	50	24.0	78.7	PS helix	0.162 BC	PE-IIIA	Al tube	0.600	15.2	20.0	29.8	Semirigid Mil-C-22931/1A
238	507-238												CANCELED same as RG197/U
239	507-239												CANCELED same as RG232/U

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft)	(m)	Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in)	(mm)	Weight (lbs / 100ft)	(kgs / 100m)	Remarks
240	507-240	50	22.0	72.2	PS helix	BC tube	None	Al tube	1.625	41.28	93.0	138	Semirigid Mil-C-22931/3A
241	507-241												CANCELED same as RG233/U
242	507-242	50	22.0	72.2	PS helix	BC tube	None	Al tube	3.125	79.38	270.0	401.8	Semirigid Mil-C-22931/4A
243	507-243												CANCELED same as RG234/U
244	507-244	75	15.5	50.9	PS helix	0.102 BC	None	Al tube	0.500	12.70	11.8	17.6	Semirigid Mil-C-22931/1A
245	507-245	75	15.5	50.9	PS helix	0.102 BC	PE-III A	Al tube	0.600	15.24	15.3	22.8	Semirigid Mil-C-22931/1A
246	507-246	75	15.5	50.9	PS helix	0.188 BC	None	Al tube	0.875	22.23	34.3	51.0	Semirigid Mil-C-22931/2A
247	507-247	75	15.5	50.9	PS helix	0.188 BC	PE-III A	Al tube	1.015	25.78	42.3	62.9	Semirigid Mil-C-22931/2A
248	507-248	75	15.0	49.2	PS helix	0.370 BC	None	Al tube	1.625	41.28	94.8	141.1	Semirigid Mil-C-22931/3A
249	507-249	75	15.0	49.2	PS helix	0.370 BC	PE-III A	Al tube	1.765	44.83	109.8	163.4	Semirigid Mil-C-22931/3A
250	507-250	75	15.0	49.2	PS helix	0.732 BC	None	Al tube	3.125	79.38	239.5	356.4	Semirigid Mil-C-22931/4A
251	507-251	75	15.0	49.2	PS helix	0.732 BC	PE-III A	Al tube	3.295	83.69	280.5	417.4	Semirigid Mil-C-22931/4A
252	507-252	75	24.4	80.1	PE tube	0.167 BC	None	Al tube	0.530	13.46	17.5	26.0	Semirigid Mil-C-22931/1A
253	507-253	75	24.4	80.1	PE tube	0.167 BC	PE	Al tube	0.635 max.	16.1 max.	22.5	33.5	Semirigid Mil-C-22931/1A
254	507-254	50	24.4	80.1	PE tube	0.311 BC	PE	Al tube	1.100 max.	27.94 max.	65.5	97.5	Semirigid Mil-C-22931/2A
255	507-255	50	24.4	80.1	PE tube	0.311 BC	None	Al tube	0.953	24.21	55.5	82.6	Semirigid Mil-C-22931/2A
256	507-256	50	23.5	77.1	TFE tube	S tube	None	Al tube	0.953	24.21	55.0	81.8	
257	507-257	50	24.4	80.1	PS tube	BC tube	None	Al tube	1.786	45.36	120.0	178.6	Semirigid Mil-C-22931/3A
258	507-258	50	24.4	80.1	PE tube	BC tube	PE	Al tube	1.936 max.	49.17 max.	138.0	205.4	Semirigid Mil-C-22931/3A
259	507-259	50	23.5	77.1	TFE tube	0.115 BC	None	Al tube	0.390	9.91	10.0	14.9	
260	507-260	50	23.5	77.1	PE tube	0.115 BC	PE-III A	Al tube	0.450	11.4	14.0	20.8	
261	507-261	50	23.5	77.1	PE tube	BC tube	None	Al tube	3.370	85.60	-	-	CANCELED
262	507-262	50	23.5	77.1	PE tube	BC tube	PE	Al tube	3.520	89.41	-	-	CANCELED
263	507-263	50	21.5	70.5	Air space TFE	0.172 BC	None	Al tube	0.500	12.7	17.0	25.3	
264	507-264	40	38.0	125	PE	4 x 19/27 BC	PVC-II A	2 BC 2 TC	0.750	19.1	33.6	50.0	Quad cable
264A	507-264A	40	38.0	125	PE	4 x 19/27 BC	PU	2 BC 2 TC	0.750	19.1	32.7	48.7	Quad cable
264B	507-264B	40	42.0 max.	138 max.	PE	4 x 19/27 BC	PU	2 BC 2 TC	0.750	19.1	-	-	Mil-C-23020A
264C	507-264C	40	42.0 max.	138 max.	PE	2 x 13 BC 2 x 13 TC	PU	2 BC 2 TC	0.750	19.1	32.7	48.7	Mil-C-23020/4
265	507-265	50	22.3	73.2	PS helix	BC tube	PE-III A	CCS tube	2.070	52.58	-	-	Mil-C-22931/7
266*	507-266	1530	53.0	174	PE	0.144 BC helix	PVC-I	BC	0.400	10.2	12.0	17.9	Delay line
267	507-267	50	22.2	72.8	PS helix	BC tube	PE-III	CCS tube	1.190	30.23	-	-	Mil-C-22931/6
268	507-268	50	23.0	75.5	PS helix	0.160 BC	None	BC tube	0.500	12.7	23.4	34.8	Mil-C-22931/5
269	507-269	50	22.2	72.8	PS helix	BC tube	None	BC tube	1.005	25.53	42.1	62.7	Mil-C-22931/6A
270	507-270	50	22.3	73.2	PS helix	BC tube	None	BC tube	1.830	46.48	87.5	130	Mil-C-22931/7A
271	507-271	Waveguide											
272	507-272	Waveguide											
273	507-273	Waveguide											
274	507-274	Waveguide											
275	507-275	Waveguide											

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft) (m)	Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in) (mm)		Weight (lbs / (kgs / 100ft) 100m)		Remarks	
276	507-276	Waveguide											
277	507-277	Waveguide											
278	507-278	Waveguide											
279*	507-279	75	17.0	55.8	Air space TFE	19/36 SCCS	FG-V	S	0.145	3.68	12.5	18.6	
280*	507-280	50	25.4	83.3	Taped TFE	0.1144 BC	FEP-IX	2 S	0.480	12.2	20.0	29.8	
281	507-281	50	25.4	83.3	Taped TFE	19/0.0378 S	SR & braid	2 S	0.750	19.1	40.0	59.5	
282	507-282	54.6	28.2	92.5	Irradiated PE	0.0253 S	FEP	2 S	0.200	5.08	3.1	4.6	
283	507-283	46	50.0	164	Rubber	19/0.177 S	Rubber-IV	2 S	0.475 max.	12.1 max.	14.2	21.1	
284A	507-284A	75	15.0	49.2	PE helix	0.220 BC	None	BC tube	1.005	25.53	41.0	61.0	
285A	507-285A	100	13.0	42.7	TFE helix	0.1140 BC	None	BC tube	1.005	25.53	43.0	64.0	
286	507-286	75	15.1	49.5	PE helix	BC tube	None	BC tube	1.830	46.48	72.0	107.1	
287	507-287	100	13.5	44.3	PE helix	0.197 BC	None	BC tube	1.830	46.48	75.0	111.6	
288	507-288	50	21.6	70.9	PE helix	BC tube	None	CCS tube	3.750	95.25	300.0	446.4	
289	507-289	75	14.7	48.2	PE helix	CCS tube	None	CCS tube	3.750	95.25	300.0	446.4	
290	507-290	Waveguide											
291	507-291	Waveguide											
292	507-292	75	15.1	49.5	PE helix	BC tube	PE FC	BC tube	1.830	46.48	104.0	154.8	
293	507-293	50	30.8	101	PE	0.106 BC	PE-III A	S	0.545	13.8	16.0	23.8	Mil-C-23020 A
293A	507-293A	50	30.8	101	PE	0.106 BC	PE-III A	S	0.545	13.8	16.0	23.8	Mil-C-23020/2
294	507-294	95	16.3	53.5	PE	0.0808 BC 0.0808 TC	PE-III A	TC	0.630	16.0	20.5	30.5	Twinaxial
294A	507-294A	95	16.3	53.5	PE	0.0808 BC 0.0808 TC	PE-III A	S	0.630	16.0	20.5	30.5	Twinaxial for submarine use
295	507-295	50	30.8	101	PE	0.195 BC	PE-III A	S	0.895	22.7	42.0	62.5	Mil-C-23020/3
296*	507-296	50	36.4	119	Silicone rubber	37/0.0336 S	Neoprene®	S	1.190	30.23	-	-	
297	507-297	50	21.4	70.2	TFE helix	BC tube	None	BC tube	1.005	25.53	-	-	Mil-C-22667 A
298	507-298	-	-	-	PE	7/24 CCS	PE foam	None	0.650	16.5	9.0	13.4	Same as RG126/U with FEP jacket
301*	507-301	50	32.0	105	TFE	7/0.0203 HR	FEP-IX	HR	0.245	6.22	6.8	10	Superseded by M17/109 - RG301
302*	507-302	75	19.5	64.0	TFE	0.025 SCCS	FEP-IX	S	0.206 max.	5.23 max.	4.0	6.0	Superseded by M17/110 - RG302
303*	507-303	50	29.4	96.5	TFE	0.039 SCCS	FEP-IX	S	0.170	4.32	3.0	4.5	Swept superseded by M17/111 Unswept superseded by M17/170-00001
304*	507-304	50	29.4	96.5	TFE	0.059 SCCS	FEP-IX	2 S	0.280	7.11	4.5	6.7	Superseded by M17/112 - RG304
305	507-305	75	19.5	64.0	FEP	BC tube	PE-III A	BC tube	1.990	50.55	-	-	Similar to RG298/U
306A	507-306A	75	16.9	55.4	PE foam	0.173 BC	PE-III A	Al tube	1.015	25.78	54.5	81.1	Mil-C-23806/2A
307A*	507-307A	75	16.7	54.8	PE foam	19/0.0058 S	PE-III A	2 S	0.270 max.	6.86 max.	8.0	12	Superseded by M17/116 - RG307
316*	507-316	50	29.4	96.5	TFE	7/0.0067 SCCS	FEP-IX	S	0.098	2.49	1.2	1.8	Same as RG188/U with FEP jacket. Swept superseded by M17/113 - RG316. Unswept superseded by M17/172-00001

* Covered by specification MIL-DTL-17

Neoprene® is a trademark of the DuPont de Nemours Co.

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft)	(m)	Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in)	(mm)	Weight (lbs / 100ft)	(kgs / 100m)	Remarks
317	507-317	95	15.4	50.5	FEP	2 cond. 7/0.029 BC	Neoprene®	TC	0.710	18.0	-	-	Mil-C-23020/5A
318	507-318	50	22.2	72.8	PE helix	BC tube O.D. 0.3580 I.D. 0.2870	PE-III A	BC tube	1.100	27.94	53.0	78.9	Mil-C-22931/6A
319	507-319	50	22.3	73.2	SS PS	BC tube O.D. 0.6880 I.D. 0.5880	PE-III A	BC tube	1.970	50.04	104.0	154.8	Mil-C-22931/7A
321	507-321	50	21.7	71.2	SS PE	BC tube	None	BC tube	2.850	72.39	121.0	180.1	
322	507-322	50	21.7	71.2	SS PE	BC tube	PE FC	BC tube	3.040	77.22	178.0	264.9	
323	507-323	50	25.6	84.0	PE foam	BC tube	PE FC	BC tube	1.060	26.92	42.0	62.5	
324	507-324	50	25.6	84.0	PE foam	BC tube	None	BC tube	0.980	24.9	32.0	47.6	
325	507-325	50	26.3	86.3	PE spline	19/0.0200 SCCA	PU	2 SC strip	0.465 max.	11.8 max.	10.0	14.9	Low loss
326	507-326	50	26.3	86.3	PE spline	19/0.0400 SCCA	PU	2 SC strip	0.779 max.	19.8 max.	24.0	35.7	Low loss
327	507-327	50	26.3	86.3	PE spline	19/0.0640 SCCA	PU	2 SC strip	1.18 max.	30.0 max.	55.0	81.8	Low loss
328*	507-328	25	85.0	278.9	Rubbere	TC braid	Neoprene®	TC, GS, TC	1.460	37.08	160.0	238.1	Superseded by M17/124 - RG328
329*	507-329	50	50.0	164.0	Rubber	19/0.0117 TC	Neoprene®	TC, GS, TC	0.700	17.8	38.0	56.6	Superseded by M17/125 - RG329
330	507-330	50	25.0	82.0	PE foam	SC	None	SC	0.242	6.15	-	-	
331	507-331	50	25.0	82.0	PE foam	0.162 BC	PE-III A	Al tube	0.625	15.9	18.7	27.8	Mil-C-23806/1A
332	507-332	50	25.0	82.0	PE foam	0.288 BC	None	Al tube	0.875	22.2	48.0	71.4	Mil-C-23806/2A
333	507-333	50	25.0	82.0	PE foam	0.288 BC	PE-III A	Al tube	1.052 max.	26.72 max.	54.5	81.1	Mil-C 23806/2A
334	507-334	75	17.0	55.8	PE foam	0.098 BC	None	Al tube	0.500	12.7	15.2	22.6	Mil-C-23806/1A
335	507-335	75	17.0	55.8	PE foam	0.098 BC	PE-III A	Al tube	0.625	15.9	18.7	27.8	Mil-C-23806/1A
336	507-336	75	16.5	54.1	PE foam	0.173 BC	None	Al tube	0.875	22.2	48.0	71.4	Mil-C-23806/1A
360	507-360	50	25.0	82.0	PE foam	0.243 BC	PE-III A	Al tube	0.825	21.0	39.8	59.2	Mil-C-23806/3A
366	507-366	50	26.6	87.3	PE foam	0.160 BC	PE-III A	BC tube	0.620	15.7	-	-	
367	507-367	50	21.7	71.2	PE helix	BC tube	PE-III A	BC tube	5.200	132.1	45.9	68.3	
369	507-369	50	23.5	77.1	PE tubes	0.177 BC	PE-III A	Al tube	0.470	11.9	14.0	20.8	
370	507-370	50	24.0	78.7	PE tubes	0.177 BC	None	Al tube	0.390	9.91	10.0	14.9	
373	507-373	-	-	-	PE	0.0508 BC	PE foam	None	0.650	16.5	-	-	Mil-C-28751 (EC) buoyant cable
374	507-374	-	-	-	PE	0.0285 BC	PE foam	None	0.650	16.5	9.7	14.4	Mil-C-24301 buoyant cable
376	507-376	50	26.0	85.3	PE foam	0.312 BC tube	PE-III A	Al tube	1.060	26.9	39.0	58.0	
377	507-377	50	24.0	78.7	TFE tubes	0.165 S tube	None	Al tube	0.530	13.5	17.0	25.3	
378	507-378	50	22.1	72.5	PE helix	BC tube	PE-III A	Al tube	2.000	50.8	62.0	92.3	Semirigid Mil-C-22931/13
382	507-382	Rigid Line											

* Covered by specification MIL-DTL-17

Neoprene® is a trademark of the DuPont de Nemours Co.

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG/U No.	Catalog Number	Nom. Imp. (ohms)	Cap. pF per (ft)	(m)	Dielect. Mat.	Size and Type of Inner Conductor (in)	Jacket	Shield	Overall Diameter (in)	(mm)	Weight (lbs / 100ft)	(kgs / 100m)	Remarks
383	507-383	100	-	-	PE	2 cond. 0.0403	PE foam	None	0.650	16.5	-	-	Twisted pair, high strength alloy conductors
384	507-384	50	30.8	101	PE	0.16 BC	PE foam	Flat BC	0.650	16.5	-	-	Mil-C-28726 (EC) buoyant cable
385	507-385	50	25.4	83.3	SS TFE	0.153 S	Optional	Al tube	0.660	16.8	17.8	26.5	Low loss
386	507-386	-	-	-	PE	0.0508 CCS	PE foam	None	0.650	16.5	-	-	
388	507-388	50	30.8	101	PE	0.1020 BC	PE-III A	S	0.545	13.8	-	-	
389	507-389	50	22.8	74.8	PE	0.250 BC AL	PE-III A	2S	0.875	22.2	36.6	54.5	Low loss, replaces RG189/U
391*	507-391	72	23.0	75.5	C PE & PE	7/26 TC	PVC-II A	TC	0.405	10.3	9.2	14	Low noise Superseded by M17/126 - RG391
392*	507-392	72	23.0	75.5	C PE & PE	7/26 TC	PVC-II A	TC	0.475	12.1	11.4	17.0	RG391/U with armor Superseded by M17/126 - RG392
393*	507-393	50	29.4	96.5	TFE	7/0.0312 S	FEP-IX	2 S	0.390	9.9	16.5	24.6	Swept superseded by M17/127 - RG393. Unswept superseded by M17/174-00001
400*	507-400	50	29.4	96.5	TFE	19/0.0077 S	FEP-IX	2 S	0.195	4.95	5.0	7.4	Swept superseded by M17/128 - RG400. Unswept superseded by M17/175-00001
401*	507-401	50	29.4	96.5	TFE	0.0641 S	None	BC tube	0.250	6.35	8.1	12	Superseded by M17/129 - RG401
402*	507-402	50	29.4	96.5	TFE	0.0360 SCCS	None	BC tube	0.141	3.58	3.2	4.8	Superseded by M17/130 - RG402
403*	507-403	50	29.4	96.5	TFE	7/38 SCCS	FEP-IX	2 S	0.104	2.64	0.750	1.12	Triaxial Superseded by M17/131 - RG403
404*	507-404	50	31.5	103	TFE	7/38 SCCS	FEP-IX	S	0.075 max.	0.191 max.	0.54	0.80	Low noise Superseded by M17/132 - RG404
405*	507-405	50	29.4	96.5	TFE	0.0201 SCCS	None	BC tube	0.086	2.18	1.53	2.28	Semirigid Superseded by M17/133 - RG405

* Covered by specification MIL-DTL-17

When an RG/U No. is superseded by a M17 number the MIL-DTL-17 specification is listed.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

COAX CABLE CROSS-REFERENCE

MIL-C No.	RG No.	Catalog No.	MIL-C No.	RG No.	Catalog No.
M17/2.....	RG 6.....	507-6	M17/60.....	RG 142.....	507-142
M17/2.....	RG 6A.....	507-6A	M17/60.....	RG 142A.....	507-142A
M17/6.....	RG 11.....	507-11	M17/60.....	RG 142B.....	507-142B
M17/6.....	RG 11A.....	507-11A	M17/62.....	RG 144.....	507-144
M17/6.....	RG 12.....	507-12	M17/64.....	RG 164.....	507-164
M17/6.....	RG 12A.....	507-12A	M17/64.....	RG 35.....	507-35
M17/15.....	RG 22.....	507-22	M17/65.....	RG 165.....	507-165
M17/15.....	RG 22A.....	507-22A	M17/65.....	RG 166.....	507-166
M17/15.....	RG 22B.....	507-22B	M17/67.....	RG 177.....	507-177
M17/15.....	RG 111.....	507-111	M17/72.....	RG 211.....	507-211
M17/16.....	RG 23.....	507-23	M17/72.....	RG 211A.....	507-211A
M17/16.....	RG 23A.....	507-23A	M17/73.....	RG 212.....	507-212
M17/16.....	RG 24.....	507-24	M17/74.....	RG 213.....	507-213
M17/16.....	RG 24A.....	507-24A	M17/74.....	RG 215.....	507-215
M17/19.....	RG 25.....	507-25	M17/75.....	RG 214.....	507-214
M17/19.....	RG 25A.....	507-25A	M17/75.....	RG 365.....	507-365
M17/21.....	RG 26.....	507-26	M17/77.....	RG 216.....	507-216
M17/21.....	RG 26A.....	507-26A	M17/78.....	RG 217.....	507-217
M17/22.....	RG 27.....	507-27	M17/79.....	RG 218.....	507-218
M17/22.....	RG 27A.....	507-27A	M17/79.....	RG 219.....	507-219
M17/23.....	RG 28.....	507-28	M17/84.....	RG 223.....	507-223
M17/23.....	RG 28A.....	507-28A	M17/90.....	RG 71.....	507-71
M17/23.....	RG 28B.....	507-28B	M17/90.....	RG 71A.....	507-71A
M17/24.....	RG 34.....	507-34	M17/90.....	RG 71B.....	507-71B
M17/24.....	RG 34A.....	507-34A	M17/92.....	RG 115.....	507-115
M17/24.....	RG 34B.....	507-34B	M17/93.....	RG 178.....	507-178
M17/28.....	RG 58.....	507-58	M17/93.....	RG 178A.....	507-178A
M17/28.....	RG 58A.....	507-58A	M17/93.....	RG 178B.....	507-178B
M17/28.....	RG 58B.....	507-58B	M17/94.....	RG 179.....	507-179
M17/28.....	RG 58C.....	507-58C	M17/94.....	RG 179A.....	507-179A
M17/29.....	RG 59.....	507-59	M17/94.....	RG 179B.....	507-179B
M17/29.....	RG 59A.....	507-59A	M17/95.....	RG 180.....	507-180
M17/29.....	RG 59B.....	507-59B	M17/96.....	RG 209.....	507-209
M17/30.....	RG 62.....	507-62	M17/97.....	RG 210.....	507-210
M17/30.....	RG 62A.....	507-62A	M17/100.....	RG 133.....	507-133
M17/30.....	RG 62B.....	507-62B	M17/100.....	RG 133A.....	507-133A
M17/30.....	RG 62C.....	507-62C	M17/109.....	RG 301.....	507-301
M17/31.....	RG 63.....	507-63	M17/110.....	RG 302.....	507-302
M17/31.....	RG 63A.....	507-63A	M17/111.....	RG 303.....	507-303
M17/31.....	RG 63B.....	507-63B	M17/112.....	RG 304.....	507-304
M17/31.....	RG 79.....	507-79	M17/113.....	RG 316.....	507-316
M17/31.....	RG 79A.....	507-79A	M17/116.....	RG 307.....	507-307
M17/31.....	RG 79B.....	507-79B	M17/116.....	RG 307A.....	507-307A
M17/33.....	RG 64.....	507-64	M17/119.....	RG 174.....	507-174
M17/33.....	RG 64A.....	507-64A	M17/124.....	RG 328.....	507-328
M17/34.....	RG 65.....	507-65	M17/125.....	RG 329.....	507-329
M17/34.....	RG 65A.....	507-65A	M17/126.....	RG 391.....	507-391
M17/45.....	RG 108.....	507-108	M17/126.....	RG 392.....	507-392
M17/45.....	RG 108A.....	507-108A	M17/127.....	RG 393.....	507-393
M17/47.....	RG 114.....	507-114	M17/128.....	RG 400.....	507-400
M17/47.....	RG 114A.....	507-114A	M17/129.....	RG 401.....	507-401
M17/52.....	RG 119.....	507-119	M17/130.....	RG 402.....	507-402
M17/52.....	RG 120.....	507-120	M17/131.....	RG 403.....	507-403
M17/54.....	RG 122.....	507-122	M17/132.....	RG 404.....	507-404
M17/56.....	RG 130.....	507-130	M17/133.....	RG 405.....	507-405
M17/56.....	RG 131.....	507-131			

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG No.	MIL-C No.	Catalog No.
RG 6	M17/2	507-6
RG 6A	M17/2	507-6A
RG 11	M17/6	507-11
RG 11A	M17/6	507-11A
RG 12	M17/6	507-12
RG 12A	M17/6	507-12A
RG 22	M17/15	507-22
RG 22A	M17/15	507-22A
RG 22B	M17/15	507-22B
RG 111	M17/15	507-111
RG 23	M17/16	507-23
RG 23A	M17/16	507-23A
RG 24	M17/16	507-24
RG 24A	M17/16	507-24A
RG 25	M17/19	507-25
RG 25A	M17/19	507-25A
RG 26	M17/21	507-26
RG 26A	M17/21	507-26A
RG 27	M17/22	507-27
RG 27A	M17/22	507-27A
RG 28	M17/23	507-28
RG 28A	M17/23	507-28A
RG 28B	M17/23	507-28B
RG 34	M17/24	507-34
RG 34A	M17/24	507-34A
RG 34B	M17/24	507-34B
RG 58	M17/28	507-58
RG 58A	M17/28	507-58A
RG 58B	M17/28	507-58B
RG 58C	M17/28	507-58C
RG 59	M17/29	507-59
RG 59A	M17/29	507-59A
RG 59B	M17/29	507-59B
RG 62	M17/30	507-62
RG 62A	M17/30	507-62A
RG 62B	M17/30	507-62B
RG 62C	M17/30	507-62C
RG 63	M17/31	507-63
RG 63A	M17/31	507-63A
RG 63B	M17/31	507-63B
RG 79	M17/31	507-79
RG 79A	M17/31	507-79A
RG 79B	M17/31	507-79B
RG 64	M17/33	507-64
RG 64A	M17/33	507-64A
RG 65	M17/34	507-65
RG 65A	M17/34	507-65A
RG 108	M17/45	507-108
RG 108A	M17/45	507-108A
RG 114	M17/47	507-114
RG 114A	M17/47	507-114A
RG 119	M17/52	507-119
RG 120	M17/52	507-120
RG 122	M17/54	507-122
RG 130	M17/56	507-130
RG 131	M17/56	507-131

RG No.	MIL-C No.	Catalog No.
RG 142	M17/60	507-142
RG 142A	M17/60	507-142A
RG 142B	M17/60	507-142B
RG 144	M17/62	507-144
RG 164	M17/64	507-164
RG 35	M17/64	507-35
RG 165	M17/65	507-165
RG 166	M17/65	507-166
RG 177	M17/67	507-177
RG 211	M17/72	507-211
RG 211A	M17/72	507-211A
RG 212	M17/73	507-212
RG 213	M17/74	507-213
RG 215	M17/74	507-215
RG 214	M17/75	507-214
RG 365	M17/75	507-365
RG 216	M17/77	507-216
RG 217	M17/78	507-217
RG 218	M17/79	507-218
RG 219	M17/79	507-219
RG 223	M17/84	507-223
RG 71	M17/90	507-71
RG 71A	M17/90	507-71A
RG 71B	M17/90	507-71B
RG 115	M17/92	507-115
RG 178	M17/93	507-178
RG 178A	M17/93	507-178A
RG 178B	M17/93	507-178B
RG 179	M17/94	507-179
RG 179A	M17/94	507-179A
RG 179B	M17/94	507-179B
RG 180	M17/95	507-180
RG 209	M17/96	507-209
RG 210	M17/97	507-210
RG 133	M17/100	507-133
RG 133A	M17/100	507-133A
RG 301	M17/109	507-301
RG 302	M17/110	507-302
RG 303	M17/111	507-303
RG 304	M17/112	507-304
RG 316	M17/113	507-316
RG 307	M17/116	507-307
RG 307A	M17/116	507-307A
RG 174	M17/119	507-174
RG 328	M17/124	507-328
RG 329	M17/125	507-329
RG 391	M17/126	507-391
RG 392	M17/126	507-392
RG 393	M17/127	507-393
RG 400	M17/128	507-400
RG 401	M17/129	507-401
RG 402	M17/130	507-402
RG 403	M17/131	507-403
RG 404	M17/132	507-404
RG 405	M17/133	507-405

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



MIL-DTL-17 Attenuation

M17/ Number	Resist- ance (ohms)	Maximum Attenuation dB/100 ft. at the Following						Max. Power (Watts @	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
M17/28	50	6.5	17.0	28.0	-	-	-	90	1.0
M17/52	50	2.1	4.4	7.6	13.0	-	-	600	1.0
M17/54	50	8.2	18.0	30.0	-	-	-	62	1.0
M17/60	50	5.5	11.7	19.0	35.0	48.0	-	1,100	12.4
M17/65	50	2.1	4.6	8.0	15.0	-	-	2,700	3.0
M17/67	50	1.0	2.6	5.0	15.0	25.0	-	1,600	5.6
M17/72	50	0.9	2.3	4.5	-	-	-	11,000	1.0
M17/73	50	3.0	6.5	12.0	24.0	34.0	54.0	350	11.0
M17/74	50	2.3	4.8	9.0	-	-	-	320	1.0
M17/75	50	2.6	6.8	12.0	25.0	35.0	56.0	330	11.0
M17/78	50	1.6	3.7	7.0	14.0	-	-	470	3.0
M17/79	50	1.0	2.8	5.0	-	-	-	1,200	1.0
M17/81	50	-	2.3	-	-	-	-	-	0.4
M17/84	50	6.5	12.0	21.0	40.0	54.0	84.0	86	12.4
M17/86	50	-	5.0	-	-	-	-	-	0.4
M17/87	50	-	3.8	-	-	-	-	-	0.4
M17/92	50	2.5	5.7	9.8	23.0	34.0	58.0	2,600	12.4
M17/93	50	16.0	33.0	52.0	94.0	-	-	110	3.0
M17/111	50	3.9	8.6	15.0	28.0	-	-	1,100	3.0
M17/112	50	2.7	6.4	11.1	22.0	30.0	-	1,450	12.4
M17/113	50	10.5	21.0	38.0	58.0	-	-	210	3.0
M17/119	50	10.0	25.0	45.0	-	-	-	26	1.0
M17/127	50	2.4	5.0	8.8	18.0	24.0	37.0	1,100	12.4
M17/128	50	4.5	10.5	17.0	38.0	50.0	78.0	1,050	12.4
M17/129	50	-	4.5	7.5	16.0	22.0	33.0	1,900	19.3
M17/130	50	-	7.1	12.0	21.0	29.0	45.0	660	34.2
M17/130-00012	50	3.3	6.8					660	20.0
M17/130-00013	50	3.3	11.9					660	20.0
M17/130-00014	50								20.0
M17/130-00015	50								20.0
M17/130-00018	50			2.2	4.8	5.1	8.1	160	20.0
M17/131	50	13.0	29.0	50.0	94.0	120.0	150.0	95	12.4
M17/133	50	-	13.5	22.0	37.0	52.0	80.0	210	40.0
M17/134	50	6.0	15.0	26.0	60.0	-	-	60	3.0
M17/135	50	2.5	6.0	11.0	22.0	-	-	350	3.0
M17/138	50	10.0	20.0	32.0	55.0	-	-	210	3.0
M17/151	50	-	25.0	40.0	70.0	90.0	130.0	52	40.0

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Resist- ance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
M17/152	50	11.5	24.0	40.0	75.0	110.0	170.0	210	12.4
M17/153	50	11.0	23.0	40.0	75.0	110.0	170.0	26	12.4
M17/154	50	-	37.0	60.0	100.0	140.0	190.0	16	40.0
M17/155	50	-	17.0	-	-	-	-	-	0.4
M17/156	50	-	4.5	-	-	-	-	-	0.4
M17/157	50	-	18.0	-	-	-	-	-	0.4
M17/158	50	-	9.5	-	-	-	-	-	0.4
M17/159	50	-	4.6	-	-	-	-	-	0.4
M17/160	50	-	2.7	-	-	-	-	-	0.4
M17/161	50	-	2.0	-	-	-	-	-	0.4
M17/162	50	-	6.5	-	-	-	-	-	0.4
M17/163	50	-	4.7	-	-	-	-	-	0.4
M17/164	50	-	4.6	-	-	-	-	-	0.4
M17/165	50	-	3.8	-	-	-	-	-	0.4
M17/167	50	-	11.5	-	-	-	-	-	0.4
M17/168	50	-	5.2	-	-	-	-	-	0.4
M17/169	50	-	29.0	-	-	-	-	-	0.4
M17/170	50	-	8.6	-	-	-	-	-	0.4
M17/171	50	-	6.4	-	-	-	-	-	0.4
M17/172	50	-	21.0	-	-	-	-	-	0.4
M17/173	50	-	25.0	-	-	-	-	-	0.4
M17/174	50	-	5.0	-	-	-	-	-	0.4
M17/175	50	-	10.5	-	-	-	-	-	0.4
M17/183	50	6.5	17.0	28.0	-	-	-	60	1.0
M17/187	50	8.0	18.0	30.0	-	-	-	62	1.0
M17/188	50	2.8	6.2	11.0	21.0	30.0	45.0	400	11.0
M17/189	50	2.2	4.7	9.0	-	-	-	320	1.0
M17/190	50	2.4	5.5	9.6	19.0	26.0	40.0	400	11.0
M17/192	50	1.6	4.0	7.0	15.0	-	-	400	3.0
M17/193	50	1.0	2.8	5.0	-	-	-	1,200	1.0
M17/194	50	6.5	12.0	20.0	40.0	55.0	84.0	86	12.4
M17/196	50	10.0	25.0	45.0	-	-	-	26	1.0
M17/210-00001	50	1.0	2.8	5.0	16.0	28.0	-	1,600	5.6
M17/212-00001	50	-	2.7	-	-	-	-	1,600	5.6
M17/213-00001	50	-	4.7	-	-	-	-	320	1.0
M17/214-00001	50	-	5.5	-	-	-	-	400	11.0
M17/215-00001	50	-	3.8	-	-	-	-	400	3.0
M17/216-00001	50	-	2.8	-	-	-	-	1,200	1.0
M17/217-00001	50	-	25.0	-	-	-	-	26	1.0

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Resist- ance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
M17/219-00001	50	5.2	10.5	17.0	31.0	40.0	-	-	-
M17/220-00001	50	4.3	8.7	14.0	22.4	-	-	233	2.5
M17/220-00002					@2.5 MHz				
M17/221-00001	50	3.3	6.6	10.7	17.1	-	-	337	2.5
M17/221-00002					@2.5 MHz				
M17/222-00001	50	2.6	5.2	8.4	13.8	-	-	471	2.5
M17/222-00002					@2.5 MHz				
M17/223-00001	50	1.7	3.5	5.7	9.4	-	-	750	2.5
M17/223-00002					@2.5 MHz				
M17/224-00001	50	1.4	2.8	4.6	7.6	-	-	987	2.5
M17/224-00002					@2.5 MHz				
M17/225-00001	50	1.1	2.2	3.7	6.1	-	-	1,219	2.5
M17/225-00002					@2.5 MHz				
M17/226-00001	50	0.7	1.4	2.4	3.9	-	-	1,979	2.5
M17/226-00002					@2.5 MHz				
M17/227-00001	50	0.5	1.1	1.8	3.1	-	-	2,768	2.5
M17/227-00002					@2.5 MHz				
M17/228-00001	50	0.4	0.9	1.4	2.6	-	-	3,950	2.5
M17/228-00002					@2.5 MHz				
M17/211-00001	72	2.3	15.0	-	-	-	-	-	1.0
M17/2	75	-	6.5	-	23.0	-	-	210	3.0
M17/6	75	-	5.2	9.4	-	-	-	290	1.0
M17/24	75	-	3.8	-	-	-	-	680	1.0
M17/29	75	-	9.0	16.0	-	-	-	130	1.0
M17/62	75	-	4.5	-	18.0	-	-	-	3.0
M17/64	75	-	2.8	6.0	-	-	-	-	1.0
M17/77	75	-	6.5	-	23.0	-	-	210	3.0
M17/94	75	-	15.8	-	-	-	-	-	0.4
M17/110	75	-	8.0	-	25.0	-	-	1,700	3.0
M17/116	75	-	7.5	-	-	-	-	130	1.0
M17/126	75	-	15.0	-	-	-	-	-	1.0
M17/136	75	-	21.0	-	-	-	-	1,400	3.0
M17/179	75	-	21.0	-	-	-	-	1,400	3.0
M17/180	75	-	6.5	-	23.0	-	-	210	3.0
M17/181	75	-	5.2	9.4	-	-	-	290	1.0
M17/184	75	-	9.0	16.0	-	-	-	130	1.0
M17/191	75	-	6.5	-	23.0	-	-	210	3.0
M17/209-00001	75	-	2.8	6.0	-	-	-	-	1.0
M17/229-00001	75	-	-	-	-	-	-	-	2.5

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

M17/ Number	Resist- ance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
M17/229-00002	75	-	-	-	-	-	-	-	2.5
M17/45	78	-	-	-	-	-	-	-	0.0
M17/30	93	-	8.0	13.0	-	-	-	9	1.0
M17/90	93	-	5.2	-	-	-	-	-	0.4
M17/97	93	-	5.0	-	-	-	-	-	0.4
M17/15	95	4.0	-	-	-	-	-	-	0.2
M17/56	95	-	5.2	-	-	-	-	-	0.2
M17/95	95	-	10.4	-	-	-	-	-	0.4
M17/100	95	-	4.5	-	-	-	-	-	0.4
M17/137	95	-	10.4	-	-	-	-	-	0.4
M17/139	95	8.8	17.0	29.0	-	-	-	-	3.0
M17/177	95	-	10.4	-	-	-	-	-	0.4
M17/178	95	-	10.4	-	-	-	-	-	0.4
M17/16	125	-	5.2	-	-	-	-	-	0.4
M17/31	125	-	3.4	-	-	-	-	-	0.4
M17/218-00001	125	-	5.5	-	-	-	-	-	1.0
M17/218-00002	125	-	5.5	-	-	-	-	-	1.0
M17/47	185	-	6.7	-	-	-	-	-	0.4
M17/208-00001	185	-	8.5	-	-	-	-	-	1.0

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



RG Attenuation

RG Number	Resistance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
RG192	12.5	-	-	-	-	-	-	-	-
RG193	12.5	-	-	-	-	-	-	-	-
RG194	12.5	-	-	-	-	-	-	-	-
RG191	25	-	-	-	-	-	-	-	-
RG230	25	-	-	-	-	-	-	-	-
RG328	25	-	-	-	-	-	-	-	-
RG264B	40	-	12.0	-	-	-	-	-	-
RG264C	40	-	12.0	-	-	-	-	-	-
RG283	46	-	5.0	-	16.0	-	-	-	-
RG25	48	-	-	-	-	-	-	-	-
RG25A	48	-	-	-	-	-	-	-	-
RG26	48	-	-	-	-	-	-	-	-
RG26A	48	-	-	-	-	-	-	-	-
RG27A	48	-	-	-	-	-	-	-	-
RG28B	48	-	-	-	-	-	-	-	-
RG64	48	-	-	-	-	-	-	-	-
RG64A	48	-	-	-	-	-	-	-	-
RG88	48	-	-	-	-	-	-	-	-
RG88A	48	-	-	-	-	-	-	-	-
RG5A	50	2.6	5.5	9.1	17.8	25.0	-	-	-
RG5B	50	2.6	5.5	9.1	17.8	25.0	-	-	-
RG9	50	2.0	4.3	7.3	15.5	23.0	36.0	-	-
RG9A	50	2.1	5.0	9.0	18.0	25.0	38.0	-	-
RG9B	50	2.1	5.0	9.0	18.0	25.0	38.0	-	-
RG55A	50	6.5	17.0	28.0	30.7	46.0	130.0	-	-
RG58A	50	6.5	17.0	28.0	54.0	83.0	247.0	-	-
RG58C	50	6.5	17	28	54	83	247	-	-
RG74	50	1.4	3.1	5.5	12.4	19	51	-	-
RG81	50	-	5.5	-	-	-	-	-	-
RG82	50	-	3.5	-	-	-	-	-	-
RG87A	50	2.07	4.45	7.6	15	21.5	36.5	-	-
RG94	50	2.2	5	9	20	-	-	-	-
RG94A	50	-	3.5	-	-	-	-	-	-
RG115	50	2.05	4.4	7.3	14	20	33	-	-

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG Number	Resistance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
RG115A	50	2.5	5.7	9.8	23.0	34.0	58.0	-	-
RG116	50	2.1	4.5	7.6	15.0	21.5	36.5	-	-
RG117	50	0.9	2.4	3.6	7.6	12.0	38.0	-	-
RG117A	50	-	2.3	-	-	-	-	-	-
RG118	50	0.9	2.4	3.6	7.6	12.0	38.0	-	-
RG118A	50	-	2.3	-	-	-	-	-	-
RG119	50	2.1	4.4	7.6	13.0	17.8	56.0	-	-
RG120	50	2.1	4.4	7.6	13.0	17.8	56.0	-	-
RG122	50	8.2	18.0	30.0	57.0	-	-	-	-
RG126	50	-	-	70.0	116.0	-	-	-	-
RG141	50	3.9	8.5	13.8	27.0	39.0	70.0	-	-
RG141A	50	3.9	8.5	13.8	27.0	39.0	70.0	-	-
RG142	50	5.5	11.7	19.0	35.0	48.0	70.0	-	-
RG142A	50	5.5	11.5	19.0	35.0	48.0	70.0	-	-
RG142B	50	5.5	11.5	19.0	35.0	48.0	70.0	-	-
RG143	50	2.8	5.8	9.6	18.2	25.5	42.0	-	-
RG143A	50	2.8	5.8	9.6	18.2	25.5	42.0	-	-
RG156	50	-	-	-	-	-	-	-	-
RG157	50	-	-	-	-	-	-	-	-
RG158	50	-	-	-	-	-	-	-	-
RG165	50	2.1	4.6	8.0	15.0	21.5	36.5	-	-
RG166	50	2.1	4.6	8.0	15.0	21.5	36.5	-	-
RG174	50	10.0	25.0	45.8	64.0	99.0	190.0	-	-
RG177	50	10.0	2.6	5.0	15.0	25.0	-	-	-
RG178	50	16.0	33.0	52.0	94.0	114.0	170.0	-	-
RG178A	50	16.0	33.0	52.0	94.0	114.0	170.0	-	-
RG178B	50	16	33	52	94	114	170	-	-
RG188	50	11.4	16.7	31	60	82	136	-	-
RG188A	50	11.4	16.7	31	60	82	136	-	-
RG190	50	-	-	-	-	-	-	-	-
RG196	50	13.8	28	46	76	114	170	-	-
RG197	50	-	1	-	3.4	-	-	2,800	6.6
RG209	50	-	2.5	-	9.4	-	-	-	-
RG211	50	0.9	2.3	4.5	7.6	12.0	38.0	-	-
RG211A	50	0.9	2.3	4.5	7.6	-	-	-	-
RG212	50	3	6.5	12	24	34	54	-	-
RG213	50	2.3	4.8	9	16.5	27	-	-	-

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG Number	Resistance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
RG214	50	2.6	6.8	12	25	35	56	-	-
RG215	50	2.3	4.8	9.0	16.5	27.0	-	-	-
RG217	50	1.6	3.7	7.0	14.0	19.0	51.0	-	-
RG218	50	1.0	2.8	5.0	9.5	15.3	-	-	-
RG219	50	1.0	2.8	5.0	9.5	15.3	-	-	-
RG220	50	0.7	1.9	3.6	7.7	-	-	-	-
RG221	50	0.7	1.9	3.6	7.7	-	-	-	-
RG222	50	13.0	26.0	43.0	85.0	-	-	-	-
RG223	50	6.5	12.0	21.0	40.0	54.0	84.0	-	-
RG224	50	1.4	3.1	5.5	12.4	19.0	51.0	-	-
RG225	50	2.1	4.5	7.6	15.0	21.5	36.5	-	-
RG226	50	-	3.5	-	-	-	-	-	-
RG227	50	2.1	4.5	7.6	15.0	21.5	36.5	-	-
RG228	50	0.9	2.4	3.6	7.6	12.0	38.0	-	-
RG228A	50	-	2.3	-	10.0	-	-	-	-
RG231	50	-	2.3	4.2	-	-	-	-	-
RG231A	50	0.8	1.8	3.3	6.8	10.0	-	1,100	10.0
RG232	50	-	1.0	-	3.4	-	-	2,800	6.6
RG233	50	0.3	0.5	0.9	2.0	-	-	-	-
RG234	50	0.1	0.3	0.5	-	-	-	-	-
RG235	50	2.1	4.4	7.3	14.0	20.0	33.0	-	-
RG236	50	0.2	1.8	3.0	6.0	8.0	14.0	1,200	10.9
RG237	50	0.2	1.8	3.0	6.0	8.0	14.0	-	-
RG240	50	0.3	0.5	0.9	2.0	-	-	-	-
RG242	50	0.1	0.3	0.5	-	-	-	-	-
RG245	50	0.8	1.7	2.7	4.5	6.0	-	-	-
RG252	50	0.9	1.8	2.8	5.0	7.7	10.2	1,200	10.2
RG253	50	0.9	1.8	2.8	5	7.7	10.2	1,200	10.2
RG254	50	-	1	1.5	3.3	-	-	2,800	5.6
RG255	50	-	1	1.5	3.3	-	-	2,800	5.6
RG257	50	0.22	0.45	0.8	1.8	-	-	-	-
RG258	50	0.22	0.45	0.8	1.8	-	-	-	-
RG265	50	0.18	0.58	1	-	-	-	-	-
RG267	50	0.47	1	1.7	3	-	-	-	-
RG268	50	0.9	1.8	2.8	5.0	7.2	12.5	-	-
RG269	50	0.4	0.9	1.5	2.6	-	-	-	-

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG Number	Resistance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
RG269A	50	-	0.9	-	2.5	-	-	3000.0	6.0
RG270	50	0.2	0.5	0.8	1.8	-	-	-	-
RG280	50	-	3.5	6.0	11.0	-	-	-	-
RG281	50	1.2	2.5	4.1	8.0	-	-	-	-
RG293A	50	-	4.0	-	15.0	-	-	-	-
RG295	50	-	3.0	-	12.5	-	-	-	-
RG296	50	-	11.0	-	-	-	-	-	-
RG301	50	-	-	70.0	116.0	-	-	-	-
RG303	50	3.9	8.6	15.9	28.0	39.0	70.0	-	-
RG304	50	2.7	6.4	11.1	22.0	30.0	42.0	-	-
RG316	50	10.5	21.0	38.0	58.0	82.0	136.0	-	-
RG318	50	-	0.9	-	2.5	-	-	3,000	6.0
RG319	50	0.2	0.5	0.8	1.8	-	-	-	-
RG325	50	2.2	4.6	7.6	14.4	19.6	30.5	340	12.4
RG326	50	1.1	2.4	4.1	8.3	11.7	-	720	7.8
RG327	50	0.8	1.7	3.0	6.5	9.4	-	1,400	5.0
RG329	50	-	-	-	-	-	-	-	-
RG331	50	0.8	1.8	3.3	6.8	10.0	-	1,100	10.0
RG332	50	0.6	1.3	2.3	4.9	7.2	-	2,100	5.7
RG333	50	0.5	1.0	2.2	4.8	7.0	-	2,100	5.6
RG360	50	0.6	1.5	2.8	6.0	9.0	-	1,600	6.7
RG366	50	0.9	1.9	3.3	6.7	9.6	-	1,000	9.0
RG369	50	1.3	2.7	4.5	8.6	12.0	22.5	670	14.6
RG370	50	1.3	2.7	4.5	8.6	12.0	22.5	670	14.6
RG376	50	0.5	1.2	2.2	4.8	-	-	2,100	4.8
RG385	50	1.2	2.5	4.3	8.6	12.0	19.6	N/A	10.6
RG389	50	0.8	1.8	3.2	6.6	9.4	-	1,500	7.6
RG8	52	2.0	4.6	8.0	16.5	27.0	-	-	-
RG8A	52	2	4.6	8	16.5	27	-	-	-
RG10	52	2	4.6	8	16.5	27	-	-	-
RG10A	52	2	4.6	8	16.5	27	-	-	-
RG14	52	1.4	3.1	5.5	12.4	19	51	-	-
RG14A	52	1.4	3.1	5.5	12.4	19	51	-	-
RG17	52	0.95	2.4	4.4	9.5	15.3	-	-	-
RG17A	52	0.95	2.4	4.4	9.5	15.3	-	-	-
RG18	52	1.0	2.4	4.4	9.5	15.3	-	-	-

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG Number	Resistance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
RG18A	52	1.0	2.4	4.4	9.5	15.3	-	-	-
RG19	52	0.7	1.9	3.6	7.7	-	-	-	-
RG19A	52	0.7	1.9	3.6	7.7	-	-	-	-
RG20	52	0.7	1.9	3.6	7.7	-	-	-	-
RG20A	52	0.7	1.9	3.6	7.7	-	-	-	-
RG74A	52	1.4	3.1	5.5	12.4	19.0	51.0	-	-
RG5	52.5	2.7	6.4	11.3	22.0	30.0	43.0	-	-
RG21	53	13.0	26.0	43.0	85.0	-	-	-	-
RG21A	53	13.0	26.0	43.0	85.0	-	-	-	-
RG55B	53	4.8	10.3	16.7	30.7	46.0	130.0	-	-
RG29	53.5	4.4	9.6	16.2	30.0	-	-	-	-
RG55	53.5	4.8	10.3	16.7	30.7	46.0	130.0	-	-
RG58	53.5	4.6	10.4	17.8	37.5	60.0	-	-	-
RG58B	53.5	4.6	10.4	17.8	37.5	60.0	-	-	-
RG54	58	3.2	6.8	11.5	25.0	-	-	-	-
RG54A	58	3.2	6.8	11.5	25.0	-	-	-	-
RG179	70	10.0	16.0	24.0	44.0	64.0	139.0	-	-
RG34	71	1.4	3.3	5.9	16.0	-	-	-	-
RG34A	71	1.4	3.3	5.9	16.0	-	-	-	-
RG35	71	0.9	2.0	3.5	8.6	15.5	18.0	-	-
RG35A	71	0.9	2.0	3.5	8.6	15.5	18.0	-	-
RG59	73	3.4	7.0	12.0	26.5	42.0	-	-	-
RG13	74	2.3	4.8	7.8	16.5	26.5	-	-	-
RG13A	74	2.3	4.8	7.8	16.5	26.5	-	-	-
RG6	75	2.7	6.4	11.3	22.0	30.0	43.0	-	-
RG6A	75	2.7	6.4	11.3	22.0	30.0	43.0	-	-
RG11	75	2.3	4.8	7.8	16.5	26.5	-	-	-
RG11A	75	2.3	4.8	7.8	16.5	26.5	-	-	-
RG12	75	2.3	4.8	7.8	16.5	26.5	-	-	-
RG12A	75	2.3	4.75	7.8	16.5	26.5	-	-	-
RG15	75	1.8	4	6.9	-	-	-	-	1.0
RG34B	75	1.4	3.28	5.85	16	-	-	-	-
RG35B	75	0.85	1.95	3.5	8.6	15.5	18	-	-
RG36	75	0.8	2	3.7	-	-	-	-	1
RG59A	75	3.4	7	12	26.5	42	-	-	-
RG59B	75	3.4	7	12	26.5	42	-	-	-

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG Number	Resistance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
RG84A	75	-	2.8	-	-	-	-	-	-
RG85A	75	-	2.8	-	-	-	-	-	-
RG140	75	4.0	8.4	13.8	25.9	-	-	-	3.0
RG144	75	1.8	3.9	6.9	14.8	-	-	-	-
RG149	75	-	8.5	-	-	-	-	-	-
RG150	75	-	8.5	-	-	-	-	-	-
RG161	75	9.3	18.8	30.1	53.3	-	-	-	3.0
RG164	75	0.9	2.0	3.5	8.6	15.5	18.0	-	-
RG179A	75	10.0	16.0	24.0	44.0	64.0	139.0	-	-
RG179B	75	-	21.0	-	-	-	-	-	-
RG187	75	10.0	16.0	24.0	44.0	64.0	139.0	-	-
RG187A	75	9.4	19.1	30.8	55.2	-	-	-	3.0
RG216	75	2.3	4.8	7.8	16.5	26.5	-	-	-
RG244	75	0.8	1.7	2.7	4.5	6.0	-	-	-
RG279	75	5.2	10.8	17.6	32.5	-	-	-	3.0
RG302	75	3.3	6.9	12.8	26.0	-	-	-	-
RG306A	75	0.5	1.3	2.2	4.8	7.0	-	1,700	6.0
RG307A	75	-	7.5	-	-	-	-	-	-
RG334	75	0.9	2.0	3.5	7.0	9.9	16.2	-	11.0
RG335	75	0.9	2.0	3.5	7.0	9.9	16.2	-	11.0
RG336	75	0.5	1.2	2.2	4.0	7.0	-	-	-
RG108	78	-	16.8	-	-	-	-	-	-
RG108A	78	-	16.8	-	-	-	-	-	-
RG62	93	2.7	5.3	8.7	18.5	30.0	83.0	-	-
RG62A	93	2.7	5.3	8.7	18.5	30.0	83.0	-	-
RG62B	93	-	7.3	-	-	-	-	-	-
RG62C	93	-	8.0	-	-	-	-	-	-
RG71	93	2.7	5.3	8.7	18.5	30.0	83.0	-	-
RG71A	93	2.7	5.3	8.7	18.5	30.0	83.0	-	-
RG71B	93	2.7	5.3	8.7	18.5	30.0	83.0	-	-
RG180	93	5.7	10.8	17	35	50	88	-	-
RG210	93	-	7	-	-	-	-	-	-
RG7	95	2.4	5.2	-	-	-	-	-	-
RG22	95	4.6	8.7	-	-	-	-	-	-
RG22B	95	3.9	7.7	12	25	-	-	-	-
RG57	95	-	6	-	-	-	-	-	-

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

RG Number	Resistance (ohms)	Maximum Attenuation dB/100 ft. at the Following Frequencies						Max. Power (Watts @ 400 MHz)	Max. Frequency (GHz)
		100 MHz	400 MHz	1 GHz	3 GHz	5 GHz	10 GHz		
RG57A	95	-	6	-	-	-	-	-	-
RG111	95	3.9	7.7	12.0	25.0	-	-	-	-
RG111A	95	3.9	7.7	12.0	25.0	-	-	-	-
RG130	95	-	6.0	-	-	-	-	-	-
RG131	95	-	6.0	-	-	-	-	-	-
RG133A	95	-	5.7	-	-	-	-	-	-
RG180A	95	5.7	10.8	17.0	35.0	50.0	88.0	-	-
RG180B	95	-	17.0	-	-	-	-	-	-
RG195	95	6.6	13.3	22.5	46.0	-	-	-	-
RG195A	95	6.6	13.3	22.5	46.0	-	-	-	-
RG294	95	-	10.0	-	-	-	-	-	-
RG294A	95	-	10.0	-	-	-	-	-	-
RG317	95	-	8.0	-	-	-	-	-	-
RG23A	125	-	5.2 ea.	-	-	-	-	-	-
RG24A	125	-	5.2 ea.	-	-	-	-	-	-
RG63	125	2.0	4.0	6.4	12.2	-	-	-	-
RG63B	125	2.0	4.0	6.4	12.2	-	-	-	-
RG79	125	2.0	4.0	6.4	12.2	-	-	-	-
RG79B	125	2.0	4.0	6.4	12.2	-	-	-	-
RG181	125	-	6.0 ea.	-	-	-	-	-	-
RG125	150	1.6	3.4	5.7	13.4	-	-	-	-
RG114	185	2.9	-	-	-	-	-	-	-
RG114A	185	2.9	-	-	-	-	-	-	-
RG65A	950	-	-	-	-	-	-	-	-
RG65A	950	-	-	-	-	-	-	-	-

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Heat Shrinkable Products

Medium/Heavy Wall Tubing

Military Heavy Wall SAE-AS81765/1
Commercial Medium/Heavy Wall
Telecom
Low Voltage Electrical

Medium & Heavy Wall Tubing, Adhesive Lined or Unlined

Wrap Around Sleeves

Commercial
Telecom
Low Voltage Electrical

Cable Jacket Repair

Cable End Caps

Wire & Cable SAE-AS81765/1
Telecom

Environmental Covers, Pressurized Cable Caps, Filled Cable Caps

Transition Boots

MIL-DTL-81765/1

Cable Harnessing Systems, Lipped/Non-lipped, Right Angle/Low-Profile

Cable Breakout Boots

Ratio Cable SAE-AS81765/1
DOD-2003-1
Navsea 803-5001027

2-8 Leg Boots, High Ratio Boots

Adhesive and Mastic Tapes

Low temperature tolerant adhesive tapes
Semi-cross-linked butyl mastic

Shrink Tubing

MIL-DTL-23053/1, /4, /5, /6, /8, /13, /16

Cable Entry Seals *

Navsea 803-500127
MIL-M-214519
SAE-AS81765/1

Straight Thru/Right Angle and Multi-leg

Ratio Tubing *

SAE-AS81765/1
UL®

True 6:1 Ratio, Sealant or Adhesive Lined

Motor Connection Kits *

Stub or "V" type
600 Volt Motor Connections type

Motor Feeder Sizes 12 AWG through 1,000 MCM

* Not shown

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Military Heavy Wall Tubing



Heavy Wall Splice Tubing - Military/Industrial OEM Grade

HHW gives the optimum mechanical protection when used as a jacket or splice cover. Its high abrasion resistant formulation combined with an extra heavy wall eliminates many problems associated with today's jacketed cable. Its feature of a superior expansion to recovery ratio allows transitions in diameter with heavy wall tubing as an added use benefit and high tear resistance. HHW conforms over irregular shapes and surfaces and exceeds SAE-AS81765/1.

COLOR: Red, white, black.

PUT UP: 12 in. (305 mm) lengths standard, cut lengths available.

Catalog No.	Standard Internal Diameter				Nominal Recovered	
	Minimum Expanded (in)	(mm)	Maximum Recovered (in)	(mm)	Wall Thickness (in)	(mm)
HHW-5	0.50	12.7	0.120	3.05	0.155	3.94
HHW-7	0.75	19.1	0.250	6.35	0.155	3.94
HHW-10	1.00	25.4	0.375	9.53	0.155	3.94
HHW-15	1.50	38.1	0.500	12.7	0.155	3.94
HHW-20	2.00	50.8	0.750	19.1	0.155	3.94

Available with sealant.

Commercial Heavy Wall Tubing



XHTU/A* is a heat shrinkable, cross-linked, heavy wall polyolefin tubing available with or without an adhesive liner.

SHRINK RATIO: 3:1
OPER. TEMP: -40° C to 135° C.
COLOR: Black.

PUT UP: 5 ft. (1.5 m) lengths standard, cut lengths are available.

LINING: Adhesive liner melts and flows providing an environmental seal.

CONSTRUCTION: Heavy wall offers increased mechanical protection as well as corrosion and abrasion resistance.

USES: Joint and cable repair in power and telecom markets. Ideally suited for aerial, underground, and direct burial applications.

Catalog No.	Minimum Expansion		Maximum Recovered**		Nominal Recovered Wall**	
	(in)	(mm)	(in)	(mm)	(in)	(mm)
XHTU-12/3	0.480	12.2	0.120	3.05	0.100	2.54
XHTU-19/6	0.756	19.2	0.200	5.08	0.106	2.69
XHTU-30/8	1.200	30.48	0.320	8.13	0.160	4.06
XHTU-45/12	1.700	43.18	0.480	12.2	0.160	4.06
XHTU-52/15	2.000	50.80	0.600	15.2	0.160	4.06
XHTU-72/22	2.830	71.88	0.835	21.2	0.165	4.19
XHTU-92/25	3.620	91.95	1.000	25.40	0.170	4.32
XHTU-120/35	4.725	120.0	1.400	35.56	0.180	4.57

* to designate adhesive insert a "A" in catalog number. ** Wall thickness does not include adhesive when ordering adhesive lined product.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Commercial Medium Wall Tubing



XMTU/A* is a heat shrinkable, cross-linked, medium wall polyolefin tubing available with or without an adhesive liner.

SHRINK RATIO: 3:1

OPER. TEMP: -40° C to 135° C.

COLOR: Black.

PUT UP: 5 ft. (1.5 m) lengths standard, cut lengths available.

LINING: Adhesive liner melts and flows providing an environmental seal.

CONSTRUCTION: Medium wall offers mechanical protection as well as corrosion and abrasion resistance.

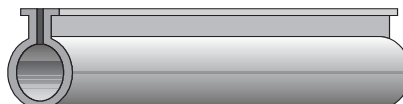
USES: Joint and cable repair in power and telecom markets, mechanical support and moisture barrier for underground burials.

Catalog No.	Minimum Expansion		Maximum Recovered**		Nominal Recovered Wall**	
	(in)	(mm)	(in)	(mm)	(in)	(mm)
XMTU-12/3	0.500	12.70	0.118	3.00	0.060	1.52
XMTU-22/6	0.866	22.00	0.240	6.10	0.100	2.54
XMTU-27/7	1.060	26.92	0.275	6.99	0.100	2.54
XMTU-34/7	1.350	34.29	0.275	6.99	0.100	2.54
XMTU-40/12	1.574	39.98	0.415	10.5	0.100	2.54
XMTU-56/17	2.200	55.88	0.650	16.5	0.110	2.79
XMTU-71/20	2.835	72.01	0.800	20.3	0.110	2.79
XMTU-92/25	3.620	91.95	1.000	25.40	0.110	2.79
XMTU-120/35	4.720	119.9	1.100	27.94	0.110	2.79

* to designate adhesive insert a "/A" in catalog number.

** Wall thickness does not include adhesive when ordering adhesive lined product.

Wrap Around Sleeves XWSA



OPER. TEMP: For cables operating up to 125° C and 1 Kv.

COLOR: Black.

PUT UP: 5 ft. (1.5 m) lengths standard, cut lengths available.

CONSTRUCTION: Pre coated with a hot melt adhesive that bonds to a wide variety of substrates commonly used in cable manufacturing, ensuring a complete environmental seal against moisture and contaminant ingress. The exterior is coated with a heat sensitive paint which changes color when the appropriate application of heat has been applied.

USES: A general purpose heat shrinkable wraparound sleeve that provides a quick and simple method for repairing cable jackets.

Catalog No.	Maximum Cable Diameter		Minimum Cable Diameter		Conductor Size AWG / KcMIL
	(in)	(mm)	(in)	(mm)	
XWSA-43/9	1.8	46	0.35	8.9	#2 - 4/0
XWSA-71/15	2.8	71	0.60	15	250 - 500
XWSA-92/25	3.6	91	1.00	25.4	750 - 1,000
XWSA-119/28	4.7	119	1.10	27.9	1,250 - 2,500
XWSA-132/38	5.2	132	1.50	38.1	n/a
XWSA-155/51	6.1	155	2.00	50.8	n/a
XWSA-200/56	8.0	203	2.20	55.9	n/a

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

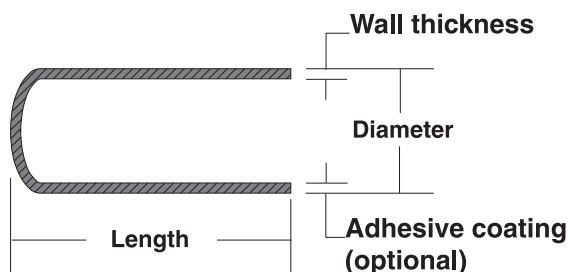
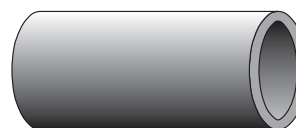
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Military/Industrial Grade End Caps Heat Shrinkable End Caps With or Without Sealant & Valves



MATERIAL: Conforms to SAE-AS81765/1.

SIZES: End caps come in sizes to cover cables ranging from 0.37" to 3.5" in diameter.

RELIABILITY: Seal moisture out and pressure in on all types of low and medium density polyethylene jacketed cable. A special design combined with a high-grade compound to form an ideal product that withstands the most severe environmental conditions.

TEMPERATURE: Cable pressure of 12 psi is maintained throughout thermal conditions ranging from 40° C to 60° C.

USES: Commonly used by cable manufacturers and installers of telephone cables, power cables, and jelly filled cables. Can also be used for terminating pipe and conduit.

Catalog No.	Recommended Cable Range		Expanded Minimum Diameter		Recovered Maximum Diameter		Nominal Length		Recovered Wall Thickness		Adhesive Coating	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
080EK025	0.25 - 0.75	6.35 - 19.1	0.80	20.3	0.25	6.35	3.00	76.2	0.140	3.56	0.02	0.51
137EK050	0.50 - 1.35	12.7 - 34.3	1.37	34.8	0.50	12.7	3.50	88.9	0.150	3.81	0.02	0.51
200EK075	0.75 - 2.00	19.1 - 50.8	2.10	53.3	0.75	19.1	3.50	88.9	0.150	3.81	0.02	0.51
270EK087	0.87 - 2.60	22.1 - 66.0	2.70	68.6	0.87	22.1	7.00	178	0.160	4.06	0.02	0.51
380EK150	1.60 - 3.75	40.6 - 95.3	3.80	96.5	1.50	38.1	4.50	114	0.180	4.57	0.02	0.51

Rancho Dominguez

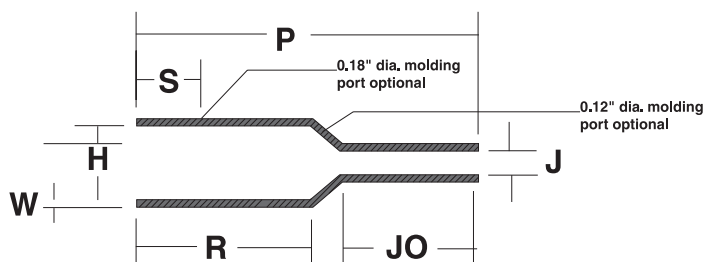
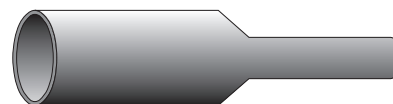
2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Transition Boot Strain Relief & Boots for Harness Systems



MATERIALS: -30 Conforms to SAE-AS81765/1, unlined.
 -31 Conforms to SAE-AS81765/1, lined with standard adhesive.
 -32 Conforms to SAE-AS81765/1, lined with high performance adhesive.

COLOR: Black.

USES: Heat shrinkable materials are supplied in an expanded form and cover a wide dynamic range, reducing the need to stock a large inventory of sizes. There are 9 sizes of strain relief boots for a range of shell sizes from 6 to 48. Heat shrinkable molded shapes provide mechanical protection and strain relief for connectors and can be used to form breakouts. The combination of heat shrinkable tubings and molded shapes provides an encapsulated wire harness assembly for maximum environmental protection.

Catalog No.			91346	91347	91348	91349	91350	91351	91352	91353	91354
H	(in)	(min) ¹	0.65	0.97	1.12	1.22	1.42	1.68	2.04	2.60	3.40
		(max) ²	0.31	0.38	0.56	0.70	0.84	1.07	1.36	1.72	2.21
	(mm)	(min) ¹	16.51	24.64	28.45	30.99	36.07	42.67	51.82	66.04	86.36
		(max) ²	7.87	9.65	14.22	17.78	21.34	27.18	34.54	43.69	56.13
J	(in)	(min) ¹	0.65	0.97	1.12	1.22	1.42	1.68	2.04	2.60	3.40
		(max) ²	0.15	0.21	0.26	0.29	0.34	0.37	0.63	0.77	1.06
	(mm)	(min) ¹	16.51	24.64	28.45	30.99	36.07	42.67	51.82	66.04	86.36
		(max) ²	3.81	5.33	6.60	7.37	8.64	9.40	16.00	19.56	26.92
P (±20%)	(in) ²		1.00	1.50	2.16	2.63	2.90	3.90	5.13	6.35	8.37
	(mm) ²		25.40	38.10	54.86	66.80	73.66	99.06	130.30	161.29	212.60
R (±10%)	(in) ²		0.56	0.86	1.10	1.40	1.63	2.47	2.56	3.55	4.45
	(mm) ²		14.22	21.84	27.94	35.56	41.40	62.74	65.02	90.17	113.03
S (±10%)	(in) ²		0.50	0.60	0.75	0.75	0.75	0.75	1.00	1.00	1.00
	(mm) ²		12.70	15.24	19.05	19.05	19.05	19.05	25.40	25.40	25.40
JO (±10%)	(in) ²		0.23	0.36	0.51	0.70	0.63	0.71	1.50	1.88	2.45
	(mm) ²		5.84	9.14	12.95	17.78	16.00	18.03	38.10	47.75	62.23
W (±20%)	(in) ²		0.05	0.06	0.07	0.07	0.07	0.08	0.13	0.15	0.16
	(mm) ²		1.27	1.52	1.78	1.78	1.78	2.03	3.30	3.81	4.06
Weight (±10%)	(lbs)		0.002	0.006	0.008	0.014	0.025	0.040	0.100	0.193	0.367
	(kg)		0.001	0.003	0.004	0.006	0.011	0.018	0.045	0.088	0.167

¹Expanded as supplied

²Unrestricted recovery

Rancho Dominguez

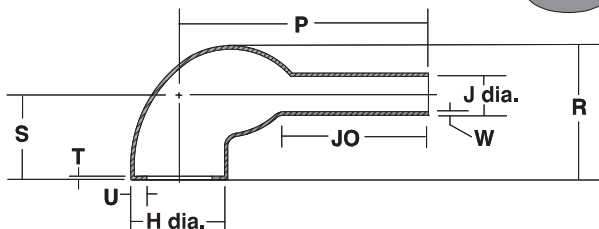
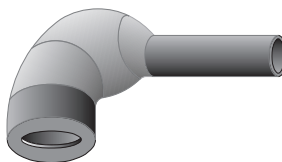
2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Transition Boot Right Angle



MATERIALS: -30 Conforms to SAE-AS81765/1, unlined.
 -31 Conforms to SAE-AS81765/1, lined with standard adhesive.
 -32 Conforms to SAE-AS81765/1, lined with high performance adhesive.

COLOR: Black.

Catalog No.			913RL48	913RL49	913RL50	913RL51	913RL52
MS No.			3117-12	3117-13	3117-14	3117-15	3117-16
H	(in)	(min) ¹	1.12	1.22	1.42	1.68	2.04
		(max) ²	0.56	0.70	0.88	1.10	1.38
	(mm)	(min) ¹	28.4	31.0	36.1	42.7	51.8
		(max) ²	14.2	17.8	22.4	27.9	35.1
J	(in)	(min) ¹	1.12	1.22	1.42	1.68	2.04
		(max) ²	0.26	0.28	0.33	0.38	0.62
	(mm)	(min) ¹	28.4	31.0	36.1	42.7	51.8
		(max) ²	6.60	7.11	8.38	9.65	15.75
P (±10%)	(in) ²		1.31	1.42	1.70	2.10	3.10
	(mm) ²		33.3	36.1	43.2	53.3	78.7
R (±10%)	(in) ²		1.07	1.20	1.40	1.70	2.10
	(mm) ²		27.2	30.5	35.6	43.2	53.3
S (±10%)	(in) ²		0.73	0.81	0.90	1.10	1.30
	(mm) ²		18.5	20.6	22.9	27.9	33.0
JO (±20%)	(in) ²		0.28	0.34	0.50	0.62	1.00
	(mm) ²		7.11	8.64	12.7	15.7	25.4
W (±20%)	(in) ²		0.06	0.07	0.07	0.08	0.13
	(mm) ²		1.52	1.78	1.78	2.03	3.30
T (±10%)	(in) ²		0.12	0.12	0.12	0.12	0.12
	(mm) ²		3.05	3.05	3.05	3.05	3.05
U (±10%)	(in) ²		0.040	0.040	0.040	0.065	0.065
	(mm) ²		1.02	1.02	1.02	1.65	1.65

¹Expanded as supplied

²Unrestricted recovery

Rancho Dominguez

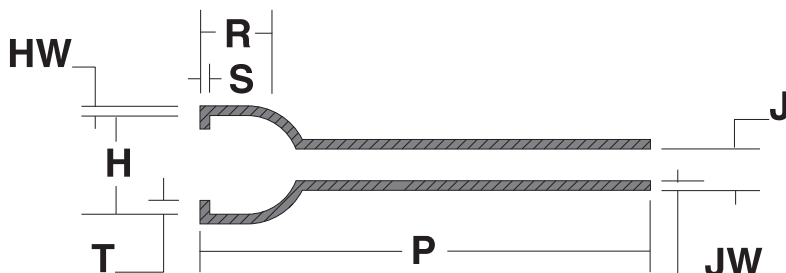
2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Transition Boot Low-Profile



MATERIALS: -30 conforms to SAE-AS81765/1, unlined.
 -31 conforms to SAE-AS81765/1, lined with standard adhesive.
 -32 conforms to SAE-AS81765/1, lined with high performance adhesive.

COLOR: Black.

Catalog No.			913L66	913L67	913L68	913L69	913L70
H	(in)	(min) ¹	0.88	1.01	1.16	1.34	1.47
		(max) ²	0.45	0.59	0.74	0.90	1.16
	(mm)	(min) ¹	22.4	25.7	29.5	34.0	37.3
		(max) ²	11.4	15.0	18.8	22.9	29.5
J	(in)	(min) ¹	0.88	1.01	1.16	1.34	1.47
		(max) ²	0.25	0.29	0.33	0.38	0.41
	(mm)	(min) ¹	22.4	25.7	29.5	34.0	37.3
		(max) ²	6.35	7.37	8.38	9.65	10.4
P (±10%)	(in) ²		4.17	4.77	5.46	6.28	7.00
	(mm) ²		106	121	139	160	178
R (±10%)	(in) ²		0.46	0.48	0.48	0.48	0.55
	(mm) ²		11.7	12.2	12.2	12.2	14.0
S (Nom)	(in) ²		0.12	0.12	0.12	0.12	0.12
	(mm) ²		3.05	3.05	3.05	3.05	3.05
T (±10%)	(in) ²		0.040	0.040	0.040	0.040	0.065
	(mm) ²		1.02	1.02	1.02	1.02	1.65
HW (±20%)	(in) ²		0.060	0.060	0.070	0.070	0.080
	(mm) ²		1.52	1.52	1.78	1.78	2.03
JW (±20%)	(in) ²		0.045	0.045	0.045	0.045	0.045
	(mm) ²		1.14	1.14	1.14	1.14	1.14

¹Expanded as supplied

²Unrestricted recovery

Rancho Dominguez

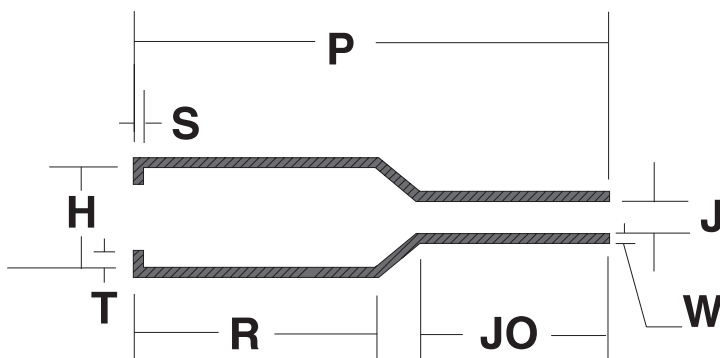
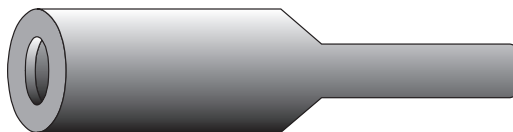
2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Transition Boot with Lip



MATERIALS: -30 conforms to SAE-AS81765/1, unlined.
 -31 conforms to SAE-AS81765/1, lined with standard adhesive.
 -32 conforms to SAE-AS81765/1, lined with high performance adhesive.

COLOR: Black.

Catalog No.			913L46	913L47	913L48	913L49	913L50	913L51	913L52	913L53	913L54
H	(in)	(min) ¹	0.65	0.92	1.12	1.22	1.42	1.68	2.04	2.60	3.40
		(max) ²	0.31	0.41	0.56	0.70	0.88	1.11	1.38	1.75	2.21
	(mm)	(min) ¹	16.5	23.4	28.4	31.0	36.1	42.7	51.8	66.0	86.4
		(max) ²	7.87	10.4	14.2	17.8	22.4	28.2	35.1	44.5	56.1
J	(in)	(min) ¹	0.65	0.92	1.12	1.22	1.42	1.68	2.04	2.60	3.40
		(max) ²	0.15	0.22	0.26	0.28	0.33	0.39	0.62	0.80	1.06
	(mm)	(min) ¹	16.5	23.4	28.4	31.0	36.1	42.7	51.8	66.0	86.4
		(max) ²	3.81	5.59	6.60	7.11	8.38	9.91	15.7	20.3	26.9
P (±10%)	(in) ²		1.00	1.50	2.16	2.63	2.90	3.90	5.13	6.35	8.37
	(mm) ²		25.4	38.1	54.9	66.8	73.7	99.1	130	161	213
R (±10%)	(in) ²		0.56	0.92	1.27	1.59	1.73	2.47	3.02	3.55	4.45
	(mm) ²		14.2	23.4	32.3	40.4	43.9	62.7	76.7	90.2	113
S (±10%)	(in) ²		0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
	(mm) ²		3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05
T (±20%)	(in) ²		0.040	0.040	0.040	0.040	0.040	0.065	0.065	0.080	0.080
	(mm) ²		1.02	1.02	1.02	1.02	1.02	1.65	1.65	2.03	2.03
JO (±10%)	(in) ²		0.23	0.36	0.51	0.70	0.63	0.71	1.50	1.88	2.45
	(mm) ²		5.84	9.14	13.0	17.8	16.0	18.0	38.1	47.8	62.2
W (±20%)	(in) ²		0.05	0.06	0.07	0.07	0.07	0.08	0.13	0.15	0.16
	(mm) ²		1.27	1.52	1.78	1.78	1.78	2.03	3.30	3.81	4.06
MIL-C-5015 Adaptors	Rotating		-	-	10SL, 12S	14S	16S, 16, 18	20, 22	24, 28	32, 36	40
	Solid		-	-	8	10	12, 14	16, 18	20, 22, 24	-	-
MIL-C-26482 Adaptors	Rotating		-	8	10	12, 14	16, 18	20	22, 24	-	-

¹Expanded as supplied

²Unrestricted recovery

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

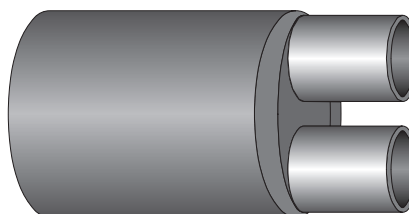
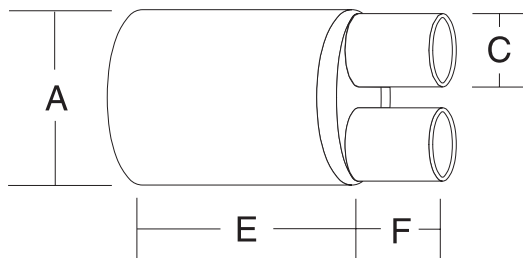
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Ratio Cable Breakout Boot



MATERIALS: Conform to SAE-AS81765/1.
Designed to meet the requirements of DOD-2003-1.

Boot Style		2 Legs		3 Legs			4 Legs		6 Legs	
Catalog No.		91342-12	91342-34	91343-5678	91343-910	91343-11	91344-1213	91344-1415	91344-1617	91346-18
Cable MCM		3-30	50-400	3-100	150-400	500-600	3-23	42-100	100-200	100-200
Combined Navy Part No.		IA62-1-2	IA62-3-4	IA62-5-6-7-8	IA62-9-10	IA62-11	IA62-12-13	IA62-14-15	IA62-16-17	IA62-18
Cable Entry I.D.	A - expanded min. dia. (in)	1.20	3.00	1.70	3.20	4.90	1.25	2.35	5.25	2.39
	A - recovered max. dia. (in)	0.37	0.90	0.36	1.40	2.32	0.43	0.98	1.40	1.45
	A - expanded min. dia. (mm)	30.5	76.2	43.2	81.3	124	31.8	59.7	133	60.7
	A - recovered max. dia. (mm)	9.40	22.9	9.14	35.6	58.9	10.9	24.9	35.6	36.8
Conductor I.D.	C - expanded min. dia. (in)	0.50	1.45	0.82	1.40	2.00	0.50	1.00	1.35	0.80
	C - recovered max. dia. (in)	0.11	0.30	0.12	0.50	1.00	0.11	0.28	0.53	0.35
	C - expanded min. dia. (mm)	12.7	36.8	20.8	35.6	50.8	12.7	25.4	34.3	20.3
	C - recovered max. dia. (mm)	2.79	7.62	3.05	12.7	25.4	2.79	7.11	13.46	8.89
Body	E - recovered min. length (in)	2.5	3.5	2.3	3.5	7.5	2.3	6.8	6.0	3.4
	E - recovered min. length (mm)	63.5	88.9	58.4	88.9	191	58.4	173	152	86.4
Legs	F - recovered min. length (in)	1.0	1.5	2.2	1.6	2.5	1.0	1.7	3.0	2.0
	F - recovered min. length (mm)	25.4	38.1	55.9	40.6	63.5	25.4	43.2	76.2	50.8
Wall	Min. wall recovered (in)	0.07	0.12	0.12	0.12	0.12	0.09	0.14	0.14	0.10
	Min. wall recovered (mm)	1.78	3.05	3.05	3.05	3.05	2.29	3.56	3.56	2.54

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

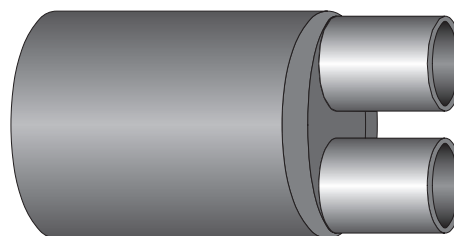
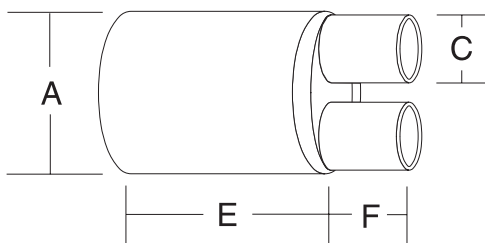
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Cable Breakout Boot



MATERIAL: Semi-rigid, flame-retardant, polyolefin, per SAE-AS81765/1.

DESIGN: Meets or exceeds Navsea Diagram No. 803-5001027.

USES: Heat shrinkable boots can be used for cable splices, breakouts, transitions, and any applications requiring water tightness. They provide excellent insulation, corrosion and weather resistance, as well as abrasion and mechanical protection.

Boot Style		2 Legs				3 Legs						
												
Catalog No.		91342-1	91342-2	91342-3	91342-4	91343-1	91343-2	91343-2A	91343-3	91343-4	91343-5	91343-6
Cable MCM		3, 4, 6, 9	14, 23, 30	50, 75, 83, 100	200, 250, 300, 400	3, 4, 6, 9	14, 23	-	42, 50, 75, 100	150, 200, 250, 300	400	500, 600
Combined Navy Part No.		IA62-1	IA62-2	IA62-3	IA62-4	IA62-5	IA62-6	IA62-7	IA62-8	IA62-9	IA62-10	IA62-11
Cable Entry I.D.	A - expanded min. dia. (in)	0.80	1.20	1.90	3.00	0.90	1.20	1.50	1.70	2.40	3.20	4.90
	A - recovered max. dia. (in)	0.37	0.60	0.90	1.50	0.36	0.69	0.50	0.90	1.40	2.00	2.32
	A - expanded min. dia. (mm)	20.3	30.5	48.3	76.2	22.9	30.5	38.1	43.2	61.0	81.3	124
	A - recovered max. dia. (mm)	9.40	15.2	22.9	38.1	9.14	17.5	12.7	22.9	35.6	50.8	58.9
Conductor I.D.	C - expanded min. dia. (in)	0.33	0.50	0.75	1.45	0.33	0.50	0.65	0.82	1.25	1.40	2.00
	C - recovered max. dia. (in)	0.11	0.17	0.30	0.50	0.12	0.18	0.16	0.30	0.50	0.75	1.00
	C - expanded min. dia. (mm)	8.38	12.7	19.1	36.8	8.4	12.7	16.5	20.8	31.8	35.6	50.8
	C - recovered max. dia. (mm)	2.79	4.32	7.62	12.7	3.05	4.57	4.06	7.62	12.7	19.1	25.4
Body	E - recovered min. length (in)	2.0	2.5	3.0	3.5	2.0	2.3	1.8	2.3	3.5	3.5	7.5
	E - recovered min. length (mm)	50.8	63.5	76.2	88.9	50.8	58.4	45.7	58.4	88.9	88.9	191
Legs	F - recovered min. length (in)	0.7	1.0	1.2	1.5	0.7	1.0	2.2	1.2	1.6	1.6	2.5
	F - recovered min. length (mm)	17.8	25.4	30.5	38.1	17.8	25.4	55.9	30.5	40.6	40.6	63.5
Wall	Min. wall recovered (in)	0.05	0.07	0.10	0.12	0.08	0.09	0.09	0.12	0.12	0.14	0.12
	Min. wall recovered (mm)	1.27	1.78	2.54	3.05	2.03	2.29	2.29	3.05	3.05	3.56	3.05

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Cable Breakout Boot (cont.)

Boot Style		4 Legs 						6 Legs 	8 Legs 
Catalog No.		91344-1	91344-2	91344-3	91344-4	91344-5	91344-6	91346-3	91348-2
Cable MCM		3, 4, 6, 9	23	42, 50, 60	75, 100	133, 150, 200	400, 500	100, 125, 150, 200	100, 125, 150
Navy Part No.		IA62-12	IA62-13	IA62-14	IA62-15	IA62-16	IA62-17	IA62-18	-
Cable Entry I.D.	A - expanded min. dia. (in)	0.90	1.25	1.75	2.35	2.65	5.25	2.39	2.25
	A - recovered max. dia. (in)	0.43	0.80	0.98	1.00	1.40	3.00	1.45	1.32
	A - expanded min. dia. (mm)	22.9	31.8	44.5	59.7	67.3	133	60.7	57.2
	A - recovered max. dia. (mm)	10.9	20.3	24.9	25.4	35.6	76.2	36.8	33.5
Conductor I.D.	C - expanded min. dia. (in)	0.28	0.50	0.79	1.00	1.20	1.35	0.80	0.56
	C - recovered max. dia. (in)	0.11	0.19	0.28	0.35	0.53	0.55	0.35	0.19
	C - expanded min. dia. (mm)	7.11	12.7	20.1	25.4	30.5	34.3	20.3	14.2
	C - recovered max. dia. (mm)	2.79	4.83	7.11	8.89	13.5	14.0	8.89	4.83
Body	E - recovered min. length (in)	2.00	2.30	2.30	6.80	3.50	6.00	3.40	2.00
	E - recovered min. length (mm)	50.8	58.4	58.4	173	88.9	152	86.4	50.8
Legs	F - recovered min. length (in)	0.75	1.00	1.20	1.70	1.50	3.00	2.00	1.25
	F - recovered min. length (mm)	19.1	25.4	30.5	43.2	38.1	76.2	50.8	31.8
Wall	Min. wall recovered (in)	0.05	0.09	0.14	0.14	0.14	0.13	0.10	0.10
	Min. wall recovered (mm)	1.27	2.29	3.56	3.56	3.56	3.30	2.54	2.54

Rancho Dominguez

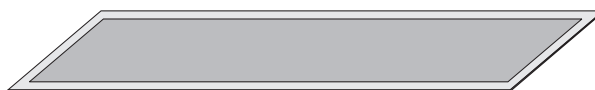
2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Very Flexible Sealing Tape XTPA 080



TYPICAL PROPERTIES:

THERMAL:

Operating temperature	-75° C to 80° C	
Low temp. flexibility (-75° C)	No cracking after bending	ASTM-D-2671C

PHYSICAL:

Tensile strength	1500 psi	ASTM-D-412
Elongation at break	600%	ASTM-D-412
Water absorption	0.5 % maximum	ASTM-D-570
Specific gravity	1.0 maximum	ASTM-D-792
Peel strength		
PE to PE	80 N/25 mm	18 lbs/in
PVC to PVC	50 N/25 mm	11 lbs/in
Neoprene® to Neoprene®	80 N/25 mm	18 lbs/in
PE to aluminum	80 N/25 mm	18 lbs/in

CHEMICAL:

Corrosive effect	Noncorrosive	
Chemical resistance	Good	
Fungus resistance	Inert	ASTM-D-G21

ELECTRICAL:

Dielectric strength	20 kV/mm 500 V/Mil	ASTM-D-257
Volume resistivity	10 ¹⁰ ohm/cm	ASTM-D-149

COLOR:

Clear

USES:

XTPA 080 is a general purpose, very flexible thermoplastic adhesive tape based on a modified polyolefin. This tape will melt and flow to provide encapsulation, corrosion protection, and an environmental seal protection against moisture ingress in cable harnesses even at very low temperatures where flexibility is desired. It was developed to be used in conjunction with heat shrinkable molded shapes and tubings and can be multi-layered to any desired thickness. XTPA 080 bonds to material such as polyethylene, PVC, Neoprene®, Hypalon®, cross-linked polyolefins, and to many metals, such as steel and aluminum. XTPA 080 is cadmium and halogen free, and is supplied on a release paper to prevent layers from sticking together.

Dimensions

Size (in)	Width (in) (mm)	Thickness (in) (mm)	Length per Roll (ft) (m)
1	1.0 25	0.01 0.25	75.0 22.9

Neoprene® is a trademark of the DuPont de Nemours Co.

Hypalon® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/1 (SWCPLD-100)



COLOR: Black.

PUT UP: Bulk spools.

CONST: Certifies to MIL-DTL-23053/1, Classes 1 and 2. 2:1 Shrink ratio. Remains highly flexible under severe environmental conditions. Resistant to fuel, oil, abrasion, and cut-thru.

USES: Heavy duty harnessing, ground support, military or shipboard vehicles, repair and maintenance of trailing cables, MIL-H-5606 hydraulic, MIL-L-3056 gasoline, MIL-L-7808 lube oil, MIL-L-23699 lube oil, SS-S-550 5% NaCl, MIL-A-8243 deice fluid, MIL-F-46162 diesel fuel, MIL-C-372 bore cleaner, VV-F-800 diesel fuel, MIL-T-5624 JP4, JP5, and MIL-F-16884 marine fuel.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1501-99	1/8	0.125	3.18	0.062	1.57	0.027	0.686
1501-100	3/16	0.187	4.75	0.093	2.36	0.031	0.787
1501-101	1/4	0.250	6.35	0.126	3.20	0.035	0.889
1501-102	3/8	0.375	9.53	0.185	4.70	0.040	1.02
1501-103	1/2	0.500	12.7	0.252	6.40	0.048	1.22
1501-104	5/8	0.625	15.9	0.357	9.07	0.052	1.32
1501-105	3/4	0.750	19.1	0.374	9.50	0.057	1.45
1501-106	7/8	0.875	22.2	0.475	12.1	0.065	1.65
1501-107	1	1.000	25.40	0.500	12.7	0.070	1.78
1501-108	1-1/4	1.250	31.75	0.714	18.1	0.087	2.21
1501-109	1-1/2	1.500	38.10	0.857	21.8	0.095	2.41
1501-110	1-3/4	1.750	44.45	1.000	25.40	0.107	2.72
1501-111	2	2.000	50.80	1.140	28.96	0.110	2.79

Listed specifications meet or exceed military specification MIL-DTL-23053/1.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/4 (SWCPLSRDW-100)



COLOR: Brown, gray, white, red, blue, yellow, and black. Other colors than listed available upon special order.

PUT UP: 4 foot lengths.

CONST: Certified to MIL-DTL-23053/4, Class 1. 3:1 shrink ratio on small sizes, 2.5:1 shrink ratio on large sizes. Shrink temperature of 125° C with operating temperatures of -55° C to 110° C. Inner liner melts and flows to provide an encapsulated environmental seal.

USES: Protects components against corrosion, shock, and vibration; provides strain relief for coaxial connectors, low cost cap, or transition. MIL-H-5606 hydraulic, MIL-L-7808 lube oil, MIL-T-5624 JP4, MIL-G-3056 gasoline, and SS-S-550 5% NaCl.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1504-101	1/8	0.125	3.18	0.023	0.584	0.038	0.965
1504-102	3/16	0.187	4.75	0.060	1.52	0.043	1.09
1504-102	1/4	0.250	6.35	0.080	2.03	0.047	1.19
1504-104	3/8	0.375	9.53	0.135	3.43	0.050	1.27
1504-105	1/2	0.500	12.7	0.195	4.95	0.055	1.40
1504-106	3/4	0.750	19.1	0.313	7.95	0.065	1.65
1504-107	1	1.000	25.40	0.400	10.2	0.075	1.91

Listed specifications meet or exceed military specification MIL-DTL-23053/4.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/4 (SWCPLDW-100)



COLOR: Black, clear. Other colors available upon special order.

PUT UP: 4 foot lengths.

CONST: Meets MIL-DTL-23053/4, Classes 2 and 3, and UL specification 224 (black only). 3:1 shrink ratio. Shrink temperature of 125° C and operating temperatures of -55° C to 135° C. Thermoplastic adhesive liner bonds to provide excellent peel strength on most substrate

USES: Strain relief, replacement of some breakouts and caps when crimped while shrinking, tamper proof cover for wire markers, insulates crimped splices. MIL-H-5606 hydraulic, MIL-I-23699 lube oil, SS-S-550 5% NaCl, MIL-T-5624 JP4, MIL-L-7808 lube oil, and MIL-A-8243 deice fluid.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1504-301	1/8	0.125	3.18	0.040	1.02	0.060	1.52
1504-301A	3/16	0.187	4.75	0.070	1.78	0.063	1.60
1504-302	1/4	0.250	6.35	0.080	2.03	0.063	1.60
1504-302A	3/8	0.375	9.53	0.120	3.05	0.075	1.91
1504-303	1/2	0.500	12.70	0.157	3.99	0.087	2.21
1504-303A	3/4	0.750	19.10	0.230	5.84	0.110	2.79
1504-304	1	1.000	25.40	0.320	8.13	0.138	3.51
1504-305	1-1/2	1.500	38.10	0.530	13.50	0.138	3.51

Listed specifications meet or exceed military specification MIL-DTL-23053/4.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/4 (SWCPLDW-104)



COLOR: Black, clear. Other colors available upon special order.

PUT UP: 4 foot lengths.

CONST: Meets MIL-DTL-23053/4, Class 3. 4:1 shrink ratio. Clear material provides environmental seal, yet allows visual inspection. Black material is flame-retardant.

USES: Cost effective strain relief boot. Harness repair on-site without removing connectors. Splice protection. MIL-H-5606 hydraulic, MIL-I-23699 lube oil, SS-S-550 5% NaCl, MIL-T-5624 JP4, MIL-L-7808 lube oil, and MIL-A-8243 deice fluid.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1504-401	3/16	0.157	3.99	0.040	1.02	0.060	1.52
1504-402	5/16	0.315	8.00	0.080	2.03	0.063	1.60
1504-403	1/2	0.500	12.70	0.120	3.05	0.075	1.91
1504-403A	5/8	0.625	15.90	0.157	3.99	0.087	2.21
1504-404	1	1.000	25.40	0.236	5.99	0.110	2.79
1504-405	1-1/4	1.250	31.75	0.315	8.00	0.137	3.48

Listed specifications meet or exceed military specification MIL-DTL-23053/4.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/5 (SWCPLF-100)



COLOR: Black, white, red, yellow, blue, green, and clear. Other colors available upon special order.

PUT UP: 4 foot lengths or bulk spools.

CONST: Certified to MIL-DTL-23053/5, Classes 1, 2, and 3. 2:1 shrink ratio. Shrink temperature of 125° C and operating temperatures of -75° C to 125° C.

USES: Insulation, wire markers, strain relief, wire bundling, mechanical protection, and color coding. MIL-H-5606 hydraulic, MIL-I-23699 lube oil, SS-S-550 5% NaCl, MIL-T-5624 JP4, MIL-L-7808 lube oil, and MIL-A-8243 deice fluid.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1505-101	3/64	0.046	1.17	0.023	0.584	0.016	0.406
1505-102	1/16	0.063	1.60	0.031	0.787	0.017	0.432
1505-103	3/32	0.093	2.36	0.046	1.17	0.020	0.508
1505-104	1/8	0.125	3.18	0.062	1.57	0.020	0.508
1505-105	3/16	0.187	4.75	0.093	2.36	0.020	0.508
1505-106	1/4	0.250	6.35	0.125	3.18	0.025	0.635
1505-107	3/8	0.375	9.53	0.187	4.75	0.025	0.635
1505-108	1/2	0.500	12.7	0.250	6.35	0.025	0.635
1505-108D	5/8	0.625	15.9	0.312	7.92	0.028	0.711
1505-109	3/4	0.750	19.1	0.375	9.53	0.030	0.762
1505-110	1	1.000	25.40	0.500	12.70	0.035	0.889
1505-111	1-1/2	1.500	38.10	0.750	19.05	0.040	1.02
1505-112	2	2.000	50.80	1.000	25.40	0.045	1.14
1505-113	3	3.000	76.20	1.500	38.10	0.050	1.27
1505-114	4	4.000	101.6	2.000	50.80	0.055	1.40

Listed specifications meet or exceed military specification MIL-DTL-23053/5.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/5 (SWCPLF-103)



COLOR: Black, white. Other colors available on special order.

PUT UP: 4 foot lengths or bulk spools.

CONST: Certified to MIL-DTL-23053/5. 3:1 shrink ratio. Shrink temperature of 125° C and operating temperatures of -55° C to 135° C.

USES: Insulation of irregularly shaped components covering a wide range of diameters on a single harness, strain relief from connector to wires. MIL-H-5606 hydraulic, MIL-I-23699 lube oil, SS-S-550 5% NaCl, MIL-T-5624 JP4, MIL-L-7808 lube oil, and MIL-A-8243 deice fluid.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1505-302	1/16	0.063	1.60	0.020	0.508	0.018	0.457
1505-304	1/8	0.125	3.18	0.040	1.02	0.022	0.559
1505-306	1/4	0.250	6.35	0.080	2.03	0.026	0.660
1505-307	3/8	0.375	9.53	0.120	3.05	0.030	0.762
1505-308	1/2	0.500	12.7	0.160	4.06	0.030	0.762
1505-309	3/4	0.750	19.1	0.250	6.35	0.030	0.762
1505-310	1	1.000	25.40	0.320	8.13	0.040	1.02
1505-311	1-1/4	1.500	38.10	0.500	12.7	0.045	1.14

Listed specifications meet or exceed military specification MIL-DTL-23053/5.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/5 (SWCPLF-104)



COLOR: Black.

PUT UP: 4 foot lengths.

CONST: Certified to MIL-DTL-23053/5, Class 1. 4:1 shrink ratio. Shrink temperature of 125° C and operating temperatures of -55° C to 135° C. Allows for on-site repairs.

USES: Repair and rework of cable jackets, ability to install wire markers over pre installed connectors, replaces molded shape designed for strain relief. MIL-H-5606 hydraulic, MIL-I-23699 lube oil, SS-S-550 5% NaCl, MIL-T-5624 JP4, MIL-L-7808 lube oil, and MIL-A-8243 deice fluid.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1504-410	1	1.000	25.40	0.250	6.35	0.060	1.52
1504-411	1-1/2	1.500	38.10	0.375	9.53	0.060	1.52
1504-412	2	2.000	50.80	0.500	12.7	0.060	1.52
1504-413	3	3.000	76.20	0.750	19.1	0.060	1.52
1504-414	4	4.000	101.6	1.000	25.40	0.060	1.52

Listed specifications meet or exceed military specification MIL-DTL-23053/5.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/6 (SWCPLSR-100)



COLOR: Black, clear. Other colors available upon special order.

PUT UP: 4 foot lengths.

CONST: Certified to MIL-DTL-23053/6. 2:1 shrink ratio. Shrink temperature of 135° C and operating temperatures of -55° C to 135° C.

USES: Strain relief of soldered connections or terminals, protection of wire splices. MIL-H-5606 hydraulic, MIL-I-23699 lube oil, SS-S-550 5% NaCl, MIL-T-5624 JP4, MIL-L-7808 lube oil, and MIL-A-8243 deice fluid.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1506-101	3/64	0.046	1.17	0.023	0.584	0.020	0.508
1506-102	1/16	0.063	1.60	0.031	0.787	0.020	0.508
1506-103	3/32	0.093	2.36	0.046	1.17	0.020	0.508
1506-104	1/8	0.125	3.18	0.062	1.57	0.020	0.508
1506-105	3/16	0.187	4.75	0.093	2.36	0.025	0.635
1506-106	1/4	0.250	6.35	0.125	3.18	0.025	0.635
1506-107	3/8	0.375	9.53	0.187	4.75	0.030	0.762
1506-108	1/2	0.500	12.7	0.250	6.35	0.030	0.762
1506-112	1	1.000	25.40	0.500	12.7	0.033	0.838

Listed specifications meet or exceed military specification MIL-DTL-23053/6.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/8 (KYNAR®)



COLOR: Clear. Other colors available upon special order.

PUT UP: 4 foot lengths.

CONST: Certified to MIL-DTL-23053/8. 2:1 shrink ratio. Continuous operating temperatures of -55° C to 175° C. Resistance to abrasion, cut-thru, and corrosion with a low profile ultra thin wall.

USES: Aerospace harnesses, lack of color pigment allows visual inspection of strain relief, and protection in high temperature, high performance environments. MIL-H-5606 hydraulic, MIL-I-23699 lube oil, SS-S-550 5% NaCl, MIL-T-5624 JP4, MIL-L-7808 lube oil, and MIL-A-8243 deice fluid.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1508-101	3/64	0.046	1.17	0.023	0.584	0.010	0.254
1508-102	1/16	0.063	1.60	0.031	0.787	0.010	0.254
1508-103	3/32	0.093	2.36	0.046	1.17	0.010	0.254
1508-104	1/8	0.125	3.18	0.062	1.57	0.010	0.254
1508-105	3/16	0.187	4.75	0.093	2.36	0.010	0.254
1508-106	1/4	0.250	6.35	0.125	3.18	0.012	0.305
1508-107	3/8	0.375	9.53	0.187	4.75	0.012	0.305
1508-108	1/2	0.500	12.7	0.250	6.35	0.012	0.305
1508-109	3/4	0.750	19.1	0.375	9.53	0.017	0.432
1508-110	1	1.000	25.40	0.500	12.7	0.019	0.483

Listed specifications meet or exceed military specification MIL-DTL-23053/8.

Kynar® is a registered trademark of Pennwalt Corporation.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/13 (VITON®)



COLOR: Black.

PUT UP: Bulk spools.

CONST: Certified to MIL-DTL-23053/13. 2:1 shrink ratio. High operating temperature of 200° C. High resistance to fuels, lubricants, solvents, and abrasions.

USES: Mechanical protection, insulation of components and cable harnesses. MIL-H-5606 hydraulic, MIL-I-23699 lube oil, SS-S-550 5% NaCl, MIL-T-5624 JP4, JP5, MIL-L-7808 lube oil, MIL-F-16884 marine fuel, and MIL-A-8243 deice fluid.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1513-100	1/8	0.125	3.18	0.062	1.57	0.031	0.787
1513-101	3/16	0.187	4.75	0.094	2.39	0.035	0.889
1513-102	1/4	0.250	6.35	0.125	3.18	0.035	0.889
1513-103	3/8	0.375	9.53	0.187	4.75	0.035	0.89
1513-104	1/2	0.500	12.7	0.250	6.35	0.035	0.89
1513-105	5/8	0.625	15.9	0.312	7.92	0.042	1.07
1513-106	3/4	0.750	19.1	0.375	9.53	0.042	1.07
1513-106D	7/8	0.875	22.2	0.437	11.1	0.049	1.24
1513-108	1	1.000	25.40	0.500	12.7	0.049	1.24
1513-110	1-1/2	1.500	38.10	0.750	19.1	0.055	1.40
1513-111	2	2.000	50.80	1.000	25.4	0.065	1.65

Listed specifications meet or exceed military specification MIL-DTL-23053/13.

Viton® is a trademark of DuPont Dow Elastomers.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

Web Page: www.standard-wire.com



Standard Wire & Cable Co.

Shrink Tube

MIL-DTL-23053/16 (SWCPLD-101)



COLOR: Black.

PUT UP: Bulk spools.

CONST: Certified to MIL-DTL-23053/16, Class 2. 2:1 shrink ratio. Shrink temperature of 135° C and operating temperatures of -70° C to 150° C. High resistance to abrasions, cut-thru, oil, and fuel.

USES: Military ground vehicle harnesses where severe temperatures and environmental conditions are critical. MIL-H-5606 hydraulic, MIL-I-23699 lube oil, SS-S-550 5% NaCl, MIL-F-16884 marine fuel, MIL-F-46162 diesel fuel, VV-F-800 diesel fuel, MIL-T-5624 JP4, JP5, MIL-L-7808 lube oil, MIL-A-8243 deice fluid, MIL-G-3056 gasoline, and MIL-C-372 bore cleaner.

Catalog No.	Size (in)	Minimum Expansion		Maximum Recovered		Nominal Recovered Wall	
		(in)	(mm)	(in)	(mm)	(in)	(mm)
1516-99	1/8	0.125	3.18	0.062	1.57	0.027	0.686
1516-100	3/16	0.187	4.75	0.093	2.36	0.031	0.787
1516-101	1/4	0.250	6.35	0.125	3.18	0.035	0.889
1516-102	3/8	0.375	9.53	0.187	4.75	0.040	1.02
1516-103	1/2	0.500	12.7	0.250	6.35	0.048	1.22
1516-103A	5/8	0.625	15.9	0.357	9.07	0.057	1.45
1516-104	3/4	0.750	19.1	0.376	9.55	0.057	1.45
1516-104A	7/8	0.875	22.2	0.475	12.1	0.070	1.78
1516-105	1	1.000	25.40	0.500	12.7	0.070	1.78
1516-105A	1 1/4	1.250	31.75	0.714	18.1	0.087	2.21
1516-106	1 1/2	1.500	38.10	0.750	19.1	0.095	2.41

Listed specifications meet or exceed military specification MIL-DTL-23053/16.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Technical Data & Conversion Tables

Recovered Wall Thickness

Polyfit 2:1 Shrink Ratio Tubing

% Recovery	K	% Recovery	K	% Recovery	K
1	0.505	34	0.670	67	0.835
2	0.510	35	0.675	68	0.840
3	0.515	36	0.680	69	0.845
4	0.520	37	0.685	70	0.850
5	0.525	38	0.690	71	0.855
6	0.530	39	0.695	72	0.860
7	0.535	40	0.700	73	0.865
8	0.540	41	0.705	74	0.870
9	0.545	42	0.710	75	0.875
10	0.550	43	0.715	76	0.880
11	0.555	44	0.720	77	0.885
12	0.560	45	0.725	78	0.890
13	0.565	46	0.730	79	0.895
14	0.570	47	0.735	80	0.900
15	0.575	48	0.740	81	0.905
16	0.580	49	0.745	82	0.910
17	0.585	50	0.750	83	0.915
18	0.590	51	0.755	84	0.920
19	0.595	52	0.760	85	0.925
20	0.600	53	0.765	86	0.930
21	0.605	54	0.770	87	0.935
22	0.610	55	0.775	88	0.940
23	0.615	56	0.780	89	0.945
24	0.620	57	0.785	90	0.950
25	0.625	58	0.790	91	0.955
26	0.630	59	0.795	92	0.960
27	0.635	60	0.800	93	0.965
28	0.640	61	0.805	94	0.970
29	0.645	62	0.810	95	0.975
30	0.650	63	0.815	96	0.980
31	0.655	64	0.820	97	0.985
32	0.660	65	0.825	98	0.990
33	0.665	66	0.830	99	0.990

To determine the wall thickness of any 2:1 shrink-ratio at any percentage of recovery, find the percentage recovery in the above table and multiply the fully recovered wall thickness of the tubing by the constant, K, located opposite the percentage of recovery.

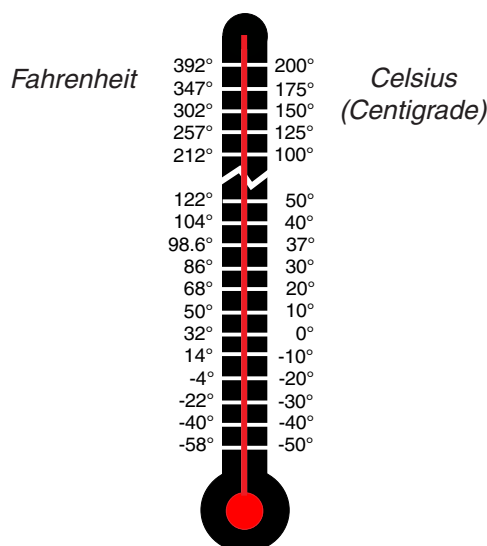
Example: What will the wall thickness of polyfit SWCPLF-100, size 1/8" tubing be when the tubing is recovered 30%?

Solution: Constant K for 30% recovery is 0.650. The fully recovered nominal wall thickness of the tubing per the product specification is 0.020 inches (0.051 mm). 0.020 inches x 0.650 = 0.013 inches or 0.03315 mm wall thickness at 30% recovery.

This method is mathematically correct and the values derived from it are useful in practice. The method and values cannot, however, take into account individual variations in tubing manufacture and nominal values or ranges of tolerances in the specifications of same, or variations in the application of the tubing.

Temperature Conversions

Celsius (Centigrade) to Fahrenheit
Fahrenheit to Celsius



$$F^{\circ} = 9/5 C^{\circ} + 32^{\circ}$$

$$C^{\circ} = (F^{\circ} - 32^{\circ}) 5/9$$

Mathematical Formulas

Diameter of Circle: circumference ÷ 3.1416

Circumference of Circle: diameter x 3.1416

Area of Circle: radius² x 3.1416 or
diameter² x 0.7854

Area of Triangle: base x 0.5 altitude

Area of Parallelogram (incl. rectangle): base x altitude

Surface Area of Sphere: diameter² x 3.1416

Volume of Sphere: diameter³ x 0.5236

Volume of Prism or Cylinder: area of base x altitude

Volume of Pyramid or Cone: area of base x 1/3 altitude

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Conversion Tables and Equivalencies

Fractional Inches & Millimeters

Fractional	Decimal	MM
1/64	0.015625	
	0.03125	
	0.03937	1
3/64	0.046875	
	0.0625	
5/64	0.078125	
	0.07874	2
	0.09375	
7/64	0.109375	
	0.11811	3
	0.125	
9/64	0.140625	
	0.15625	
	0.15748	4
11/64	0.171875	
	0.1875	
	0.19685	5
13/64	0.203125	
	0.21875	
15/64	0.234375	
	0.23622	6
	0.25	
17/64	0.265625	
	0.27559	7
	0.28125	
19/64	0.296875	
	0.3125	
	0.31496	8
21/64	0.328125	
	0.34375	
	0.35433	9
23/64	0.359375	
	0.375	
25/64	0.390625	
	0.3937	10
	0.40625	
27/64	0.421875	
	0.43307	11
	0.4375	
29/64	0.453125	
	0.4875	
	0.47244	12
31/64	0.484375	
	0.5	

Fractional	Decimal	MM
33/64	0.515625	
	0.51181	13
	0.53125	
35/64	0.546875	
	0.55118	14
	0.5625	
37/64	0.578125	
	0.59055	15
	0.59375	
39/64	0.609375	
	0.625	
	0.62992	16
41/64	0.640625	
	0.65625	
	0.66929	17
43/64	0.671875	
	0.6875	
45/64	0.703125	
	0.70866	18
	0.71875	
47/64	0.734375	
	0.74803	19
	0.75	
49/64	0.765625	
	0.78125	
	0.7874	20
51/64	0.796875	
	0.8175	
	0.82677	21
53/64	0.828125	
	0.84375	
55/64	0.859375	
	0.86614	22
	0.875	
57/64	0.890625	
	0.90551	23
	0.90625	
59/64	0.921875	
	0.9375	
	0.94488	24
61/64	0.953125	
	0.96875	
	0.98425	25
63/64	0.984375	

Decimal Equivalents of Millimeters

mm	in	mm	in
25	0.9842520	63	2.4803150
26	1.0236220	64	2.5196850
27	1.0629921	65	2.5590551
28	1.1023622	66	2.5984252
29	1.1417323	67	2.6377953
30	1.1811024	68	2.6771654
31	1.2204724	69	2.7165354
32	1.2598425	70	2.7559055
33	1.2992126	71	2.7952756
34	1.3385827	72	2.8346457
35	1.3779528	73	2.8740157
36	1.4173228	74	2.9133858
37	1.4566929	75	2.9527559
38	1.4960630	76	2.9921260
39	1.5354331	77	3.0314961
40	1.5748031	78	3.0708661
41	1.6141732	79	3.1102362
42	1.6535433	80	3.1496063
43	1.6929134	81	3.1889764
44	1.7322835	82	3.2283465
45	1.7716535	83	3.2677165
46	1.8110236	84	3.3070866
47	1.8503937	85	3.3464567
48	1.8897638	86	3.3858268
49	1.9291339	87	3.4251969
50	1.9685039	88	3.4645669
51	2.0078740	89	3.5039370
52	2.0472441	90	3.5433071
53	2.0866142	91	3.5826772
54	2.1259843	92	3.6220472
55	2.1653543	93	3.6614173
56	2.2047244	94	3.7007874
57	2.2440945	95	3.7401575
58	2.2834646	96	3.7795276
59	2.3228346	97	3.8188976
60	2.3622047	98	3.8582677
61	2.4015748	99	3.8976378
62	2.4409449	100	3.9370079

Area

1 square inch	=	6.452 square centimeters
1 square foot	=	0.093 square meter
1 square yard	=	0.836 square meter
1 acre	=	0.405 hectare
1 square mile	=	2.59 square kilometers
1 square kilometer	=	0.386 square mile
1 hectare	=	2.471 acres
1 square meter	=	1.196 square yards

Length

1 inch	=	2.54 centimeters
1 foot	=	0.305 meter
1 yard	=	0.914 meter
1 mile	=	1.609 kilometers
1 nautical mile	=	1.151 statute miles
1 nautical mile	=	1.852 kilometers
1 meter	=	1.094 yards
1 kilometer	=	0.621 mile

Weight

1 ounce	=	28.35 grams
1 pound	=	0.454 kilogram
1 long ton	=	1.016 metric tons
1 gram	=	0.035 ounce
1 kilogram	=	2.205 pounds

Volume

1 cubic inch	=	16.387 cubic cm
1 cubic foot	=	0.028 cubic meter
1 cubic yard	=	0.765 cubic meter
1 cubic meter	=	1.308 cubic yards

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Shrink Tube Usage Requirement Table

Length		Length Required per 1000 Pieces		Yield - No. of Pieces in 1000	
(in)	(mm)	(ft)	(m)	(ft)	(m)
1/8	3.2	10.5	3.2	96,000	314,961
3/16	4.8	15.7	4.79	64,000	209,974
1/4	6.4	20.9	6.37	48,000	157,480
5/16	7.9	26.1	7.96	38,400	125,984
3/8	9.5	31.3	9.54	32,000	104,987
7/16	11.1	36.5	11.1	27,400	89,895
1/2	12.7	41.7	12.7	24,000	78,740
9/16	14.3	46.9	14.3	21,300	69,882
5/8	15.9	52.1	15.9	19,200	62,992
11/16	17.5	57.3	17.5	17,400	57,087
3/4	19.1	62.5	19.1	16,000	52,493
13/16	20.6	67.8	20.7	14,700	48,228
7/8	22.2	73.0	22.3	13,700	44,948
15/16	23.8	78.2	23.8	12,800	41,995
1	25.4	83.4	25.4	12,000	39,370
1-1/16	27.0	88.6	27	11,200	36,745
1-1/8	28.6	93.8	28.6	10,600	34,777
1-3/16	30.2	99.0	30.2	10,100	33,136
1-1/4	31.8	104.2	31.76	9,600	31,496
1-5/16	33.3	109.4	33.35	9,100	29,856
1-3/8	34.9	114.6	34.93	8,700	28,543
1-7/16	36.5	119.8	36.52	8,300	27,231
1-1/2	38.1	125.0	38.1	8,000	26,247
1-9/16	39.7	130.3	39.72	7,600	24,934
1-5/8	41.3	135.5	41.3	7,300	23,950
1-11/16	42.9	140.7	42.89	7,100	23,294
1-3/4	44.5	145.9	44.47	6,800	22,310
1-13/16	46.0	151.1	46.06	6,600	21,654
1-7/8	47.6	156.3	47.64	6,400	20,997
1-15/16	49.2	161.5	49.23	6,100	20,013
2	50.8	166.7	50.81	6,000	19,685
2-1/16	52.4	171.9	52.4	5,800	19,029
2-1/8	54.0	177.1	53.98	5,600	18,373
2-3/16	55.6	182.3	55.57	5,400	17,717
2-1/4	57.2	187.5	57.15	5,300	17,388
2-5/16	58.7	192.8	58.77	5,100	16,732
2-3/8	60.3	198.0	60.35	5,000	16,404
2-7/16	61.9	203.2	61.94	4,900	16,076
2-1/2	63.5	208.4	63.52	4,800	15,748

Length		Length Required per 1000 Pieces		Yield - No. of Pieces in 1000	
(in)	(mm)	(ft)	(m)	(ft)	(m)
2-9/16	65.1	213.6	65.11	4,600	15,092
2-5/8	66.7	218.8	66.69	4,500	14,764
2-11/16	68.3	224	68.28	4,400	14,436
2-3/4	69.9	229.2	69.86	4,300	14,108
2-13/16	71.4	234.4	71.45	4,200	13,780
2-7/8	73	239.6	73.03	4,100	13,451
2-15/16	74.6	244.8	74.62	4,000	13,123
3	76.2	250	76.2	4,000	13,123
3-1/16	77.8	255.3	77.82	3,900	12,795
3-1/8	79.4	260.5	79.4	3,800	12,467
3-3/16	81	265.7	80.99	3,700	12,139
3-1/4	82.6	270.9	82.57	3,600	11,811
3-5/16	84.1	276.1	84.16	3,600	11,811
3-3/8	85.7	281.3	85.74	3,500	11,483
3-7/16	87.3	286.5	87.33	3,400	11,155
3-1/2	88.9	291.7	88.91	3,400	11,155
3-9/16	90.5	296.9	90.5	3,300	10,827
3-5/8	92.1	302.1	92.08	3,300	10,827
3-11/16	93.7	307.3	93.67	3,200	10,499
3-3/4	95.3	312.5	95.25	3,200	10,499
3-13/16	96.8	317.8	96.87	3,100	10,171
3-7/8	98.4	323	98.45	3,000	9,843
3-15/16	100	328.2	100	3,000	9,843
4	101.6	333.4	101.6	3,000	9,843
4-1/16	103.2	338.6	103.2	2,900	9,514
4-1/8	104.8	343.8	104.8	2,900	9,514
4-3/16	106.4	349	106.4	2,800	9,186
4-1/4	108	354.2	108	2,800	9,186
4-5/16	109.5	359.4	109.5	2,780	9,121
4-3/8	111.1	364.6	111.1	2,740	8,990
4-7/16	112.7	369.8	112.7	2,700	8,858
4-1/2	114.3	375	114.3	2,660	8,727
4-9/16	115.9	380.3	115.9	2,630	8,629
4-5/8	117.5	385.5	117.5	2,590	8,497
4-11/16	119.1	390.7	119.1	2,560	8,399
4-3/4	120.7	395.9	120.7	2,520	8,268
4-13/16	122.2	401.1	122.3	2,490	8,169
4-7/8	123.8	406.3	123.8	2,460	8,071
4-15/16	125.4	411.5	125.4	2,430	7,972

Length		Length Required per 1000 Pieces		Yield - No. of Pieces in 1000	
(in)	(mm)	(ft)	(m)	(ft)	(m)
5	127	416.7	127	2,400	7,874
5-1/16	128.6	421.9	128.6	2,370	7,776
5-1/8	130.2	427.1	130.2	2,340	7,677
5-3/16	131.8	432.3	131.8	2,310	7,579
5-1/4	133.4	437.5	133.4	2,280	7,480
5-5/16	134.9	442.8	135	2,250	7,382
5-3/8	136.5	448	136.6	2,230	7,316
5-7/16	138.1	453.2	138.1	2,200	7,218
5-1/2	139.7	458.4	139.7	2,180	7,152
5-9/16	141.3	463.6	141.3	2,150	7,054
5-5/8	142.9	468.8	142.9	2,130	6,988
5-11/16	144.5	474	144.5	2,100	6,890
5-3/4	146.1	479.2	146.1	2,080	6,824
5-13/16	147.6	484.4	147.6	2,060	6,759
5-7/8	149.2	489.6	149.2	2,040	6,693
5-15/16	150.8	494.8	150.8	2,020	6,627
6	152.4	500	152.4	2,000	6,562
6-1/16	154	505.3	154	1,970	6,463
6-1/8	155.6	510.5	155.6	1,950	6,398
6-3/16	157.2	515.7	157.2	1,930	6,332
6-1/4	158.8	520.9	158.8	1,920	6,299
6-5/16	160.3	526.1	160.4	1,900	6,234
6-3/8	161.9	531.3	161.9	1,880	6,168
6-7/16	163.5	536.5	163.5	1,860	6,102
6-1/2	165.1	541.7	165.1	1,840	6,037
6-9/16	166.7	546.9	166.7	1,820	5,971
6-5/8	168.3	552.1	168.3	1,810	5,938
6-11/16	169.9	557.3	169.9	1,790	5,873
6-3/4	171.5	562.5	171.5	1,770	5,807
6-13/16	173	567.8	173.1	1,760	5,774
6-7/8	174.6	573	174.7	1,740	5,709
6-15/16	176.2	578.2	176.2	1,720	5,643
7	177.8	583.4	177.8	1,710	5,610
7-1/16	179.4	588.6	179.4	1,690	5,545
7-1/8	181	593.8	181	1,680	5,512
7-3/16	182.6	599	182.6	1,660	5,446
7-1/4	184.2	604.2	184.2	1,650	5,413
7-5/16	185.7	609.4	185.7	1,640	5,381
7-3/8	187.3	614.6	187.3	1,620	5,315

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Length		Length Required per 1000 Pieces		Yield - No. of Pieces in 1000	
(in)	(mm)	(ft)	(m)	(ft)	(m)
7-7/16	188.9	619.8	188.9	1,610	5,282
7-1/2	190.5	625	190.5	1,600	5,249
7-9/16	192.1	630.3	192.1	1,580	5,184
7-5/8	193.7	635.5	193.7	1,570	5,151
7-11/16	195.3	640.7	195.3	1,560	5,118
7-3/4	196.9	645.9	196.9	1,540	5,052
7-13/16	198.4	651.1	198.5	1,530	5,020
7-7/8	200	656.3	200	1,520	4,987
7-15/16	201.6	661.5	201.6	1,510	4,954
8	203.2	666.7	203.2	1,500	4,921
8-1/16	204.8	671.9	204.8	1,480	4,856
8-1/8	206.4	677.1	206.4	1,470	4,823
8-3/16	208	682.3	208	1,460	4,790
8-1/24	209.6	687.5	209.6	1,450	4,757
8-5/16	211.1	692.8	211.2	1,440	4,724
8-3/8	212.7	698	212.8	1,430	4,692
8-7/16	214.3	703.2	214.3	1,420	4,659
8-1/2	215.9	708.4	215.9	1,410	4,626
8-9/16	217.5	713.6	217.5	1,400	4,593
8-5/8	219.1	718.8	219.1	1,390	4,560
8-11/16	220.7	724	220.7	1,380	4,528
8-3/4	222.3	729.2	222.3	1,370	4,495
8-13/16	223.8	734.4	223.8	1,360	4,462
8-7/8	225.4	739.6	225.4	1,350	4,429
8-15/16	227	744.8	227	1,340	4,396
9	228.6	750	228.6	1,330	4,364
9-1/16	230.2	755.3	230.2	1,320	4,331
9-1/8	231.8	760.5	231.8	1,310	4,298
9-3/16	233.4	765.7	233.4	1,300	4,265
9-1/4	235	770.9	235	1,290	4,232
9-5/16	236.5	776.1	236.6	1,280	4,199
9-3/8	238.1	781.3	238.1	1,280	4,199
9-7/16	239.7	786.5	239.7	1,270	4,167
9-1/2	241.3	791.7	241.3	1,260	4,134
9-9/16	242.9	796.9	242.9	1,250	4,101
9-5/8	244.5	802.1	244.5	1,240	4,068
9-11/16	246.1	807.3	246.1	1,230	4,035
9-3/4	247.7	812.5	247.7	1,230	4,035
9-13/16	249.2	817.8	249.3	1,220	4,003

Length		Length Required per 1000 Pieces		Yield - No. of Pieces in 1000	
(in)	(mm)	(ft)	(m)	(ft)	(m)
9-7/8	250.8	823	250.9	1,210	3,970
9-15/16	252.4	828.2	252.4	1,200	3,937
10	254	833.4	254	1,200	3,937
10-1/16	255.6	838.6	255.6	1,190	3,904
10-1/8	257.2	843.8	257.2	1,180	3,871
10-3/16	258.8	849	258.8	1,170	3,839
10-1/4	260.4	854.2	260.4	1,170	3,839
10-5/16	261.9	859.4	261.9	1,160	3,806
10-3/8	263.5	864.6	263.5	1,150	3,773
10-7/16	265.1	869.8	265.1	1,140	3,740
10-1/2	266.7	875	266.7	1,140	3,740
10-9/16	268.3	880.3	268.3	1,130	3,707
10-5/8	269.9	885.5	269.9	1,120	3,675
10-11/16	271.5	890.7	271.5	1,120	3,675
10-3/4	273.1	895.9	273.1	1,110	3,642
10-13/16	274.6	901.1	274.7	1,100	3,609
10-7/8	276.2	906.3	276.2	1,100	3,609
10-15/16	277.8	911.5	277.8	1,090	3,576
11	279.4	916.7	279.4	1,090	3,576
11-1/16	281	921.9	281	1,080	3,543
11-1/8	282.6	927.1	282.6	1,070	3,510
11-3/16	284.2	932.3	284.2	1,070	3,510
11-1/4	285.8	937.5	285.8	1,060	3,478
11-5/16	287.3	942.8	287.4	1,060	3,478
11-3/8	288.9	948	289	1,050	3,445
11-7/16	290.5	953.2	290.5	1,040	3,412
11-1/2	292.1	958.4	292.1	1,040	3,412
11-9/16	293.7	963.6	293.7	1,030	3,379
11-5/8	295.3	968.8	295.3	1,030	3,379
11-11/16	296.9	974	296.9	1,020	3,346
11-3/4	298.5	979.2	298.5	1,020	3,346
11-13/16	300	984.4	300	1,010	3,314
11-7/8	301.6	989.6	301.6	1,010	3,314
11-15/16	303.2	994.8	303.2	1,000	3,281
12	304.8	1000	304.8	1,000	3,281

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



FIBER OPTIC CABLE

THEORY AND CONSTRUCTION

The major benefit of fiber optics over its alternatives is superior transmission capacity, or bandwidth. One optical fiber can carry almost 375 times as much voice and data as high capacity, high-speed T-1 communication lines. Fibers of ultrapure glass carry voice, video, and data signals faster than electron-based copper or coaxial cabling. AT&T Bell Laboratories has tested a system that enables transmission at 4 billion bits per second.

Fiber cabling also surpasses conventional electronic wiring systems for transmitting signals over long distances. Signals on electronic cabling must be retransmitted every mile or so by repeaters. Fiber optic links can carry unrepeatable signals great distances. Experimental systems have sent signals via fiber up to 125 miles without the aid of repeaters.

Another advantage of optical fiber is phenomenally low error rates. Typically, only one in 100 billion bits of information transmitted by fiber optic cabling is faulty as compared with one in 10 billion bits for the next best medium, broadband coaxial cabling.

Fiber optic transmission is not sensitive to electromagnetic interference as are electron based systems.

Fiber optic cabling has the advantage over conventional circuitry for protecting sensitive information against electronic meddling. Even without direct physical contact, it's possible for monitoring devices to pick up signals from the electromagnetic field that surrounds coaxial or copper cabling. Light signals cannot be tapped electromagnetically and fiber optic cabling is virtually impossible to tap.

SYSTEMS COMPONENTS

Like any communication system, a fiber optic link includes a transmitter, a transmission medium, and a receiver. Fiber optic links are designed to accept input and produce output in standard electronic formats but inside the fiber optic system, the signal is transmitted in the form of light.

The light source within the transmitter is a semi-conductor laser or light-emitting diode. Electronic circuits

within the transmitter convert the input signal into a bias current which drives the laser or LED. When current exceeds a threshold value, which depends on the individual device, the semi-conductor junction emits light with intensity dependent on how much larger the current is than the threshold level. The result is a straightforward amplitude modulation applied by the bias current to a carrier wave with frequency around 300,000 gigahertz. Laboratory transmitters based on semi-conductor lasers have operated in the gigahertz or gigabits-per-second range, but only a handful of commercial systems operate above 100 megahertz or 100 megabits-per-second. LED's generally operate at lower speeds than lasers.

At the end of the fiber, the light from the laser or LED is changed back into an electrical signal by a photo detector, a semi-conductor device which generates a current when light illuminates a junction. A variety of photo detectors are available, with wavelength response dependent on composition of the semiconductor, and response speed and amplitude dependent on device structure. Electrical output of a photo detector generally requires amplification and often needs some form of "cleaning up" before the signal can be passed on by the fiber optic system. This processing and amplification is the job of the receiver electronics. Fiber optic light sources and detectors can operate in either analog or digital mode and over a range of speeds.

Light is carried from the transmitter to the receiver through an optical fiber, which confines light to a central core, described in more detail below. Because a waveguiding effect is involved, optical fibers are sometimes called optical waveguides, a term which sometimes is applied to thin-film planar waveguides.

In telecommunication systems, the ends of separate fibers are usually spliced together permanently, either by melting ("fusion" splicing) or by gluing with epoxy. In many other fiber optic systems, connectors are factory-mounted on fiber ends, then mated together in the field to join the fibers. Splices offer lower loss and are inexpensive, but connectors are needed when the system configuration is subject to change.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



FUNDAMENTAL PRINCIPLE

The fundamental principle underlying the operation of optical fibers is total internal reflection. Internal reflection may occur when light traveling in a material strikes the boundary of another material with a lower refractive index. The angle at which internal reflection will occur is dependent upon the difference of refractive indices of the two materials.

Optical fibers are designed with a circular core region surrounded by a concentric cladding layer with the index of refraction of the core slightly higher than that of the cladding. The refractive index difference determines the acceptance angle of the fiber (numerical aperture). Optical energy entering the fiber core within this acceptance angle will propagate within the core region. The fibers employ a glass core and glass cladding with various materials added to provide the required refractive index variation.

FIBER TYPES

There are three basic types of fiber which can be used in communication systems: Multi-mode step-index, multi-mode graded-index, and single-mode.

MULTI-MODE STEP-INDEX:

The light carrying core of this fiber is surrounded by a cladding of glass with a lower refractive index. There is a discontinuity of "step" in the refractive index at the core-cladding boundary, hence the name. If light in the core hits this boundary at a glancing angle, it is totally reflected back into the core. This mechanism, known as total internal reflection, is what guides the light along the core of a step-index fiber.

In multi-mode fibers, the core is typically tens of micrometers to one millimeter in diameter. Light rays can take many different paths through such cores and these paths may differ significantly in length. The difference in path length causes pulses of light to spread out as they travel along a fiber and, thereby, reduce the bandwidth of the fiber. The pulse-spreading effect gets worse as core diameter increases, leading to a trade-off with light-collection capability and ease of connection, both of which increase with core diameter.

SINGLE-MODE:

If the core diameter of step-index fiber is reduced to a few micrometers, the number of different paths a light wave can take is effectively reduced to one. This

is best seen from the standpoint of waveguide theory, which indicates that such a fiber can support only one mode; hence, the name single-mode. This effectively eliminates pulse dispersion due to path-length differences and as a result, single-mode fibers have the broadest bandwidth of any type. In practice, other effects limit bandwidth, but only become significant at frequencies well into the gigahertz range. Unfortunately, the small core diameter of single-mode fibers makes it hard to transfer light into such fibers from light sources or other types of fiber, a very serious problem in practical communication systems.

MULTI-MODE GRADED-INDEX:

It's possible to combine broad bandwidth with good light-collecting capability by using a different type of fiber structure -- the graded-index fiber. In this type, the boundary between core and cladding is not abrupt but gradual, so the change in refractive index with distance from the center of the fiber is not a sharp step but a gradual slope. Light trying to pass from the core through this graded region at a low enough angle is gradually bent back toward the core rather than abruptly reflected. If the refractive index profile is properly adjusted, light rays traveling different paths through a graded-index fiber will travel nearly the same distance, minimizing pulse spreading and increasing bandwidth. Of necessity, the manufacturing of graded-index fibers is a somewhat more complex task than production of step-index fibers, but graded-index fiber has major advantages and is mass-producible. Graded-index fiber is used in virtually all long-distance fiber optic links for commercial telecommunications.

CABLE CONSTRUCTION CONSIDERATIONS

If fibers are not stressed, their mechanical and optical properties remain unchanged for typical lifetimes of 20 to 40 years, even in the presence of humidity, water, and strongly acid and basic chemicals.

Fibers that are stressed due to tension or sharp bending (macro bending) are fatigued, exhibit loss of strength and may fail, even when the stress is well below screen test levels used at the fiber manufacturing stage. In addition to stress affecting fiber life, stress upon the fiber also can produce micro bending, or microscopic fiber bends, which will increase the signal loss of the fiber.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

The fiber sensitivity to micro bending is a function of the core-cladding diameter ratio, the difference between core and cladding and the primary coating. In order to eliminate added loss due to micro bending, the cable structure must isolate the fiber from stress due to both environmental effects, such as temperature and physical properties such as bending, and residual stress due to installation conditions. The cable structure also must restrain the minimum bend radius of the fiber since micro bending which occurs below a minimum bend radius will also induce added fiber attenuation.

Traditionally, cable designs have been classified as either tight or loose buffer designs. The design type is differentiated by the protective coating or buffer that is used to facilitate fiber handling during the cabling process.

Tight buffer designs are characterized by application of one or two layers of protective plastic over the primary fiber coating. This may be on an individual fiber basis or in a ribbon structure. The former normally yields a cabling element with an outer diameter of 0.9 to 1 mm and is tightly contained within the cable structure. In ribbon design several fibers, typically 12, are sandwiched in parallel between two tape layers but the ribbon or layers of ribbons normally are allowed to float within the cable structure.

The loose structure is characterized by the fiber or fibers being placed in a cavity whose inner dimensions are much larger than that of the outer diameter of the coated fiber. Common types are slotted core or loose tube design. A variation on the loose tube design is the filled loose tube. This technique uses a viscous fluid which allows for fiber movement and excludes the presence of water.

As a general rule, when optimum environmentally stable transmission characteristics, especially under continuous mechanical stress, are specified, the filled loose buffer will be preferred. If, however, simple and robust designs with small numbers of fibers are required, the tight buffer may be advantageous.

Typically tight buffer designs are more sensitive to low temperature because of the relative large amount of plastic in intimate contact with the fiber. Since the coefficient of thermal expansion for plastic and glass are very dissimilar, the contraction forces at low tem-

perature of the fiber coating can cause unacceptable added loss. Tight buffering also is more sensitive to added loss during buffering and subsequent cabling operations.

In order to minimize cable elongation and contraction characteristics, structural members are included in many cable designs. The structural center member is normally steel or epoxy fiberglass, as a core foundation, around which the buffered fibers are stranded and act as an anti buckling element. Typically, a layer of Kelvar® is placed over the cable core to serve as the primary cable load-bearing element.

The table below describes representative cable performance and should be used as a guideline for system design.

TYPICAL CABLE TRANSMISSION CHARACTERISTICS			
Operating Wavelength (nanometers)	Attenuation (dB / km)	Bandwidth (MHz / km)	Distance between repeaters for 90 Mbps system (km)
850	2.8 - 4.5	200 - 1,000	12
1,300	0.9 - 2.5	200 - 1,300	22
850 / 1,300	2.8 / 1.5 - 4.5 / 3.0	200 - 800	10* / 12 / 14

TRANSMISSION CONSIDERATIONS

Bandwidth, or information carrying capacity, and attenuation, or loss of power, are the two primary properties of the transmission medium that impact the performance of a fiber optic communications system. Fiber bandwidth is specified normalized to a 1 km length and expressed in units of megahertz per kilometer. Optical characteristics for typical constructions are:

OPTICAL CHARACTERISTICS					
Construction	Glass Type	Code (X)	Operating Wavelength (nanometers)	Minimum Bandwidth (MHz / km)	Maximum Attenuation (db / km)
Loose tube	50 / 125 multi-mode	1	850 / 1,300	400 / 400	3.0 / 1.0
Loose tube	62.5 / 125 multi-mode	2	850 / 1,300	160 / 500	3.25 / 1.0
Loose tube	8 / 125 single-mode	3	1,310 / 1,550		0.45 / 0.35
Tight buffered & micro-loose tube	50 / 125 multi-mode	1	850 / 1,300	400 / 400	3.50 / 1.25
Tight buffered & micro-loose tube	62.5 / 125 multi-mode	2	850 / 1,300	160 / 500	3.50 / 1.25
Tight buffered & micro-loose tube	8 / 125 single-mode	3	1,310 / 1,550		0.80 / 0.5

*With wavelength division multiplexing.

Kelvar® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



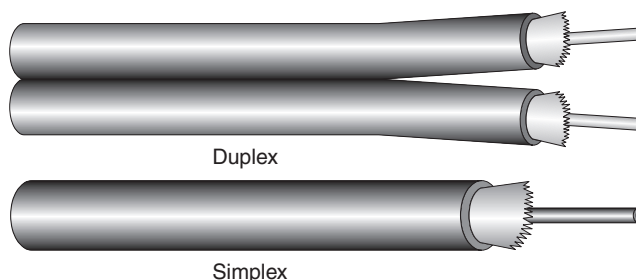
Standard Wire & Cable Co.

Simplex & Duplex Cables

UL Type OFNR

UL Type OFNP

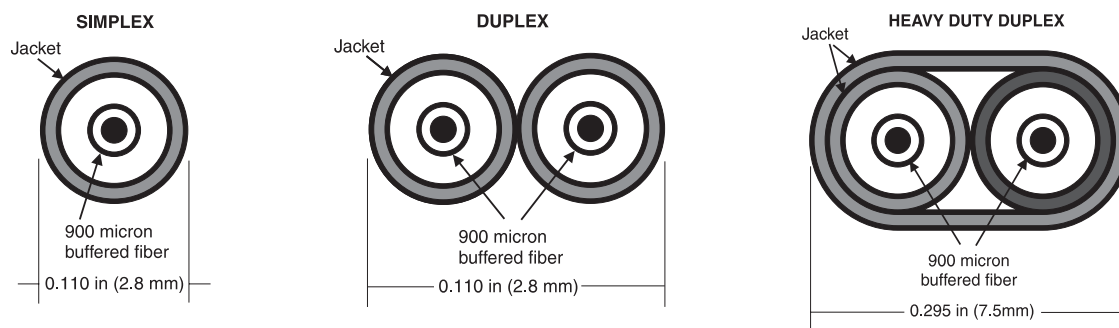
2.8 mm Diameter



MECHANICAL, ENVIRONMENTAL & FLAME CHARACTERISTICS:

Crush Resistance	EIA-455-41	200 Newtons/cm
Impact Resistance	EIA-455-25	20 Impacts with 1.0 newton-meter
Flexure	EIA-455-104	100 Cycles minimum
Minimum Bend Radius	Long-term - No Load	10 x Cable diameter
Minimum Bend Radius	Short-term - Load	15 x Cable diameter
Operating Temperature		-20° C to 70° C
Storage Temperature		-40° C to 70° C
UL Rated	Type OFNR	Riser
UL Rated	Type OFNP	Plenum

USES: Patch cables, short run office wiring, computer room wiring.



Riser

Part Number	Fiber Count	Weight (lbs / 1000 ft) (kg / km)		Minimum Bend Radius				Maximum Load (Installation) (lbs) (Newtons)	
				Short Term (in) (cm)		Long Term (in) (cm)			
M9X001	1	6	8.9	1.7	4.32	1.1	2.79	77	343
M9X002	2	10	14.9	1.7	4.32	1.1	2.79	154	685
M9X080	2	25	37.2	1.7	4.32	1.1	2.79	154	685

Plenum

Part Number	Fiber Count	Weight (lbs / 1000 ft) (kg / km)		Minimum Bend Radius				Maximum Load (Installation) (lbs) (Newtons)	
				Short Term (in) (cm)		Long Term (in) (cm)			
M9X003	1	7	10.4	1.7	4.32	1.1	2.79	77	343
M9X004	2	15	22.3	1.7	4.32	1.1	2.79	154	685
M9X081	2	30	44.6	1.7	4.32	1.1	2.79	154	685

For "X" in part number, see optical characteristics chart on page 173.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Distribution Cables

UL Type OFNR

Riser

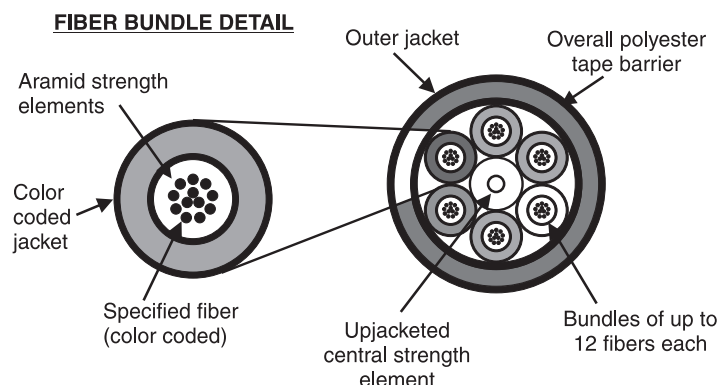


MECHANICAL, ENVIRONMENTAL, & FLAME CHARACTERISTICS:

Crush Resistance	EIA-455-41	2,000 Newtons/cm
Impact Resistance	EIA-455-25	2,000 Impacts with 1.6 newton-meter
Flexure	EIA-455-104	2,000 Cycles minimum
Minimum Bend Radius	Long-term - No Load	10 x Cable diameter
Minimum Bend Radius	Short-term - Load	15 x Cable diameter
Operating Temperature		-20° C to 70° C
Storage Temperature		-40° C to 80° C
UL Rated	Type OFNR	
Flame Resistance	UL 1666	Passed

USES: Riser wiring, office wiring, and computer room wiring.

PRODUCT FEATURES: 900 µm tight buffered fibers. Color coded for easy termination. Flame-retardant. UL listed for code compliance.



Part Number	Fiber Count	Outside Diameter		Weight		Minimum Bend Radius				Maximum Load (Installation)	
		(in)	(mm)	(lbs / 1000 ft)	(kg / km)	Short Term (in)	Short Term (cm)	Long Term (in)	Long Term (cm)	(lbs)	(Newtons)
M9X037	2	0.184	4.67	15	22.3	2.8	7.1	1.8	4.6	90	400
M9X038	4	0.200	5.08	15	22.3	3.0	7.6	2.0	5.1	120	534
M9X039	6	0.220	5.59	20	29.8	3.3	8.4	2.2	5.6	150	667
M9X040	8	0.242	6.15	25	37.2	3.6	9.1	2.4	6.1	180	801
M9X042	12	0.300	7.62	35	52.1	4.5	11.4	3.0	7.6	240	1,068
M9X600	16	0.528	13.4	100	149	7.90	20.1	5.3	13	720	3,203
M9X602	24	0.528	13.4	110	164	7.90	20.1	5.3	13	1,080	4,804
M9X604	36	0.634	16.1	150	223	9.50	24.1	6.3	16	1,260	5,605
M9X606	48	0.754	19.2	230	342	11.3	28.7	7.5	19	1,440	6,405
M9X609	72	0.754	19.2	260	387	11.3	28.7	7.5	19	1,620	7,206
M9X619	144	1.04	26.4	400	595	15.6	39.6	10.4	26.4	2,500	11,121

For "X" in part number, see optical characteristics chart on page 173.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Distribution Cables

UL Type OFNP

Plenum

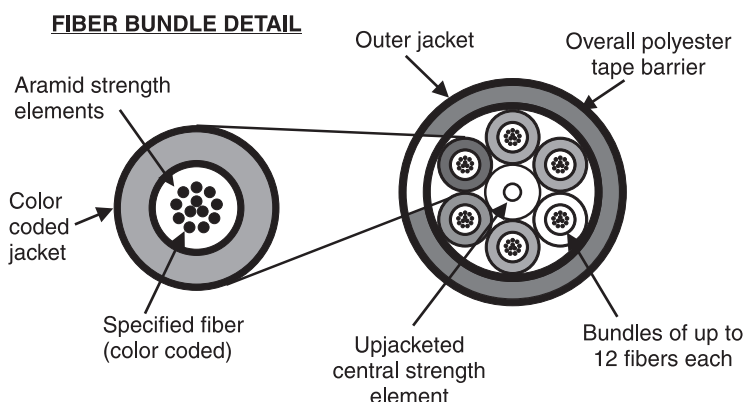


MECHANICAL, ENVIRONMENTAL, & FLAME CHARACTERISTICS:

Crush Resistance	EIA-455-41	2,000 Newton/cm
Impact Resistance	EIA-455-25	2,000 Impacts with 1.6 newton-meter
Flexure	EIA-455-104	2,000 Cycles minimum
Minimum Bend Radius	Long-term - No Load	10 x Cable diameter
Minimum Bend Radius	Short-term - Load	15 x Cable diameter
Operating Temperature		-20° C to 70° C
Storage Temperature		-40° C to 80° C
UL Rated	Type OFNP	
Flame Resistance	UL 910 Modified	Passed

USES: Plenum wiring, office wiring, and computer room wiring.

PRODUCT FEATURES: 900 µm tight buffered fibers. Color coded for easy termination. Flame-retardant UL listed for code compliance.



Part Number	Fiber Count	Outside Diameter		Weight		Minimum Bend Radius				Maximum Load (Installation)	
		(in)	(mm)	(lbs / 1000 ft)	(kg / km)	Short Term (in) (cm)		Long Term (in) (cm)		(lbs)	(Newtons)
M9X043	2	0.184	4.67	15	22	2.8	7.1	1.8	4.6	90	400
M9X044	4	0.184	4.67	15	22	2.8	7.1	1.8	4.6	120	534
M9X045	6	0.200	5.08	20	30	3.0	7.6	2.0	5.1	150	667
M9X046	8	0.222	5.64	25	37	3.3	8.4	2.2	5.6	180	801
M9X048	12	0.270	6.86	30	45	4.1	10	2.7	6.9	240	1,068
M9X610	16	0.508	12.9	105	156	7.6	19	5.1	13	720	3,203
M9X612	24	0.498	12.6	100	149	7.5	19	5.0	13	1,080	4,804
M9X614	36	0.614	15.6	180	268	9.2	23	6.1	15	1,260	5,605
M9X616	48	0.734	18.6	210	312	11.0	27.9	7.3	19	1,440	6,405
M9X620	72	0.737	18.7	220	327	11.0	27.9	7.3	19	1,620	7,206

For "X" in part number, see optical characteristics chart on page 173.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com

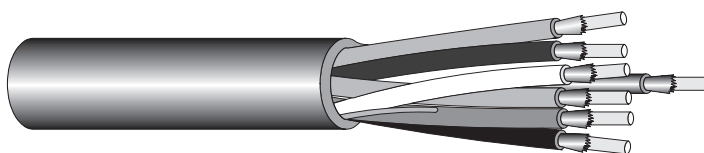


Standard Wire & Cable Co.

Breakout Cables

UL Type OFNP

2.0 mm subunit - Plenum

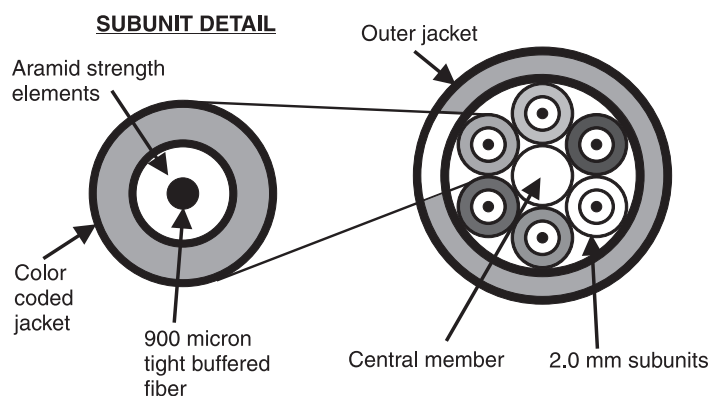


MECHANICAL, ENVIRONMENTAL, & FLAME CHARACTERISTICS:

Crush Resistance	EIA-455-41	2,000 Newton/cm
Impact Resistance	EIA-455-25	2,000 Impacts with 1.6 newton-meter
Flexure	EIA-455-104	2,000 Cycles minimum
Minimum Bend Radius	Long-term - No Load	10 x Cable diameter
Minimum Bend Radius	Short-term - Load	15 x Cable diameter
Operating Temperature		-20° C to 70° C
Storage Temperature		-40° C to 80° C
UL Rated	Type OFNP	
Flame Resistance	UL 910 Modified	Passed

USES: Plenum wiring, office wiring, and computer room wiring.

PRODUCT FEATURES: 900 µm tight buffered fibers. Color coded for easy termination. Flame-retardant. UL listed for code compliance. 2-12 fibers per DEC specifications.



Part Number	Fiber Count	Outside Diameter		Weight		Minimum Bend Radius				Maximum Load (Installation)	
		(in)	(mm)	(lbs / 1000 ft)	(kg / km)	Short Term		Long Term		(lbs)	(Newtons)
M9X013	2	0.191	4.85	20	30	2.9	7	1.9	4.8	224	996
M9X014	4	0.224	5.69	25	37	3.4	9	2.2	5.6	600	2,669
M9X015	6	0.280	7.11	40	60	4.2	11	2.8	7.1	600	2,669
M9X016	8	0.342	8.69	60	89	5.1	13	3.4	8.6	600	2,669
M9X017	10	0.387	9.83	80	119	5.8	15	3.9	9.9	600	2,669
M9X018	12	0.458	11.6	100	149	6.9	18	4.6	12	600	2,669
M9X019	18	0.458	11.6	100	149	6.9	18	4.6	12	600	2,669
M9X020	24	0.558	14.2	145	216	8.4	21	5.6	14	600	2,669
M9X082	36	0.603	15.3	165	246	9.0	23	6.0	15	600	2,669

For "X" in part number, see optical characteristics chart on page 173.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com

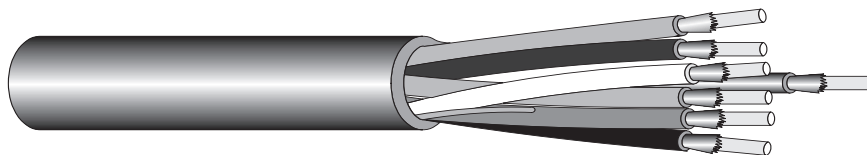


Standard Wire & Cable Co.

Breakout Cables

UL Type OFNR

2.0 mm subunit - Riser



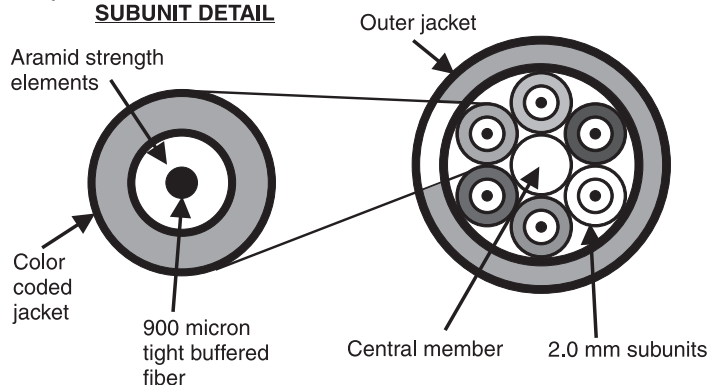
MECHANICAL, ENVIRONMENTAL, & FLAME CHARACTERISTICS:

Crush Resistance	EIA-455-41	2,000 Newton/cm
Impact Resistance	EIA-455-25	2,000 Impacts with 1.6 newton-meter
Flexure	EIA-455-104	2,000 Cycles minimum
Minimum Bend Radius	Long-term - No Load	10 x Cable diameter
Minimum Bend Radius	Short-term - Load	15 x Cable diameter
Operating Temperature		-20° C to 70° C
Storage Temperature		-40° C to 80° C
UL Rated	Type OFNR	
Flame Resistance	UL 1666	Passed

USES: Riser wiring (typically under 300 meters), office wiring, and computer room wiring.

PRODUCT FEATURES: 900 µm tight buffered fibers. Color coded for easy termination. Flame-retardant. UL listed for code compliance. Direct connectorization. 2-12 fibers per DEC specifications.

SUBUNIT DETAIL



Part Number	Fiber Count	Outside Diameter		Weight		Minimum Bend Radius				Maximum Load (Installation)	
		(in)	(mm)	(lbs / 1000 ft)	(kg / km)	Short Term (in)		Long Term (in)		(lbs)	(Newtons)
M9X005	2	0.280	7.11	20	30	4.2	11	2.8	7.1	224	996
M9X006	4	0.312	7.92	25	37	4.7	12	3.1	7.9	600	2,669
M9X007	6	0.358	9.09	35	52	5.4	14	3.6	9.1	600	2,669
M9X008	8	0.405	10.3	55	82	6.1	15	4.1	10	600	2,669
M9X009	10	0.454	11.5	70	104	6.8	17	4.5	11	600	2,669
M9X010	12	0.514	13.1	115	171	7.7	20	5.1	13	600	2,669
M9X011	18	0.514	13.1	115	171	7.7	20	5.1	13	600	2,669
M9X012	24	0.604	15.3	130	193	9.1	23	6.0	15	600	2,669
M9X083	36	0.680	17.3	175	260	10.2	25.9	6.8	17	600	2,669

For "X" in part number, see optical characteristics chart on page 173.

Rancho Dominguez

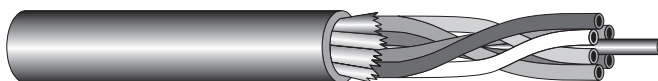
2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Loose Tube Cables UL Type OFNR - Outdoor

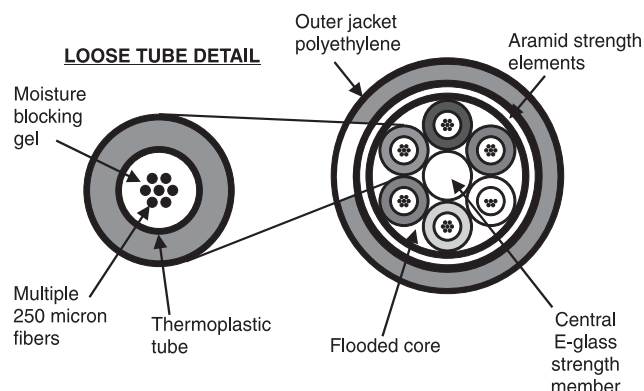


MECHANICAL, ENVIRONMENTAL, & FLAME CHARACTERISTICS:

Crush Resistance	EIA-455-41	2,000 Newtons/cm
Impact Resistance	EIA-455-25	2,000 Impacts with 1.6 newton-meter
Flexure	EIA-455-104	2,000 Cycles minimum
Minimum Bend Radius	Long-term - No Load	15 x Cable diameter
Minimum Bend Radius	Short-term - Load	20 x Cable diameter
Operating Temperature		-40° C to 70° C
Storage Temperature		-50° C to 80° C
UL Rated	Type OFNR	
Flame Resistance	UL 1666	Passed

USES: Building interconnections, telecommunications and data trunk, long haul networking, ducts between buildings, and applications requiring good ozone, moisture, and weather resistance.

PRODUCT FEATURES: Available in several fiber counts. All dielectric central strength member. Excellent attenuation performance. Water block gel for moisture protection. Polyethylene jacket for weather and UV protection. Breakout kits available.



1 Fiber per tube

Part Number	Fiber Count	Outside Diameter		Weight		Minimum Bend Radius				Maximum Load (Installation)	
		(in)	(mm)	(lbs / 1000 ft)	(kg / km)	Short Term		Long Term		(lbs)	(Newtons)
M9X058	2	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X059	4	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X060	6	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X061	8	0.520	13.2	125	186	10.4	26.4	7.8	20	600	2,669
M9X062	12	0.520	13.2	125	186	10.4	26.4	7.8	20	600	2,669

For "X" in part number, see optical characteristics chart on page 173.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

2 Fibers per tube

Part Number	Fiber Count	Outside Diameter (in) (mm)		Weight (lbs / 1000 ft) (kg / km)		Minimum Bend Radius				Maximum Load (Installation) (lbs) (Newtons)	
						Short Term (in) (cm)		Long Term (in) (cm)			
M9X063	4	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X064	6	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X065	8	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X066	10	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X067	12	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669

6 Fibers per tube

Part Number	Fiber Count	Outside Diameter (in) (mm)		Weight (lbs / 1000 ft) (kg / km)		Minimum Bend Radius				Maximum Load (Installation)	
						Short Term (in) (cm)		Long Term (in) (cm)		(lbs)	(Newtons)
M9X510	6	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X511	12	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X512	18	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X500	24	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X501	30	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X502	36	0.375	9.53	55	82	7.5	19	5.6	14	600	2,669
M9X518	48	0.415	10.5	110	164	8.3	21	6.2	16	600	2,669
M9X503	54	0.520	13.2	125	186	10.4	26.4	7.8	20	600	2,669
M9X519	60	0.520	13.2	125	186	10.4	26.4	7.8	20	600	2,669
M9X504	72	0.520	13.2	125	186	10.4	26.4	7.8	20	600	2,669

12 Fibers per tube

Part Number	Fiber Count	Outside Diameter (in) (mm)		Weight (lbs / 1000 ft) (kg / km)		Minimum Bend Radius				Maximum Load (Installation) (lbs) (Newtons)	
						Short Term (in) (cm)		Long Term (in) (cm)			
M9X515	12	0.475	12.1	95	141	9.5	24	7.1	18	600	2,669
M9X516	24	0.475	12.1	95	141	9.5	24	7.1	18	600	2,669
M9X517	36	0.475	12.1	95	141	9.5	24	7.1	18	600	2,669
M9X505	48	0.475	12.1	95	141	9.5	24	7.1	18	600	2,669
M9X506	60	0.475	12.1	95	141	9.5	24	7.1	18	600	2,669
M9X507	72	0.475	12.1	95	141	9.5	24	7.1	18	600	2,669
M9X513	96	0.542	13.8	150	223	10.8	27.4	8.1	21	600	2,669
M9X508	108	0.695	17.7	250	372	13.9	35.3	10.4	26.4	600	2,669
M9X514	120	0.695	17.7	250	372	13.9	35.3	10.4	26.4	600	2,669
M9X509	144	0.695	17.7	250	372	13.9	35.3	10.4	26.4	600	2,669

For "X" in part number, see optical characteristics chart on page 173.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

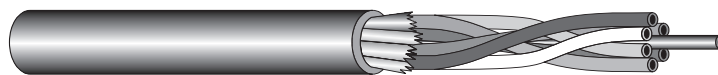
Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Loose Tube Cables UL Type OFNR - Indoor/Outdoor

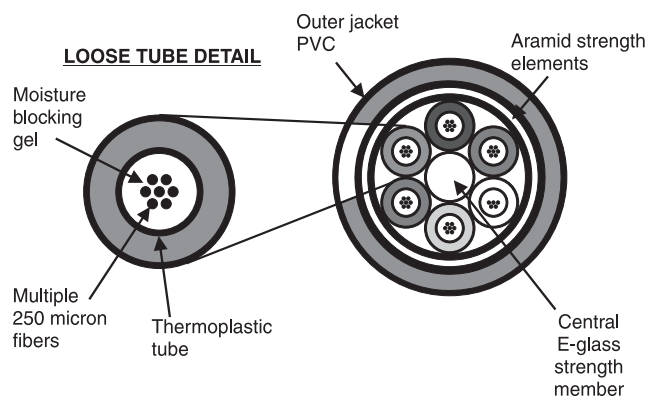


MECHANICAL, ENVIRONMENTAL, & FLAME CHARACTERISTICS:

Crush Resistance	EIA-455-41	2,000 Newton/cm
Impact Resistance	EIA-455-25	2,000 Impacts with 1.6 newton-meter
Flexure	EIA-455-104	2,000 Cycles minimum
Minimum Bend Radius	Long-term - No Load	15 x Cable diameter
Minimum Bend Radius	Short-term - Load	20 x Cable diameter
Operating Temperature		-40° C to 70° C
Storage Temperature		-40° C to 80° C
UL Rated	Type OFNR	
Flame Resistance	UL 1666	Passed

USES: Indoor/outdoor installations, telecommunications and data trunk, and building interconnections.

PRODUCT FEATURES: No splicing required at building entrance. Available with zero-halogen jacket.
Armored/direct burial versions available. Breakout kits available.



Part Number	Fiber Count	Outside Diameter		Weight		Minimum Bend Radius				Maximum Load (Installation)	
		(in)	(mm)	(lbs / 1000 ft)	(kg / km)	Short Term		Long Term		(lbs)	(Newtons)
M9X810	6	0.375	9.53	73	109	7.5	19	5.6	14	600	2,669
M9X811	12	0.375	9.53	73	109	7.5	19	5.6	14	600	2,669
M9X812	24	0.375	9.53	73	109	7.5	19	5.6	14	600	2,669
M9X813	36	0.375	9.53	73	109	7.5	19	5.6	14	600	2,669
M9X814	48	0.475	12.1	116	173	9.5	24	7.1	18	600	2,669
M9X815	72	0.475	12.1	116	173	9.5	24	7.1	18	600	2,669
M9X816	96	0.542	13.8	172	256	10.8	27.4	8.1	21	600	2,669
M9X817	144	0.695	17.7	287	427	13.9	35.3	10.4	26.4	600	2,669

For "X" in part number, see optical characteristics chart on page 173.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Comparative Properties of Insulating and Jacketing Compounds

	PVC	Low Density Poly-ethylene	Cellular Poly-ethylene	High Density Poly-ethylene	Poly-propylene	Cellular Poly-propylene	Poly-urethane	Nylon	CPE
Abrasion Resistance	F-G	G	F	E	F-G	F-G	O	E	E-O
Acid Resistance	G-E	G-E	G-E	E	E	E	F	P-F	E
Alcohol Resistance	G-E	E	E	E	E	E	P-G	P	E
Alkali Resistance	G-E	G-E	G-E	E	E	E	F	E	E
Benzol, Toluol, Etc. (Aromatic Hydrocarbons) Resistance	P-F	P	P	P	P-F	P	P-G	G	G-E
Degreaser Solvents (Halogenated Hydrocarbons) Resistance	P-F	G	G	G	P	P	P-G	G	E
Electrical Properties	F-G	E	E	E	E	E	P	P	E
Flame Resistance	E	P	P	P	P	P	P	P	E
Gasoline, Kerosene, Etc. (Aliphatic Hydrocarbons) Resistance	P	G-E	G	G-E	P-F	P	P-G	G	E
Heat Resistance	G-E	G	G	E	E	E	G	E	E
Low Temperature Flexibility	P-G	E	E	E	P	P	G	G	E
Nuclear Radiation Resistance	F	G-E	G	G-E	F	F	G	F-G	O
Oil Resistance	F	G-E	G	G-E	F	F	E	E	E
Oxidation Resistance	E	E	E	E	E	E	E	E	E
Ozone Resistance	E	E	E	E	E	E	E	E	E
Underground Burial	P-G	G	N/A	E	N/A	N/A	G	P	E-O
Water Resistance	F-G	E	E	E	E	E	P-G	P-F	O
Weather, Sun Resistance	G-E	E	E	E	E	E	G	E	E

	Nylon	CPE	Flam-arrest	FEP	ETFE	PTFE	Solef / Kynar (PVDF) / PVF	Halar (E-CTFE)
Abrasion Resistance	E	E-O	F-G	E	E	O	E	E
Acid Resistance	P-F	E	G	E	E	E	G-E	E
Alcohol Resistance	P	E	G	E	E	E	E	E
Alkali Resistance	E	E	G	E	E	E	E	E
Benzol, Toluol, Etc. (Aromatic Hydrocarbons) Resistance	G	G-E	P-F	E	E	E	G-E	E
Degreaser Solvents (Halogenated Hydrocarbons) Resistance	G	E	P-F	E	E	E	G	E
Electrical Properties	P	E	G	E	E	E	G-E	E
Flame Resistance	P	E	E	O	G	E	E	E-O
Gasoline, Kerosene, Etc. (Aliphatic Hydrocarbons) Resistance	G	E	P	E	E	E	E	E
Heat Resistance	E	E	G-E	O	E	O	O	O
Low Temperature Flexibility	G	E	P-G	O	E	O	O	O
Nuclear Radiation Resistance	F-G	O	F	P-G	E	P	E	E
Oil Resistance	E	E	F	O	E	E-O	E	O
Oxidation Resistance	E	E	E	O	E	O	O	O
Ozone Resistance	E	E	E	E	E	O	E	E
Underground Burial	P	E-O	P	E	E	E	E	E
Water Resistance	P-F	O	F	E	E	E	E	E
Weather, Sun Resistance	E	E	G	O	E	O	E-O	O

P=Poor, F=Fair, G=Good, E=Excellent, O=Outstanding

These ratings are based on average performance of general purpose components. Any given property can usually be improved by the use of selective compounding.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



CURRENT CARRYING CAPACITY OF COPPER CONDUCTORS

Current carrying capacity is defined as the amperage a conductor can carry before melting either the conductor or the insulation.

Heat, caused by an electrical current flowing through a conductor, will determine the amount of current a wire will handle. Theoretically, the amount of current that can be passed through a single bare copper wire can be increased until the heat generated reaches the melting temperature of the copper.

There are many factors which will limit the amount of current that can be passed through a wire. These major determining factors are:

Conductor Size:

The larger the circular mil area, the greater the current capacity.

Insulation:

The amount of heat generated should never exceed the maximum temperature rating of the insulation material.

Ambient Temperature:

The higher the ambient temperature, the less heat required to reach the maximum temperature rating of the insulation.

Conductor Number:

Heat dissipation is lessened as the number of individually insulated conductors, bundled together, is increased.

Installation Conditions:

Restricting the heat dissipation by installing the conductors in conduit, duct, trays or raceways lessens the current carrying Capacity. This restriction can be alleviated somewhat by using proper ventilation methods, forced air cooling, etc.

Taking into account all the variables involved, no simple table of current rating can be developed and used as the final word when designing a system where amperage ratings can become critical. The first table on the next page shows the current required to raise the temperatures of single insulated conductor in free air (30° C ambient) to the limits of various insulation types. The second table on the next page gives a derating factor to be used when the conductors are bundled. **These tables should only be used as a guide when attempting to establish current ratings on conductor and cable.**

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Amperes

Insulation Materials	Polyethylene Neoprene Polyurethane Polyvinylchloride (Semi-Rigid)	Polypropylene Polyethylene (High Density)	Polyvinylchloride PVC (Irradiated) Nylon	Kynar (135° C) Polyethylene (Crosslinked) Thermoplastic Elastomers	Kapton PTFE Silicone
Copper Temp.	80° C	90° C	105° C	125° C	200° C
30 AWG	2	3	3	3	4
28 AWG	3	4	4	5	6
26 AWG	4	5	5	6	7
24 AWG	6	7	7	8	10
22 AWG	8	9	10	11	13
20 AWG	10	12	13	14	17
18 AWG	15	17	18	20	24
16 AWG	19	22	24	26	32
14 AWG	27	30	33	40	45
12 AWG	36	40	45	50	55
10 AWG	47	55	58	70	75
8 AWG	65	70	75	90	100
6 AWG	95	100	105	125	135
4 AWG	125	135	145	170	180
2 AWG	170	180	200	225	240
1 AWG		211		265	280
1/0 AWG		245		305	325
2/0 AWG		283		355	370
3/0 AWG		328		410	430
4/0 AWG		380		475	510

Single Conductor in Free Air 30° C Ambient Temperature

Derating Factors for Bundled Conductors

Bundle #	Derating Factor (X Amps)
2 - 5	0.8
6 - 15	0.7
16 - 30	0.5

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



COMPARISON CHART FOR UL WIRES & CABLES

UL STYLE NUMBER	AWG SIZE RANGE	VOLTAGE RATING	TEMP. RATING	INSULATION		REMARKS
				THICKNESS	MATERIAL	
1508	30 - 20	30	105°C	0.0055"	ETFE	Back panels for computers
1512	16 - 14	Not rated	105°C	0.010"	PTFE	
1513	30 - 20	Not rated	105°C	0.0045"	ETFE	Back panels for computers
1516	30 - 20	Not rated	105°C	0.004"	ETFE	Back panels for computers
1517	30 - 20	Not rated	105°C	0.006"	ETFE	Back panels for computers
1523	30 - 20	Not rated	105°C	0.005"	ETFE	Back panels for computers
1534	30 - 14	Not rated	80°C	0.010"	Irradiated PVC	Internal wiring of appliances
1536	30 - 10	Not rated	80°C	0.010"	Irradiated PVC	Internal wiring of appliances
1538	32 - 6	125	105°C	0.0055 - 0.020"	FEP or PFA	
	36 - 8	125	105°C		PTFE	
1570	24 - 8	600	250°C	0.020 - 0.030"	PTFE (mineral filled)	
1577	32 - 16	Not rated	200°C	0.012"	FEP or PTFE	
1558	32 - 20	Not rated	125°C	0.004"	ETFE	
1584	32 - 10	1,000	200°C	0.022"	PTFE	
1586	36 - 6	Not rated	105°C	0.0055 - 0.020"	ETFE	
1591	32 - 16	300	150°C	0.016"	FEP	
1592	32 - 16	300	200°C	0.016"	FEP	
1609	36 - 6	125	105°C	0.0055 - 0.020"	ETFE	
1610	32 - 10	Not rated	105°C	0.010"	ETFE	
1643	32 - 4/0	300	150°C	0.13 - 0.030"	ETFE	
1644	30 - 4/0	600	150°C	0.020 - 0.045"	ETFE	
1659	26 - 8	600	250°C	0.020 - 0.030"	PTFE	

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

UL STYLE NUMBER	AWG SIZE RANGE	VOLTAGE RATING	TEMP. RATING	INSULATION		REMARKS
				THICKNESS	MATERIAL	
1227	30 - 20	Not rated	105°C	0.010"	FEP	Back panel wiring
1293	30 - 20	Not rated	105°C	0.010"	FEP / nylon	Office equipment
1294	26 - 20	Not rated	80°C	0.010"	FEP / nylon	Office equipment
1327	30 - 16	Not rated	105°C	0.010"	Kynar®	Office appliances
1330	28 - 10	600	150°C	0.020"	FEP	Office equipment
1331	28 - 10	600	200°C	0.020"	FEP	Office equipment
1332	28 - 10	300	200°C	0.013"	FEP	Office equipment
1333	28 - 10	300	150°C	0.013"	FEP	Office equipment
1351	30 - 16	Not rated	80°C	0.010"	Kynar®	Office appliances
1354	-	30	60°C	-	-	Coaxial cable
1355	32 - 20	Not rated	200°C	0.0055"	FEP - polyimide	
1371	32 - 6	Not rated	105°C	0.0055 - 0.020"	FEP	
				0.006 - 0.020"	PTFE	
1394	32 - 20	Not rated	200°C	0.0055"	PTFE - Polyimide	
1422	32 - 20	Not rated	105°C	0.005"	Kynar®	Back panel wiring
1423	32 - 20	Not rated	105°C	0.004"	Kynar®	Back panel wiring
1426	32 - 20	Not rated	105°C	0.006"	Kynar®	Back panel wiring
1429	30 - 16	150	80°C	0.010"	Irradiated PVC	Internal wiring of appliances
1430	30 - 16	300	105°C	0.015"	Irradiated PVC	Internal wiring of appliances
1431	30 - 10	600	105°C	0.030"	Irradiated PVC	Motor lead
1431	8	600	105°C	0.045"	Irradiated PVC	Motor lead
1431	6 - 2	600	105°C	0.060"	Irradiated PVC	Motor lead
1431	1 - 1/0	600	105°C	0.078"	Irradiated PVC	Motor lead

Kynar® is a registered trademark of Pennwalt Corporation.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

UL STYLE NUMBER	AWG SIZE RANGE	VOLTAGE RATING	TEMP. RATING	INSULATION		REMARKS
				THICKNESS	MATERIAL	
1508	30 - 20	30	105°C	0.0055"	ETFE	Back panels for computers
1512	16 - 14	Not rated	105°C	0.010"	PTFE	
1513	30 - 20	Not rated	105°C	0.0045"	ETFE	Back panels for computers
1516	30 - 20	Not rated	105°C	0.004"	ETFE	Back panels for computers
1517	30 - 20	Not rated	105°C	0.006"	ETFE	Back panels for computers
1523	30 - 20	Not rated	105°C	0.005"	ETFE	Back panels for computers
1534	30 - 14	Not rated	80°C	0.010"	Irradiated PVC	Internal wiring of appliances
1536	30 - 10	Not rated	80°C	0.010"	Irradiated PVC	Internal wiring of appliances
1538	32 - 6	125	105°C	0.0055 - 0.020"	FEP or PFA	
	36 - 8	125	105°C		PTFE	
1570	24 - 8	600	250°C	0.020 - 0.030"	PTFE (mineral filled)	
1577	32 - 16	Not rated	200°C	0.012"	FEP or PTFE	
1558	32 - 20	Not rated	125°C	0.004"	ETFE	
1584	32 - 10	1,000	200°C	0.022"	PTFE	
1586	36 - 6	Not rated	105°C	0.0055 - 0.020"	ETFE	
1591	32 - 16	300	150°C	0.016"	FEP	
1592	32 - 16	300	200°C	0.016"	FEP	
1609	36 - 6	125	105°C	0.0055 - 0.020"	ETFE	
1610	32 - 10	Not rated	105°C	0.010"	ETFE	
1643	32 - 4/0	300	150°C	0.13 - 0.030"	ETFE	
1644	30 - 4/0	600	150°C	0.020 - 0.045"	ETFE	
1659	26 - 8	600	250°C	0.020 - 0.030"	PTFE	
1671	32 - 10	300	150°C	0.010"	ETFE	

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

UL STYLE NUMBER	AWG SIZE RANGE	VOLTAGE RATING	TEMP. RATING	INSULATION		REMARKS
				THICKNESS	MATERIAL	
1709	32 - 10	300	200°C	0.013"	PFA	
1710	30 - 4/0	600	200°C	0.020 - 0.045"	PFA	
1716	36 - 6	150	150°C	0.0055 - 0.020"	FEP or PFA or PTFE	
1726	32 - 4/0	300	250°C	0.013 - 0.045"	PFA	
1727	32 - 4/0	600	250°C	0.020 - 0.045"	PFA	
1814	32 - 20	150	150°C	0.006"	ETFE	
1815	32 - 10	300	250°C	0.013"	PTFE	
1828	32 - 10	300	150°C	0.013"	ETFE	
1829	32 - 10	600	150°C	0.020"	ETFE	
1857	32 - 16	150	150°C	0.010"	PFA	
1858	32 - 10	300	150°C	0.013"	PFA	
1859	32 - 4/0	600	150°C	0.020 - 0.045"	PFA	
1860	32 - 16	150	200°C	0.010"	PFA	
1875	32 - 20	30	105°C	0.0055"	PTFE (expanded)	
2095	30 - 16	300	80°C	1/64	PVC	2 conductor shielded PVC jacket
2096	30 - 16	300	80°C	1/64	PVC	3 conductor shielded PVC jacket
2097	30 - 16	300	80°C	1/64	PVC	4 conductor shielded PVC jacket
2098	26 - 16	300	90°C	1/64	PVC	2 conductor shielded PVC jacket
2099	26 - 16	300	90°C	1/64	PVC	3 conductor shielded PVC jacket
2100	26 - 16	300	90°C	1/64	PVC	4 conductor shielded PVC jacket
2101	26 - 16	300	105°C	1/64	PVC	2 conductor shielded PVC jacket
2102	26 - 16	300	105°C	1/64	PVC	3 conductor shielded PVC jacket

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

UL STYLE NUMBER	AWG SIZE RANGE	VOLTAGE RATING	TEMP. RATING	INSULATION		REMARKS
				THICKNESS	MATERIAL	
2103	26 - 16	300	105°C	1/64	PVC	4 conductor shielded PVC jacket
2106	26 - 16	600	60°C	1/32	PE	2 conductor shielded PVC jacket
2107	26 - 16	600	60°C	1/32	PE	3 conductor shielded PVC jacket
2108	26 - 16	600	60°C	1/32	PE	4 conductor shielded PVC jacket
2115	26 - 16	600	80°C	1/32	PVC	2 conductor shielded PVC jacket
2116	26 - 16	600	80°C	1/32	PVC	3 conductor shielded PVC jacket
2117	26 - 16	600	80°C	1/32	PVC	4 conductor shielded PVC jacket
2343	30 minimum	Not rated	80°C	-	-	Computer cable 0.060" PVC jacket
2344	30 minimum	Not rated	80°C	-	-	Computer cable 0.080" PVC jacket
2345	30 minimum	Not rated	80°C	-	-	Computer cable 0.110" PVC jacket
2346	30 minimum	Not rated	80°C	-	-	Computer cable 0.140" PVC jacket
2384	30 minimum	300	60°C	-	-	Computer cable 0.035" PVC jacket
2385	30 minimum	300	60°C	-	-	Computer cable 0.060" PVC jacket
2386	30 minimum	300	60°C	-	-	Computer cable 0.080" PVC jacket
2387	30 minimum	300	60°C	-	-	Computer cable 0.110" PVC jacket
2388	30 minimum	300	60°C	-	-	Computer cable 0.140" PVC jacket
2448	30 minimum	30	60°C	-	-	Low voltage computer cable
2461	26 - 16	300	80°C	-	-	2 - 61 conductor PVC jacket
2462	24 - 16	300	60°C	-	-	2 - 61 conductor PVC jacket
2463	26 - 16	600	80°C	-	-	2 - 19 conductor PVC jacket
2464	30 - 16	300	80°C	-	-	Multi-conductor control cable PVC
2490	30 - 16	Not rated	60°C	-	-	Multi-conductor control cable PVC
2493	30 - 16	Not rated	60°C	-	-	Multi-conductor control cable PVC

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

UL STYLE NUMBER	AWG SIZE RANGE	VOLTAGE RATING	TEMP. RATING	INSULATION		REMARKS
				THICKNESS	MATERIAL	
2501	30 minimum	600	105°C	-	-	Multi-conductor control cable PVC
2502	40 minimum	30	80°C	-	-	Multi-conductor control cable PVC
2507	32 - 26	Not rated	105°C	-	-	Multi-conductor control cable PVC
3068	26 - 20	300	105°C	0.016"	Silicone rubber / glass braid	Internal wiring of appliances
3069	26 - 20	600	150°C	0.032"	Silicone rubber / glass braid	Internal wiring of appliances
3070	18 - 12	600	150°C	0.032"	Silicone rubber / glass braid	Internal wiring of appliances
3071	18 - 14	600	200°C	0.032"	Silicone rubber / glass braid	Internal wiring of appliances
3074	12	600	200°C	0.032"	Silicone rubber / glass braid	Internal wiring of appliances
3075	10	600	200°C	0.032"	Silicone rubber / glass braid	Internal wiring of appliances
3101	10	600	150°C	0.048"	Silicone rubber / glass braid	Internal wiring of appliances
3122	26 - 20	300	200°C	0.016"	Silicone rubber / glass braid	Internal wiring of appliances
3123	30 - 16	600	150°C	0.030"	Silicone rubber	Internal wiring of appliances
3132	30 - 16	300	150°C	0.015"	Silicone rubber	Internal wiring of appliances
3133	30 - 16	600	150°C	0.030"	Silicone rubber	Internal wiring of appliances
3134	18 - 12	600	150°C	0.032"	Silicone rubber	Internal wiring of appliances
3135	18 - 12	600	200°C	0.032"	Silicone rubber	Internal wiring of appliances
3136	26 - 20	300	150°C	0.048"	Silicone rubber	Internal wiring of appliances
3137	26 - 20	600	150°C	0.048"	Silicone rubber	Internal wiring of appliances
3138	18 - 12	600	150°C	0.048"	Silicone rubber	Internal wiring of appliances
3139	18 - 12	600	200°C	0.048"	Silicone rubber	Internal wiring of appliances
3142	18 - 12	600	150°C	0.064"	Silicone rubber	Internal wiring of appliances
3143	18 - 12	600	200°C	0.064"	Silicone rubber	Internal wiring of appliances
3167	26 - 9	600	105°C	0.032"	XLPE	Internal wiring of appliances

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

UL STYLE NUMBER	AWG SIZE RANGE	VOLTAGE RATING	TEMP. RATING	INSULATION		REMARKS
				THICKNESS	MATERIAL	
3168	18 - 12	1000	90°C	0.032"	XLPE	Internal wiring of appliances
3173	26 - 9	600	125°C	0.032"	XLPE	Internal wiring of appliances
3182	26 - 9	600	125°C	0.048"	XLPE	Internal wiring of appliances
3195	8	600	125°C	0.048"	XLPE	Internal wiring of appliances
3196	7 - 4	600	125°C	0.064"	XLPE	Internal wiring of appliances
3239	24 - 10	10,000 - 20,000	200°C	0.018 - 0.024"	FEP (modified)	
5107	22 - 4/0	600	200°C / 450°C	0.025 - 0.035"	Mica / Glass	
5108	22 - 4/0	600	250°C	0.025 - 0.035"	Mica / Glass	
5128	24 - 4	300	450°C	0.015 - 0.020"	Mica / Glass	
5134	22 - 4	300	250°C	0.015 - 0.020"	Mica / Glass	
5127	24 - 8	600	250°C	0.015"	PTFE Severed Glass / Glass Braid	
5180	16 - 2	300	250°C	0.004 - 0.012"	PTFE Severed Glass / Glass Braid	
5181	24 - 4/0	600	250°C	0.020 - 0.045"	PTFE / Glass Braid	
5259	22 - 4/0	600	250°C	0.012 - 0.030"	Mica / PTFE /Glass Braid	
10086	32 - 4/0	600	150°C / 200°C	0.010 - 0.045"	ETFE	
10109	32 - 4/0	300	150°C / 200°C	0.006 - 0.045"	ETFE	
10125	32 - 4/0	300	150°C	0.006 - 0.045"	ETFE	
10126	32 - 4/0	600	150°C	0.010 - 0.045"	ETFE	

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



COMPARISON CHART FOR MILITARY SPECIFICATION WIRES & CABLES

Specifications	Operating Temperature	Oper. Voltage	AWG Size Range	Cond. Material	Primary Insulation	Secondary Insulation	Jacket	Dielectric Strength Min. KV	Comments
MIL-DTL-5086 M5086	-55° C +105° C	600	22 - 10	TC	PVC	None	Nylon	1.5	
			22 - 4/0			glass			
						glass PVC			
MIL-W-7139B	-65° C +200° C	600	22 - 4/0	SPC	TFE film glass tape		PTFE glass braid	1.5	Replaced by M22759/1&2
	-65° C +260° C			NPC					
MIL-DTL-8777D MS 25471	-55° C +200° C	600	22 - 2/0	SPC	silicone rubber	lacquered synthetic fiber	when specified FEP or none	1.5	
MIL-DTL-25038 M25038/1 M25038/3	+260° C (+2000° F)**	600	22 - 4/0 22 - 12	NCC	inorganic dielectric & TFE		PTFE glass braid	1.5	
Type B MIL-DTL-16878/1	-54° C +105° C	600	32 - 14	TC	PVC		as specified	2.0	
Type C MIL-DTL-16878/2	-54° C +105° C	1,000	26 - 12	TC	PVC		as specified	3.0	
Type D MIL-DTL-16878/3	-54° C +105° C	3,000	24 - 1/0	TC	PVC		as specified	6.0	
Type E MIL-W-16878/4 NEMA HP-3	-65° C +200° C	600	32 - 10	SPC	TFE		as specified*	2.2	
	-65° C +260° C			NPC			as specified		
Type EE MIL-W-16878/5 NEMA HP-3	-65° C +200° C	1000	32 - 8	SPC	TFE		as specified*	3.0	
	-65° C +260° C			NPC			as specified		
Type ET MIL-W-16878/6 NEMA HP-3	-65° C +200° C	250	32 - 20	SPC	TFE		as specified*	1.5	
	-65° C +260° C			NPC			as specified		
Type F MIL-DTL-16878/7	-54° C +200° C	600	24 - 10	SPC	silicone rubber		as specified* glass braid recommended	2.2	
Type FF MIL-DTL-16878/8	-54° C +200° C	1,000	24 - 4/0	SPC	silicone rubber		as specified* glass braid recommended	3.0	
Type J MIL-DTL-16878/10	-65° C +75° C	600	24 - 4/0	TC	polyethylene		as specified*	2.2	
Type K MIL-W-16878/11 NEMA HP- 4	-65° C +150° C	600	32 - 8	TC	FEP			2.0	
	-65° C +200° C	600	32 - 8	SPC NPC	FEP		as specified*	2.0	
Type KK MIL-W-16878/12 NEMA HP- 4	-65° C +150° C	1,000	32 - 4/0	TC	FEP			3.0	
	-65° C +200° C	1,000	32 - 4/0	SPC	FEP		as specified*	3.0	
Type KT MIL-W-16878/13 NEMA HP- 4	-65° C +150° C	250	32 - 20	TC	FEP			1.5	
	-65° C +200° C	250	32 - 20	SPC	FEP		as specified*	1.5	
MS 17331	-65° C +200° C	600	22 - 8	SPC	TFE	TFE impregnated asbestos	None	2.5	Canceled
MIL-DTL-16878/29	150° C	600	24 - 10	TC	silicone rubber			2.2	supercedes MIL-DTL-16878/7
MIL-DTL-16878/30	150° C	1000	24 - 4/0	TC	silicone rubber			3.0	supercedes MIL-DTL-16878/8

* Increase of outside diameters dependent on jacketing material used.

** For short-term intervals.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



COMPARISON CHART FOR MILITARY SPECIFICATION WIRES & CABLES

AWG MAXIMUM OUTSIDE DIAMETERS (see footnote *)																				
32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	1	1/0	2/0	3/0	4/0
					0.072	0.082	0.092	0.102	0.122	0.142	0.164									
					0.080	0.090	0.100	0.110	0.132	0.150	0.196	0.247	0.300	0.365	0.435	0.480	0.540	0.605	0.665	0.735
					0.090	0.100	0.115	0.130	0.150	0.170	0.200	0.255	0.310	0.370	0.445	0.495	0.550	0.610	0.680	0.750
					0.090	0.100	0.115	0.135	0.150	0.170	0.200	0.255	0.310	0.370	0.445	0.495	0.550	0.610	0.680	0.750
				without jacket	0.090	0.100	0.115	0.130	0.150	0.170	0.200	0.255	0.310	0.370	0.435	0.470	0.550	0.590		
				with jacket	0.106	0.115	0.128	0.136	0.163	0.183	0.217	0.272	0.311	0.386						
					0.116	0.125	0.135	0.147	0.170	0.185	0.230	0.280	0.342	0.407	0.484	0.533	0.573	0.635	0.700	0.770
					0.054	0.083	0.097	0.103	0.123	0.142										
0.031	0.034	0.037	0.041	0.047	0.053	0.061	0.071	0.081	0.095	For nylon jackets on types B, C, & D O.D. of 0.080" or less, add 0.004" to 0.008" O.D. of 0.081" or more, add 10%										
			0.057	0.062	0.068	0.076	0.086	0.095	0.109											
				0.090	0.096	0.104	0.114	0.123	0.137	0.169	0.189	0.254	0.298	0.366	0.435	0.488	0.538			
0.033	0.036	0.039	0.043	0.048	0.054	0.062	0.074	0.087	0.101	0.120	0.141									
0.043	0.046	0.049	0.053	0.058	0.064	0.072	0.084	0.095	0.113	0.132	0.153	0.197								
0.023	0.026	0.029	0.033	0.038	0.044	0.052														
				0.058	0.064	0.072	0.082	0.091	0.121	0.140										
				0.091	0.097	0.105	0.115	0.124	0.171	0.190	0.210	0.307	0.351	0.407	0.473	0.550	0.596	0.649	0.725	0.773
				0.053	0.060	0.070	0.080	0.091	0.110	0.129	0.156	0.226	0.282	0.349	0.415	0.465	0.511	0.585	0.633	0.710
0.034	0.036	0.039	0.043	0.048	0.054	0.062	0.074	0.087	0.102	0.121	0.141	0.199								
0.043	0.046	0.049	0.053	0.058	0.064	0.072	0.084	0.095	0.114	0.133	0.153	0.219	0.301	0.369	0.415	0.495	0.524	0.577	0.657	0.727
0.024	0.026	0.029	0.033	0.038	0.044	0.052														
					0.080	0.090	0.103	0.115	0.140	0.160	0.193	0.245								
				0.058	0.064	0.072	0.082	0.091	0.122	0.141	0.166									
				0.091	0.097	0.105	0.115	0.124	0.171	0.190	0.210	0.307	0.351	0.407	0.473	0.550	0.596	0.649	0.725	0.773

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Specifications	Operating Temperature	Oper. Voltage	AWG Size Range	Cond. Material	Primary Insulation	Secondary Insulation	Jacket	Dielectric Strength Min. KV	Comments
MS 17332	-65°C +260°C	600	22 - 8	NPC	TFE	TFE impregnated asbestos	None	2.5	Canceled
MS 17410	-65°C +200°C	600	22 - 2/0	SPC	TFE	TFE coated glass braid	FEP	2.2	Canceled
MS 17411	-65°C +200°C	600	24 - 4	SPC	TFE mineral filled		None	2.5	Canceled
MS 17412	-65°C +260°C	600	24 - 4	NPC	TFE mineral filled		None	2.5	Canceled
MS 18000	-65°C +200°C	600	24 - 4	SPC	TFE mineral filled		None	2.5	Replaced by MIL-DTL-22759/7
MS 18001	-65°C +260°C	600	24 - 4	NPC	TFE mineral filled		None	2.5	Replaced by MIL-DTL-22759/8
MS 18032	-65°C +200°C	600	30 - 2	SPC	Laminated TFE		None	2.5	Canceled
MS 18033	-65°C +260°C	600	30 - 2	NPC	Laminated TFE		None	2.5	Canceled
MS 18104	-65°C +200°C	600	28 - 12	SPC	TFE		polyimide	3.0	Canceled
MS 18105	-65°C +260°C	600	28 - 12	NPC	TFE		polyimide	3.0	Canceled
MS 18113	-65°C +200°C	1000	28 - 8	SPC	TFE		None	3.0	Canceled
MS 18114	-65°C +260°C	1000	28 - 8	NPC	TFE		None	3.0	Canceled
MS 21985	-65°C +200°C	600	28 - 16	SPC	TFE		None	2.2	Superseded by MIL-DTL-22759/11
MS 21986	-65°C +260°C	600	28 - 16	NPC	TFE		None	2.2	Superseded by MIL-DTL-22759/12
MS 27110	-55 °C +200° C	600	22 - 4	SPC	silicone rubber	lacquered synthetic fiber	FEP	1.5	
MS 90294	-65°C +200°C	600	22 - 2/0	SPC	TFE tape & / or TFE coated glass tape	TFE coated glass braid	FEP	2.5	Superseded by MIL-DTL-22759/4
MIL-DTL-22759/1	-65°C +200°C	600	22 - 4/0	SPC	TFE or TFE tape	TFE coated glass braid	TFE coated glass braid	2.5	Supersedes MIL-W-7139B Class I
MIL-DTL-22759/2	-65°C +260°C	600	22 - 4/0	NPC	TFE or TFE tape	TFE coated glass braid	TFE coated glass braid	2.5	Supersedes MIL-W-7139B Class II
MIL-DTL-22759/3	-65°C +260°C	600	22 - 2/0	NPC	TFE tape & / or TFE coated glass tape	TFE coated glass braid	TFE tape	2.5	

* Increase of outside diameters dependent on jacketing material used.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

AWG MAXIMUM OUTSIDE DIAMETERS (see footnote *)																				
32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	1	1/0	2/0	3/0	4/0
					0.080	0.090	0.103	0.115	0.140	0.160	0.193	0.245								
					0.090	0.100	0.115	0.130	0.150	0.017	0.200	0.255	0.310	0.370	0.445	0.495	0.550	0.610		
				0.080	0.090	0.100	0.115	0.130	0.150	0.017	0.200	0.255	0.310	0.370						
				0.080	0.090	0.100	0.115	0.130	0.150	0.017	0.200	0.255	0.310	0.370						
				0.064	0.075	0.084	0.094	0.105	0.118	0.137	0.172	0.225	0.276	0.335						
				0.064	0.075	0.084	0.094	0.105	0.118	0.137	0.172	0.225	0.276	0.335						
	0.027	0.030	0.035	0.040	0.047	0.055	0.070	0.076	0.091	0.114	0.150	0.196	0.244	0.307	0.388					
	0.027	0.030	0.035	0.040	0.047	0.055	0.070	0.076	0.091	0.114	0.150	0.196	0.244	0.307	0.388					
		0.037	0.041	0.045	0.052	0.060	0.072	0.082	0.103	0.124										
		0.037	0.041	0.045	0.052	0.060	0.072	0.082	0.103	0.124										
		0.045	0.050	0.055	0.062	0.070	0.080	0.087	0.103	0.124	0.145	0.212								
		0.045	0.050	0.055	0.062	0.070	0.080	0.087	0.103	0.124	0.145	0.212								
		0.033	0.040	0.045	0.051	0.060	0.070	0.077												
		0.033	0.040	0.045	0.051	0.060	0.070	0.077												
					0.106	0.115	0.128	0.136	0.163	0.183	0.217	0.272	0.311	0.386						
					0.077	0.085	0.098	0.109	0.120	0.136	0.173	0.245	0.292	0.364	0.445	0.495	0.550	0.610		
					0.088	0.098	0.110	0.125	0.143	0.162	0.188	0.255	0.303	0.370	0.435	0.485	0.535	0.595	0.660	0.730
					0.088	0.098	0.110	0.125	0.143	0.162	0.188	0.255	0.303	0.370	0.435	0.485	0.535	0.595	0.660	0.730
					0.077	0.085	0.098	0.107	0.120	0.137	0.170	0.242	0.292	0.366	0.445	0.495	0.550	0.610		

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Specifications	Operating Temperature	Oper. Voltage	AWG Size Range	Cond. Material	Primary Insulation	Secondary Insulation	Jacket	Dielectric Strength Min. KV	Comments
MIL-DTL-22759/4	-65°C +200°C	600	22 - 2/0	SPC	TFE tape & / or TFE coated glass tape	TFE coated glass braid	FEP	2.5	Supersedes MS 90294
MIL-DTL-22759/5	-65°C +200°C	600	24 - 4	SPC	TFE mineral filled		None	2.5	Supersedes MS 17411
MIL-DTL-22759/6	-65°C +260°C	600	24 - 4	NPC	TFE mineral filled		None	2.5	Supersedes MS 17412
MIL-DTL-22759/7	-65°C +200°C	600	24 - 4	SPC	TFE mineral filled		None	2.5	Supersedes MS 18000
MIL-DTL-22759/8	-65°C +260°C	600	24 - 4	NPC	TFE mineral filled		None	2.5	Supersedes MS 18001
MIL-DTL-22759/9	-65°C +200°C	1000	28 - 8	SPC	TFE		None	3.0	Supersedes MS 18113
MIL-DTL-22759/10	-65°C +260°C	1000	28 - 8	NPC	TFE		None	3.0	Supersedes MS 18114
MIL-DTL-22759/11	-65°C +200°C	600	28 - 8	SPC	TFE		None	2.2	Supersedes MS 21985
MIL-DTL-22759/12	-65°C +260°C	600	28 - 8	NPC	TFE		None	2.2	Supersedes MS 21986
MIL-DTL-22759/13	-55°C +135°C	600	24 - 1/0	TC	FEP		polyvinylidene fluoride	2.0	
MIL-DTL-22759/14	-55°C +135°C	600	26 - 12	TC	FEP		polyvinylidene fluoride	2.0	
MIL-DTL-22759/15	-55°C +135°C	600	26 - 20	SPC alloy	FEP		polyvinylidene fluoride	2.0	
MIL-DTL-22759/16	-65°C +150°C	600	24 - 2/0	TC	ETFE		None	2.2	
MIL-DTL-22759/17	-65°C +150°C	600	26 - 20	SPC alloy	ETFE		None	2.2	
MIL-DTL-22759/18	-65°C +150°C	600	26 - 10	TC	ETFE		None	2.0	
MIL-DTL-22759/19	-65°C +150°C	600	26 - 20	SPC alloy	ETFE		None	2.0	
MIL-DTL-22759/20	-65°C +200°C	1000	28 - 20	SPC alloy	TFE		None	3.0	
MIL-DTL-22759/21	-65°C +200°C	1000	28 - 20	NPC alloy	TFE		None	3.0	
MIL-DTL-22759/22	-65°C +200°C	600	28 - 20	SPC alloy	TFE		None	2.2	
MIL-DTL-22759/23	-65°C +260°C	600	28 - 20	NPC alloy	TFE		None	2.2	
MIL-DTL-22759/24	-65°C +150°C	600	24 - 2/0	TC	ECTFE		None	2.2	

* Increase of outside diameters dependent on jacketing material used.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

AWG MAXIMUM OUTSIDE DIAMETERS (see footnote *)																				
32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	1	1/0	2/0	3/0	4/0
					0.077	0.085	0.098	0.107	0.120	0.137	0.170	0.242	0.292	0.366	0.445	0.495	0.550	0.610		
				0.080	0.090	0.100	0.115	0.130	0.150	0.167	0.186	0.225	0.310	0.370						
				0.080	0.090	0.100	0.115	0.130	0.150	0.167	0.186	0.255	0.310	0.370						
				0.064	0.075	0.084	0.094	0.105	0.118	0.137	0.162	0.225	0.276	0.335						
				0.064	0.075	0.084	0.094	0.105	0.118	0.137	0.162	0.225	0.276	0.335						
		0.045	0.050	0.055	0.062	0.070	0.080	0.087	0.103	0.124	0.145	0.212								
		0.045	0.050	0.055	0.062	0.070	0.080	0.087	0.103	0.124	0.145	0.212								
		0.035	0.040	0.045	0.051	0.060	0.070	0.077	0.092	0.114	0.143	0.206								
		0.035	0.040	0.045	0.051	0.060	0.070	0.077	0.092	0.114	0.143	0.208								
				0.051	0.054	0.064	0.074	0.081	0.095	0.115	0.142	0.202	0.253	0.308	0.386	0.426	0.474			
			0.039	0.044	0.051	0.059	0.069	0.075	0.091	0.111										
			0.039	0.044	0.051	0.059														
				0.047	0.054	0.062	0.073	0.081	0.095	0.117	0.142	0.202	0.253	0.316	0.392	0.436	0.485	0.553		
			0.042	0.047	0.054	0.062														
			0.034	0.038	0.045	0.053	0.063	0.072	0.087	0.110	0.137									
			0.034	0.038	0.045	0.053														
		0.045	0.050	0.055	0.062	0.070														
		0.045	0.050	0.055	0.062	0.070														
		0.035	0.040	0.045	0.051	0.060														
		0.035	0.040	0.045	0.051	0.060														
				0.047	0.054	0.062	0.073	0.081	0.095	0.117	0.142	0.202	0.253	0.316	0.392	0.436	0.485	0.553		

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Specifications	Operating Temperature	Oper. Voltage	AWG Size Range	Cond. Material	Primary Insulation	Secondary Insulation	Jacket	Dielectric Strength Min. KV
MIL-DTL-22759/25	-65°C +150°C	600	26 - 20	SPC alloy	ECTFE		None	2.2
MIL-DTL-22759/26	-65°C +150°C	600	26 - 10	TC	ECTFE		None	2.0
MIL-DTL-22759/27	-65°C +150°C	600	26 - 20	SPC alloy	ECTFE		None	2.0
MIL-DTL-22759/28	-65°C +200°C	600	28 - 8	SPC	TFE	polyimide	None	2.2
MIL-DTL-22759/29	-65°C +260°C	600	28 - 8	NPC	TFE	polyimide	None	2.2
MIL-DTL-22759/30	-65°C +200°C	600	28 - 20	SPC alloy	TFE	polyimide	None	2.2
MIL-DTL-22759/31	-65°C +260°C	600	28 - 20	NPC alloy	TFE	polyimide	None	2.2
MIL-DTL-22759/32	-65°C +150°C	600	30 - 12	TC	XETFE		None	2.5
MIL-DTL-22759/33	-65°C +150°C	600	30 - 20	SPC alloy	XETFE		None	2.5
MIL-DTL-22759/34	-65°C +150°C	600	24 - 2/0	TC	XETFE	XETFE	None	2.5
MIL-DTL-22759/35	-65°C +150°C	600	26 - 20	SPC alloy	XETFE	XETFE	None	2.5
MIL-DTL-22759/36	-65°C +135°C	600	26 - 12	TC	XLPA		ECTFE	2.5
MIL-DTL-22759/37	-65°C +150°C	600	24 - 12	TC	XLPA		ECTFE	2.5
MIL-DTL-22759/38	-65°C +135°C	600	26 - 20	SPC alloy	XLPA		ECTFE	2.5
MIL-DTL-22759/39	-65°C +135°C	600	26 - 10	TC	XLPA		ECTFE	2.5
MIL-DTL-22759/40	-65°C +135°C	600	26 - 20	SPC alloy	XLPA		ECTFE	2.5
MIL-DTL-22759/41	-65°C +200°C	600	26 - 2/0	NPC	XETFE	XETFE	None	2.5
MIL-DTL-22759/42	-65°C +200°C	600	26 - 20	NPC alloy	XETFE	XETFE	None	2.5
MIL-DTL-22759/43	-65°C +200°C	600	26 - 2/0	SPC	XETFE	XETFE	None	2.5
MIL-DTL-22759/44	-65°C +200°C	600	28 - 12	SPC	XETFE	XETFE	None	2.5
MIL-DTL-22759/45	-65°C +200°C	600	28 - 12	NPC	XETFE	XETFE	None	2.5
MIL-DTL-22759/46	-65°C +200°C	600	28 - 20	NPC alloy	XETFE	XETFE	None	2.5
MIL-DTL-22759/80	-65°C +150°C	600	26 - 10	TC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/81	-65°C +200°C	600	26 - 20	SPC	PTFE/polyimide	PTFE	None	3.0

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

AWG MAXIMUM OUTSIDE DIAMETERS (see footnote *)																				
32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	1	1/0	2/0	3/0	4/0
			0.042	0.047	0.054	0.062														
			0.034	0.038	0.045	0.053	0.063	0.069	0.083	0.105	0.128									
			0.034	0.038	0.045	0.053														
		0.036	0.041	0.046	0.052	0.061	0.071	0.079	0.094	0.114	0.143	0.200								
		0.036	0.041	0.046	0.052	0.061	0.071	0.079	0.094	0.114	0.143	0.204								
		0.036	0.041	0.046	0.052	0.061														
		0.036	0.041	0.046	0.052	0.061														
	0.026	0.029	0.034	0.039	0.045	0.052	0.062	0.070	0.088	0.106										
	0.026	0.029	0.034	0.039	0.045	0.052														
				0.047	0.052	0.060	0.073	0.080	0.097	0.114	0.138	0.203	0.251	0.320	0.421	0.461	0.501	0.561		
			0.042	0.047	0.052	0.060														
			0.036	0.042	0.049	0.057	0.067	0.075	0.093	0.112										
				0.056	0.065	0.073	0.083	0.093	0.112	0.130										
			0.036	0.042	0.049	0.057														
			0.042	0.046	0.053	0.062	0.074	0.082	0.096	0.119	0.143									
			0.042	0.046	0.053	0.062														
			0.042	0.047	0.052	0.060	0.073	0.080	0.097	0.114	0.138	0.203	0.251	0.320	0.421	0.461	0.501	0.561		
			0.042	0.047	0.052	0.060														
			0.042	0.047	0.052	0.060	0.073	0.080	0.097	0.114	0.138	0.203	0.251	0.320	0.421	0.461	0.501	0.561		
		0.029	0.034	0.039	0.045	0.052	0.062	0.070	0.088	0.106										
		0.029	0.034	0.039	0.045	0.052	0.062	0.070	0.088	0.106										
		0.029	0.034	0.039	0.045	0.052														
			0.034	0.038	0.043	0.051	0.060	0.069	0.082	0.101	0.124									
			0.034	0.038	0.043	0.051														

* Increase of outside diameters dependent on jacketing material used.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Specifications	Operating Temperature	Oper. Voltage	AWG Size Range	Cond. Material	Primary Insulation	Secondary Insulation	Jacket	Dielectric Strength Min. KV
MIL-DTL-22759/82	-65°C +200°C	600	26 - 20	NPC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/83	-65°C +200°C	600	2-4/0	SPC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/84	-65°C +200°C	600	2-4/0	NPC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/85	-65°C +150°C	600	2-4/0	TC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/86	-65°C +200°C	600	26 - 4/0	SPC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/87	-65°C +200°C	600	26 - 4/0	NPC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/88	-65°C +150°C	600	26 - 4/0	TC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/89	-65°C +200°C	600	26 - 20	SPC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/90	-65°C +200°C	600	26 - 20	NPC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/91	-65°C +200°C	600	26 - 10	SPC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-22759/92	-65°C +200°C	600	26 - 10	NPC	PTFE/polyimide	PTFE	None	3.0
MIL-DTL-81044/1	-65°C +135°C	600	24 - 4	SPC	XLPA		XLPVF	2.5
MIL-DTL-81044/2	-65°C +135°C	600	24 - 4	TC	XLPA		XLPVF	2.5
MIL-DTL-81044/3	-65°C +135°C	600	30 - 12	SPC	XLPA		XLPVF	2.5
MIL-DTL-81044/4	-65°C +135°C	600	30 - 12	TC	XLPA		XLPVF	2.5
MIL-DTL-81044/5	-65°C +150°C	600	24 - 1/0	SPC	XLPA		XLPVF	2.5
MIL-DTL-81044/6	-65°C +150°C	600	24 - 1/0	TC	XLPA		XLPVF	2.5
MIL-DTL-81044/7	-65°C +150°C	600	26 - 20	SPC alloy	XLPA		XLPVF	2.5
MIL-DTL-81044/8	-65°C +150°C	600	24 - 1/0	SPC	XLPA		XLPVF	2.5
MIL-DTL-81044/9	-65°C +150°C	600	24 - 1/0	TC	XLPA		XLPVF	2.5
MIL-DTL-81044/10	-65°C +150°C	600	26 - 20	SPC alloy	XLPA		XLPVF	2.5
MIL-DTL-81044/11	-65°C +150°C	600	30 - 12	SPC	XLPA		XLPVF	2.5
MIL-DTL-81044/12	-65°C +150°C	600	30 - 12	TC	XLPA		XLPVF	2.5
MIL-DTL-81044/13	-65°C +150°C	600	30 - 20	SPC alloy	XLPA		XLPVF	2.0

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

AWG MAXIMUM OUTSIDE DIAMETERS (see footnote *)																				
32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	1	1/0	2/0	3/0	4/0
			0.034	0.038	0.043	0.051														
															0.380	0.420	0.462	0.528	0.584	0.655
															0.380	0.420	0.462	0.528	0.584	0.655
															0.380	0.420	0.462	0.528	0.584	0.655
			0.037	0.042	0.047	0.055	0.068	0.073	0.086	0.105	0.127	0.188	0.229	0.288	0.364	0.408	0.450	0.505	0.560	0.630
			0.037	0.042	0.047	0.055	0.068	0.073	0.086	0.105	0.127	0.188	0.229	0.288	0.364	0.408	0.450	0.505	0.560	0.630
			0.037	0.042	0.047	0.055	0.068	0.073	0.086	0.105	0.127	0.188	0.229	0.288	0.364	0.408	0.450	0.505	0.560	0.630
			0.037	0.042	0.047	0.055														
			0.037	0.042	0.047	0.055														
			0.034	0.038	0.043	0.051	0.060	0.069	0.082	0.101	0.124									
			0.034	0.038	0.043	0.051	0.060	0.069	0.082	0.101	0.124									
				0.060	0.072	0.081	0.091	0.101	0.119	0.112	0.166	0.225	0.276	0.333						
				0.060	0.072	0.081	0.091	0.101	0.119	0.112	0.166	0.225	0.276	0.333						
	0.029	0.032	0.036	0.042	0.049	0.057	0.067	0.075	0.091	0.112										
	0.029	0.032	0.036	0.042	0.049	0.057	0.067	0.075	0.091	0.112										
				0.059	0.072	0.081	0.091	0.101	0.119	0.135	0.166	0.225	0.276	0.333	0.416	N/A	0.510			
				0.059	0.072	0.081	0.091	0.101	0.119	0.135	0.166	0.225	0.276	0.333	0.416	N/A	0.510			
			0.055	0.059	0.072	0.081														
				0.056	0.065	0.073	0.083	0.093	0.112	0.130	0.160	0.220	0.271	0.328	0.412	N/A	0.506			
				0.056	0.065	0.073	0.083	0.093	0.112	0.130	0.160	0.220	0.271	0.328	0.412	N/A	0.506			
			0.050	0.056	0.065	0.073														
	0.029	0.032	0.036	0.042	0.049	0.057	0.067	0.075	0.093	0.112										
	0.029	0.032	0.036	0.042	0.049	0.057	0.067	0.075	0.093	0.112										
	0.029	0.032	0.036	0.042	0.049	0.057														

* Increase of outside diameters dependent on jacketing material used.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Specifications	Operating Temperature	Oper. Voltage	AWG Size Range	Cond. Material	Primary Insulation	Secondary Insulation	Jacket	Dielectric Strength Min. KV
MIL-DTL-81044/14	-65°C +135°C	600	24 - 1/0	TC	XLPA		XLPVF	2.5
MIL-DTL-81044/15	-65°C +135°C	600	26 - 20	SPC	XLPA		XLPVF	2.5
MIL-DTL-81044/16	-65°C +150°C	600	24 - 2/0	TC	XLAP	XLAP	MIP	2.5
MIL-DTL-81044/17	-65°C +150°C	600	26 - 20	SPC alloy	XLAP	XLAP	MIP	2.5
MIL-DTL-81044/18	-65°C +150°C	600	30 - 12	TC	XLAP	XLAP	MIP	2.5
MIL-DTL-81044/19	-65°C +150°C	600	30 - 20	SPC alloy	XLPA		MIP	2.5
MIL-DTL-81044/20	-65°C +150°C	600	26 - 8	TC	polyarylene	polyarylene	None	2.5
MIL-DTL-81044/21	-65°C +200°C	600	26 - 8	SPC	polyarylene	polyarylene	None	2.5
MIL-DTL-81044/22	-65°C +200°C	600	30 - 20	SPC alloy	polyarylene	polyarylene	None	2.5
MIL-DTL-81044/23	-65°C +260°C	600	26 - 8	NPC	polyarylene	polyarylene	None	2.5
MIL-DTL-81044/24	-65°C +260°C	600	30 - 20	NPC alloy	polyarylene	polyarylene	None	2.5
MIL-DTL-81044/25	-65°C +150°C	600	30 - 12	TC	polyarylene		None	2.5
MIL-DTL-81044/26	-65°C +200°C	600	30 - 12	SPC	polyarylene		None	2.5
MIL-DTL-81044/27	-65°C +200°C	600	30 - 20	SPC alloy	polyarylene		None	2.5
MIL-DTL-81044/28	-65°C +260°C	600	30 - 12	NPC	polyarylene		None	2.5
MIL-DTL-81044/29	-65°C +260°C	600	30 - 20	NPC alloy	polyarylene		None	2.5
MIL-DTL-81381/1	-65°C +200°C	600	26 - 10	SPC	FI pol tape		FEP dispersion	2.5
MIL-DTL-81381/2	-65°C +200°C	600	26 - 10	NPC	FI pol tape		FEP dispersion	2.5
MIL-DTL-81381/3	-65°C +200°C	600	26 - 2	SPC	FI pol tape		FEP dispersion* or TFE tape	2.5
MIL-DTL-81381/4	-65°C +200°C	600	26 - 2	NPC	FI pol tape		FEP dispersion* or TFE tape	2.5
MIL-DTL-81381/5	-65°C +200°C	600	26 - 20	SPC alloy	FI pol tape		FEP dispersion	2.5
MIL-DTL-81381/6	-65°C +200°C	600	26 - 20	NPC alloy	FI pol tape		FEP dispersion	2.5
MIL-DTL-81381/7	-65°C +200°C	600	26 - 10	SPC	FI pol tape		FEP dispersion	2.5
MIL-DTL-81381/8	-65°C +200°C	600	26 - 10	NPC	FI pol tape		FEP dispersion	2.0

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

AWG MAXIMUM OUTSIDE DIAMETERS (see footnote *)																				
32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	1	1/0	2/0	3/0	4/0
				0.056	0.065	0.073	0.083	0.093	0.112	0.130	0.160	0.220	0.271	0.328	0.412	N/A	0.506			
			0.050	0.056	0.065	0.073														
				0.047	0.054	0.062	0.073	0.082	0.099	0.116	0.142	0.203	0.251	0.311	0.386	N/A	0.482	0.542		
			0.042	0.047	0.054	0.062														
	0.026	0.029	0.034	0.039	0.045	0.054	0.064	0.072	0.090	0.108										
	0.026	0.029	0.034	0.039	0.045	0.054														
			0.042	0.047	0.054	0.062	0.073	0.082	0.099	0.116	0.142	0.203								
			0.042	0.047	0.054	0.062	0.073	0.082	0.099	0.116	0.142	0.203								
	0.034	0.037	0.042	0.047	0.054	0.062														
			0.042	0.047	0.054	0.062	0.073	0.082	0.099	0.116	0.142	0.203								
	0.034	0.037	0.042	0.047	0.054	0.062														
	0.026	0.029	0.034	0.039	0.045	0.054	0.064	0.072	0.090	0.108										
	0.026	0.029	0.034	0.039	0.045	0.054	0.064	0.072	0.090	0.108										
	0.026	0.029	0.034	0.039	0.045	0.054														
	0.026	0.029	0.034	0.039	0.045	0.054	0.064	0.072	0.090	0.108										
	0.026	0.029	0.034	0.039	0.045	0.054														
			0.040	0.043	0.050	0.058	0.067	0.074	0.089	0.108	0.131									
			0.040	0.043	0.050	0.058	0.067	0.074	0.089	0.108	0.131									
			0.049	0.054	0.060	0.068	0.079	0.087	0.099	0.117	0.141	0.210	0.250	0.308	0.378					
			0.049	0.054	0.060	0.068	0.079	0.087	0.099	0.117	0.141	0.210	0.250	0.308	0.378					
			0.040	0.042	0.049	0.057														
			0.040	0.042	0.049	0.057														
			0.034	0.037	0.044	0.052	0.062	0.068	0.082	0.101	0.124									
			0.034	0.037	0.044	0.052	0.062	0.068	0.082	0.101	0.124									

* Increase of outside diameters dependent on jacketing material used.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Specifications	Operating Temperature	Oper. Voltage	AWG Size Range	Cond. Material	Primary Insulation	Secondary Insulation	Jacket	Dielectric Strength Min. KV
MIL-DTL-81381/9	-65°C +200°C	600	30 - 20	SPC alloy	Fl pol tape		FEP dispersion	2.5
MIL-DTL-81381/10	-65°C +200°C	600	30 - 20	NPC alloy	Fl pol tape		FEP dispersion	2.5
MIL-DTL-81381/11	-65°C +200°C	600	24 - 2	SPC	Fl pol tape		Aromatic polyimide* or TFE tape	2.5
MIL-DTL-81381/12	-65°C +200°C	600	24 - 2	NPC	Fl pol tape		Aromatic polyimide* or TFE tape	2.5
MIL-DTL-81381/13	-65°C +200°C	600	28 - 20	SPC alloy	Fl pol tape		Aromatic polyimide	2.5
MIL-DTL-81381/14	-65°C +200°C	600	26 - 20	NPC alloy	Fl pol tape		Aromatic polyimide	2.5
MIL-DTL-81381/15	CANCELED							
MIL-DTL-81381/16	CANCELED							
MIL-DTL-81381/17	-65°C +200°C	600	26 - 12	SPC	Fl pol tape		Aromatic polyimide	2.5
MIL-DTL-81381/18	-65°C +200°C	600	26 - 12	NPC	Fl pol tape		Aromatic polyimide	2.5
MIL-DTL-81381/19	-65°C +200°C	600	30 - 20	SPC alloy	Fl pol tape		Aromatic polyimide	2.5
MIL-DTL-81381/20	-65°C +200°C	600	30 - 20	NPC alloy	Fl pol tape		Aromatic polyimide	2.5
MIL-DTL-81381/21	-65°C +150°C	600	26 - 10	TC	Fl pol tape	Fl pol tape	Aromatic polyimide	2.5
MIL-DTL-81381/22	-65°C +150°C	600	24 - 2/0	TC	Fl pol tape	Fl pol tape	Aromatic polyimide resin or braid	2.0

* Increase of outside diameters dependent on jacketing material used.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

AWG MAXIMUM OUTSIDE DIAMETERS (see footnote *)																				
32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	1	1/0	2/0	3/0	4/0
	0.026	0.029	0.034	0.037	0.044	0.052														
	0.027	0.030	0.034	0.037	0.044	0.052														
				0.044	0.049	0.057	0.067	0.073	0.086	0.105	0.127	0.206	0.251	0.306	0.378					
				0.045	0.050	0.058	0.068	0.074	0.087	0.107	0.129	0.206	0.251	0.306	0.378					
		0.035	0.040	0.045	0.051	0.059														
			0.040	0.045	0.051	0.060														
CANCELED																				
CANCELED																				
			0.030	0.035	0.041	0.049	0.058	0.065	0.078	0.098										
			0.030	0.035	0.041	0.050	0.059	0.066	0.080	0.099										
	0.024	0.027	0.030	0.035	0.041	0.050														
	0.024	0.027	0.030	0.035	0.042	0.050														
			0.034	0.038	0.045	0.053	0.063	0.069	0.083	0.102	0.125									
				0.044	0.049	0.058	0.068	0.074	0.089	0.107	0.130	0.206	0.251	0.306	0.378	N/A	0.461	0.578		

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Cable Design Formulas

Weight of Conductor:

Weight = $340.5 D^2 GNK$ = lbs./1,000 ft.
D = diameter of conductor in inches
G = specific gravity of conductor material;
 (8.89 for copper, 2.71 for aluminum)
N = number of strands
K = weight increase factor for stranded
 conductor. (**K** = 1 for solid conductor)

No. of strands	K
19	1.02
37	1.026
49	1.03
133 or more	1.04

Weight of Insulation:

Weight = $340.5 (D^2 - d^2) G$ = lbs./1,000 ft.
D = diameter over insulation in inches
d = diameter over conductor in inches
G = specific gravity of insulation

Weight of Jacket:

Weight = $340.5 (D^2 - d^2) G$ = lbs./1,000 ft.
D = diameter over jacket in inches
d = diameter under jacket in inches
G = specific gravity of jacket material

Weight of Tape:

Weight = $1362 Gt ((d+t) + (d+3t) f)$ =
 lbs./1,000 ft.
G = specific gravity of tape
t = tape thickness in inches
d = diameter of cable under tape in inches
f = multiplying factor from % lap

% Lap	f
17.5	0.35
25.0	0.5
33.0	0.67
50.0	1.0

Total Weight of Cabled Conductor:

Weight = $N \times L \times W$ = lbs./1,000 ft.
N = number of conductors
L = twisting loss factor = 1.03
W = weight of one conductor

Cabling Factors:

Number of Conductors	Factor	Number of Conductors	Factor
2	2.0	12	4.155
3	2.154	16	4.7
4	2.414	19	5.0
5	2.7	27	6.155
6	3.0	37	7.0
7	3.0	41	8.0
10	4.0	61	9.0

Use the following formula for other combinations:

$$O.D. = 1.155 \times (\text{Number of Conductors}) \times (\text{Diameter of Individual Conductor})$$

To determine the approximate O.D. of the finished cable, double the wall thickness of the wire, add this figure to the O.D. of the desired stranded conductor and multiply this dimension by the indicated factor for the number of conductors to be in the cable. Add 0.025" for a bare, tinned, or silver-plated copper shield of #36 gauge wire; e.g., 6 conductors of 24 gauge, 19/36 stranded, Type E wire with overall shield - 2×0.010 " (wall) = 0.020 " + 0.025 " (conductor O.D.) = 0.045 " (finished wire). Taking 0.045 " (finished wire) $\times 3$ (Factor for 6 conductors) = 0.135 ". Add the 0.135 " to the shield diameter of 0.025 " which yields a finished cable diameter (no jacket) of 0.160 ".

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Percent of Shield Coverage:

$$\text{Percent coverage} = (2F - F^2) \times 100$$

$$F = N P d / \sin(a)$$

N = number of ends (strands) per carrier

P = picks per inch

D = diameter over dielectric core in inches

d = diameter of shielding strand in inches

a = the smaller of the two angles between the longitudinal axis of the cable and the lay of the braid.

C = number of carriers (groups of ends around the diameter of the cable) in a "two over" "two under" woven basket weave.

$$p = 3.14159265$$

$$\tan(a) = 2p(D + 2d)P / C$$

AWG Size	d (inches)	W (lbs./1,000 ft)
#40	0.0031	0.0291
#38	0.0040	0.0481
#36	0.0050	0.0757
#34	0.0063	0.120
#32	0.0080	0.194
#30	0.0100	0.303

Diameter of Shield:

The formula to determine adders for diameter over the shield diameter of a multi-conductor cable is:

$$\text{Shield O.D.} = \text{diameter under shield} + \text{adder}$$

AWG Size (braid)	Adder (inches)
#40	0.014
#38	0.018
#36	0.022
#34	0.028
#32	0.035
#30	0.044
#28	0.056

Property Values (nominal):

Material	Specific Gravity	K 1 Mc	Max. Oper. Temp. °C
TFE	2.15	1.95	260
FEP	2.15	2.15	200
Polyvinylidene fluoride.....	1.76	7.5	125
FEP/polyimide film.....	1.67	2.35	200
Polyester film	1.40	2.80	150
Semi-rigid PVC	1.39	4.0	80
PVC	1.38	4.6	105
Neoprene®.....	1.38	-	60
EP rubber	1.30	3.7	105
Fire resistant polyethylene.....	1.29	2.7	80
Polyethylene/polyester film	1.26	2.80	105
Polysulfone	1.24	3.3	125
Polyurethane.....	1.12	-	80
Nylon	1.09	4.8	105
Polyethylene	0.92	2.26	80
Polypropylene	0.91	2.30	80
Cellular polyethylene	0.55	1.50	80

Twisting Loss:

Approximately 3% for all cables

Weight of Shield:

$$\text{Weight} = \frac{N \times C \times W}{\cos(a)} \times 1.03 = \text{lbs./1,000 ft.}$$

N = number of ends per carrier

C = number of carriers

W = weight of one of the shielding strands (lbs./1,000 ft.), see above

a = braid angle

Neoprene® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



GLOSSARY OF WIRE & CABLE TERMINOLOGY

A

ABRASION - The destruction of a material caused by scraping or rubbing against a rough, hard surface.

ABRASION MACHINE - A laboratory device for determining the abrasion resistance of wire and cable. The two standard types of machines are the squirrel cage, with square steel bars, and the abrasive grit type.

ABRASION RESISTANCE - The ability of a wire or cable jacket to resist surface wear.

AC - Abbreviation for alternating current. See alternating current. Also abbreviated as ac.

ACCELERATED LIFETEST - A test in which a cable is subjected to extreme conditions to determine the life of a cable.

ACCELERATOR - Chemical additive which hastens a chemical reaction, e.g., a compound added to rubber or Neoprene® mixtures to reduce curing time. Neoprene® is a trademark of the DuPont de Nemours Co.

ACR - Designation for cable with corona resisting insulation.

ACRS - Aluminum conductor, steel reinforced. Aluminum wires stranded around a steel core. Usually used for high voltage cross-country transmission lines.

ADAPTER - a) Device used for joining two fiber optic connectors together. b) A device for connecting two parts (of different diameters) of an apparatus.

ADHESIVE - Usually a synthetic material which, when applied to tapes, potting operations, etc., permits materials to be bonded together.

ADMITTANCE - Symbol Y. The reciprocal of impedance. Given by the formula:

$$Y = G + iB$$

where **G** is the conductance, **B** the susceptance, and **i** equals $\sqrt{-1}$. Since impedance, **Z**, is given by:

$$Z = R + iX$$

where **R** and **X** are the resistance and reactance, respectively, then:

$$Y = (R - iX) / (R^2 + X^2)$$

AEC - Atomic Energy Commission. The government agency which oversees all atomic energy projects.

AERIAL CABLE - A cable suspended in the air on poles or other overhead structures.

AIEE - Formerly American Institute of Electrical Engineers. Now called the Institute of Electrical and Electronic Engineers (IEEE).

AIR SPACED COAX - A coaxial cable in which air is basically the dielectric material. The conductor may be centered by means of a spirally wound synthetic filament, beads, or braided filaments. This construction is also referred to as an air dielectric.

AIRCRAFT IGNITION CABLE - A high tension cable designed for use in the ignition systems of internal combustion aircraft engines.

AIRCRAFT WIRE - An electrical wire primarily designed for the extreme conditions (temperature, altitude, solvents, fuels, etc.) of airborne equipment.

AL - Abbreviation for aluminum.

ALKALI - A soluble salt obtained from the ashes of plants and consisting largely of potassium or sodium carbonate.

ALL RUBBER CABLE - A cable in which all voids between conductors are filled with a rubber com-

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

pound. This construction gives greater resistance to impact, adds strength, and reduces the tendency to kink. It also reduces flexibility.

ALLOY - A metal made by the fusion of two or more metals.

AL/MY- Abbreviation for Aluminum Mylar®. Sometimes called out as ALMY. Mylar® is a trademark of the DuPont de Nemours Co.

ALS - A type of cable consisting of insulated conductors enclosed in a continuous, closely fitting aluminum tube.

ALTERNATING CURRENT - An alternating current is one where the direction of current is reversed at regular intervals. The rate at which reversals occur is expressed in cycles per second (Hertz or Hz). Abbreviated as AC or ac.

ALUMEL® - An alloy used for thermocouple and thermocouple extension wire. Alumel® is a trademark of the Hoskins Mfg. Co.

ALUMINUM CONDUCTOR - A wire or group of wires of aluminum, not insulated from each other, suitable for carrying electrical current.

am - Abbreviation for amplitude modulation. Also abbreviated as AM.

AMBIENT TEMPERATURE - The temperature of a medium (gas or liquid) surrounding an object.

AMERICAN WIRE GAUGE - Abbreviated AWG. See AWG.

AMP - Abbreviation for ampere. See Ampere.

AMPACITY - See current carrying capacity.

AMPERE - The unit expressing the rate of flow of an electrical current. One ampere is the current flowing through one ohm resistance with one volt potential. Abbreviated as amp.

AMPLIFIER - A device usually employing electron tubes or transistors to obtain amplification of voltage, current, or power.

AN - Literally "aircraft number". For example, AN-6

signifies a wire size of No. 6 AWG.

ANALOG - Being or relative to a mechanism in which data is represented by continuously varying physical quantities. Opposite - digital.

ANNEALED WIRE - Wire which has been softened by heating and gradually cooling. Also called soft drawn wire.

ANNULAR CONDUCTOR - An annular conductor consists of a number of wires stranded in three reverse concentric layers around a saturated hemp core.

ANODE - Positive pole of an electric source. Opposite - cathode.

ANSI - Abbreviation for American National Standards Institute. A federation of trade, technical, professional organizations, government agencies, and consumer groups. Coordinates standards development and publishes standards. Operates a voluntary certification program. Used to be called the American Standards Association (ASA).

ANTENNA WIRE - A wire usually of high tensile strength such as Copperweld®, bronze, etc., with or without insulation used as an antenna for radio and electronic equipment. Copperweld® is a trademark of the Copperweld Steel Company.

ANTIOXIDANT - A substance which prevents or slows down oxidation of material exposed to air.

APPROX. - Abbreviation for approximate.

ARAMID - A lightweight strong heat-resistant aromatic polyamide material used in fiber optic strength members.

ARMATURE WIRE - Stranded annealed copper wire, straight lay, soft loose white cotton braid. It is used for low voltage, high current rotor winding motors and generators. Straight lay permits forming in armature slots and compressibility.

ARMOR - An outer braid of metal or spiral steel tapes, primarily for the purpose of mechanical protection. Generally placed over the outer sheath.

AROMATIC - An organic material composed of benzene in a ring structure.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



ARTOS STRIPPER - A machine that will automatically measure to a predetermined length, cut, strip, count, and tie wire in bundles.

ASA - Abbreviation for American Standards Association. Former name of the American National Standards Institute (ANSI). See ANSI.

ASESA - Abbreviation for Armed Services Electro Standards Agency.

ASG - Abbreviation for Aeronautical Standards Group.

ASME - Abbreviation for American Society of Mechanical Engineers.

ASTM - Abbreviation for American Society for Testing Materials. An organization that tests materials and attempts to set standards on various materials for industry.

ATTENUATION - The loss of power or signal in a circuit, generally expressed in decibels (dB) per unit length, usually one thousand (1,000) feet. In optical fiber cables, attenuation is the ratio of input power vs. output power, measured in decibels per unit length, usually dB/km. Abbreviated as attn.

ATTN. - Abbreviation for attenuation. See attenuation.

AUDIO FREQUENCY - The range of frequencies audible to the human ear, approximately 20 to 20,000 Hz.

AUTO PRIMARY WIRE - A single or multi-conductor wire used for original equipment or replacement on automotive products. Normally low voltage, resistant to oil, acid, and weather.

AWG - Abbreviation for American Wire Gauge. The system most commonly used in the United States for describing the size of copper wire. It is based on the circular mil system. One (1) mil equals 0.001 inch. Also referred to as the Brown and Sharpe (B&S) wire gauge.

AWM - Designation for appliance wiring material.

B

B - Symbol for susceptance. See susceptance.

B & S GAUGE - Brown and Sharpe wire gauge used for describing different sizes of copper conductors. It is the same as AWG (American Wire Gauge). See AWG.

BACKBONE - A transmission network that carries information in a fiber optic system. Mainly for indoor applications between floors and areas with different types of cables.

BACKSHELL MOLD - An aluminum mold used to mold a rubber or Neoprene® covering over the back-shell of a conductor or plug after it is connected to a cable. The compound is usually chemically cured. Neoprene® is a trademark of the DuPont de Nemours Co.

BALCO® - An alloy of 70% nickel and 30% iron. It is used in devices where self-regulation by temperature is required. Wilbur Driver Company trademark for a resistance wire.

BAND MARKING - A circular band applied at regular intervals to the insulation of a conductor for the purpose of color coding or circuit identification.

BANDED CABLE - Two or more cables which have been banded together by stainless steel strapping.

BANDWIDTH - The frequency range of transmitted electrical or optical signals, expressed in Hertz. The greater or higher the bandwidth, the greater the information carrying capacity.

BARE CONDUCTOR - A conductor not covered with any insulating material.

BASE BAND - The frequency band occupied by all the transmitted modulating signals.

BASE PRICE - The price of copper per pound before any adders are applied. To this base price, adders are used to determine price for drawing the copper into a wire and for tinning or insulating the bare copper wire.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

BATTERY CABLE - A single conductor cable either insulated or uninsulated used for carrying current from batteries to the point where power is needed. May also be used for grounding.

BAUD - Unit of measure for data transmission speed representing bits per second, e.g., 9,600 baud = 9,600 bits per second (bps).

BC - Abbreviation for bare copper.

2BC - Abbreviation for double bare copper shield.

BCCS - Abbreviation for bare copper-clad steel.

BC-S - Abbreviation for double shield; 1 bare copper, 1 silver.

BEADED COAX - A coaxial cable in which the dielectric consists of beads made of various materials.

BELL WIRE - Common term for wire primarily used for making doorbell and thermostat connections.

BELT (BELTEDTYPE CABLE) - Refers to the number of layers of insulation on a conductor or number of layers of jacket on a cable.

BEND RADIUS - The radius of curvature that an optical fiber cable can bend without causing harmful effects on the optical or mechanical performance of the cable.

BENDING LOSS - In a fiber optic system a form of increased attenuation caused by: a) Having the fiber curved around a restrictive radius of curvature; or b) Micro bends caused by minute distortions in the fiber imposed by externally induced disturbances. Excessive bending loss may result from poor drawing or cable manufacturing technique.

BENDING RADIUS - Radius of curvature around which a fiber is bent under a stated pulling force.

BerC - Abbreviation for beryllium-copper alloy.

BIAS - a) A voltage applied to a device to establish a reference level for operation. b) A high frequency voltage combined with an audio signal to reduce distortion.

BINDER - A spirally served tape or thread used for

holding assembled cable components in place awaiting subsequent manufacturing operations.

BLASTING WIRE - Wire used for detonating explosives. It is usually a very inexpensively constructed wire.

BLK - Abbreviation for black.

BMS - Abbreviation for Boeing Material Specification.

BOND STRENGTH - Amount of adhesion between bonded surfaces, e.g., in cemented ribbon cable.

BONDABLE WIRE - An insulated wire whose surface has been specially treated to make it possible to adhere to other materials such as potting compounds. The term usually refers to extruded PTFE insulated wires. The etching process roughens the surface of the insulation permitting an interlocking effect with potting compounds.

BONDED CONSTRUCTION - A type of insulation construction in which the glass braid and nylon jacket are bonded together as in certain wire sizes of MIL-DTL-5086 Type II.

BOOT - A protective covering over any portion of a cable or conductor in addition to its jacket or insulation.

BPS - Abbreviation for bits per second.

BRAID - A fibrous or metallic group of filaments interwoven in cylindrical form to form a covering over one or more wires. It can be made of materials such as cotton, glass, nylon, or copper fibers. Usually fibrous braid is saturated with an impregnant to protect it against moisture and fraying.

BRAID ANGLE - The smaller of the two angles formed by the shielding strand and the axis of the cable being shielded.

BRAIDED WIRE - Woven bare or tinned copper wire used as shielding for wires, cables, and ground wire for batteries or heavy industrial equipment. There are many different types of constructions.

BRAKE WIRE - Wires used in the manufacture of

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

both home and truck trailers to supply current to the electrical brakes on the equipment.

BRAZING - The joining of the end of two wires, rods, or groups of wires with a nonferrous filler metal at temperatures above 427° C (800° F).

BREAKDOWN (PUNCTURE) - A disruptive discharge through the insulation.

BREAKDOWN OF INSULATION - Failure of an insulation resulting in a flow of current through the insulation. It may be caused by the application of too high a voltage or defects or decay in the insulation.

BREAKDOWN VOLTAGE - The voltage at which the insulation between two conductors breaks down.

BREAKING STRENGTH - The maximum load that a conductor can withstand when tested in tension to rupture. This force is usually expressed in pounds (lbs) or kilograms (kgs).

BREAKOUT - A breakout is a joint where a conductor or conductors break out from a multi-conductor cable to complete circuits at various points along the main cable. The rest of the conductors continue on within the jacket. The breakout may itself be jacketed and the joint sealed.

BROADBAND - A frequency band that extends over a relatively large range.

BUFFER (TUBE) - Metallic or nonmetallic tube used to protect optical fibers from physical damage, providing mechanical isolation and/or protection.

BUILDING WIRE - Commercial wires used in the building trades such as: Types RR, RH, RL, TW, THW, and THHN wires. General used for light and power, 600 volts or less, usually not exposed to outdoor environment.

BUNA RUBBER - A synthetic rubber used as a replacement for natural rubber.

BUNCH STRANDING - A conductor in which all individual wires are twisted in the same direction without a predetermined pattern.

BURIAL CABLE - A cable installed directly in the earth without use of an underground conduit. Also

called "direct burial cable."

BUS (BUS BAR) - A conductor, often a heavy strap or bar, used to make a common connection between several circuits.

BUTT BRAIDER - A machine used for braiding or shielding cable or wire. It may be 8, 16, 24, 32, 48, or 64 carriers. These braiders are manufactured by New England Butt Company and operate on the maypole type principal.

BUTYL - Used for any of various synthetic rubbers made by polymerizing isobutylene.

BX - A very common type of armored building wire in various configurations, rated at 600 volt.

C

c - Abbreviation for centimeter. Also abbreviated cm.

C - Abbreviation for Centigrade. A scale for measuring temperature, water freezes at 0° C and boils at 100° C. See Celsius temperature scale.

CABLE - a) A cable may be a small number of large conductors or a large number of small conductors, cabled together, usually color coded and with a protective jacket overall. b) A single conductor larger than 9 AWG.

CABLE ASSEMBLY - A cable assembly is a cable with plugs or connectors on each end for a specific purpose. It may be formed in various configurations.

CABLE CORE - The portion of an insulated cable lying under the protective covering or jacket.

CABLE FILLER - The material used in multi-conductor cables to occupy the spaces formed by the assembly of components thus forming a core of the desired shape (normally cylindrical).

CABLE PULLERS - A cable puller is a tool for pulling cables through a conduit made of metal, plastic, rubber, or Neoprene®. Neoprene® is a trademark of the DuPont de Nemours Co.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



CABLE SHEATH - A cable sheath is a covering of rubber, Neoprene®, resin, or lead over a wire or cable core. Neoprene® is a trademark of the DuPont de Nemours Co.

CABLING FACTOR - Symbol *K*. A constant used in determining the approximate finished O.D. of an unshielded, unjacketed cable. $D = Kd$, where *D* is the diameter, *K* is the factor, and *d* is the diameter of one insulated conductor. A separate constant is used based on the number of conductors used (see Cable Design Formulas page 200).

CAD BR - Abbreviation for cadmium bronze.

CADMIUM - A bluish-white malleable ductile toxic bivalent metallic element used in protective platings and in bearing metals.

CAGED ARMOR - The armor wires within a polyethylene jacket to increase mechanical protection and tensile strength. Often used in submarine cables.

CAL-TRANS - Abbreviation for California Department of Transportation.

CAP - Abbreviation for capacitance. See capacitance.

CAPACITANCE - Capacitance is that property of a system of conductors and dielectrics which permits the storage of electricity when potential differences exist between the conductors. The value depends largely on the surface area of the plates, distance between them, and the composition of the medium between the plates. Abbreviation CAP. The unit of measure is farad (f).

CAPACITANCE, DIRECT - The capacitance measured directly from conductor to conductor through a single insulating layer.

CAPACITANCE, MUTUAL - The capacitance between two conductors with all other conductors, including shield, short-circuited to ground.

CAPACITANCE, UNBALANCED - An inequality of capacitance between the wires of two or more pairs which results in a transfer of unwanted signal from one pair to others.

CAPACITANCE, UNBALANCED to GROUND - An inequality of capacitance between the ground capacitance of the conductors of a pair which results in a pick up of external source energy, usually from power transmission lines.

CAPACITIVE COUPLING - Electrical interaction between two conductors caused by the capacitance between them.

CATEGORY 1 - A UL designation for inside telephone cable for voice. Also referred to as Level 1.

CATEGORY 2 - A UL designation for inside telephone cable for voice. Also referred to as Level 2.

CATEGORY 3 - A UL designation for inside telephone cable that is the lowest performance level recommended for voice. Also referred to as Level 3.

CATEGORY 4 - A UL designation for inside cable for Data Grade UTP. Also referred to as Level 4.

CATEGORY 5E - A UL designation for inside data cable that is the lowest performance level recommended for enhanced 350 MHz data cable. Also referred to as Level 5.

CATEGORY 6 - A UL designation for inside data cable that is the highest performance data cable.

CATHODE - Negative pole of an electric source. Opposite - anode.

CATV - Abbreviation for Community Antenna Television.

CBO - Brewery cord, Neoprene® insulated. Neoprene® is a trademark of the DuPont de Nemours Co.

CCA - Abbreviation for copper-clad aluminum.

CCS - Abbreviation for copper-clad steel. See copper-clad.

CCTV - Abbreviation for Closed Circuit Television.

CDDI - Abbreviation for cable distributed data interface.

CEC - Abbreviation for Canadian Electrical Code.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

CELLULAR POLYETHYLENE - Expanded or "foam" polyethylene consisting of individual closed cells suspended in a polyethylene medium.

CELSIUS TEMPERATURE SCALE - Formerly called Centigrade Temperature Scale. A temperature scale based upon the freezing point of water defined as 0° C and the boiling point defined as 100° C.

CENTI - A prefix to a unit, denoting a submultiple of one-hundredth (10^{-2}) of that unit.

CENTIGRADE TEMPERATURE SCALE - The older name for the Celsius Temperature Scale in English speaking countries. Officially abandoned by international agreements and the U.S. Bureau of Standards in 1948, but still in common usage.

CERTIFICATE OF COMPLIANCE (CONFORMANCE) - A certificate which is normally generated by a quality control department which shows that the product being shipped meets the customer's specifications. Abbreviation C of C, sometimes referred to as CERTS.

CERTIFIED TEST REPORTS - A report providing actual test data on a cable. Tests are normally run by a quality control department which show that the product being shipped conforms to test specifications. Abbreviation CTR or TR.

CERTS - Abbreviation for certificate of compliance. See certificate of compliance.

CF - The designation for cotton fixture wire. It is a cotton insulated, impregnated with moisture resisting, flame-retarding compound. It is used in lighting fixtures up to 90° C.

CF GLASS - Means continuous filament glass yarn which is used in braiding, in making glass fabric, and glass thread.

CFT - The abbreviation for 100 feet.

CHARACTERISTIC IMPEDANCE - a) The impedance that when connected to the output terminals of a transmission line of any length, makes the line appear infinitely long. b) The ratio of voltage to current at every point along a transmission line on which there are no standing waves.

CHEMICALLY CURED COMPOUND - Those compounds which are cured by chemical process rather than by heat and pressure.

CHLORO - Abbreviation for chloroprene. See chloroprene.

CHLOROPRENE - A colorless liquid C_4H_5Cl . Abbreviated as chloro.

CHLOROSULFONATED POLYETHYLENE - A synthetic rubber, made by DuPont de Nemours Co. Resistant to oxidation by ozone, sun, weather, heat, and chemicals, rated 90° C. Abbreviated CP or CSPE. Trade name is Hypalon® which is a trademark of the DuPont de Nemours Co.

CHROMATIC DISPERSION - Different wavelengths travel along an optical medium at different speeds. Wavelengths reach the end of the medium at different times, causing the light pulse to spread. This chromatic dispersion is expressed in picoseconds (of dispersion) per kilometer (of length) per nanometer (of source bandwidth). It is the sum of material and waveguide dispersion.

CHROMEL®-ALUMEL® - The alloy used in making Chromel-Alumel® thermocouple wires. Chromel® is an alloy of nickel and chrome plus nine other elements. Alumel® is an alloy containing nickel, manganese, aluminum, silicon, and nine other elements. Chromel® is nonmagnetic; Alumel® is highly magnetic. Chromel® and Alumel® are trademarks of the Hoskins Mfg. Co.

CHROMIUM - A blue-white metallic element found naturally only in combination and used in alloys and in electroplating.

CIRCUIT (ELECTRIC) - The complete path of an electrical current. When the continuity of the circuit is broken, it is called an open circuit; when continuity is maintained, it is called a closed circuit.

CIRCUIT SIZES - A popular term for building wires sizes 14 through 10 AWG.

CIRCULAR MIL - A term universally used to define cross sectional areas of conductors. It is an area (7.854×10 sq. in.) equal to the area of a circle one-thousandth (10^{-3}) of an inch in diameter. As the

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

number of circular mils increases, the size of a wire increases. Abbreviation CM.

CL2 - Abbreviation for Class 2 cable.

CL2P - Abbreviation for Class 2 plenum cable.

CL2R - Abbreviation for Class 2 riser cable.

CL2X - Abbreviation for Class 2 cable, limited use.

CL3 - Abbreviation for Class 3 cable.

CL3P - Abbreviation for Class 3 plenum cable.

CL3R - Abbreviation for Class 3 riser cable.

CL3X - Abbreviation for Class 3 cable, limited use.

CLADDING - a) In fiber optics the layer of material, usually glass, that immediately surrounds the fiber core of optical fiber cable. The cladding is usually coated with another material to provide protection when handling. b) A method of applying a layer of metal over another metal whereby the junction of the two metals is continuously welded.

CLEAVING - The process of separating an optical fiber by a controlled fracture of the glass, for the purpose of obtaining a fiber end, which is flat, smooth, and perpendicular to the fiber axis.

cm - Abbreviation for centimeter. Also abbreviated c.

CM - a) Abbreviation for communication general purpose cable. b) Abbreviation for circular mil. See circular mil.

CMP - Abbreviation for communication plenum cable.

CMR - Abbreviation for communication riser cable.

CMX - Abbreviation for communication cable, limited use.

COATING - A material applied to the surface of a conductor to prevent environmental deterioration, facilitate soldering, or improve electrical performance.

COAX - See coaxial cable.

COAXIAL CABLE - A cable in which one conductor completely surrounds the other, the two being coaxial and separated by a continuous solid dielectric or by dielectric spacers. When the outside conductor is grounded, the inside conductor is not susceptible to external fields from outside sources. Commonly called coax.

COIL - A coiled conductor, wound on a form or core which uses electromagnetic induction to cause changes in a current.

COLD BEND - Generally refers to a test to determine cable or wire characteristics at low temperatures. The test specimen and a specified mandrel are cooled in a low temperature box to the specified temperature. The wire specimen is then wound around the mandrel after which it is examined for cracks or other defects caused by bending at low temperatures.

COLD FLOW - Permanent deformation of the insulation due to mechanical force or pressure (not due to heat softening).

COLD TEST - Tests performed on cables to check their performance at a specified low temperature as outlined in various specifications.

COLOR CODE - Color code is the use of different colored insulated wires for purposes of identification in a multi-conductor cable.

COMMON AXIS CABLING - In multiple cable constructions, a twisting of all conductors around a "common axis" with two conductor groups then selected as pairs. This method yields smaller diameter constructions than does a separate axis construction, but tends to yield greater susceptible to EMI and ESI.

COMMUNITY TV CABLE - Community TV cables are coaxial cables that are used to transmit television signals from a master antenna to a group of receivers in a community. RG 17/U is used as the primary lead-in, RG 11/U as the secondary lead-in, and RG 59/U as the tap-off lead-in.

COMPACT CONDUCTOR - Refers to a stranded conductor which is rolled to deform the round wires

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

to fill the normal interstices between the wires in a strand.

COMPOSITE CABLE - A cable consisting of two or more different types or sizes of wire and/or cable.

COMPOUND - An insulating or jacketing material made by the chemical union of two or more ingredients.

CONCENTRIC LAY CONDUCTOR - A single conductor composed of a central core surrounded by one or more helically laid wires. Each of these succeeding layers is applied with an opposite direction twist. The number of wires laid up the center wire is six, and each succeeding layer consists of six additional wires so that the number of wires in the strands are 7, 19, 37, 61, etc.

CONCENTRIC STRANDING - A central wire or core surrounded by one or more layers of helically wound strands in a fixed round geometric arrangement. Generally each layer, after the first, has six more strands than the preceding layer and is applied in a direction opposite to that of the layer under it.

CONCENTRICITY - In a wire or cable, the measurement of the location of the center of the conductor with respect to the geometric center of the surrounding insulation.

COND. - Abbreviation for conductor. See conductor.

CONDUCTANCE - Symbol G . The measure of the ability of a substance to conduct electricity. The ratio of the current flow to the potential difference causing the flow. The real part of the admittance, Y , which is given by:

$$Y = G + iB$$

where B is the susceptance and i equals $\sqrt{-1}$.

For a direct current circuit, the conductance is the reciprocal of resistance and is measured in ohms. For a circuit containing both resistance, R , and reactance, X , the conductance is given by:

$$G = R / (R^2 + X^2)$$

CONDUCTIVITY - The capability of a material to carry electrical current, usually expressed as a percentage of copper conductivity (copper being 100%). The reciprocal of resistivity.

CONDUCTOR - A material that offers a low resistance to the passage of electric current (see resistivity). When a potential difference is applied across it, a relatively large current flows. A conductor usually consists of copper, aluminum, steel, silver, or other materials. Abbreviated as cond.

CONDUIT - A tube or trough for protecting electrical wires or cables.

CONNECTOR - A mechanism used to unite two pieces of cable, both physically and electrically.

CONSERVATION OF ENERGY PRINCIPLE - A principle in physics; the total energy of an isolated system remains constant irrespective of whatever internal change may take place with energy disappearing in one form and reappearing in another.

CONST. - Abbreviation for construction.

CONSTANTAN - An alloy of 55% copper and 45% nickel used in thermocouple with copper in the temperature range of 169° C to 386° C. Temperature coefficient of electrical resistivity, 0.0002 / ° C.

CONT. - Abbreviation for continued.

CONTACT - The part of a conductor which actually carries the electrical current and is touched together or separated to control flow.

CONTINUITY CHECK - A test performed on a length of finished wire or cable to determine if the electrical current flows continuously throughout the length. Each conductor may also be checked against each other to ascertain that no shorts exist between conductors.

CONTINUOUS DUTY - In some portable cords there are two standard number of strands of a given wire size. The one with the greater number (most flexible) is called continuous duty and the other is called stationary duty.

CONTINUOUS VULCANIZATION - The process of extruding on a wire, under high pressure, a uniform seamless, close-fitting tube of a rubber or rubberlike

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

compound. The covered wire then continues into a vulcanizing chamber, where, under high pressure and temperature, the insulation or jacket is vulcanized continuously rather than in sections. Abbreviated as cv.

CONTROL CABLE - A cable used for remote control operation of any type of electrical power equipment.

COPO - Abbreviation for copolene. See copolene.

COPOLENE - Copolene is a dielectric material used in manufacturing coaxial cable. Developed as a substitute for polystyrene, it is composed of polystyrene and polyisobutylene. Since it has undesirable characteristics, it has been replaced by polyethylene. Abbreviated as copo.

COPOLYMER - A compound resulting from the polymerization of two different monomers.

COPPER-CLAD - Steel wire with a coating of copper welded to it, as distinguished from copper-plated. Abbreviated CCS. Same as Copperweld®. Copperweld® is a trademark of the Copperweld Steel Company.

COPPER CONSTANTAN - Copper and constantan are two materials used in making thermocouple wires. The copper is the positive wire and the constantan is the negative wire.

COPPERWELD® - Copperweld® is the trade name for copper covered steel wire manufactured by Copperweld Steel Company. It is made by an exclusive molten welding process whereby a thick copper covering is inseparably welded to a steel core. Copperweld® thus performs as one metal. Hot rolling, cold drawing, pounding, or temperature changes cannot adversely affect it. Abbreviated as cw.

CORD - A small, flexible insulated conductor or conductors, usual 10 AWG or smaller and not more than four conductors, jacketed to protect the conductors, and most often used for portable applications.

CORD SETS - Portable cords fitted with any type of wiring device at one or both ends.

CORE - a). In cables, a component or assembly of components over which additional components (shield, sheath, etc.) are applied. b). In fiber optic

cable, the central part of the glass construction through which light is transmitted.

CORONA - Ionization of air surrounding a conductor caused by the influence of high voltage.

CORPS OF ENGINEERS - The branch of the United States Army in charge of construction on all military installations.

COVERAGE - The percent of completeness with which a metal braid covers the underlying surface.

COVERINGS - Coverings may consist of textile braids or may be jackets of rubber, plastics, or other materials applied over wires and cables. Such coverings provide mechanical protection and, in some cases, circuit identification.

CP - Abbreviation for chlorosulfonated polyethylene. Also abbreviated as CSPE. See Hypalon®. Hypalon® is a trademark of the DuPont de Nemours Co.

CPC - Abbreviation for copper polyester copper laminate.

CPE - Abbreviation for chlorinated polyethylene, a conductive polyethylene.

CPVC - Abbreviation for chlorinated polyvinylchloride.

CR - Abbreviation for chloroprene rubber. See Neoprene®. Neoprene® is a trademark of the DuPont de Nemours Co.

CRAZING - The minute cracks on the surface of plastic materials.

CRCS - Abbreviation for continuous rigid cable support, synonymous with tray.

CREEPAGE - Electric leakage on a solid dielectric surface.

CROSS-LINKED - Intermolecular bonds between long chain thermoplastic polymers by means of chemical or electron bombardment. The properties of the resulting thermosetting material are usually improved. Abbreviation XL.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



CROSS SECTIONAL AREA OF A CONDUCTOR

Cross sectional area of a conductor is the sum of cross sectional areas of all the individual wires comprising the strand.

CROSS TALK - Signal interference due to cross coupling between nearby conductors producing an unwanted signal in one circuit when a signal is present in the other. A phenomenon usually due to induction.

CSA - Abbreviation for Canadian Standards Association. This is the Canadian counterpart of the Underwriters Laboratories (UL) in the U.S.

CSPE - Abbreviation for chlorosulfonated polyethylene. Also abbreviated as CP. See Hypalon®. Hypalon® is a trademark of the DuPont de Nemours Co.

CURE DATE - a) The date at which the curing cycle is completed on Neoprene® or rubber. b) The date of manufacture. Neoprene® is a trademark of the DuPont de Nemours Co.

CURRENT - The rate of flow of electricity. Usually measured in amperes. Symbol I.

CURRENT CARRYING CAPACITY - The maximum current an insulated conductor can continuously carry without exceeding its insulation and jacket temperature limitations. Also called ampacity.

CUTOFF WAVELENGTH - In fiber optics cable, the wavelength at which a single-mode fiber transmits a single-mode of light.

CV - The abbreviation for continuous vulcanization. See continuous vulcanization.

CW - Abbreviation for Copperweld® conductor. See Copperweld®. Copperweld® is a trademark of the Copperweld Steel Company.

CYCLE - The complete sequence of alteration or reversal of the flow of an alternating electric current.

D

db - Abbreviation for decibel(s). See decibel.

db LOSS - The loss of signal over a path or conductor, expressed in decibels.

DC - Abbreviation for direct current. See direct current. Also abbreviated dc.

DCR - Abbreviation for direct current resistance. The resistance offered by any circuit to the flow of direct current.

DEC - Abbreviation for Digital Equipment Corporation.

DECA - A prefix to a unit, denoting a multiple of ten (10) of that unit.

DECI - A prefix to a unit, denoting a submultiple of one-tenth (10⁻¹) of that unit.

DECIBEL - A unit used to express ratios of sound or signal power, defined by the following formula where **n** is the number of decibels.

$$n = 10 \log_{10} (P_2 / P_1)$$

Where **P₁** and **P₂** are the power levels. Since decibels represent a ratio, it is necessary to establish a reference level in order to indicate an absolute level. For sound, the reference level is a pressure of 0.0002 microbar. Abbreviated as db.

DEGREE RISE - The amount of increase in temperature caused by the introduction of electricity into a unit.

DELAY LINE - A conductor that is made of a specific material in a specific size and length that will permit the delay of an electrical impulse for a predetermined specific length of time. The delay is measured in microseconds or nanoseconds.

DENSITY - The distribution of a quantity (as mass, electricity, or energy) per unit, usually of space.

DESICCANT - Water or moisture absorbent material used to prevent moisture from damaging packaged equipment or other merchandise.

DESIGN VOLTAGE - Voltage at which a cable is designed for maximum work.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

DETECTA-DUCT® - Traffic signal inductance loop detector wire. Detecta-Duct® is a trademark of the Standard Wire & Cable Co.

DIA. - Abbreviation for diameter.

DIELECT. - Abbreviation for dielectric. See dielectric.

DIELECTRIC - Any insulating material that is a non-conductor of electricity. Abbreviated as dielect.

DIELECTRIC ABSORPTION - That property of an imperfect dielectric whereby there is an accumulation of electric charge within the body of the material when it is placed in an electric field.

DIELECTRIC CONSTANT - The factor by which the electric field strength in a vacuum exceeds that in the dielectric for the same distribution of charge. Symbol **K**. The **K** for air is 1.0.

DIELECTRIC LOSS - Energy dissipated as heat when the dielectric is placed in a varying electric field.

DIELECTRIC STRENGTH - The maximum potential gradient (volts per mil) a dielectric will stand without breaking down; the voltage stress required to puncture an insulation of known thickness (in volts per unit, usually volts per mil.)

DIGITAL - Of or relating to calculation by numerical methods or by discrete units. Opposite - analog.

DIODE - Any electronic device that has only two electrodes. There are several different types of diodes, their voltage characteristics determining their application. Diodes are most commonly used as rectifiers.

DIRECT BURIAL CABLE - A cable installed directly in the earth without use of an underground conduit. Also called "burial cable".

DIRECT CURRENT - A direct current is one which flows in one direction. Further classifications of direct currents are: a) Continuous currents which are steady, non pulsating direct currents; b) Constant currents, which continue to flow for a considerable time in the same direction and with unvarying intensity; and c) Pulsating currents, which are regularly varying continuous currents. Abbreviations DC and dc.

DIRECTION OF LAY - The lateral direction in which the strands of a cable run over the top of the cable as they recede from you looking along the axis of the cable.

DISPERSION - A general term for those phenomena that cause a broadening or spreading of light as it propagates through an optical fiber. The three types are modal, chromatic, and waveguide.

DOD - Abbreviation for the U. S. Department of Defense.

DOUBLE SHIELD - Two shields, one over the other. Maximum coverage is 98%.

DP - Abbreviation for data processing.

DRAIN WIRE - An uninsulated solid or stranded tinned copper wire which is placed directly under a shield. It touches the shield throughout the cable, and, therefore, may be used in terminating the shield to ground. A big labor saver in terminating all shielded cables. It is completely necessary on spiral shielded cables because it eliminates the possibility of induction in a spiral shield.

DRAWING - In wire manufacturing, pulling of metal through a die or series of dies to reduce diameter to a specific size.

DROP CABLE - In a CATV system, the transmission cable from the distribution cable to a dwelling.

DUCT - An underground or overhead tube for carrying electrical conductors.

DUPLEX - Two conductors twisted together, usually with no outer covering. This word has a double meaning and it is possible to have parallel wires and jacketed parallel wires and still refer to them as a duplex.

E

EARTH FAULT - A fault that occurs when a conductor is accidentally connected to earth or when the resistance to earth of an insulator falls below a specific value.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

EARTH POTENTIAL - The potential of a large conducting body, such as the earth, taken to be the arbitrary zero in the scale of electrical potential. Synonymous with zero potential.

ECM - Abbreviation for Electronic Counter Measure. The use of equipment to prevent or induce jamming of electronic equipment, missile systems, radar, radio, and other devices.

ECTFE - Abbreviation for ethylene chlorotrifluoroethylene copolymer. See ethylene chlorotrifluoroethylene. Trade name Halar®. Halar® is a trademark of the Allied Chemical Co.

EEA - Abbreviation for ethylene-ethyl acrylate copolymer.

EHF - Abbreviation for extremely high frequency. See frequency band.

EIA - Abbreviation for Electronics Industries Association. Formerly known as RETMA (Radio Electronics Television Manufacturers Association).

ELASTOMER - A rubberlike substance.

ELECTRICAL DUCT - Any electrical conduit or other raceway round in cross section, approved or listed for use underground, and embedded in earth or concrete.

ELECTROTINNED - Wire tinned with pure tin using an electrolytic process.

ELECTROMOTIVE FORCE - Pressure or voltage. The force which causes current to flow in a circuit. The algebraic sum of the potential differences in a circuit equals the EMF, which is measured by the energy liberated when unit electric charge passes completely round the circuit. A battery of EMF, **E**, will supply a current, **I**, to an external resistance, **R**:

$$E = I(R + r)$$

where **r** is the internal resistance of the battery.

The term "electromotive force" strictly applies to a source of electrical energy but is sometimes misused as being equivalent to potential difference. Symbol **E**. Abbreviated as EMF.

ELONGATION - The state of being elongated or lengthened.

EMC - Abbreviation for electromagnetic compatibility. No emission of interference exceeding FCC limits.

EMF - Abbreviation for electromotive force. See electromotive force.

EMI - Abbreviation for electromagnetic interference.

EMP - Abbreviation for electromagnetic pulse.

ENAMELED WIRE - A conductor with a baked-on varnish enamel; may be 7 AWG through 50 AWG. Intended for use in winding motors, coils, transformers, and other applications of similar usage.

ENERGIZE - To apply rated voltage to a circuit or device, such as the coil of a relay, in order to activate it.

ENERGY - The capacity for performing work.

EP - Abbreviation for ethylene propylene.

EPDM - Abbreviation for ethylene propylenediene monomer rubber.

EPN - Abbreviation for extended performance network cable.

EPOXY - A potting resin used in bonding, e.g., to bond PTFE wire to pot connectors to assure that they are moisture proof.

EPR - Abbreviation for ethylene propylene copolymer rubber. It has properties similar to butyl rubber. The polymer is chemically cross-linked.

ESI - Abbreviation for electrostatic interference.

ETCHED WIRE - A process applied to PTFE wire in which the wire is passed through a sodium bath to create a rough surface to allow epoxy resin to bond the PTFE.

ETFE - Abbreviation for ethylene tetrafluoroethylene. See ethylene tetrafluoroethylene.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



ETHERNET - Local area network configuration.

ETHYLENE - A colorless flammable gaseous unsaturated hydrocarbon C_2H_4 that is found in coal gas. It can be produced by pyrolysis of petroleum hydrocarbon.

ETHYLENE CHLOROTRIFLUOROETHYLENE - A high temperature fluoropolymer of high dielectric strength (HALAR®). Abbreviation ECTFE. Also abbreviated as ECTFE-XI. Halar® is a trademark of the Allied Chemical Co.

ETHYLENE TETRAFLUOROETHYLENE - A high temperature insulation of high dielectric strength. Abbreviation ETFE.

ETHYLENETETRAFLUOROETHYLENE COPOLYMER - A high temperature cross-linked fluoropolymer of high dielectric strength per MIL-C-17. Abbreviation XLETFE.

ETL - ETL Testing Laboratory.

EXTREMELY HIGH FREQUENCY - See frequency band.

EXTRUDE - To shape (as metal or plastic) by forcing through a die.

EXTRUSION - The process of continuously forcing both a plastic or elastomer and a conductor core through a die, thereby applying a continuous coating of insulation or jacket to the core or conductor.

F

f - Abbreviation for farad. See farad.

F - Abbreviation for Fahrenheit. See Fahrenheit.

FAA - Abbreviation for Federal Aeronautics Administration.

FAHRENHEIT - A scale for measuring temperature. Water freezes at 32° F and boils at 212° F. Abbreviated F.

FARAD - A unit of capacitance. Usually expressed in microfarads (μF) one-millionth (10^{-6}) of a farad;

or picofarads (pf) one-trillionth (10^{-18}) of a farad. Abbreviation f.

FATIGUE RESISTANCE - Resistance to metal crystallization that occurs when the conductors or wires break from flexing.

FAULT CURRENT - A current that may flow through a circuit or device as a result of a fault, such as a defect in the insulation.

FDDI - Abbreviation for fiber distributed data interface.

FEP - Abbreviation for fluorinated ethylene propylene. It was formerly called X-100 or FEP-100. This is a fluorocarbon resin.

FEP-IX - Abbreviation for extruded fluorinated ethylene propylene, type IX per MIL-C-17.

FEP-XII - Abbreviation for extruded fluorinated ethylene propylene, type XII per MIL-C-17.

FF - There are two types, commercial and military. Commercial type is UL approved fixture wire. Construction is stranded copper conductor, rubber insulation, and cotton braid. Military type FF is MIL-W-16878D, 1,000 volt, 200° C, sizes 24 AWG to 4/0 AWG. Construction is stranded tin copper conductor, silicone rubber insulation, with or without an outer glass braid.

FG - Abbreviation for fiberglass.

FG BRAID-V - Abbreviation for fiberglass impregnated type V per MIL-C-17.

FHPE - Abbreviation for foamed high density polyethylene.

FIBER OPTICS - Transmission of energy by light through glass fibers.

FIELD - Area through which passes electric and/or magnetic lines of force.

FIGURE 8 CABLE - An aerial cable in which the conductors and steel supporting strand are jacketed together in such a manner that a cross section of the cable approximates the figure eight.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

FILLED CABLE - A telephone cable construction in which the cable core is filled with a material that will prevent moisture from entering or passing through the cable.

FILLED STRAND - Conductor in which the interstices between the individual wires are filled with a compound to prevent moisture migration along the conductor.

FILLER - a) Fillers are used in multi-conductor cable to occupy the voids formed by the assembled conductors. This is done so that the resulting configuration will be round. b) An inert substance added to a compound to improve properties or decrease cost.

FIRE CONTROL EQUIPMENT - This is equipment that automatically directs the firing of armament. It is constructed in accordance with International Municipal Signal Association Standards. These standards recognize 18 to 9 AWG wires and cables that may be insulated with rubber or polyethylene with lead or lead alloy sheath.

FL - Abbreviation for FL poly tape.

FLAME-RESISTANCE - The ability of a material not to propagate flame once the heat source is removed.

FLAME-RETARDANT - Ability of a material to prevent the spread of combustion by a low rate of travel so the flame will not be conveyed.

FLAMMABILITY - The measure of a material's ability to support combustion.

FLASHOVER - A disruptive discharge in the form of an arc or spark between two electrical conductors or between a conductor and earth.

FLASHOVER VOLTAGE - The voltage between two conductors at which flashover just occurs. The dry flashover voltage is the voltage at which flashover occurs when the conductors are separated by a clean dry insulator. The wet flashover voltage is the voltage at which flashover occurs when the clean insulator is wet.

FLAT CONDUCTOR - A wire having a rectangular cross section as opposed to round or square conductors.

FLEX. - Abbreviation for flexible.

FLEX LIFE - The measure of the ability of a conductor or cable to withstand repeated bending.

FLEXOPRENE® - Standard Wire & Cable Co. trademark for flexible, oil resistant portable cord and cable.

FLUOROCARBON - Any of various chemically inert compounds containing carbon and fluorine used chiefly as lubricants, refrigerants, nonstick coatings, and formerly aerosol propellants and in making resins and plastics.

FLUOROPOLYMER - Insulations or jackets characterized by the presence of fluorine in the formulation.

FM - Abbreviation for frequency modulation.

FOAMED PLASTICS - Insulations having a cellular structure.

FP - Abbreviation for fluorocarbon polymer, modified polytetrafluoroethylene (PTFE). See polytetrafluoroethylene.

FPL - Abbreviation for fire protective power-limited signaling circuit cable.

FPLP - Abbreviation for fire protective power-limited signaling circuit plenum cable.

FPLR - Abbreviation for fire protective power-limited signaling circuit riser cable.

FR-1 - See VW-1.

FREQUENCY - The number of times an alternating current reverses itself in one second. Expressed in Hertz (Hz), which is one cycle per second.

FREQUENCY BAND - A particular range of frequencies that forms part of a larger continuous series of frequencies. The internationally agreed radio frequency bands are shown below:

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Wavelength	Band	Frequency
1 mm - 1 cm	extremely high frequency (EHF)	300 - 30 GHz
1 cm - 10 cm	superhigh frequency (SHF)	30 - 3 GHz
10 cm - 1 m	ultrahigh frequency (UHF)	3 - 0.3 GHz
1 m - 10 m 300 - 30 MHz	very high frequency (VHF)	
10 m - 100 m	high frequency (HF)	30 - 3 MHz
100 m - 1,000 m	medium frequency (MF)	3 - 0.3 MHz
1 Km - 10 Km	low frequency (LF)	300 - 30 KHz
10 Km - 100 Km	very low frequency (VLF)	30 - 3 KHz

Microwave frequencies, ranging from VHF to EHF bands are usually subdivided into bands designated by letters. These are not internationally agreed upon but the commonly used subdivisions are shown below:

Band	Frequency (GHz)	Wavelength (cm)
P	0.225 - 0.390	133.3 - 76.9
L	0.390 - 1.550	76.9 - 19.3
S	1.550 - 5.20	19.3 - 5.77
X	5.20 - 10.90	5.77 - 2.75
K	10.90 - 36.00	2.75 - 0.834
Q	36.0 - 46.0	0.834 - 0.652

V	46.0	-	56.0	0.652	-	0.536
W	56.0	-	100.0	0.536	-	0.300

FREQUENCY MULTIPLEXING - The technique of sharing a transmission channel wherein carrier signals of different frequencies are transmitted simultaneously.

FRHF - Abbreviation for flame-retardant and halogen-free. A sheathing material which is flame-retardant, halogen-free, noncorrosive, low-smoke, and non fire propagating.

FRPE - Fire retardant polyethylene.

F/S - Abbreviation for foam skin insulation (expanded polyolefin with a skin of solid polyolefin).

ft - Abbreviation for feet.

FT-4 - CSA designation for vertical tray flame test.

FT-6 - CSA designation for plenum or MI flame test.

FUSED SPIRAL TAPE - This refers to a type of PTFE insulated hook-up wire. The conductor is run through a taping head so that each successive wrap overlays the previous wrap. The spiral wrapped conductor is then passed through a sintering oven where the overlaps are fused together. The wire is then sized and polished.

FUSION SPLICE - A splice accomplished by the application of localized heat sufficient to fuse or melt the ends of two lengths of optical fiber. Same as heat shrink splice.

G

g - Abbreviation for gram.

G - Symbol for conductance. See conductance.

G. CABLE - G. cable is a type W or power cable with ground wires. The total CM (circular mil) area of the ground wires is approximately one-half to three-quarters of the CM area of one of the conductors.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

GAS FILLED CABLE - Paper insulated lead sheath cable filled with gas which provides a self-supervised alarm system. There are three different types; low pressure, medium pressure, and high pressure. They may be installed in ducts, in air, or buried directly.

GAS PRESSURE COMPENSATED - A saturated paper insulated cable containing tubes for the transmission of gas pressure along a cable and with external gas feed to the tubes.

GAUGE - A term used to denote the physical size of a wire.

GC - Abbreviation for ground conductor.

GFI - Abbreviation for Ground Fault Interrupter. A protective device that detects abnormal current flowing to ground and then interrupts the circuit.

G-GC - Type G-GC mining cable with grounding conductor and a ground check conductor.

GHz - Abbreviation for gigahertz. See gigahertz.

GIGA - A prefix to a unit, denoting a multiple of one billion (10^9) of that unit.

GIGAHERTZ - A term for one billion (10^9) cycles per second. Used to replace the more cumbersome term kilomegacycle. Abbreviation GHz.

GLASS BRAID - Used to provide thermal and/or mechanical protection to the underlying insulation of certain types of conductors.

GPU - Abbreviation for Ground Power Unit. A GPU is a mobile power generator used typically at airports.

GRADED INDEX - In fiber optic cable the refractive index profile that varies with the radius of the core. The refractive indices decrease from the center axis out. The purpose is to reduce modal dispersion and thereby increase fiber bandwidth.

GROMMET - A flexible loop that serves as a fastening, support, or reinforcement; an eyelet of firm material to strengthen or protect an opening or to insulate or protect something passed through it.

GROUND - An object that makes an electrical connection with the earth; a large conducting body (as

the earth) used as a common return for an electrical circuit and as an arbitrary zero potential; synonym for earth.

GROUND FAULT - A failure of transmission involving insulation to shield or insulation to ground wire.

GROUND POWER CABLE - A cable assembly fitted with the applicable terminations to supply power to an aircraft from a ground power unit (GPU).

GROUND NEUTRAL - The neutral wire is metal-lically connected to ground.

GRS - Abbreviation for Government Rubber Synthetic. This is a government standard for Buna-S rubber for jacketing and insulating compounds for military wires and cables.

GS - Abbreviation for galvanized steel.

GTO - Abbreviation for gas tube, sign, and oil burner ignition cable. Stranded tin copper conductor, poly-ethylene insulation, PVC jacket overall. Manufactured in 14 AWG for 10 kV and 15 kV service.

gu - Abbreviation for gauge.

GW - Abbreviation for galvanized wire.

H

H - Abbreviation for henry (unit of measure of in-ductance).

H-FILM® - High temperature polyimide Kapton® film. H-FILM® and Kapton® are trademarks of the DuPont de Nemours Co.

HALAR® - Ethylene chlorotrifluoroethylene or ECTFE copolymer. A high temperature insulation. Halar® is a trademark of the Allied Chemical Co. See ethylene chlorotrifluoroethylene.

HALOGEN - Any of the five elements fluorine, chlorine, bromine, iodine, and astatine that form part of group VII A of the periodic table and exist in the free state normally as diatomic molecules.

HAM - An amateur radio operator.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

HARD DRAWN - The conductor is work hardened in the drawing process. Hard drawn refers to the temper of conductors that are not annealed after drawing.

HARNESS - An arrangement of wires and cables, usually with many breakouts, which have been tied together or pulled into a rubber or plastic sheath, used to interconnect an electric circuit.

HASH MARK STRIPE - A noncontinuous helical stripe applied to a conductor for identification.

HD - Abbreviation for high density.

HDP - Abbreviation for high density polyethylene. Compared to PE (polyethylene) it has higher abrasion resistance, higher weatherability, and lower flexibility at room and low temperature. Also abbreviated as HDPE.

HDPE - Abbreviation for high density polyethylene. Compared to PE (polyethylene) it has higher abrasion resistance, higher weatherability, and lower flexibility at room and low temperature. Also abbreviated as HDP.

HDXLPE - Abbreviation for high density cross-linked polyethylene.

HEAD SET CORD - A very flexible cord used for communication equipment usually 24 AWG to 22 AWG multi-conductor. Usually made with Buna insulation, rubber or Neoprene® jacket; sometimes the outer jacket is a cotton braid. The conductor may be bare copper or cadmium bronze. Neoprene® is a trademark of the DuPont de Nemours Co.

HEAT AND PRESSURE CURE - Uncured rubber or rubberlike compound that is usually cooked in a mold under high pressure at a given temperature. The pressure, temperature, and time required for curing depends upon the type of compound used.

HEAT ENDURANCE - The time of heat aging that a material can withstand before failing a specific physical test.

HEAT SEAL - A method for sealing a tape-wrap jacket by thermal fusion.

HEAT SHOCK - A test to determine stability of a

material by sudden exposure to a high temperature for a short period of time.

HEAT SHRINK - A material that shrinks when heated. Heat shrink tubing is used for insulation, sealing, and protecting wire connections, terminations, and splices.

HEAT SHRINK SPLICE - Same as Fusion Splice except the splice is protected within a heat shrink tube.

HEATER CORD - Flexible stranded copper conductor, cotton wrapped, rubber insulation, and high temperature roving. For indoor use on household appliances such as flat irons, coffee pots, toasters, heaters, and soldering irons.

HECTO - A prefix to a unit, denoting a multiple of 100 (10^2) of that unit.

HELICAL STRIPE - A continuous spiral stripe applied to the insulation of a conductor for the purpose of circuit identification.

HELIX - Something spiral in form; a coil formed by winding wire around a uniform tube; a curve traced on a cylinder or cone by the rotation of a point crossing its right sections at a constant oblique angle.

HENRY - The unit of measure of inductance. It is defined as the inductance of a circuit in which a counter electromotive force of one volt is generated when the current is changing at the rate of one ampere per second. Abbreviation H.

HERTZ - A term replacing cycles per second as an indication of frequency. Abbreviation Hz.

HF - a) Heavy Formvar Magnet Wire. Soft bare copper wire with baked synthetic insulation overall. b) Abbreviation for high frequency. See frequency band.

HF/LS/LT - Abbreviation for halogen-free, low smoke, low toxicity.

HI-POT (HIGH POT) - A test designed to determine the highest potential that can be applied to a conductor without breaking through the insulation.

HIGH FREQUENCY - See frequency band.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



HIGH TENSION - See high voltage. Abbreviation HT.

HIGH VOLTAGE - A wire or cable with an operating voltage over 600 volts.

HL - CSA mark used to identify cables which comply with the Hazardous Location performance requirements of CSA C22.2 No. 174 specification.

HMWPE - Abbreviation for high molecular weight polyethylene.

HOOK-UP WIRE - A wire used for low current, low voltage (under 1,000 volts) applications within enclosed electronic equipment, usually 12 AWG and smaller.

HOTTIN DIP - A process of passing bare wire through a bath of molten tin to provide a coating.

HPD - Heater cord, rubber, and high temperature barrier, insulated with an overall braid.

HPN - Heater cord, Neoprene®, parallel, two conductor. Neoprene® is a trademark of the DuPont de Nemours Co.

HR - Abbreviation for high resistance wire.

hrs - Abbreviation for hours.

HT - a) Abbreviation for high tension. See high voltage. b) Abbreviation for high temperature.

HW - Type designation for heavy wall, 2,500 volt electronic hook-up wire to MIL-W-76.

HYGROSCOPIC - Readily absorbing and retaining moisture.

HYPALON® - A synthetic rubber, chlorosulfonated polyethylene (CSPE or CP). Hypalon® is a trademark of the DuPont de Nemours Co. Resistant to oxidation by ozone, sun, weather, heat, and chemicals, rated 90° C.

Hz - Abbreviation for Hertz. See Hertz.

I

I - Symbol used to designate current. See current.

IACS - Abbreviation for International Annealed Copper Standard. Refined copper for electrical conductors: 100% conductivity at 20° C for 1 m X 1 mm² has 1/58 ohm resistivity, 8.93 (changed to 8.89 in 1977) grams per mm² density, 0.000017 per degree C coefficient of linear expansion, and 1/254.45 per degree C coefficient of variation of resistance.

IC - Abbreviation for integrated circuit.

ICEA - Abbreviation for Insulated Cable Engineers Association, formerly IPCEA.

ID - Abbreviation for identification.

I.D. - Abbreviation for inside diameter.

IEC - Abbreviation for International Electrotechnical Commission, similar to the International Standards Organization (ISO).

IEEE - Abbreviation for Institute of Electrical and Electronic Engineers. Formerly American Institute of Electrical Engineers (AIEE) and Institute of Radio Engineers (IRE).

IMP - Abbreviation for impedance. See impedance.

IMPACT STRENGTH - A test for determining the mechanical punishment a cable can withstand without physical or electrical breakdown by impacting with a given weight, dropped a given distance, in a controlled environment.

IMPEDANCE - A measure of the response of an electric circuit to an alternating current. Measured in ohms (volts per ampere). Symbol Z. The current is opposed by the capacitance and inductance of the circuit in addition to the resistance. The total opposition to current flow is the impedance, given by the formula:

$$Z = R + iX$$

where **R** is resistance, **X** is reactance and **i** equals $\sqrt{-1}$.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



The real part, the resistance, represents a loss of power due to dissipation. The imaginary part, the reactance, indicates the phase difference between the voltage and current. It is either positive or negative depending on whether the current lags or leads the voltage, respectively. In a circuit containing only resistance or in a resonant circuit, the current and voltage are in phase and **Z** is purely resistive. In a circuit containing only reactance, the current and voltage are out of phase and **Z** is purely imaginary, i.e., there is no dissipation in the circuit. Reciprocal of admittance. Abbreviated imp.

IMPEDANCE, HIGH - Generally, the area of 25,000 ohms or higher.

IMPEDANCE, LOW - Generally, the area of 1 through 600 ohms.

IMPREGNATED CABLE - A cable with paper insulation in which the insulating properties of the paper tapes are improved by impregnating them with an insulating compound, such as oil.

IMPULSE STRENGTH - The voltage breakdown of insulation under voltage surges on the order of microseconds in duration.

IMSA - Abbreviation for International Municipal Signal Association, specification for fire alarm cable.

in - Abbreviation for inches.

INCL - Abbreviation for including.

INDEX OF REFRACTION - See refractive index.

INDIV - Abbreviation for individual.

INDUCED CURRENT - An electric current that flows in a conductor as a result of a changing magnetic flux density, in which lines of magnetic flux intersect with the conductor.

INDUCTANCE - The property of a circuit or circuit element that opposes a change in current flow, thus causing current changes to lag behind voltage changes. It is measured in henrys. Symbol L.

INDUCTION - The phenomenon of a voltage, magnetic field, or electrostatic charge being produced in an object by lines of force from the source of such

fields.

INDUCTIVE COUPLING - Cross talk resulting from the electromagnetic field of one conductor on another.

INSERTION LOSS - The total optical power loss caused by the insertion of an optical component such as a connector, splice, or coupler.

INSULATION - That portion which is relied upon in a cable to segregate and protect the conductor from the other conductors, conducting parts, or from ground.

INSULATION LEVEL - The impulse voltage breakdown of cables and equipment.

INSULATION RESISTANCE - The resistance offered by an insulating material to the flow of current resulting from an impressed DC voltage.

INSULATOR - a) A nonconducting substance such as porcelain, plastic, glass, rubber, etc; b) a device made of such material used for separating or supporting conductors to prevent undesired flow of electricity.

INTERAXIAL SPACING - Center to center conductor spacing in paired wire; center to center spacing between conductors in a flat cable.

INTERCOM WIRE - Wire used to connect communication instruments, telephones, telegraphs, etc.

INTERLACED TAPES - Two or more tapes, generally of different composition, applied simultaneously in such a manner that a portion of each tape overlays a portion of the other tape.

INTERSTICE - A space that intervenes between things.

IPCEA - Abbreviation for Insulated Power Cable Engineers Association. Now ICEA.

IPE - Abbreviation for irradiated polyethylene tape.

IRE - Abbreviation for Institute of Radio Engineers, now IEEE.

IRON CONSTANTAN - A combination of metals used in thermocouple, thermocouple wires, and

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



thermocouple lead wires. The iron wire is positive. The constantan is the negative wire.

IRRADIATION - In insulations, the exposure of the material to high energy emissions for the purpose of favorably altering the molecular structure by cross-linking.

ISA - Abbreviation for Instrument Society of America.

ISO - Abbreviation for International Standards Organization.

ISO 9000 - An international quality assurance program.

J

J-BOX - Abbreviation for junction box. A box for joining different runs of raceway or cable, plus space for connecting and branching the enclosed conductors.

JACKET - A covering over insulation usually non-metallic, plastic, rubber, cotton, Neoprene®, fluoro-polymer, or glass. Neoprene® is a trademark of the DuPont de Nemours Co.

JAN-C-17A - Joint Army-Navy specifications covering coaxial cables used for high frequency applications in radio, television, radar, etc.

JAN-C-76A - Joint Army-Navy specifications covering radio hook-up wire. Types SRIR, SRHV, WL, and SRRF. Superseded by MIL-W-76.

JOULE - The unit of measure for energy or work. The international joule is equal to the work required to maintain a current of one ampere for one second in a resistance of one ohm.

JUMPER - Usually a temporary connection. A short length of conductor to connect between terminals, across a break in a circuit, or around an instrument.

JUTE FILLER - Rope like strands of material used in cables for filling in the voids to form a rounded final cable shape.

K

K - Abbreviation for Karma®. Karma® is a trademark of the Driver Harris Company.

K BAND - A band of microwave frequencies. See frequency band.

KAPTON® - Trade name for polyimide resin. See polyimide. Kapton® is a trademark of the DuPont de Nemours Co.

KARMA® - Trade name of the Driver Harris Company for a resistance wire composed of 74.5% nickel, 20% chromium, 2.75% aluminum, and 2.75% copper. Abbreviated K.

KEVLAR® - Trademark of the DuPont de Nemours Co. for the para-aramid fiber polyparaphenylene terephthalamide. See polyparaphenylene terephthalamide.

kgs - Abbreviation for kilograms.

KHz - Abbreviation for kilohertz. See kilohertz.

KILO - A prefix to a unit, denoting a multiple of one thousand (1,000) of that unit; a prefix used in computing to denote a multiple of one thousand, twenty four (2¹⁰).

KILOHERTZ - One thousand (1,000) cycles per second. Abbreviation kHz.

KILOVOLT - One thousand (1,000) volts. Abbreviation kV.

KILOVOLT AMPERE - One thousand (1,000) volts x amperes. Abbreviation kVA

KILOWATT - A unit of measure of power equal to one thousand (1,000) watts. Abbreviation kW.

KIRCHOFF'S LAWS - The algebraic sum of the currents at any point in a circuit is zero; the algebraic sum of the product of the current and the impedance in each conductor in a circuit is equal to the electromotive force in the circuit.

km - Abbreviation for kilometer (1,000 meters).

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



KOVAR - An alloy of iron, nickel, and cobalt.

kV - Abbreviation for kilovolt (1,000 volts). See kilovolt.

kVA - Abbreviation for kilovolt ampere (1,000 volt ampere). See kilovolt ampere.

kW - Abbreviation for kilowatt (1,000 watts). See kilowatt.

KYNAR® - Trademark of the Pennwalt Corporation for polyvinylidene fluoride. See polyvinylidene fluoride.

L

L - Symbol for inductance. See inductance.

L BAND - A band of microwave frequencies. See frequency band.

LACQUER FINISH - A finish applied over braided wire or cable for appearance, for moisture proofing, to reduce friction, and resist abrasion.

LAMINATES - A buildup of layers of material to increase thickness as in braid varnished cambric (VCB).

LAMP CORD - Flexible stranded conductor cord, rubber or plastic insulated, used in wiring of lamps, household fans, and similar appliances. Not subject to hard usage. UL approved.

LAN - Abbreviation for Local Area Network. See local area network.

LAPEL MIKE CABLE - Small O.D., flexible microphone cable.

LASER - Acronym from light amplification by stimulated emission of radiation. A source of intense monochromatic coherent radiation in the visible, ultraviolet, or infrared regions of the electromagnetic spectrum. The narrow beam can be either pulsed or continuous.

LATEX - Rubber material used for insulation of wire.

LAUNCH FIBER - An optical fiber used to couple and condition light from an optical source into an optical fiber. Often the launch fiber is used to create an equilibrium modal distribution in multi-mode fiber. Also referred to as launching fiber.

LAY - The length measured along the axis of a wire or cable required for a single strand (in stranded wire) or conductor (in cable) to make one complete turn around the axis of the conductor or cable.

lbs - Abbreviation for pounds.

LDPE - Abbreviation for low density polyethylene.

LEACHING AND NON LEACHING - In a leaching wire, the plasticizer will migrate or leave the vinyl compound when exposed to the heat of baking. The wire so treated becomes brittle and hard. A non leaching wire will retain its plasticizer under extreme temperature conditions and remain flexible after baking. Non leaching wire is desirable for use as motor lead wire.

LEAD CURED - A cable that is cured or vulcanized in a metallic lead mold.

LEAD-IN - The cable that connects the active part of an aerial to the transmitter or receiver.

LEAKAGE - The passage of an electric current along a path other than that intended due to faulty insulation or isolation in a circuit, component, device, or other piece of apparatus.

LED - Abbreviation for light emitting diode.

LEVEL 1, 2, 3, 4, & 5 - Underwriters Laboratories' performance designations for unshielded, twisted pair cables. See Category 1, 2, 3, 4, or 5.

LF - Abbreviation for low frequency. See frequency band.

LINE VOLTAGE - The voltage existing in a cable or circuit.

LITZWIRE - Short for litzendraht wire. A construction of fine individually insulated strands specially woven or braided together to reduce skin effect and thus lower resistance to high frequency currents.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

LOCAL AREA NETWORK - A baseband or broadband interactive bidirectional communication system for voice, video, or data use on a common cable medium. Abbreviation LAN.

LONGITUDINAL SHIELD - A tape shield, flat or corrugated, applied longitudinally with the axis of the core being shielded.

LOOP RESISTANCE - The total resistance of two conductors measured round-trip from one end.

LOOSETUBE (BUFFER) - A type of cable construction in which the fiber is placed in a plastic tube with a diameter much larger than the fiber itself. The loose tube isolates the fiber from exterior mechanical forces acting on the cable. The space between the tube and fiber is often filled with a gel which serves to cushion the fiber.

LOSS FACTOR - The product of the dissipation and dielectric constant of an insulating material.

LOW FREQUENCY - See frequency band.

LOW LOSS - A cable that has a small amount of power loss when extended over long lengths.

LOW NOISE - A cable constructed in such a manner as to reduce to a minimum any signals generated by the motion of the cable components in respect to each other. Used to reduce the noise level in coaxial or microphone cable circuits.

LOW TENSION - Low voltage as applied to ignition cable.

LT - Abbreviation for low temperature non contaminating jacket, Type II.

LW - Abbreviation for light wall, 300 volt, electronic hook-up wires to MIL-W-76.

M

m - Abbreviation for meter. See meter.

M - Abbreviation for Mylar®. See Mylar®. Mylar® is a trademark of the DuPont de Nemours Co. Also abbreviated as MY.

mA - Abbreviation for milliamper, one-thousandth (10^{-3}) of an ampere.

MAG. OX. - Abbreviation for magnesium oxide.

MAGNET WIRE - Insulated copper wire used for winding coils, motors, and transformers.

MAINS - The source of domestic electrical power distributed nationally throughout the U.K. The mains frequency is the frequency at which the electrical power is supplied. This is 50 hertz in the U.K. and 60 hertz in the U.S.

MARKER TAPE - A tape laid parallel to the conductors under the sheath in a cable, imprinted with the manufacturer's name and the specification to which the cable is made.

MARKER THREAD - A colored thread laid parallel and adjacent to the strand in an insulated conductor which identifies the manufacturer and sometimes the specification to which the wire is made.

MAT - Abbreviation for material.

MATV - Abbreviation for Master Antenna TV.

MAX - Abbreviation for maximum.

Mbps - Abbreviation for megabits per second.

MC - Abbreviation for megacycle.

MCM - Abbreviation for one thousand (1,000) circular mils, e.g., 500 MCM = 500,000 circular mils.

MECHANICAL SPLICE - A fiber splice accomplished by fixtures or materials, rather than by thermal fusion. Index matching material may be applied between the two fiber ends.

MEDIUM FREQUENCY - See frequency band.

MEGA - A prefix to a unit, denoting a multiple of one million (1,000,000) of that unit.

MEGAHERTZ - One million (1,000,000) cycles per second. Abbreviation MHz.

MEGAWATT - One million (1,000,000) watts. Abbreviation MW.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



MELAMINE - A thermosetting resin chemically known as melamine formaldehyde. It has excellent resistance to acids and alkalies and good resistance to water and solvents. Has high strength, high insulation resistance as compared to plastics.

MESA - Abbreviation for Mining Enforcement and Safety Administration. Formerly PBM (Pennsylvania Bureau of Mines).

MESSENGER - The linear supporting member, usually a high strength steel wire, used as the supporting element of a suspended aerial cable. The messenger may be an integral part of the cable or exterior to it.

METER - The unit of length defined as the length of the path traveled by light in vacuum during a time interval of $1/299,792,458$ of a second. One meter equals 39.3701 inches. Abbreviation m.

MF - Abbreviation for medium frequency. See frequency band.

Mfd - Abbreviation for microfarad. See microfarad.

MFG. - Abbreviation for manufacture/manufacturing.

MFT - Abbreviation for one thousand (1,000) feet.

MHD - Abbreviation for medium hard drawn copper wire.

Mho - The unit of conductivity. The reciprocal of an ohm.

MHz - Abbreviation for megahertz, one million (1,000,000) cycles per second. Formerly mc. See megahertz.

MI - Nomenclature for mineral insulated cable, made with one or more conductors using mineral for insulation and overall solid metal tube sheath.

MICA - A transparent silicate which separates into layers and has high insulation resistance, high dielectric strength, and high heat resistance.

MICRO - A prefix to a unit, denoting a submultiple of one-millionth (10^{-6}) of that unit.

MICRO BENDING - Minute but severe bends in the fiber of fiber optic cable that result in light displacement and increased loss. Most micro bending can be avoided by the correct selection of materials and proper cabling, handling, and installation techniques.

MICROFARAD - A unit of measure for capacitance. One-millionth (10^{-6}) of a farad. Abbreviation μF or Mfd.

MICROMETER - A unit of length equal to one-millionth (10^{-6}) of a meter, formerly called micron. Abbreviated μm .

MICROMINIM[®] - Ultra-flexible micro-miniature wire. A trade name of Standard Wire & Cable Co.

MICRON - A unit of length equal to one-millionth (10^{-6}) of a meter, now renamed as the micrometer. Abbreviated μm .

MICROSECOND - One-millionth (10^{-6}) of a second.

MICROWAVE - An electromagnetic wave with a wavelength in the range 3 millimeters to 1-3 meters, i.e., between infrared radiation and radio waves on the frequency spectrum. See frequency band.

MICROWAVE FREQUENCY - See frequency band.

MIGRATION - The movement of the non resinous plasticizers in vinyl which takes place at elevated or lowered temperatures. The migrating plasticizer from the jacket will contaminate the polyethylene core of a coaxial cable and thus change its electrical characteristics.

MIKE CABLE or MICROPHONE CABLE - A flexible, generally shielded cable used to connect the microphone to the amplifier.

MIL - a) Abbreviation for one-thousandth (10^{-3}) of an inch (0.001"). b) A unit used in measuring the diameter of wire or thickness of insulation. c) Abbreviation for military specification (mil spec).

MIL-C - Military cable specification.

MILLI - A prefix to a unit, denoting a submultiple of

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



one-thousandth (10^{-3}) of that unit.

MILLIMETER - Unit of measure for linear distance. One millimeter equals one-thousandth (10^{-3}) of a meter. Abbreviation mm.

MILLISECOND - One-thousandth (10^{-3}) of a second. Abbreviation ms.

MIL SPEC - Abbreviation for military specification.

MIL STD - Abbreviation for military standard.

MIL-W - Military wire specification.

MIN. - Abbreviation for minimum.

MINIATURE WIRE - Refers to insulated conductors of approximately 20 to 34 AWG with a small overall diameter as compared to usual constructions.

MIP - Abbreviation for mylene irradiated polymer.

mm - Abbreviation for millimeter. See millimeter.

MMfd - Abbreviation for one-trillionth (10^{-12}) of a farad. Commonly referred to as a picofarad (pF).

MODAL DISPERSION - Pulse spreading due to multiple light rays traveling different distances and speeds through a fiber.

MODE - A path of light through a fiber of a fiber optic cable.

MODE FIELD DIAMETER - In single-mode fiber, the region in which light propagates is larger than the glass core diameter. This mode field diameter is a measured value and often listed as a requirement with core diameter in fiber specifications.

MODES - Individual paths in optical waveguides. Single-mode fiber has only one mode, the fundamental mode, while multi-mode fiber has several hundred modes. The upper limit to the number of modes is determined by the core diameter of the waveguide.

MODULUS OF ELASTICITY - The ratio of stress to strain in an elastic material.

MOISTURE RESISTANCE - Ability of a material to resist absorbing moisture from the air or when immersed in water.

MOLDED PLUG - A connector, male or female, molded on either end of a cord or cable.

MONOMER - The basic chemical unit used in building a polymer.

MP - Abbreviation for multipurpose cable.

MPa - Abbreviation for mega pascal (10^6 pascals), the metric unit of pressure.

MPG - Abbreviation for multipurpose general purpose cable.

MPP - Abbreviation for multipurpose plenum cable.

MPR - Abbreviation for multipurpose riser cable.

MSHA - Abbreviation for Mining Safety and Health Administration.

MT - Abbreviation for machine tool wire used for internal wiring of appliances or tools. Solid or stranded conductor. Thermoplastic insulations.

MTW - Abbreviation for machine tool wire, plastic insulated, 600 volt, varies 90° C to 105° C.

MULTI-CONDUCTOR - More than one conductor within a single cable complex.

MULTI-MODE FIBER - An optical fiber whose core diameter is large compared with the optical wavelength and thus can contain a large number of modes.

MULTIPLEX - Being or relating to a system of transmitting several messages/signals simultaneously on the same circuit or channel.

MV - Abbreviation for millivolt, one-thousandth (10^{-3}) of a volt.

MW - a) Abbreviation for megawatt, one million (10^6) watts. b) Abbreviation for milli watt. One-thousandth (10^{-3}) of a watt. c) Usually, used in reference to one thousand (1,000) volt plastic insulated wire covered by MIL-W-76.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



MY - Abbreviation for Mylar®. See Mylar®. Mylar® is a trademark of the DuPont de Nemours Co. Also abbreviated as M.

MYLAR® - Trade name for DuPont de Numerous Co. polyester material (polyethylene terephthalate) used in the form of a tape. A synthetic compound with high dielectric properties. Abbreviated as MY and M.

N

N - a) Abbreviation for newtons. See newton. b) Abbreviation for nichrome.

N/A - Abbreviation for not applicable.

NA - Abbreviation for numerical aperture. See numerical aperture.

NANO - A prefix to a unit, denoting a submultiple of one-billionth (10^{-9}) of that unit.

NANOMETER - One billionth (10^{-9}) of a meter. Abbreviated nm.

NANOSECOND - One-billionth (10^{-9}) of a second.

NATIONAL ELECTRIC CODE - Recommendations of the National Fire Protection Association (NFPA) are revised every three years. City, county, or state regulations may differ from code regulations and take precedent over NEC Code rules, which of themselves, have no legal status.

NATIONAL FIRE PROTECTION ASSOCIATION - The organization whose prime mission is to maintain and publish the National Electrical Code.

NAVAIR - Abbreviation for Naval Air Systems Command (see NMC).

NAVELEX - Abbreviation for Naval Electronics Systems Command (see NMC).

NAVFAC - Abbreviation for Naval Facilities Engineering Command (see NMC).

NAVORD - Abbreviation for Naval Ordnance Systems Command (see NMC).

NAVSEA - Abbreviation for Naval Sea Systems Command.

NAVSHIPS - Abbreviation for Naval Ships Systems Command (see NMC).

NAVSUP - Abbreviation for Naval Supply Systems Command (see NMC).

NBFU - Abbreviation for National Board of Fire Underwriters.

NBS - Abbreviation for National Bureau of Standards.

NC - a). Abbreviation for nickel-plated copper. Also abbreviated as NPC. b). Abbreviation for nickel-clad copper. Also abbreviated as NCC. c). Abbreviation for nickel conductor.

NCC - Abbreviation for nickel-clad copper. Also abbreviated as NC.

NCCCS - Abbreviation for nickel-covered copper-clad steel.

NEC - Abbreviation for National Electric Code. See National Electric Code.

NEMA - Abbreviation for National Electrical Manufacturers Association. Maintains standardization of electrical motors, gear reducers, and wire and cable specifications.

NEOPRENE® - A synthetic rubber made by the polymerization of chloroprene and characterized by superior resistance (as to oils). Neoprene® is a trademark of the DuPont de Nemours Co.

NET LOSS - The difference between the attenuation and the gain in any circuit, device, network, or transmission line.

NEUTRAL - a). Having no net positive or negative electric charge at earth potential. b). c) Denoting the line that completes the domestic mains supply and is connected to earth at the power station.

NEWTON - The unit of force in the metric system of physical units that is of such size that under its influence a body whose mass is one kilogram would experience an acceleration of one meter per second

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

per second. Abbreviated N.

NFPA - Abbreviation for National Fire Protection Association. See National Fire Protection Association.

NICKEL-CLAD COPPER WIRE - A wire with a layer of nickel on a copper core where the area of the nickel is approximately 30% of the conductor area. The nickel has been rolled and fused to the copper before drawing. It has a very high resistivity and can operate at extremely high temperatures. Abbreviated NCC and NC.

NICROME® - Driver Harris Company's trade name for an alloy of 60% nickel, 16% chromium, and the balance steel. Used exclusively in wire wound resistors and heating elements.

nm - Abbreviation for nanometer. One-billionth (10^{-9}) of a meter.

NMC - Abbreviation for Naval Material Command. Central Navy agency for the development, procurement, maintenance, supply, disposal, distribution, and storage of material. Includes the following Systems Commands; the Naval Ships Systems Command (NAVSHIPS), the Naval Ordnance Systems Command (NAVORD), the Naval Air Systems Command (NAVAIR), the Naval Electronics Systems Command (NAVELEX), the Naval Facilities Engineering Command (NAVFAC), and the Naval Supply Systems Command (NAVSUP).

NO. - Abbreviation for number.

NOM. - Abbreviation for nominal.

NOMEX® - DuPont de Nemours Co. trademark for a temperature resistant, flame-retardant nylon.

NON CONTAMINATING - Refers to a type of PVC jacketing material whose plasticizer will not migrate into the dielectric of a coaxial cable and thus avoids contaminating and destroying the dielectric.

NONFERROUS - Not of iron. Refers to alloys which have no iron or steel as ingredients.

NON HYGROSCOPIC - Material does not absorb moisture.

NON MIGRATING - Same as non contaminating.

NPC - Abbreviation for nickel-plated copper. Also abbreviated as NC.

NPLF - Abbreviation for non power-limited fire protective signaling circuit cable.

NPLFP - Abbreviation for non power-limited fire protective signaling circuit plenum cable.

NPLFR - Abbreviation for non power-limited fire protective signaling circuit riser cable.

NRC - Abbreviation for Nuclear Regulatory Commission.

NUMERICAL APERTURE - In fiber optics, the sine of half the angle over which a fiber can accept light, it is a function of the relationship between the refractive index of the core and that of the cladding. It is the "light gathering ability" of a fiber, defining the maximum angle to the fiber axis at which light will be accepted and propagated through the fiber. Abbreviation NA. NA is also used to describe the angular spread of light from a central axis, as in exiting a fiber, emitting from a source, or entering a detector.

NYLON - A group of polyamide polymers which are used for wire and cable jacketing. Mechanical and chemical protection 105° C.

NYLON JACKETED - Refers to the outer covering of nylon on wire or cable which can either be an extruded layer or a braid of nylon filaments.

O

O.D. - Abbreviation for outside diameter.

OEM - Abbreviation for Original Equipment Manufacturer.

OFC - Abbreviation for optical fiber conductive general purpose cable.

OFCG - Abbreviation for optical fiber conductive fire resistant general purpose cable.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

OFCP - Abbreviation for optical fiber conductive plenum cable.

OFCR - Abbreviation for optical fiber conductive riser cable.

OFFGASSING - Percentage of a specified gas released during the combustion of an insulating or jacketing material.

OFHC - Abbreviation for oxygen free, high conductivity copper. It has no residual deoxidant, 99.95% minimum copper content and an average annealed conductivity of 100%.

OFN - Abbreviation for optical fiber non conductive general purpose cable.

OFNG - Abbreviation for optical fiber non conductive fire resistant general purpose cable.

OFNP - Abbreviation for optical fiber non conductive plenum cable.

OFNR - Abbreviation for optical fiber non conductive riser cable.

OHM - The unit of measure for electrical resistance, reactance, and impedance. A constant current of one ampere produces a force of one volt. Symbol Ω .

OHM (300) LEAD WIRE - Television lead-in wire. Leads signal in from the antenna to the set.

OHM'S LAW - The electric current, **I**, flowing in a conductor or resistor is linearly proportional to the applied difference, **V**, across it. From the definition of resistance, **R**, Ohm's law can be written:

$$V = IR \text{ (i.e., Volts = Current x Resistance.)}$$

OIL FILLED CABLE - Paper insulated, lead sheathed cable, into which high grade mineral oil is forced under pressure, saturating the insulation. The main object is to prevent moisture and gases from entering. It is also easier to detect flaws due to leakage, as the oil is kept under constant pressure at all times.

OIL FILLED PIPE CABLE - Basically the same as oil filled cable, but inside of rigid pipe instead of lead sheath. Sometimes it is a standard oil filled cable

inserted into rigid pipe under pressure, both units being oil filled. Usually for much higher voltage where constant pressure is maintained at all times.

OIL RESISTANT - Performance characteristics of a material against exposure to a specific oil.

OKOCORD® - Trade name for portable power cables made by Okonite Company.

OKOPRENE® - Trade name for Neoprene® covered wire and cable made by Okonite. Neoprene® is a trademark of the DuPont de Nemours Co.

OPEN WIRE - Synonymous with overhead line. A conductor that is not surrounded by insulation and is supported separately above ground.

OPER. - Abbreviation for operating.

OPTICAL RECEIVER - Unit for converting optical signals into electrical signals.

OPTICAL TIME DOMAIN REFLECTOMETER - An instrument that measures transmission characteristics of fiber by sending a pulse of light down the fiber and measuring the light scattered across the length and reflected back from the end as a function of time. Used to measure attenuation, point discontinuities, and fiber length, as well as to find breaks.

OPTICAL TRANSMITTER - Unit for converting electrical signals into optical signals.

OSHA - Abbreviation for Occupational Safety and Health Act.

OUTGASSING - The dissipation of gas from a dielectric evidencing decomposition.

OVERCOAT - Individual strands of tin copper wire stranded together and then covered with a tin coating.

OVERHEAD LINE - Synonymous with open wire. A conductor that is not surrounded by insulation and is supported separately above ground.

OVERLOAD - Any load delivered at the output of an electrical device, circuit, machine, or other apparatus that exceeds the rated output of the equipment.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



OXIDIZE - To change (a compound) by increasing the proportion of the electronegative part or charge (an element or ion) from a lower to a higher positive valence; remove one or more electrons from an atom, ion, or molecule.

OXYGEN BOMB TEST - To determine aging effect, heat, tensile strength, and elongation of wire. The wire is placed in a bomb at 70° C, under 300 psi using pure oxygen gas for a period of 48 to 96 hours.

OXYGEN INDEX - Percentage of oxygen necessary to support combustion of a specified material.

OZ - Abbreviation for ounce.

OZONE - Form of oxygen produced by discharge of electricity into air. Chemical symbol O₂.

P

PAIR - Two insulated wires of a single circuit associated together.

PAIRING - The union of two insulated single conductors through twisting.

PAN CURED - Method of vulcanizing. Coils of unvulcanized insulated wire are coiled in pans and vulcanized under pressure with live steam.

PAP - A commonly used term for air core (unfilled) direct burial telephone cable with a corrugated aluminum shield.

PAPER INSULATED - Insulation used for telephone cable, high voltage cable, and magnet wire. Has high dielectric strength; however, pretty much passe because of better insulations.

PAR - Acronym for **p**recision **a**pproach **r**adar.

PARALLEL CABLE - Two insulated conductors in parallel in a cable.

PATCH CABLE - A power cable with plugs or terminals on each end of the conductor or conductors used to connect equipment.

PATCH CORD - Usually braid covered, with plugs

or terminals on each end. Used to connect jacks or blocks in switchboards or analog programming systems. Called a patch cord because it is used to "patch" a circuit.

P BAND - A band of microwave frequencies. See frequency band.

PBM-109 - Trailing mine cable with an outer sheath of flame-resistant Neoprene®. Cable conforms to requirements of Pennsylvania Bureau of Mines and the Federal Bureau of Mines. Neoprene® is a trademark of the DuPont de Nemours Co.

PBX - Abbreviation for private branch exchange.

PC - Abbreviation for Physical Contact adaptor. In fiber optics, the physical contact refers to connectors which provide back reflections (also referred to as return loss) of less than 30 db. D4 adaptors allow the fibers to be butted together, resulting in a constant index of refraction in the optical transmission path, thereby eliminating most of the reflection. In non-PC adaptors, the fiber cores are brought into close proximity to each other with a small air gap (usually only a few microns) between them.

PCP - A commonly used term for air core (unfilled) direct burial cable with a corrugated copper shield.

PCTFE - Abbreviation for polychlorotrifluorethylene. One of the fluoropolymers which has a high dielectric strength used at temperatures to 250° C.

PE - Abbreviation for polyethylene. A thermoplastic insulation having excellent electrical properties. Also abbreviated as poly and pol.

PEAK VOLTAGE - The maximum voltage reached during an alternation of frequency.

PEF - Abbreviation for polyethylene foam. Also abbreviated as PE Foam.

PE FC - Abbreviation for polyethylene flooding compound.

PE Foam - Abbreviation for polyethylene foam. Also abbreviated as PEF.

PE-III - Abbreviation for clear polyethylene.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

PE-III A - Abbreviation for high molecular weight, black polyethylene, type III A, per MIL-C-17.

PERCENT CONDUCTIVITY - Conductivity of a material expressed as a percentage of that of copper.

PERFLUOROALKOXY - High temperature compound in the fluorocarbon family of dielectrics. Used at temperatures to 250° C. Abbreviation PFA. Also abbreviated as PFA-XII, per MIL-C-17.

PETROL WIRE - Wire insulated to withstand immersion in gas and oil. Usually thermoplastic with or without a nylon jacket.

pF - Abbreviation for picofarad. See picofarad.

PFA - Abbreviation for perfluoroalkoxy resin. See perfluoroalkoxy.

PFA-XIII - Abbreviation for perfluoroalkoxy resin. See perfluoroalkoxy.

PIB - Abbreviation for polyisobutylene, type B, per MIL-C-17.

PIC - A general term for any type of plastic insulated telephone cable.

PICK - The distance between two adjacent crossover points of braid filaments. The measurement in picks per inch indicates the degree of coverage.

PICO - A prefix to a unit, denoting a submultiple of one-trillionth (10^{-12}) of that unit.

PICOFARAD - A unit of measure for capacitance; one-trillionth (10^{-12}) farads. Abbreviation pF.

PIGTAIL WIRE - Fine stranded, extra flexible, rope lay, lead wire.

PIPE TYPE CABLE - Pressure cable. Pressure medium is a loose rigid metal pipe.

PITCH - In flat cable, the nominal distance between the index edges of two adjacent conductors.

PLAIN ENAMEL - Type of magnet wire. Wire is dip coated with a varnish and then baked.

PLANAR - Of, relating to, or lying in a plane; two-

dimensional in quantity.

PLASTICIZER - A chemical agent added to plastics to make them softer and more pliable.

PLATED - Covered with an adherent layer mechanically, chemically, or electrically.

PLENUM - The air return path of a central air handling system, either duct work or open space, over a dropped ceiling.

PLENUM CABLE - Cable approved by Underwriters Laboratories for installation in plenums without the need for conduit. Generally the insulation and jackets are fluorocarbon based materials.

PLSJ - Cord, light duty, all rubber, parallel, two conductor, 300 volt.

PLT - Same as PLSJ except plastic.

PLTC - Abbreviation for parallel tray cable.

P/N - Abbreviation for part number.

PNR - Control cable using polyethylene and nylon on the conductors and PVC jacket.

PO - Rayon parallel lamp cord with a stranded copper conductor, separator, rubber insulation, cotton braid, rayon braid overall. Used in dry places on small appliances.

POL - Abbreviation for polyethylene. Also abbreviated PE and poly. See polyethylene.

POLY - Abbreviation for polyethylene. Also abbreviated PE and pol. See polyethylene.

POLYALKALENE - A polymer, typically polyethylene, made from alkene monomer. Primary insulation compound used in MIL-W-81044.

POLYAMIDE - a) A compound characterized by more than one amide group. b) A polymeric amide (nylon).

POLYCHLOROPRENE - Chemical name for Neoprene®. Used for jacketing wire and cable that will be subject to rough usage, moisture, oil, greases, solvents, and/or chemicals. May also be used as

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

a low voltage insulating material. Neoprene® is a trademark of the DuPont de Nemours Co.

POLYESTER - Any of a group of polymers that consists basically of repeated units of an ester and are used especially in making fibers or plastics. More specifically, polyethylene terephthalate which is used extensively in the production of a high strength moisture resistant film used as a cable core wrap.

POLYETHYLENE - A thermoplastic material, polymerized ethylene. They are basically pure hydrocarbon resins, often with small amounts of other additives to impart needed properties. All members of the polyethylene family are excellent dielectrics. Electrically they are far superior to any other extrudable dielectric in use today. Outstanding electrical properties include high insulation resistance, high dielectric strength, low dielectric constant, low dielectric loss at all frequencies, excellent resistance to cold flow, and good abrasion resistance. One or more members of the polyethylene family also have the following properties: Resistance to sunlight, weather, chemicals, and flame. Polyethylene is widely used for insulation on telephone, signal and control cables, high frequency electronic cables, high voltage and low voltage power cables, line wire, neutral supported secondary and service drop cables. They are suitable for direct earth burial. Temperature ratings vary with type and application from 75° C up. Abbreviation PE, POL, and POLY.

POLYIMIDE - A relatively high temperature plastic developed for use as a dielectric or jacketing material, Kapton®. Usually laminated to FEP and used as heat sealable tape. It does not burn and has high abrasion resistance. Kapton® is a trademark of the DuPont de Nemours Co.

POLYMER - A material of high molecular weight formed by the chemical union on monomers.

POLYOLEFIN - A family of thermoplastics based upon the unsaturated hydrocarbons known as olefins. When combined with butylene or styrene polymers, they form compounds such as polyethylene and polypropylene.

POLYPARAPHENYLENE TEREPHTHALAMIDE - This synthetic has high tensile strength at low weight, low elongation to break, high modulus (structural rigidity), low electrical conductivity, high chemical

resistance, low thermal shrinkage, high toughness (work-to-break), excellent dimensional stability, high cut resistance, flame-resistant, and self-extinguishing properties. Trade name KEVLAR®. KEVLAR® is a trademark of the DuPont de Nemours Co.

POLYPROPYLENE - A thermoplastic polymer of propylene with good electrical characteristics, high tensile strength, and resistance to heat.

POLYSTYRENE - A rigid transparent thermoplastic of good physical and electrical insulating properties used especially in molded products, foams, and sheet materials. Abbreviation PS.

POLYSULFONE - A polymer highly resistant to mineral, acid, alkali, and salt conditions. Good dielectric properties up to 350° F.

POLYTETRAFLUOROETHYLENE - This is modified ETFE, a copolymer of ethylene and tetrafluoroethylene. This is the most thermally stable and chemically resistant carbonaceous insulating compound. It is unaffected by sunlight, moisture, and practically all chemicals. Temperature range is -90° C to 250° C and electrical properties are very constant over the temperature range and a wide range of frequencies. This insulation may be applied by extrusion, taping, dip-coating, and in cases where other material is used, by dispersion coating. Both conventional and ribbon type wires and cables are made as well as magnet wire. This insulation material is used as dielectric, insulation, and extruded jackets. Abbreviation is PTFE. Most common trade name is Teflon®. Teflon® is a trademark of the DuPont de Nemours Co.

POLYURETHANE - Enamel that has excellent moisture resistance, easily soldered, also has excellent winding properties as a magnet wire insulation. Abbreviation PU.

POLYVINYLCHLORIDE - A family of insulating compounds whose basic ingredient is either polyvinylchloride or its copolymer with vinyl acetate, in combination with appropriate plasticizers, stabilizers, fillers, and pigments. Like many other plastic materials, these insulations can be compounded to provide a wide variety of properties for various applications. Among the properties obtained are: Resistance to moisture, cold, heat, flame, oils, solvents, chemicals, and ozone. Electrical properties are adequate for low voltage power applications. Temperature ratings up to

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

105° C are recognized by UL for certain applications. These insulations are widely used for types T and TW building wires, series street lighting cable, machine tool wiring, hook-up and appliance wiring, overhead line wire, control and signal cables, and many others. Known as PVC or Vinyl. Abbreviation PVC.

POLYVINYLIDENE FLUORIDE - VF_2 vinylidene fluoride resin is a crystalline, high molecular weight polymer of VF_2 having high dielectric strength as well as abrasion resistant characteristics. This thermoplastic resin, a fluorocarbon, is characterized by good mechanical, electrical, and chemical properties. In primary insulation and in jackets for multi-conductor cables, it has a temperature range of -80° F to 300° F. This material can be extruded, applied as a film or solution, or by dispersion coating. This compound offers excellent resistance to abrasion and cut-through. Radiation cross-linking provides improved heat resistance. Abbreviation PVDF. Known as Kynar®. Kynar® is a trademark of the Pennwalt Corporation.

PORTABLE POWER CABLE - Extra flexible, all rubber insulated to allow hard usage. Some cables have additional protection of shielded conductors, metallic or nonmetallic, and can have Neoprene® sheath overall. Neoprene® is a trademark of the DuPont de Nemours Co.

POTENTIAL DIFFERENCE - The difference in electric potential between two points, equal to the line integral of the electric field strength between points. If a charge is moved from one to the other of the points by any path, the work done is equal to the product of the potential difference per unit length.

POTTING - The sealing of a cable termination or other component with a liquid which thermosets into an elastomer making the joint moisture proof or air tight.

POWER CABLE - A cable of various sizes, various constructions, and insulations used to supply power to a variety of types of equipment.

POWER FACTOR - The ratio of resistance, **R**, to impedance, **Z**. The ratio of the actual power of an alternating current to apparent power. Mathematically, the cosine of the angle between the voltage applied and the current resulting.

POWER FREQUENCY - The frequency at which

domestic and industrial mains electricity is supplied and distributed. In the U.K. the standard value is 50 hertz; in the U.S. it is 60 hertz.

POWER LINE - See transmission line.

POWER RATING - AC voltage that can be applied between adjacent conductors.

POWER RATIO - The ratio of power appearing at the load to the input power. Expressed in db, it is equal to $10 \log_{10} (P_1/P_2)$ where P_1 is input power and P_2 is the power at the load.

PPE - Abbreviation for polypropylene ethylene.

PRESSURE CABLE - Oil impregnated, paper insulated conductors. Lead or steel pipe outer covering, in which positive pressure is constantly maintained. Has higher dielectric strength, greater insulation stability, increased current-carrying capacity, and saves space.

PRICE'S GUARD WIRE - A wire conductor used to prevent surface leakage current associated with an insulator from reaching the measuring instrument during determination of insulation resistance, particularly of cables.

PRIMARY INSULATION - The first layer of non conductive material applied over a conductor, whose prime function is to act as electrical insulation.

PRIMARY VOLTAGE - Initial or main voltage.

PROP. - Abbreviation for propagation.

PROPYLENE - A flammable gaseous hydrocarbon C_3H_6 obtained by cracking petroleum hydrocarbons.

PS - Abbreviation for polystyrene. See polystyrene.

psi - Abbreviation for pounds per square inch.

PS TAPE - Nonmetallic shielding, very flexible. Remains in positive contact with insulation. Prevents formation of air gaps between conductor and insulation.

PTFE - Abbreviation for polytetrafluoroethylene. See

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

polytetrafluoroethylene. Most common trade name is Teflon®. Teflon® is a trademark of the DuPont de Nemours Co.

PU - Abbreviation for polyurethane. See polyurethane.

PUFF - Colloquial term for one picofarad. See picofarad.

PULLING EYE - A device on the end of a cable to which a pulling line is attached for pulling the cable into a conduit or duct.

PULSE CABLE - Type of coaxial cable with or without a magnetic core constructed to transmit repeated high voltage pulses without degradation. Usually multi-shielded.

PULSE COMMUNICATIONS - Telecommunications involving the transmission of information by means of pulse modulation. Pulse communication is used in systems that operate by means of time-division multiplexing.

PUNCTURE VOLTAGE - The value of voltage that causes an insulator to be punctured when it is subjected to a gradually increasing voltage.

PUT UP - Packaging of finished wire or cable.

PVC - Abbreviation for polyvinylchloride. See polyvinylchloride.

PVC-I - Abbreviation for black polyvinylchloride, contaminating, type I, per MIL-C-17.

PVC-II - Abbreviation for gray polyvinylchloride, contaminating, type II, per MIL-C-17.

PVC-IIA - Abbreviation for black polyvinylchloride, contaminating, type IIA, per MIL-C-17.

PVC-IV - Abbreviation for black polyvinylchloride, contaminating, type IV, per MIL-C-17.

PVC-105° C - Specially compounded high temperature polyvinylchloride.

PVD - Abbreviation for polyvinylidene fluoride, Kynar®. Also abbreviated PVDF. See polyvinylidene fluoride. Kynar® is a trademark of the Pennwalt Corporation.

PVDF - Abbreviation for polyvinylidene fluoride, Kynar®. Also abbreviated PVD. See polyvinylidene fluoride. Kynar® is a trademark of the Pennwalt Corporation.

Q

Q BAND - A band of microwave frequencies. See frequency band.

QPL - Abbreviation for Qualified Products List issued by a United States Government Agency.

QUAD - A four conductor cable.

R

R - a) Symbol for resistance (see resistance) or resistor. b) 600 volt copper conductor stranded or solid, rubber insulated, cotton braid (rubber filled tape 6 AWG and larger). Cotton braid saturated with moisture resisting, flame-retarding compound smoothly finished. Used for power wiring. c) Abbreviation for riser.

RAD - The unit of measure for a radiation dose which is absorbed, equal to 0.01 joule per kilogram.

RADAR - Acronym for **radio detecting and ranging**. A system that measures distances and usually the direction to an object by determining the amount of time required for electromagnetic energy to travel to and return from the object.

RADIO - A general term, principally an adjective, applied to the use of electromagnetic waves between 10 KHz and 3 GHz and, in particular, their transmission through space.

RAM EXTRUDER - Wire making machinery for pressure and heat extruding PTFE insulation over a conductor. A predetermined amount of cylindrical shaped molded PTFE powder is placed in a cylinder chamber. A ram is pushed through the cylinder by a jack screw, forcing the PTFE through an orifice or tip through which the conductor is moving and forms a homogeneous tube of insulation around

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



the conductor. The unsintered insulated wire is then passed through a curing oven to complete the process. The limitation of a ram extruder is the size of the slug of preformed PTFE powder. Since it is of constant size, when the slug is exhausted it is the end of the run. It cannot be continuously fed. As the diameter increases, the maximum length of wire to be covered decreases.

RATED TEMPERATURE - The maximum temperature at which an electric component can operate for extended periods without loss of its basic properties.

RATED VOLTAGE - The maximum voltage at which an electric component can operate for extended periods without undue degradation or safety hazard.

REACTANCE - The part of the total impedance of a circuit not due to pure resistance, measured in ohms. Symbol X . It is the imaginary part of the complex impedance, Z given by:

$$Z = R + iX$$

where R is resistance, X is reactance and i equals $\sqrt{-1}$.

Reactance is due to the presence of capacitance or inductance in a circuit. The effect of reactance is to cause the voltage and current to become out-of-phase.

RECEIVER - A detector and electronic circuitry to change optical signals to electrical signals.

REEL - Circular container on which wire is wound for storage or transit, usually made of wood or metal.

REFLECTION LOSS - The part of a signal which is lost due to reflection of power at a line discontinuity.

REFLOW SOLDERING - The process of connecting two solder coated conductive surfaces by remelting of the solder to cause fusion.

REFRACTIVE INDEX - The ratio of the speed of light in a vacuum to the speed of light in a material. Also called Index of Refraction.

REFRACTION - Deflection from a straight path undergone by a light ray or energy wave in passing obliquely from one medium (as air) into another (as glass) in which its velocity is different.

REPEATER - A device that receives signals in one circuit and automatically delivers corresponding signals to one or more other circuits, usually amplifying the signal.

RESIN - A solid or semi-solid organic substance, originally of plant origin but largely synthesized now. It may be clear, yellowish, or brown, ranging from transparent to translucent; typically a nonconductor of electricity and soluble in organic solvents but not in water. Consequently, resins are widely used in insulating, potting, and encapsulating. Resins are broadly classified as thermoplastic or thermosetting according to whether they soften or harden with the application of heat.

RESISTANCE - The tendency of a material to resist the passage of an electric current and to convert electrical energy into heat energy. Symbol R . It is the ratio of the applied potential difference across a conductor to the current flowing through it (see Ohm's law). If the current is an alternating current, the resistance, measured in ohms, is the real part of electrical impedance, Z , given by the formula:

$$Z = R + iX$$

where i equals $\sqrt{-1}$ and X is the reactance.

RESISTANCE WIRE - Wire constructed from a material, such as Nichrome® or constantan, that has a high resistivity and low temperature coefficient of resistance. It is used for accurate wire-wound resistors. Nichrome® is a trademark of the Driver Harris Company.

RESISTIVITY - An intrinsic property of a material equal to the resistance per unit length and unit cross sectional area. Reciprocal of conductivity. The lower the resistivity of a material the better conductor it is. Materials can be classified as conductors, semi-conductors, or insulators according to their resistivity. Conductors have a resistivity of 10^{-6} to 10^{-8} ohms per meter, semi-conductors have a resistivity of 10^{-6} to 10^{-7} ohms per meter, and insulators have a resistivity of 10^{-7} to 10^{-23} ohms per meter.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



RESPOOL - To rerun material from one package spool to another for various purposes, such as to verify lengths, inspect for defects, or to a specified packaging by customer.

RETRACTILE CORD - A cord in which the insulation and/or jacket has been specially treated so that it will return to its original contracted form from an extended condition.

REV. - Abbreviation for revision.

RF - a) Abbreviation for radio frequency. b) Tinned copper conductors, rubber insulation, cotton braid saturated with moisture resisting, flame-retarding compound, smoothly finished in white, black, red, green, blue, and yellow for identification. The lubricated surface finish of the wire permits easy pulling through conduits.

RF CONNECTOR - Connector used for connecting or terminating coaxial cable.

RFI - Abbreviation for radio frequency interference.

RG - Abbreviation for Radio Frequency (Government). Prefix for many coaxial cables.

RHRW - Tinned copper conductors, rubber insulation, saturated braid, flame and moisture resistant finish for moist locations.

RHW - 75° C rubber insulated. Heat and moisture resistant insulation with an outer cover of moisture resistant, flame-retardant and a nonmetallic covering. Generally used in wet locations.

RIBBON CABLE - A flat cable with individually insulated conductors processed together in a parallel position. Conductors may be all in one color, or each individual conductor may be of a different color.

RIDGE MARKER - One or more ridges running laterally along the outer surface of plastic wire for purposes of identification.

RIGID COAXIAL CABLE - Non flexible coaxial cable, usually a metal tube armored coaxial cable.

RIGID WAVEGUIDE - A type of coaxial cable. A metal form (usually an extrusion) using air as a dielectric.

RIM Helix - Abbreviation for resin insulated magnet wire.

RIP CORD - A parallel construction of two or more insulated conductors which may be easily separated leaving the insulation of the conductors undisturbed.

RISER - A UL designation for cable approved to go from one floor to another floor in a multistory building.

RMS - Abbreviation for Root Mean Square. It is a means of expressing AC voltage in terms of DC. It is approximately 80% of AC peak voltage.

ROENTGEN - The amount of radiation that will produce one electrostatic unit of ions per cubic centimeter volume.

RoHS - RoHS is the acronym for Restriction of Hazardous Substances. RoHS, also known as Directive 2002/95/EC, originated in the European Union and restricts the use of specific hazardous materials found in electrical and electronic products. All applicable products in the EU market after July 1, 2006 must pass RoHS compliance. For the complete directive, see Directive 2002/95/EC of the European Parliament. The substances banned under RoHS are lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (CrVI), polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE).

ROPE LAY STRAND - A conductor made of multiple groups of filaments. A 7 x 19 rope lay strand has 19 wires laid into a group and then 7 such groups laid cabled into a conductor.

RR - An all rubber nonmetallic underground cable suitable for direct burial in the earth or in conduit. It has heat and moisture resistant insulation and an outer Neoprene® jacket. Neoprene® is a trademark of the DuPont de Nemours Co.

RUB - Abbreviation for rubber.

RUBBER MOLD - A metal mold containing a cavity that will give the desired form or part. The part is made by placing uncured rubber or synthetic compound in the cavity and curing under heat and pressure.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



S

S - a) Abbreviation for silver-plated copper. Also abbreviated as SPC. b) 600 volt senior service rubber insulated portable cord. 18 AWG two conductor through 6 AWG four conductor.

2S - Abbreviation for silver-plated copper double shield.

SA - a) Abbreviation for silver-covered alloy. b) Nomenclature for silicone rubber insulation with high temperature barrier or glass overall for use up to 125° C.

S BAND - A band of microwave frequencies. See frequency band.

SC - Abbreviation for silver-covered copper. Also abbreviated as SCC.

2SC - Abbreviation for two silver-plated copper shields.

SCB - Abbreviation for silver-plated cadmium bronze. Also abbreviated as SCCad Br.

SCBerC - Abbreviation for silver-covered beryllium-copper alloy.

SCC - Abbreviation for silver-covered copper. Also abbreviated as SC.

SCCA - Abbreviation for silver-covered copper-clad aluminum. Also abbreviated SCCAL.

SCCad Br - Abbreviation for silver-covered cadmium bronze. Also abbreviated as SCB

SCCAL - Abbreviation for silver-covered copper-clad aluminum. Also abbreviated SCCA.

SCCS - Abbreviation for silver-covered copper-clad steel. Also abbreviated as SCS.

SCHSCA - Silver-coated high strength copper alloy.

SCPE - Semi-conducting polyethylene.

SCS - Abbreviation for silver-covered copper-clad steel. Also abbreviated as SCCS.

SCW - Abbreviation for silver-plated Copperweld® conductor. Copperweld® is a trademark of the Copperweld Steel Company.

SD - Abbreviation for soft drawn (annealed).

SECONDARY INSULATION - A high resistance dielectric material which is placed over primary insulation to protect it from abrasion.

SECTOR STRAND - A group of wires laid in triangular shape with rounded corners, for use as one conductor of a three conductor cable with 120° angle between faces, and with 90° angle for a four conductor cable.

SEGMENTAL CONDUCTOR - In single conductor cables one million (1,000,000) CM or more, the conductors are divided into three or four segments, insulated from each other by paper tapes, to reduce current resistance in AC circuits.

SELENIUM CURE - Process used in curing Neoprene® and rubber jacketed wires and cables. The process makes a dense, tough, durable jacket. Neoprene® is a trademark of the DuPont de Nemours Co.

SELF-EXTINGUISHING - The characteristic of a material whose flame is extinguished after the igniting flame is removed.

SELF-SUPPORTING AERIAL CABLE - A cable consisting of one or more insulated conductors assembled or cabled with a steel core or attached to a separate steel cable, which supports the weight of the cable. It may be from pole to pole or in a vertical position on a tower.

SELF-SUPPORTING CABLE - A cable with a steel support strand capable of supporting the cable weight across spans.

SEMI-CONDUCTING JACKET - A jacket having a sufficiently low resistance so that its outer surface can be kept at substantially ground potential by a grounded conductor in contact with it at frequent intervals.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

SEMI-CONDUCTOR - Any of a class of solids whose electrical conductivity is between that of a conductor and that of an insulator in being nearly as great as that of a metal at high temperatures and nearly absent at Low temperatures.

SEMI-RIGID - Rigid to some degree or in some part.

SEMI-TIGHT BUFFER - Type of optical fiber cable construction where each fiber is loosely surrounded by a protective coating to a diameter of 900 microns.

SEPARATOR - Layer of insulating material between: (a) Conductors and insulation; and (b) Between cable components and jacket.

SERVING OF A CABLE - A serve is a separator applied directly over the conductor. The serve may consist of one or a combination of materials such as paper, cotton, silk, nylon, or rayon. These materials may be applied spirally or laterally.

SF - Fixture wire, silicone rubber insulated. Can be solid or stranded.

SFF - Same as SF but in flexible grade stranding.

SH-A - Portable power cable, commonly known as shovel cable, Neoprene® jacket, usually three or four conductors individually shielded. Cable rated 5 kV. Neoprene® is a trademark of the DuPont de Nemours Co.

SH-B - Similar to SH-A except shield over all conductors.

SH-C - Similar to SH-B except with grounds.

SH-D - Similar to SH-A except with grounds.

SHEATH - The outer covering or jacket over the insulated conductors to provide mechanical protection for the conductors.

SHF - Abbreviation for super high frequency. See frequency band.

SHIELD - In cables, a metallic layer placed around a conductor or group of conductors to prevent electrostatic or electromagnetic interference between the enclosed wires and external fields.

SHIELD COVERAGE (PERCENTAGE) - The physical area of a cable that is actually covered by the shielding material and is expressed in percent.

SHIELDED CONDUCTOR - An insulated conductor which has been shielded by a copper braid or tape, aluminum foil, copper foil, or a semi-conductive vinyl. The purpose is to confine the electrical field.

SHIELDED MULTI-CONDUCTOR CABLE - A cable with a multiplicity of conductors with a metallic or nonmetallic shield over the cable core.

SHORTS - Less than standard lengths of wire or cable which are generated by making cuts for special orders, i.e., remnants.

SHRINK TUBING - A thermoplastic tube, when heated, shrinks and cures to a smaller diameter. Used to seal joints, etc.

SHUNT WIRE - A conductor joining two parts of an electric circuit to divert part of the current.

SIGNAL - A current used to convey information, either digital, analog, audio, or video.

SIGNAL CABLE - A cable designed to carry current of less than 1 ampere per conductor.

SIGNAL GENERATOR - A device used to furnish current at a known frequency, modulated, and to deliver a measured voltage only at the terminals of the generator without appreciable radiation at any other point.

SIGNAL-TO-NOISE RATIO - At any point in an electronic circuit, device, or transmission system, the ratio of one parameter of a desired signal to the same or corresponding parameter of the noise. In broadcast communication the signal-to-noise ratio is often quoted in decibels and the noise parameter taken as its root mean square value.

SIL/DAC-VI - Abbreviation for Dacron braid over silicon rubber, Type VI, per MIL-C-17.

SILICONE - A thermoplastic elastomer insulation with excellent heat resistance.

SILICONE IMPREGNATED - The complete saturation of insulating tapes or braids with a silicone varnish

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



compound. The process may be performed under a vacuum. The compound serves as a heat and flame-retardant as well as a binder.

SIMPLEX CABLE - A single fiber optical cable.

SINGLE-MODE FIBER - An optical waveguide in which only one mode propagates due to its small core diameter of approximately 9 microns.

SINTERED - Usually refers to curing of PTFE. To cause to become a coherent mass by heating without melting. .

SIS - XLP (cross-linked polyolefin) switchboard wire.

SJ - 300 volt junior service rubber insulated UL approved portable cord, rubber jacket. 18 AWG two conductor through 16 AWG four conductor.

SJO - 300 volt junior service rubber insulated UL approved portable cord, Neoprene® jacket. Neoprene® is a trademark of the DuPont de Nemours Co.

SJT - 300 volt junior service vinyl insulated UL approved portable cord, vinyl jacket.

SJTO - 300 volt. Same as SJO except all thermoplastic construction.

SKELETON BRAID - Widely separated braid of fiber, copper, or steel may be used to hold core together, for reinforcing jacket or for shielding.

SKIN EFFECT - In an alternating current system, a phenomenon that occurs at increased frequencies causing an increase in resistance of the conductor causing the outer skin to carry most of the current. The phenomenon increases in intensity the higher the frequency.

SLEEVEING - A braided, knitted, woven tube.

SNCCS - Abbreviation for silver-covered nickel-covered copper-clad steel.

SO - A 600 volt senior service Neoprene® jacket UL approved portable cord; 18 AWG two conductor through 10 AWG four conductor. Neoprene® is a trademark of the DuPont de Nemours Co.

SOLDER - A metal or metallic alloy used when melted to join metallic surfaces; an alloy of lead and tin so used.

SOLDERABLE NYLON LITZ - Litz wire made up of soldereze strands with a nylon serve overall.

SOLDEREZE - Magnet wire insulated with polyurethane base enamel.

SOLID CONDUCTOR - A conductor composed of one wire. Generally 18 AWG through 6 AWG, used where flexibility is not required.

SONAR - Acronym from **sound navigation ranging**. A method of detecting and locating underwater objects by transmitting a pulse of sound energy, usually ultrasonic, then measuring the return "reflected" echo.

SP-1 - Lamp cord, parallel, all rubber, two conductor, 300 volt.

SP-2 - Similar to SP-1 except heavier insulation.

SP-3 - Similar to SP-1 except heavier insulation, also may have a ground.

SPACE FACTOR - Given values in coil winding for amount of space available.

SPARK TEST - A test given to wire or cable to determine if there are defects in the insulation. A semi-destructive test, in that it will find weak spots in insulation by a spark breaking through thin spots or pinholes in the jacket when a high voltage potential from the conductor to an outside source is applied. Where these sparks emanate, the cable is cut, thus shortening the cable. This test should only be run once on a wire or cable.

SPC - Abbreviation for silver-plated copper. Also abbreviated as S.

SPECIFIC GRAVITY - The ratio of the density (mass per unit volume) of a material to that of water.

SPECIFIC INDUCTIVE CAPACITY - Dielectric constant of insulating material. Abbreviated as K, SK, SIC.

SPHINCTER RING - A high ratio heat shrinkable strain relief grommet that can be placed over the

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

cable assembly after the assembly is fabricated.

SPIRAL SHIELD - A metallic shield of fine stranded wires applied spirally rather than braided.

SPIRAL WRAP - The helical wrap of a material over a core.

SPLICE - A permanent joint between two optical waveguides.

SPOOL - Circular container on which wire is wound for storage or transit, usually made of plastic, paper, or metal.

SP SHIELD - Abbreviation for silver-plated shield.

SPT-1 - Same as SP-1 except in plastic.

SPT-2 - Same as SP-2 except in plastic.

SPT-3 - Same as SP-3 except in plastic.

sq. - Abbreviation for square.

SR - Abbreviation for silicone rubber insulated cable, 600 volt.

SRAW - Abbreviation for silicone rubber insulated, overall glass braid, with nickel-plated copper conductor, flexible stranding, 600 volt.

SRL - Abbreviation for structural return loss.

SRML - Abbreviation for silicone rubber motor lead.

SS - Abbreviation for stainless steel.

SSC - Abbreviation for silver-covered strip.

SSPE - Abbreviation for semi-solid polyethylene. Also abbreviated as SS poly.

SS Poly - Abbreviation for semi-solid polyethylene. Also abbreviated as SSPE.

SSPS - Abbreviation for semi-solid polystyrene.

SSTFE - Abbreviation for semi-solid tetrafluorethylene, TFE.

SSTUBE - Abbreviation for stainless steel tube.

ST - Same as SJT, except 600 volt.

STABILITY FACTOR - The difference between the percentage power factor at 80 volts/mil and at 40 volts/mil measured on wire immersed in water at 75° C for a specific time.

STANCOTE® - Standard Wire & Cable Co. trade name for plastic insulated wire.

STANDING WAVE RATIO - In a transmission line, waveguide or analogous system, a figure of merit used to express the efficiency of the system in transmitting power, specifically taking into account the mismatch between source, line, and load. The standing wave ratio **S** is given by the formula:

$$S = V_{\max} / V_{\min} = I_{\max} / I_{\min}$$

In an ideally matched system, **S**=1 indicating the presence of a pure traveling wave and no reflected power. As the proportion of power reflected increases, **S** approaches infinity, which value would indicate a pure standing wave.

STANFLEX® - Standard Wire & Cable Co. trade name for rubber jacketed portable cords and cables.

STATIC - Disturbing effects produced in a radio, telephone, or television receiver by atmospheric or various natural or man-made electrical disturbances.

STATIONARY DUTY - See continuous duty.

STEP INDEX - In fiber optics the refractive index profile characterized by a uniform refractive index within the core and a sharp decrease at the core cladding interface. It usually refers to a multi-mode fiber.

STRAND - A single uninsulated wire.

STRANDED CONDUCTOR - A conductor made with a specified number of strands. Rope lay strand, for example, is a conductor made of multiple groups of strands (filaments). A 7 x 19 rope lay strand has 19 wires laid into a group and then seven such groups cabled laid into a conductor.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

STRENGTH MEMBER - Included in a cable configuration for purposes of adding tensile strength only. Does not conduct any power or signal.

STRIP INSULATIONS - Strip process insulation consists of one or more longitudinal strips of unvulcanized thermosetting material folded around a conductor and vulcanized after application.

SUBMARINE CABLE - Cable used underwater from one point to another for power or communication. Lead sheath and/or rubber jacket.

SUBSTRATE - Insulating material of a printed circuit.

SUGGESTED WORKING VOLTAGE - Usually refers to the AC voltage that can be applied between adjacent conductors.

SUPER HIGH FREQUENCY - See frequency band.

SUSCEPTANCE - Symbol B . The imaginary part of the admittance, Y , which is given by:

$$Y = G + iB$$

where G is the conductance and i equals $\sqrt{-1}$. For a circuit containing both resistance, R , and reactance, X , the susceptance is given by:

$$B = -X / (R^2 + X^2)$$

SV - Vacuum cleaner cord 18/2, 300 volt, light duty rubber, portable.

SVO - Same as SV except with Neoprene® jacket. Neoprene® is a trademark of the DuPont de Nemours Co.

SVT - Same as SV except non marking plastic jacket.

SWEEPTTEST - A method to determine the frequency response of a cable by generating an RF voltage whose frequency is varied at a rapid constant rate over a given range. A test commonly made on coaxial cables.

SWEPT COAX - Coaxial cable which has been checked by the sweep test and certified by the manufacturer.

SWITCHBOARDWIRE - High temperature insulated wire such as TA or AVB, used to wire switchboards and control apparatus. It is heat, flame, and corrosive vapor resistant.

SYN. RUB. - Abbreviation for synthetic conductive rubber.

SYNTH - Abbreviation for synthetic.

T

T - The old UL designation for switchboard wire insulated with thermoplastic lead wire.

TA - The UL designation for switchboard wire insulated with thermoplastic and a high temperature barrier.

TAGT - Stranded nickel-clad copper conductor insulated with fused PTFE tape, high temperature barrier, and PTFE impregnated glass braid. 600 volt, 250° C rating.

TANKTEST - A voltage dielectric test in which the test sample is submerged in water and voltage is applied between the conductor and water as ground.

TC - a) Abbreviation for tinned copper. b) Type TC power and control tray cable.

2TC - Abbreviation for tinned copper double shield.

3TC - Abbreviation for tinned copper triple shield.

4TC - Abbreviation for tinned copper quadruple shield.

TCCS - Abbreviation for tinned copper-clad steel.

TCW - Abbreviation for tinned Copperweld®. Copperweld® is a trademark of the Copperweld Steel Company.

TEFLON® - Teflon® is DuPont de Nemours Co.'s trade name for their family of fluorocarbon resins including Teflon® TFE (tetrafluoroethylene), Teflon®

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



FEP (fluorinated ethylene propylene), and Teflon® PFA (perfluoroalkoxy). See tetrafluoroethylene and perfluoroalkoxy.

TEFLON® IMPREGNATED - Refers to the saturation of a heat resistant fibrous glass braid with Teflon® suspension. After saturation, the Teflon® is cured. Teflon® is a trademark of the DuPont de Nemours Co.

TEFZEL® - Trademark of the DuPont de Nemours Co. Abbreviation ETFE. See ethylene tetrafluoroethylene.

TELEMETRY CABLE - Cable used for the transmission of information from instruments to the peripheral recording equipment.

TELEPHONE WIRE - This is a general term referring to many different types of communication wire. It refers to a class of wires and cables rather than a specific type.

TELLURIUM CURE - A curing process similar to selenium cure, except a different element is used.

TEMP. - Abbreviation for temperature.

TEMPERATURE COEFFICIENT OF RESISTANCE - The amount of resistance change of a material per degree of temperature change.

TEMPERATURE RATING - The maximum temperature at which an insulating material may be used in continuous operation without loss of its basic properties.

TENSILE STRENGTH - The pull stress required to break a given specimen. In fiber optics, the maximum allowed pulling force until a specific attenuation is reached. The stated value is short-term.

TERMINAL - Any fitting used for making a convenient electrical connection.

TEST LEAD - A flexible, insulated lead wire which usually has a test probe on one end. It is ordinarily used for making temporary electrical connections. The insulation normally is rubber, the standard colors are red and black.

TEST REPORTS - The permanent records made by a wire manufacturer of the tests performed on a

batch of wire to a specification.

TETRAFLUOROETHYLENE - A fluorocarbon resin. Abbreviation TFE.

TEW - Nomenclature for appliance wire by Canadian Standards Association (CSA), plastic insulated, solid or stranded conductor, 600 volt.

TEXTILE BRAID - Any braid made from threads of cotton, silk, or synthetic fibers.

TF - The UL designation for fixture wire, solid soft copper conductor, insulated with thermoplastic lead wire.

TFE - Abbreviation for tetrafluoroethylene.

TFF - Same as TF, except stranded copper conductor.

TG - PTFE tape with overall glass braid, stranded nickel-clad copper conductor.

TGGT - Flexible stranded nickel-coated copper conductor with PTFE tapes, covered by wrapped fiberglass yarns. A fiberglass braid jacket is applied over insulation and is treated with high-temp saturant. 600 volt, 250° C rating.

THERMAL RATING - The maximum and/or minimum temperature at which a material will perform its function without undue degradation.

THERMAL RESISTANCE - The resistance of a substance to conductivity of heat.

THERMAL SHOCK - A test to determine the ability of a material to withstand heat and cold by subjecting it to rapid and wide changes in temperature.

THERMOCOUPLE - A union of dissimilar metals in which a voltage is generated due to a change in temperature. The voltage is usually in micro or milli volts.

THERMOCOUPLE EXTENSION - Same as thermocouple lead wire.

THERMOCOUPLE LEAD WIRE - An insulated pair of wires used from the couple to a junction box or to the recording instrument.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

THERMOCOUPLE WIRE - Wire drawn from special metals or alloys and calibrated to established specifications such as for the U.S. Bureau of Standards or Instruments Society of American standards.

THERMOPLASTIC - A material which softens when heated and becomes firm on cooling.

THERMOSET - A material which hardens or sets when heat is applied, and which, once set, cannot be re-softened by heating. The application of heat is called "curing".

THERMOSTAT WIRE - Single or multi-conductor wire, bare soft solid copper conductor, usually PVC insulated. May be twisted and/or jacketed. May have enameled or nylon covered conductors and may have a metal armor covering. May also have a high temperature barrier insulation. It is used to transmit electrical signals between the thermostat and the heating or cooling unit.

THHN - Building wire, plastic insulated, 90° C, 600 volt, nylon jacket. Used in dry locations.

THINNET - RG58 type coaxial cable used in local area network configurations.

THW - Building wire, plastic insulated, heat, flame, and moisture resistant, 75° C.

THWN - Same as THW with overall nylon jacket. Used in dry and wet locations.

TIGHT BUFFER - Type of fiber optic cable construction where each fiber is tightly buffered by a protective thermoplastic coating to a diameter of 900 microns.

TINNED COPPER - Tin coating added to a copper conductor or braid to aid in soldering and inhibit corrosion. Abbreviated as TC.

TINSEL CORD - Extra flexible cord made with tinsel conductors to give the ultimate in flexibility. Used mostly in the communications field on headsets, handsets, and anywhere that repeated flexibility is necessary.

TINSEL WIRE - A low voltage, stranded wire in which each strand is very thin copper ribbon spirally wrapped around a textile yarn. Insulation is generally

a textile braid. Intended for use where severe flexing is expected.

TOKEN RING - A star-wired ring architecture used for computer LAN data communications.

TOLERANCE - a) The allowable deviation from a standard especially the range of variation permitted in maintaining a specified dimension in machining a piece; or b) The variance between the quantity ordered and the quantity shipped, generally accepted in the wire industry to be plus or minus 10%.

TOPCOAT - Bare (untinned) copper wire, stranded, then coated with pure tin.

TPDDI - Abbreviation for twisted pair distributed data interface.

TPE - A highly flexible jacket material of thermoplastic elastomer.

TP-PMD - Abbreviation for twisted pair physical medium dependent.

TR - Abbreviation for (certified) test reports. See certified test reports

TRACER STRIPE - When color coding is accomplished by more than one stripe on the same wire. The first stripe, or widest, is called the base stripe, the others, usually narrower, are called tracer stripes.

TRANSFER MOLD - A type of rubber mold. The term derived from the method used of moving the compound into the cavity of the mold. The compound is forced or transferred by pressure, from a cavity in the top of the mold through sprues, into the lower section.

TRANSFORMER - A device for transferring electrical energy in an AC circuit by means of electromagnetic induction. Each circuit is represented by a winding around a common magnetic core, the ratio of the voltage in the two circuits being (in an ideal transformer) equal to the ratio of the number of turns. From Ohm's Law and the Conservation of Energy Principle, it follows that (except for losses) the product of current and voltage is the same in both circuits.

TRANSMISSION LINE - Synonymous with power line. One or more insulated conductors arranged to

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

transmit electrical energy signals from one locality to another.

TRANSMITTER - A driver and a source used to change electrical signals to optical signals.

TRAPWIRE - A low voltage wire used at hinge points, where severe flexing occurs, usually in burglar alarm systems. It is made with tinsel conductor to withstand the repeated flexing.

TRAY - A metal raceway for holding cable.

TRAY CABLE - A factory assembled multi-conductor control, signal, and power cable specifically approved under the NEC for installation in trays.

TRIAD - A group of three insulated conductors twisted together with or without a sheath overall. Usually color coded for identification. Also called a triplex.

TRIAxIAL - Refers to a three conductor cable with one conductor in the center, a second circular conductor concentric with the first, and a third circular conductor insulated from and concentric with the first and second, usually with insulation, and a braid or impervious sheath overall.

TRIBOELECTRIC NOISE - Noise generated in a shielded cable due to variations in capacitance between shielding and conductor as the cable is flexed.

TRIPLEX - A group of three insulated conductors twisted and/or sheathed or held together mechanically. Usually color coded or ridge marked. Also called triad.

TUBING - A tube of extruded non supporting plastic or metallic material.

TV - Abbreviation for Television. The transmission of images by means of radio waves or wires.

TV CAMERA CABLE - A portable, flexible cable consisting of several coaxial cables and other conductors cabled together, overall shield and usually Neoprene® jacketed. It is used to carry signals between the camera and transmitter and plate and heater currents to the camera. Neoprene® is a trademark of the DuPont de Nemours Co.

TW - The UL designation for thermoplastic insulated wire for use in conduit, underground, and wet locations. It is a common building wire having a bare soft copper conductor, which may be either solid or stranded.

TWINAX - A shielded coaxial cable with two central conductors. Also called twinaxial.

TWINAXIAL - A shielded coaxial cable with two central conductors. Also called twinax.

TWIN CABLE - A pair of insulated conductors of 8 AWG or larger, twisted or laid parallel and/or sheathed or held together mechanically under a common covering.

TWIN WIRE - A pair of insulated conductors of 9 AWG or smaller, twisted or bonded together and not identifiable from each other.

TWISTED PAIR - Two insulated conductors twisted together without a common covering.

U

UF - Single or multi-conductor, with or without ground, used for direct burial underground feeders and branch circuits between buildings, yard lights, floodlights, and similar installations.

UG - The two letter designation that proceeds the number on connectors for coaxial cable. It means Universal Government.

UHF - Abbreviation for ultra high frequency. See frequency band.

UL - Abbreviation for Underwriters Laboratories Inc. A nonprofit organization that maintains and operates laboratories for the examination and testing of devices, systems and materials relative to life, fire and casualty, hazards, and crime prevention. Founded in 1894, the enterprise is sponsored by the National Board of Fire Underwriters.

UL APPROVED - A product that has been tested and approved to Underwriters Laboratories standards.

ULTRA HIGH FREQUENCY - See frequency band.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Abbreviation UHF.

UNBALANCED CIRCUIT - A transmission line in which voltage on the two conductors are unequal with respect to ground, e.g., a coaxial cable.

UNILAY CONDUCTOR - A central core surrounded by one or more concentric layers of helically wound strands in a fixed geometrical arrangement with the direction of lay the same for each layer and the central core.

UNSINTERED - Means uncured. This word is usually used to differentiate between cured and uncured PTFE tape.

UNSWEPT - Coaxial cable that has not had an attenuation check (sweep test).

URC - Nomenclature for weatherproof wire.

USASI - Abbreviation for United States of American Standards Institute. Superseded ASA and in turn was superseded by ANSI.

USE - Neoprene® jacketed underground service entrance cable. Neoprene® is a trademark of the DuPont de Nemours Co.

UTP - Abbreviation for unshielded twisted pair.

UV - Abbreviation for ultraviolet.

V

V - Abbreviation for voltage. See voltage.

VA - Abbreviation for volt-ampere. A designation of power in terms of volts and amperes.

V BAND - A band of microwave frequencies. See frequency band.

VEL. - Abbreviation for velocity.

VELCRO® - Set of nylon strips of interlocking barbs on one strip and hooks on another that can be fastened and unfastened repeatedly. Velcro® is a trademark of the Velcro Industries B.V.

VELOCITY OF PROPAGATION - Is the ratio of the speed of an electric signal down a length of cable compared to the speed of light in free space. All insulated cables have this ratio and it is expressed in percentage. It is the reciprocal of the square root of the dielectric constant of the cable insulation. For example, in the case of coaxial cables with polyethylene dielectric, this ratio is 65% to 66%.

VERTICAL RISER CABLE - Steel wire armored power cable for vertical runs in a building.

VERY HIGH FREQUENCY - See frequency band. Abbreviation VHF.

VERY LOW FREQUENCY - See frequency band. Abbreviation VLF.

VHF - Abbreviation for very high frequency. See frequency band.

VIDEO PAIR CABLE - A transmission cable containing low loss pairs with an impedance of 125 ohms. Used for TV pick ups, closed circuit TV, telephone carrier circuits, etc.

VITON® - A synthetic family of elastomer for high performance jacketing material. It possesses very good resistance to chemicals, heat, fire, and good mechanical properties. Viton® is a trademark of DuPont Dow Elastomers.

VLF - Abbreviation for very low frequency. See frequency band.

VOLT - A unit of measure of electromotive force. One volt is the amount of pressure that will cause one ampere of current in one ohm of resistance. Abbreviation V.

VOLTAGE - The term most often used in place of electromotive force, potential, potential difference, or voltage drop to designate the electric pressure that exists between two points and is capable of producing a current when a close circuit is connected between two points.

VOLTAGE BREAKDOWN - A test to determine maximum voltage of insulated wire before electrical current leakage through insulation occurs.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

VOLTAGE RATING - The highest voltage which may be applied to a wire or cord for continuous service in conformance with the governing standards or specifications.

VOLUME RESISTIVITY (SPECIFIC INSULATION RESISTANCE) - The electrical resistance between opposite faces of a 1 centimeter cube of insulating material, commonly expressed in ohms per centimeter.

VS. - Abbreviation for versus.

VSWR - Abbreviation for Voltage Standing Wave Ratio. The ratio of the voltage maximum to voltage minimum which exists in a transmission line. Caused when there is reflection of incident wave, due to a discontinuity or improper match to the transmission line (see Standing Wave Ratio).

VW-1 - Vertical flame test for wire and cable. A standard established by Underwriters Laboratories. Formerly known as FR-1.

W

W - a) Abbreviation for watt. See watt. b) Heavy duty portable power cable, Neoprene® jacket, in single or multiple conductors, 600 volt. Neoprene® is a trademark of the DuPont de Nemours Co. c) Abbreviation for with.

WALL THICKNESS - Refers to insulation thickness or jacket thickness that has been applied.

WATER ABSORPTION - A test to determine the water absorbed by a material after a given immersion period.

WATER BLOCKED CABLE - A multi-conductor cable having voids filled to prevent water flow or wicking.

WATT - The unit of measure of electric power. One watt is equivalent to the power represented by one ampere of current under a pressure of one volt in a DC circuit. Abbreviation W.

WAVEGUIDE - A transmission line that consists of a suitably shaped hollow conductor, which may be filled with a dielectric material, and that is used to guide

ultrahigh frequency electromagnetic waves propagated along its length. The most common shapes of waveguide are rectangular and cylindrical; the most common dielectric is air. A cylindrical waveguide is sometimes known as a wave duct; one that contains a solid rod of dielectric is a uniconductor waveguide. If a wide range of frequencies is to be transmitted, a ridged waveguide may be used. The presence of the ridges extends the possible range of frequencies that may be propagated in a particular transmission mode but the transmission is greater than in the equivalent rectangular waveguide.

WAVEGUIDE DISPERSION - Dispersion caused by the fact that light travels at different speeds in the core and cladding of single-mode fibers.

WAVELENGTH - The distance, measured in the direction of propagation, of a repetitive electrical pulse or waveform between two successive points that are characterized by the same phase of vibration.

W BAND - A band of microwave frequencies. See frequency band.

WICKING - The longitudinal flow of a liquid in a wire or cable due to capillary action.

WIRE - A slender rod or filament of drawn metal. The term is a generally used one, which may refer to any single conductor. If larger than 9 AWG or multiple conductors, it is usually referred to as a cable.

WIRE BRAID - Flexible wire constructed of small size strands woven together in tubular form. Used for shielding or connections where constant flexing is required.

WIRE GAUGE - The American Wire Gauge, originally called Brown & Sharpe Gauge. A system of numerical wire sizes starting with the lowest numbers for the largest sizes. Gauge sizes are each 20.6% apart based on cross sectional area. Abbreviation AWG.

WOLLASTON WIRE - Extremely fine platinum wire that is used for electroscope wires, micro fuses, and hot-wire instruments. It is produced by coating platinum wire with a sheath of silver, drawing them together into a relatively fine uniform diameter wire, and then dissolving the silver with a suitable acid. Diameters to about one micrometer may be produced by this method.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



WOVEN CABLES - A method of producing a flat or ribbon type cable by holding the conductors together with thread as a result of a weaving process.

X

X - Symbol for reactance. See reactance.

X-100 - See FEP.

X BAND - A band of microwave frequencies. See frequency band.

XETFE - Abbreviation for cross-linked extruded, modified ethylene tetrafluoroethylene copolymer. See ethylene tetrafluoroethylene.

X GUIDE - A transmission line that is used for the propagation of surface waves and consists of a length of dielectric material with a X-shaped cross section.

XHHW - Cross-linked polyethylene insulated, rated at 90° C in dry locations and 75° C in wet locations.

XL - Abbreviation for cross-linked insulation. See cross-linked.

XLAP - Abbreviation for cross-linked extruded alkane-imide polymer.

XLETFE - Abbreviation for cross-linked ethylene tetrafluoroethylene copolymer. See ethylene tetrafluoroethylene copolymer.

XLP - Abbreviation for cross-linked polyethylene. Also abbreviated as XLPE.

XLPA - Abbreviation for cross-linked extruded polyalkene.

XLPE - Abbreviation for cross-linked polyethylene. Also abbreviated as XLP.

XL POLYOLEFIN - Cross-linked polyolefin.

XLPVF - Abbreviation for cross-linked extruded polyvinylidene fluoride.

Y

Y - Symbol for admittance. See admittance.

yrs. - Abbreviation for years.

Z

Z - Symbol for impedance. See impedance.

ZERO POTENTIAL - See earth potential.

ZIP CORD - Parallel cable that can be easily separated by pulling apart.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



DECIMAL EQUIVALENTS

FRACTIONS OF ONE INCH					DECIMAL EQUIV. (in)	METRIC EQUIV. (mm)
8 ths	16 ths	32 ths	64 ths			
			1		0.015625	0.396875
		1	2		0.031250	0.793750
					0.039370	1.000000
			3		0.046875	1.190625
	1	2	4		0.062500	1.587500
			5		0.078125	1.984375
					0.078740	2.000000
		3	6		0.093750	2.381250
			7		0.109375	2.778125
					0.118110	3.000000
1/8	1	2	4	8	0.125000	3.175000
				9	0.140625	3.571875
			5	10	0.156250	3.968750
					0.157480	4.000000
				11	0.171875	4.365625
		3	6	12	0.187500	4.762500
					0.196850	5.000000
				13	0.203125	5.159375
			7	14	0.218750	5.556250
				15	0.234375	5.953125
					0.236220	6.000000
1/4	2	4	8	16	0.250000	6.350000
				17	0.265625	6.746875
					0.275591	7.000000
			9	18	0.281250	7.143750
				19	0.296875	7.540625
		5	10	20	0.312500	7.937500
					0.314961	8.000000
				21	0.328125	8.334375
			11	22	0.343750	8.731250
					0.354331	9.000000
				23	0.359375	9.128125
3/8	3	6	12	24	0.375000	9.525000
				25	0.390625	9.921875
					0.393701	10.000000
			13	26	0.406250	10.318750
				27	0.421875	10.715625
					0.433071	11.000000
		7	14	28	0.437500	11.112500
				29	0.453125	11.509375
			15	30	0.468750	11.906250
					0.472441	12.000000
				31	0.484375	12.303125
1/2	4	8	16	32	0.500000	12.700000

FRACTIONS OF ONE INCH					DECIMAL EQUIV. (in)	METRIC EQUIV. (mm)
8 ths	16 ths	32 ths	64 ths			
			33		0.515625	13.096875
					0.511811	13.000000
		17	34		0.531250	13.493750
			35		0.546875	13.890625
					0.551181	14.000000
	9	18	36		0.562500	14.287500
			37		0.578125	14.684375
					0.590551	15.000000
		19	38		0.593750	15.081250
			39		0.609375	15.478125
5/8	5	10	20	40	0.625000	15.875000
					0.629921	16.000000
			41		0.640625	16.271875
		21	42		0.656250	16.668750
					0.669291	17.000000
			43		0.671875	17.065625
	11	22	44		0.687500	17.462500
			45		0.703125	17.859375
					0.708661	18.000000
		23	46		0.718750	18.256250
			47		0.734375	18.653125
					0.748031	19.000000
3/4	6	12	24	48	0.750000	19.050000
				49	0.765625	19.446875
		25	50		0.781250	19.843750
					0.787402	20.000000
			51		0.796875	20.240625
	13	26	52		0.812500	20.637500
					0.826772	21.000000
			53		0.828125	21.034375
		27	54		0.843750	21.431250
			55		0.859375	21.828125
					0.866142	22.000000
7/8	7	14	28	56	0.875000	22.225000
				57	0.890625	22.621875
					0.905512	23.000000
		29	58		0.906250	23.018750
			59		0.921875	23.415625
	15	30	60		0.937500	23.812500
					0.944882	24.000000
			61		0.953125	24.209375
		31	62		0.968750	24.606250
					0.984252	25.000000
				63	0.984375	25.003125
1	8	16	32	64	1.000000	25.400000

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



CONVERSION TABLE OF TEMPERATURES

Locate temperature to be converted in center column, read Centigrade (Celsius) equivalents to left, Fahrenheit equivalents to right.

°C	°C or °F	°F
-73.3	-100	-148.0
-67.8	-90	-130.0
-62.2	-80	-112.0
-56.7	-70	-94.0
-51.1	-60	-76.0
-45.6	-50	-58.0
-40.0	-40	-40.0
-34.4	-30	-22.0
-28.9	-20	-4.0
-23.3	-10	14.0
-17.8	0	32.0
-17.2	1	33.8
-16.7	2	35.6
-16.1	3	37.4
-15.6	4	39.2
-15.0	5	41.0
-14.4	6	42.8
-13.9	7	44.6
-13.3	8	46.4
-12.8	9	48.2
-12.2	10	50.0
-11.7	11	51.8
-11.1	12	53.6
-10.6	13	55.4
-10.0	14	57.2
-9.4	15	59.0
-8.9	16	60.8
-8.3	17	62.6
-7.8	18	64.4
-7.2	19	66.2
-6.7	20	68.0
-6.1	21	69.8
-5.6	22	71.6
-5.0	23	73.4
-4.4	24	75.2
-3.9	25	77.0
-3.3	26	78.8
-2.8	27	80.6
-2.2	28	82.4
-1.7	29	84.2
-1.1	30	86.0

°C	°C or °F	°F
-0.6	31	87.8
0.0	32	89.6
0.6	33	91.4
1.1	34	93.2
1.7	35	95.0
2.2	36	96.8
2.8	37	98.6
3.3	38	100.4
3.9	39	102.2
4.4	40	104.0
5.0	41	105.8
5.6	42	107.6
6.1	43	109.4
6.7	44	111.2
7.2	45	113.0
7.8	46	114.8
8.3	47	116.6
8.9	48	118.4
9.4	49	120.2
10.0	50	122.0
10.6	51	123.8
11.1	52	125.6
11.7	53	127.4
12.2	54	129.2
12.8	55	131.0
13.3	56	132.8
13.9	57	134.6
14.4	58	136.4
15.0	59	138.2
15.6	60	140.0
16.1	61	141.8
16.7	62	143.6
17.2	63	145.4
17.8	64	147.2
18.3	65	149.0
18.9	66	150.8
19.4	67	152.6
20.0	68	154.4
20.6	69	156.2
21.1	70	158.0
21.7	71	159.8

°C	°C or °F	°F
22.2	72	161.6
22.8	73	163.4
23.3	74	165.2
23.9	75	167.0
24.4	76	168.8
25.0	77	170.6
25.6	78	172.4
26.1	79	174.2
26.7	80	176.0
27.2	81	177.8
27.8	82	179.6
28.3	83	181.4
28.9	84	183.2
29.4	85	185.0
30.0	86	186.8
30.6	87	188.6
31.1	88	190.4
31.7	89	192.2
32.2	90	194.0
32.8	91	195.8
33.3	92	197.6
33.9	93	199.4
34.4	94	201.2
35.0	95	203.0
35.6	96	204.8
36.1	97	206.6
36.7	98	208.4
37.2	99	210.2
37.8	100	212.0
38.3	101	213.8
38.9	102	215.6
39.4	103	217.4
40.0	104	219.2
40.6	105	221.0
41.1	106	222.8
41.7	107	224.6
42.2	108	226.4
42.8	109	228.2
43.3	110	230.0
43.9	111	231.8
44.4	112	233.6

°C	°C or °F	°F
45.0	113	235.4
45.6	114	237.2
46.1	115	239.0
46.7	116	240.8
47.2	117	242.6
47.8	118	244.4
48.3	119	246.2
48.9	120	248.0
49.4	121	249.8
50.0	122	251.6
50.6	123	253.4
51.1	124	255.2
51.7	125	257.0
52.2	126	258.8
52.8	127	260.6
53.3	128	262.4
53.9	129	264.2
54.4	130	266.0
55.0	131	267.8
55.6	132	269.6
56.1	133	271.4
56.7	134	273.2
57.2	135	275.0
57.8	136	276.8
58.3	137	278.6
58.9	138	280.4
59.4	139	282.2
60.0	140	284.0
60.6	141	285.8
61.1	142	287.6
61.7	143	289.4
62.2	144	291.2
62.8	145	293.0
63.3	146	294.8
63.9	147	296.6
64.4	148	298.4
65.0	149	300.2
65.6	150	302.0
66.1	151	303.8
66.7	152	305.6
67.2	153	307.4

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



CONVERSION TABLE OF TEMPERATURES

Locate temperature to be converted in center column, read Centigrade (Celsius) equivalents to left, Fahrenheit equivalents to right.

°C	°C or °F	°F
67.8	154	309.2
68.3	155	311.0
68.9	156	312.8
69.4	157	314.6
70.0	158	316.4
70.6	159	318.2
71.1	160	320.0
71.7	161	321.8
72.2	162	323.6
72.8	163	325.4
73.3	164	327.2
73.9	165	329.0
74.4	166	330.8
75.0	167	332.6
75.6	168	334.4
76.1	169	336.2
76.7	170	338.0
77.2	171	339.8
77.8	172	341.6
78.3	173	343.4
78.9	174	345.2
79.4	175	347.0
80.0	176	348.8
80.6	177	350.6
81.1	178	352.4
81.7	179	354.2
82.2	180	356.0
82.8	181	357.8
83.3	182	359.6
83.9	183	361.4
84.4	184	363.2
85.0	185	365.0
85.6	186	366.8
86.1	187	368.6
86.7	188	370.4
87.2	189	372.2
87.8	190	374.0
88.3	191	375.8
88.9	192	377.6
89.4	193	379.4
90.0	194	381.2

°C	°C or °F	°F
90.6	195	383.0
91.1	196	384.8
91.7	197	386.6
92.2	198	388.4
92.8	199	390.2
93.3	200	392.0
93.9	201	393.8
94.4	202	395.6
95.0	203	397.4
95.6	204	399.2
96.1	205	401.0
96.7	206	402.8
97.2	207	404.6
97.8	208	406.4
98.3	209	408.2
98.9	210	410.0
99.4	211	411.8
100.0	212	413.6
100.6	213	415.4
101.1	214	417.2
101.7	215	419.0
102.2	216	420.8
102.8	217	422.6
103.3	218	424.4
103.9	219	426.2
104.4	220	428.0
105.0	221	429.8
105.6	222	431.6
106.1	223	433.4
106.7	224	435.2
107.2	225	437.0
107.8	226	438.8
108.3	227	440.6
108.9	228	442.4
109.4	229	444.2
110.0	230	446.0
110.6	231	447.8
111.1	232	449.6
111.7	233	451.4
112.2	234	453.2
112.8	235	455.0

°C	°C or °F	°F
113.3	236	456.8
113.9	237	458.6
114.4	238	460.4
115.0	239	462.2
115.6	240	464.0
116.1	241	465.8
116.7	242	467.6
117.2	243	469.4
117.8	244	471.2
118.3	245	473.0
118.9	246	474.8
119.4	247	476.6
120.0	248	478.4
120.6	249	480.2
121.1	250	482.0
121.7	251	483.8
122.2	252	485.6
122.8	253	487.4
123.3	254	489.2
123.9	255	491.0
124.4	256	492.8
125.0	257	494.6
125.6	258	496.4
126.1	259	498.2
126.7	260	500.0

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



WIRE DATA - SOLID BARE COPPER

AWG	DIAMETER		CROSS SECTIONAL AREA			WEIGHT	
	(in)	(mm)	(sq in)	(sq mm)	(circular mills)	(lbs / 1000 ft)	(kgs / 1000 m)
44	0.0020	0.0502	0.00000307	0.0000198	3.91	0.01183	0.01761
43	0.0022	0.0564	0.00000387	0.0000250	4.93	0.01492	0.02220
42	0.0025	0.0633	0.00000488	0.0000315	6.22	0.01881	0.02799
41	0.0028	0.0711	0.00000616	0.0000397	7.84	0.02374	0.03533
40	0.0031	0.0799	0.00000777	0.0000501	9.89	0.02995	0.04457
39	0.0035	0.0897	0.00000979	0.0000632	12.5	0.03773	0.05615
38	0.0040	0.1007	0.00001235	0.0000797	15.7	0.04760	0.07084
37	0.0045	0.1131	0.00001557	0.000100	19.8	0.06001	0.08931
36	0.0050	0.1270	0.00001963	0.000127	25.0	0.07565	0.1126
35	0.0056	0.1426	0.00002476	0.000160	31.5	0.09543	0.1420
34	0.0063	0.1601	0.00003122	0.000201	39.8	0.1203	0.1790
33	0.0071	0.1798	0.00003937	0.000254	50.1	0.1517	0.2258
32	0.0080	0.2019	0.00004964	0.000320	63.2	0.1913	0.2847
31	0.0089	0.2268	0.0000626	0.000404	79.7	0.2413	0.3591
30	0.0100	0.2546	0.0000789	0.000509	101	0.3041	0.4526
29	0.0113	0.2859	0.0000995	0.000642	127	0.3835	0.5707
28	0.0126	0.3211	0.0001255	0.000810	160	0.4837	0.7198
27	0.0142	0.3606	0.0001583	0.00102	202	0.6101	0.9079
26	0.0159	0.4049	0.0001996	0.00129	254	0.7693	1.145
25	0.0179	0.4547	0.0002517	0.00162	320	0.9701	1.444
24	0.0201	0.5106	0.0003173	0.00205	404	1.223	1.820
23	0.0226	0.5733	0.0004001	0.00258	509	1.542	2.295
22	0.0253	0.6438	0.0005046	0.00326	642	1.945	2.895
21	0.0285	0.7229	0.0006363	0.00411	810	2.452	3.649
20	0.0320	0.8118	0.0008023	0.00518	1,022	3.092	4.601
19	0.0359	0.9116	0.001012	0.00653	1,288	3.900	5.804
18	0.0403	1.0237	0.001276	0.00823	1,624	4.918	7.319
17	0.0453	1.1495	0.001609	0.0104	2,048	6.201	9.228
16	0.0508	1.2908	0.002028	0.0131	2,583	7.816	11.63
15	0.0571	1.4495	0.002558	0.0165	3,257	9.859	14.67
14	0.0641	1.6277	0.003225	0.0208	4,107	12.43	18.50
13	0.0720	1.8278	0.004067	0.0262	5,178	15.67	23.32
12	0.0808	2.0525	0.005129	0.0331	6,530	19.77	29.42
11	0.0907	2.3048	0.006467	0.0417	8,234	24.92	37.09
10	0.1019	2.5882	0.008155	0.0526	10,383	31.43	46.77
9	0.1144	2.9064	0.01028	0.0663	13,093	39.62	58.96
8	0.1285	3.2636	0.01297	0.0837	16,510	49.99	74.39
7	0.1443	3.6649	0.01635	0.105	20,818	63.01	93.77
6	0.1620	4.1154	0.02062	0.133	26,251	79.47	118.3
5	0.1819	4.6213	0.02600	0.168	33,102	100.2	149.1
4	0.2043	5.1894	0.03278	0.211	41,741	126.3	188.0
3	0.2294	5.8273	0.04134	0.267	52,635	159.3	237.1
2	0.2576	6.5437	0.05213	0.336	66,371	200.9	299.0
1	0.2893	7.3481	0.06573	0.424	83,693	253.3	377.0
1/0	0.3249	8.2515	0.08289	0.535	105,535	319.5	475.5
2/0	0.3648	9.2658	0.1045	0.674	133,077	402.7	599.3
3/0	0.4096	10.4049	0.1318	0.850	167,806	508.0	756.0
4/0	0.4600	11.6840	0.1662	1.07	211,600	640.5	953.2

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



WIRE DATA - SOLID BARE COPPER

AWG	SOFT OR ANNEALED					
	MAXIMUM TENSILE STRENGTH		MINIMUM BREAKING STRENGTH		MAXIMUM DC RESISTANCE @ 20° C (68° F)	
	(lbs / sq in)	(kg / sq mm)	(lbs)	(kg)	(ohms / 1000 ft)	(ohms / 1000 m)
44	40,000	59,520	0.1229	0.05575	2,652	8,701
43	40,000	59,520	0.1549	0.07026	2,103	6,900
42	40,000	59,520	0.1954	0.08863	1,668	5,473
41	40,000	59,520	0.2464	0.1118	1,323	4,341
40	40,000	59,520	0.3106	0.1409	1,049	3,442
39	40,000	59,520	0.3917	0.1777	831.8	2,729
38	40,000	59,520	0.4939	0.2240	659.6	2,164
37	40,000	59,520	0.6228	0.2825	523.1	1,716
36	40,000	59,520	0.7854	0.3563	414.8	1,361
35	40,000	59,520	0.9904	0.4492	329.0	1,079
34	40,000	59,520	1.249	0.5665	260.9	856.0
33	40,000	59,520	1.575	0.7144	206.9	678.8
32	40,000	59,520	1.986	0.9008	164.1	538.4
31	40,000	59,520	2.504	1.136	130.1	426.9
30	40,000	59,520	3.157	1.432	103.2	338.6
29	40,000	59,520	3.981	1.806	81.84	268.5
28	40,000	59,520	5.020	2.277	64.90	212.9
27	40,000	59,520	6.331	2.872	51.47	168.9
26	40,000	59,520	7.983	3.621	40.81	133.9
25	40,000	59,520	10.07	4.568	32.37	106.2
24	40,000	59,520	12.69	5.756	25.67	84.22
23	38,500	57,288	15.41	6.990	20.36	66.80
22	38,500	57,288	19.43	8.813	16.14	52.96
21	38,500	57,288	24.50	11.11	12.80	42.00
20	38,500	57,288	30.89	14.01	10.15	33.30
19	38,500	57,288	38.95	17.67	8.051	26.42
18	38,500	57,288	49.12	22.28	6.385	20.95
17	38,500	57,288	61.93	28.09	5.064	16.61
16	38,500	57,288	78.10	35.43	4.016	13.18
15	38,500	57,288	98.48	44.67	3.184	10.45
14	38,500	57,288	124.2	56.34	2.525	8.285
13	38,500	57,288	156.6	71.03	2.003	6.572
12	38,500	57,288	197.5	89.59	1.588	5.210
11	38,500	57,288	249.0	112.9	1.260	4.134
10	38,500	57,288	314.0	142.4	0.9989	3.277
9	37,000	55,056	380.5	172.6	0.7921	2.599
8	37,000	55,056	479.8	217.6	0.6282	2.061
7	37,000	55,056	605.0	274.4	0.4982	1.635
6	37,000	55,056	762.9	346.0	0.3951	1.296
5	37,000	55,056	961.9	436.3	0.3133	1.028
4	37,000	55,056	1,213	550.2	0.2485	0.8153
3	37,000	55,056	1,530	694.0	0.1970	0.6464
2	37,000	55,056	1,929	875.0	0.1563	0.5128
1	37,000	55,056	2,432	1,103	0.1239	0.4065
1/0	36,000	53,568	2,984	1,354	0.09827	0.3224
2/0	36,000	53,568	3,763	1,707	0.07793	0.2557
3/0	36,000	53,568	4,745	2,152	0.06180	0.2028
4/0	36,000	53,568	5,983	2,714	0.04901	0.1608

AWG	HARD DRAWN					
	MAXIMUM TENSILE STRENGTH		MINIMUM BREAKING STRENGTH		MAXIMUM DC RESISTANCE @ 20° C (68° F)	
	(lbs / sq in)	(kg / sq mm)	(lbs)	(kg)	(ohms / 1000 ft)	(ohms / 1000 m)
44	72,000	107,136	0.2212	0.1003	2,758	9,049
43	72,000	107,136	0.2789	0.1265	2,187	7,176
42	72,000	107,136	0.3517	0.1595	1,734	5,689
41	72,000	107,136	0.4434	0.2011	1,375	4,511
40	72,000	107,136	0.5592	0.2537	1,091	3,580
39	71,800	106,838	0.7031	0.3189	865.0	2,838
38	71,500	106,392	0.8829	0.4005	686.0	2,251
37	71,300	106,094	1.1100	0.5035	544.0	1,785
36	71,100	105,797	1.3960	0.6332	431.4	1,415
35	70,900	105,499	1.7550	0.7961	342.1	1,122
34	70,600	105,053	2.204	0.9997	271.3	890.1
33	70,400	104,755	2.772	1.257	215.2	706.1
32	70,200	104,458	3.485	1.581	170.6	559.7
31	69,900	104,458	4.376	1.985	135.3	443.9
30	69,700	104,011	5.502	2.496	107.3	352.1
29	69,400	103,714	6.908	3.133	85.10	279.2
28	69,300	103,267	8.698	3.945	67.49	221.4
27	69,000	103,118	10.920	4.953	53.52	175.6
26	68,800	102,672	13.730	6.228	42.44	139.2
25	68,600	102,374	17.26	7.829	33.66	110.4
24	68,300	102,077	21.67	9.829	26.69	87.57
23	68,100	101,630	27.25	12.36	21.17	69.46
22	67,900	101,333	34.26	15.54	16.79	55.09
21	67,700	101,035	43.07	19.54	13.31	43.67
20	67,400	100,738	54.08	24.53	10.56	34.65
19	67,200	100,291	67.99	30.84	8.373	27.47
18	67,000	99,994	85.47	38.77	6.640	21.79
17	66,800	99,696	107.5	48.76	5.266	17.28
16	66,600	99,398	135.1	61.28	4.176	13.70
15	66,400	99,101	169.8	77.02	3.312	10.87
14	66,200	98,803	213.5	96.84	2.626	8.616
13	65,900	98,506	268.0	121.6	2.083	6.834
12	65,700	98,059	336.9	152.8	1.652	5.420
11	65,400	97,762	422.9	191.8	1.310	4.298
10	64,900	97,315	529.2	240.0	1.0390	3.409
9	64,300	96,571	661.2	299.9	0.8238	2.703
8	63,700	95,678	826.0	374.7	0.6533	2.143
7	63,000	94,786	1,030	467.2	0.5181	1.700
6	62,100	93,744	1,280	580.6	0.4108	1.348
5	61,200	92,405	1,591	721.7	0.3258	1.069
4	60,100	91,066	1,970	893.6	0.2584	0.8478
3	59,000	89,429	2,439	1,106	0.2049	0.6723
2	57,600	87,792	3,003	1,362	0.1625	0.5332
1	56,100	85,709	3,688	1,673	0.1289	0.4229
1/0	54,500	83,477	4,517	2,049	0.10110	0.3317
2/0	52,800	81,096	5,519	2,503	0.08021	0.2632
3/0	51,000	78,566	6,722	3,049	0.06361	0.2087
4/0	49,000	75,888	8,143	3,694	0.05045	0.1655

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

WIRE DATA - STRANDED TINNED COPPER

AWG	STRAND- ING	NOMINAL O.D. OF STRAND		APPROXIMATE O.D.		CROSS SECTIONAL AREA			WEIGHT	
		(in)	(mm)	(in)	(mm)	(sq in)	(sq mm)	(circ mils)	(lbs / 1000 ft)	(kgs / 1000 m)
36	7/44	0.0020	0.0502	0.006	0.152	0.00002150	0.01385	27.38	0.083	0.123
34	7/42	0.0025	0.0633	0.008	0.191	0.00003419	0.02203	43.53	0.132	0.196
32	7/40	0.0031	0.0799	0.008	0.203	0.00005436	0.03510	69.22	0.210	0.312
32	19/44	0.0020	0.0502	0.009	0.229	0.00005836	0.03761	74.31	0.225	0.335
30	7/38	0.0040	0.1007	0.012	0.305	0.00008644	0.05575	110.06	0.333	0.496
30	19/42	0.0025	0.0633	0.012	0.305	0.00009280	0.05979	118.15	0.358	0.532
28	7/36	0.0050	0.1270	0.015	0.381	0.0001374	0.08867	175.00	0.530	0.788
28	19/40	0.0031	0.0799	0.016	0.406	0.0001476	0.09527	187.87	0.569	0.846
27	7/35	0.0056	0.1426	0.018	0.457	0.0001733	0.1118	220.67	0.668	0.994
26	7/34	0.0063	0.1601	0.019	0.483	0.0002185	0.1409	278.26	0.842	1.25
26	10/36	0.0050	0.1270	0.021	0.533	0.0001963	0.1267	250.00	0.757	1.13
26	19/38	0.0040	0.1007	0.020	0.508	0.0002346	0.1513	298.73	0.904	1.35
24	7/32	0.0080	0.2019	0.024	0.610	0.0003475	0.2241	442.45	1.34	1.99
24	10/34	0.0063	0.1601	0.023	0.584	0.0003122	0.2013	397.52	1.20	1.79
24	19/36	0.0050	0.1270	0.024	0.610	0.0003731	0.2407	475.00	1.44	2.14
24	41/40	0.0031	0.0799	0.023	0.584	0.0003184	0.2056	405.41	1.23	1.83
22	7/30	0.0100	0.2546	0.030	0.762	0.0005525	0.3564	703.53	2.13	3.17
22	19/34	0.0063	0.1601	0.031	0.787	0.0005932	0.3825	755.28	2.29	3.40
22	26/36	0.0050	0.1270	0.030	0.762	0.0005105	0.3294	650.00	1.97	2.93
20	10/30	0.0100	0.2546	0.036	0.914	0.0007894	0.5091	1,005.0	3.04	4.53
20	19/32	0.0080	0.2019	0.037	0.940	0.0009432	0.6083	1,200.9	3.64	5.41
20	26/34	0.0063	0.1601	0.036	0.914	0.0008117	0.5234	1,033.5	3.13	4.66
20	41/36	0.0050	0.1270	0.036	0.914	0.0008050	0.5194	1,025.0	3.10	4.62
18	7/26	0.0159	0.4049	0.048	1.22	0.001397	0.9013	1,778.7	5.38	8.01
18	16/30	0.0100	0.2546	0.047	1.19	0.001263	0.8146	1,608.1	4.87	7.24
18	19/30	0.0100	0.2546	0.049	1.24	0.001500	0.9673	1,909.6	5.78	8.60
18	41/34	0.0063	0.1601	0.047	1.19	0.001280	0.8254	1,629.8	4.93	7.34
18	65/36	0.0050	0.1270	0.047	1.19	0.001276	0.8234	1,625.0	4.92	7.32
16	7/24	0.0201	0.5106	0.060	1.52	0.002221	1.433	2,828.3	8.56	12.7
16	19/29	0.0113	0.2859	0.058	1.47	0.001891	1.220	2,407.9	7.29	10.8
16	26/30	0.0100	0.2546	0.059	1.50	0.002052	1.324	2,613.1	7.91	11.8
16	65/34	0.0063	0.1601	0.059	1.50	0.002029	1.309	2,583.9	7.82	11.6
16	105/36	0.0050	0.1270	0.059	1.50	0.002062	1.330	2,625.0	7.95	11.8
14	7/22	0.0253	0.6438	0.073	1.85	0.003532	2.279	4,497.1	13.6	20.3
14	19/27	0.0142	0.3606	0.073	1.85	0.003007	1.940	3,828.8	11.6	17.2
14	41/30	0.0100	0.2546	0.073	1.85	0.003236	2.087	4,120.7	12.5	18.6
14	105/34	0.0063	0.1601	0.073	1.85	0.003278	2.114	4,173.9	12.6	18.8
12	7/20	0.0320	0.8118	0.096	2.44	0.005616	3.623	7,150.7	21.6	32.2
12	19/25	0.0179	0.4547	0.093	2.36	0.004781	3.085	6,088.0	18.4	27.4
12	65/30	0.0100	0.2546	0.095	2.41	0.005131	3.309	6,532.7	19.8	29.4
12	165/34	0.0063	0.1601	0.095	2.41	0.005151	3.322	6,559.0	19.9	29.5

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



WIRE DATA - STRANDED TINNED COPPER

AWG	STRAND- ING	NOMINAL O.D. OF STRAND		APPROXIMATE O.D.		CROSS SECTIONAL AREA			WEIGHT	
		(in)	(mm)	(in)	(mm)	(sq in)	(sq mm)	(circ mils)	(lbs / 1000 ft)	(kgs / 1000 m)
10	37/26	0.0159	0.4049	0.115	2.92	0.007384	4.764	9,401.8	28.5	42.3
10	49/27	0.0142	0.3606	0.116	2.95	0.007755	5.004	9,874.1	29.9	44.5
10	105/30	0.0100	0.2546	0.116	2.95	0.008288	5.346	10,553	31.9	47.5
8	49/25	0.0179	0.4547	0.147	3.73	0.01233	7.957	15,701	47.5	70.7
8	133/29	0.0113	0.2859	0.147	3.73	0.01324	8.538	16,855	51.0	75.9
8	655/36	0.0050	0.1270	0.147	3.73	0.01286	8.297	16,375	49.6	73.8
6	133/27	0.0142	0.3606	0.184	4.67	0.02105	13.58	26,801	81.1	121
6	259/30	0.0100	0.2546	0.184	4.67	0.02044	13.19	26,030	78.8	117
6	1050/36	0.0050	0.1270	0.184	4.67	0.02062	13.30	26,250	79.5	118
4	133/25	0.0179	0.4547	0.232	5.89	0.03347	21.60	42,616	129	192
4	259/27	0.0142	0.3606	0.232	5.89	0.04099	26.45	52,192	158	235
4	1666/36	0.0050	0.1270	0.232	5.89	0.03271	21.10	41,650	126	188
2	133/23	0.0226	0.5733	0.292	7.42	0.05322	34.33	67,762	205	305
2	259/26	0.0159	0.4049	0.292	7.42	0.05169	33.35	65,813	199	296
2	665/30	0.0100	0.2546	0.292	7.42	0.05249	33.86	66,835	202	301
2	2646/36	0.0050	0.1270	0.292	7.42	0.05195	33.52	66,150	200	298
1	133/22	0.0253	0.6438	0.328	8.33	0.06711	43.30	85,446	259	385
1	259/25	0.0179	0.4547	0.328	8.33	0.06518	42.06	82,988	251	374
1	817/30	0.0100	0.2546	0.328	8.33	0.06449	41.59	82,112	249	370
1	2109/34	0.0063	0.1601	0.328	8.33	0.06584	42.46	83,836	254	378
1/0	133/21	0.0285	0.7229	0.368	9.35	0.08462	54.59	107,745	326	485
1/0	259/24	0.0201	0.5106	0.368	9.35	0.08219	53.03	104,646	317	471
1/0	1045/30	0.0100	0.2546	0.368	9.35	0.08249	53.20	105,026	318	473
1/0	2660/34	0.0063	0.1601	0.368	9.35	0.08305	53.55	105,739	320	476
1/0	4214/36	0.0050	0.1270	0.368	9.35	0.08274	53.38	105,350	319	475
2/0	133/20	0.0320	0.8118	0.414	10.5	0.1067	68.84	135,864	411	612
2/0	259/23	0.0226	0.5733	0.414	10.5	0.1036	66.86	131,957	399	594
2/0	1330/30	0.0100	0.2546	0.414	10.5	0.1050	67.71	133,670	405	602
2/0	3325/34	0.0063	0.1601	0.414	10.5	0.1038	66.94	132,174	400	595
2/0	5292/36	0.0050	0.1270	0.414	10.5	0.1039	67.04	132,300	400	596
3/0	259/22	0.0253	0.6438	0.464	11.8	0.1307	84.31	166,394	504	749
3/0	427/24	0.0201	0.5106	0.464	11.8	0.1355	87.43	172,525	522	777
3/0	1661/30	0.0100	0.2546	0.464	11.8	0.1311	84.56	166,937	505	752
3/0	4256/34	0.0063	0.1601	0.464	11.8	0.1329	85.68	169,183	512	762
3/0	6713/36	0.0050	0.1270	0.464	11.8	0.1318	85.04	167,825	508	756
4/0	259/21	0.0285	0.7229	0.522	13.3	0.1648	106.3	209,819	635	945
4/0	427/23	0.0226	0.5733	0.522	13.3	0.1709	110.2	217,550	659	980
4/0	2104/30	0.0100	0.2546	0.522	13.3	0.1661	107.1	211,460	640	952
4/0	5320/34	0.0063	0.1601	0.522	13.3	0.1661	107.1	211,478	640	953
4/0	8512/36	0.0050	0.1270	0.522	13.3	0.1671	107.8	212,800	644	958

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



WIRE DATA - STRANDED TINNED COPPER

AWG	STRAND- ING	DC RESISTANCE @ 20° C	
		(ohms / 1000 ft)	(ohms / 1000 m)
36	7/44	401.6	1318
34	7/42	252.6	828.6
32	7/40	158.8	521.1
32	19/44	150.9	495.2
30	7/38	99.90	327.7
30	19/42	94.93	311.5
28	7/36	62.82	206.1
28	19/40	59.70	195.9
27	7/35	49.82	163.5
26	7/34	39.51	129.6
26	10/36	43.98	144.3
26	19/38	37.55	123.2
24	7/32	24.85	81.52
24	10/34	27.66	90.74
24	19/36	23.61	77.47
24	41/40	28.84	94.61
22	7/30	15.63	51.27
22	19/34	14.85	48.72
22	26/36	17.62	57.82
20	10/30	10.94	35.89
20	19/32	9.340	30.64
20	26/34	11.08	36.36
20	41/36	11.41	37.42
18	7/26	6.181	20.28
18	16/30	6.908	22.66
18	19/30	5.874	19.27
18	41/34	7.173	23.53
18	65/36	7.194	23.60
16	7/24	3.887	12.75
16	19/29	4.658	15.28
16	26/30	4.384	14.38
16	65/34	4.524	14.84
16	105/36	4.453	14.61
14	7/22	2.445	8.021
14	19/27	2.930	9.611
14	41/30	2.837	9.308
14	105/34	2.801	9.189
12	7/20	1.538	5.044
12	19/25	1.842	6.045
12	65/30	1.789	5.871
12	165/34	1.799	5.903

AWG	STRAND- ING	DC RESISTANCE @ 20° C	
		(ohms / 1000 ft)	(ohms / 1000 m)
10	37/26	1.243	4.079
10	49/27	1.184	3.884
10	105/30	1.108	3.634
8	49/25	0.7446	2.443
8	133/29	0.7002	2.297
8	655/36	0.7207	2.365
6	133/27	0.4403	1.445
6	259/30	0.4534	1.487
6	1050/36	0.4496	1.475
4	133/25	0.2769	0.9086
4	259/27	0.2261	0.7419
4	1666/36	0.2834	0.9296
2	133/23	0.1742	0.5714
2	259/26	0.1793	0.5883
2	665/30	0.1766	0.5793
2	2646/36	0.1784	0.5853
1	133/22	0.1381	0.4531
1	259/25	0.1422	0.4666
1	817/30	0.1437	0.4715
1	2109/34	0.1408	0.4618
1/0	133/21	0.1095	0.3594
1/0	259/24	0.1128	0.3700
1/0	1045/30	0.1124	0.3687
1/0	2660/34	0.1116	0.3662
1/0	4214/36	0.1120	0.3675
2/0	133/20	0.08686	0.2850
2/0	259/23	0.08944	0.2934
2/0	1330/30	0.08829	0.2897
2/0	3325/34	0.08929	0.2929
2/0	5292/36	0.08920	0.2927
3/0	259/22	0.07093	0.2327
3/0	427/24	0.06841	0.2244
3/0	1661/30	0.07070	0.2319
3/0	4256/34	0.06976	0.2289
3/0	6713/36	0.07032	0.2307
4/0	259/21	0.05625	0.1845
4/0	427/23	0.05425	0.1780
4/0	2104/30	0.05581	0.1831
4/0	5320/34	0.05581	0.1831
4/0	8512/36	0.05546	0.1820

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Trademarks

The following is a list of trademarks referenced in this publication:

Alumel®	-	Hoskins Mfg. Co.
Balco®	-	Wilbur Driver Co.
Chromel®	-	Hoskins Mfg. Co.
Copperweld®	-	Copperweld Steel Company
Detecta-Duct®	-	Standard Wire & Cable Co.
Flexoprene®	-	Standard Wire & Cable Co.
H-Film®	-	DuPont de Nemours Co.
Halar®	-	Allied Chemical Co.
Hypalon®	-	DuPont de Nemours Co.
Kapton®	-	DuPont de Nemours Co.
Karma®	-	Driver Harris Company
Kevlar®	-	DuPont de Nemours Co.
Kynar®	-	Pennwalt Corporation
Microminum®	-	Standard Wire & Cable Co.
Mylar®	-	DuPont de Nemours Co.
Neoprene®	-	DuPont de Nemours Co.
Nicrome®	-	Driver Harris Company
Nomex®	-	DuPont de Nemours Co.
Okocord®	-	Okonite Company
Okoprene®	-	Okonite Company
Stanflex®	-	Standard Wire & Cable Co.
Teflon®	-	DuPont de Nemours Co.
Tefzel®	-	DuPont de Nemours Co.
Velcro®	-	Velcro Industries B.V.
Viton®	-	DuPont Dow Elastomers.

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Index of Catalog Numbers

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
107-1A.....43	300-53.....41	400-8.....4	405-6A.....5
107-10A.....43	300-55.....41	400-8A.....2	405-6APL.....17
107-11A.....43	300-56.....41	400-8BC.....3	500-0A.....44
107-12A.....43	300-57.....41	400-8FA.....8	500-0D.....46
107-13A.....43	300-59.....41	400-8PL.....13	500-0.....44
107-14A.....43	300-61.....41	400-9.....4	500-1.....44
107-15A.....43	301-3.....60	400-9BC.....3	500-1A.....44
107-16A.....43	301-6.....60	400-10.....4	500-1D.....46
107-1.....43	301-9.....60	400-11.....4	500-11.....44
107-2A.....43	301-12.....60	400-16.....4	500-11A.....44
107-2.....43	301-15.....60	400-16BC.....3	500-11AA.....44
107-3A.....43	301-18.....60	400-16FA.....8	500-11AB.....44
107-3.....43	301-21.....60	400-16FPL.....17	500-11D.....46
107-4A.....43	302-3.....42	400-16PL.....13	500-12.....47
107-4.....43	302-4.....42	400-17.....4	500-14.....48
107-5A.....43	302-5.....42	400-17PL.....13	500-16.....49
107-5.....43	302-6.....42	400-20.....4	500-22.....44
107-6A.....43	302-7.....42	400-20BC.....3	500-22A.....44
107-6.....43	302-8.....42	400-20FA.....8	500-22AA.....44
107-7A.....43	302-9.....42	400-20FPL.....17	500-22AB.....44
107-7.....43	302-10.....42	400-20PL.....13	500-22D.....46
107-8A.....43	302-11.....42	400-25.....4	500-22DA.....46
107-9A.....43	302-12.....42	400-25BC.....3	500-23.....47
300-5.....41	302-13.....42	400-25FA.....8	500-23A.....47
300-8.....41	302-14.....42	400-25FPL.....17	500-25.....48
300-12.....41	302-15.....42	400-25PL.....13	500-25A.....48
300-13.....41	302-16.....42	400-26.....4	500-27.....49
300-15.....41	302-17.....42	400-27.....4	500-27A.....49
300-18.....41	302-18.....42	400-27BC.....3	500-33.....44
300-19.....41	302-19.....42	400-27FA.....8	500-33A.....44
300-19B.....41	303-7.....42	400-27PL.....13	500-33AA.....44
300-20.....41	303-8.....42	400-30.....4	500-33AB.....44
300-23B.....41	303-9.....42	400-30FA.....8	500-33D.....46
300-23.....41	303-10.....42	400-34FA.....8	500-33DA.....46
300-26.....41	303-11.....42	400-38FA.....8	500-34A.....47
300-28.....41	303-12.....42	401-4F-C5.....9	500-36A.....48
300-28B.....41	303-13F.....61	401-4F-C6.....11	500-38A.....49
300-30.....41	303-13.....42	401-4FP-C5.....15	500-44.....44
300-31.....41	303-14D.....61	401-4FPL-C6.....12	500-44A.....44
300-33.....41	303-14.....42	401-4FS-C5.....10	500-44AA.....44
300-35.....41	303-15.....42	401-4FPS-C5.....16	500-44AB.....44
300-38.....41	303-16.....42	401-25F-C5.....9	500-44DA.....46
300-40.....41	303-17.....42	401-25FP-C5.....15	500-45A.....47
300-42.....41	303-18.....42	401-25FS-C5.....10	500-47A.....48
300-44.....41	400-4.....4	402-1F.....18	500-49A.....49
300-46.....41	400-4A.....2	405-2A.....5	500-55A.....44
300-48.....41	400-4BC.....3	405-2AG.....7	500-55AB.....44
300-50.....41	400-4PL.....13	405-2APL.....17	500-55DA.....46
300-51.....41	400-5.....4	405-3A.....5	500-56A.....47
300-52.....41	400-5PL.....13	405-3APL.....17	500-58A.....48

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
500-60A.....49	501-58A.....48	502-66D.....46	504-20A.....6
500-66.....44	501-60A.....49	502-67A.....47	504-20APL.....14
500-66AB.....44	501-66.....44	502-69A.....48	504-24A.....6
500-66D.....46	501-66AB.....44	502-71A.....49	504-25A.....5
500-67A.....47	501-66D.....46	502-77.....45	504-25APL.....14
500-69A.....48	501-67A.....47	502-77AB.....45	504-34A.....6
500-71A.....49	501-69A.....48	502-77D.....46	504-49A.....6
500-77.....44	501-71A.....49	502-78A.....47	504-67A.....6
500-77AB.....44	501-77.....44	502-80A.....48	504-67APL.....14
500-77D.....46	501-77AB.....44	502-82A.....49	504-67FA.....7
500-78A.....47	501-77D.....46	502-88.....45	504-67FAP.....18
500-80A.....48	501-78A.....47	502-88AB.....45	504-71A.....6
500-82A.....49	501-80A.....48	502-88D.....46	504-71APL.....14
501-11.....44	501-82A.....49	502-89A.....47	504-72A.....6
501-11A.....44	501-88.....44	502-91A.....48	504-72APL.....14
501-11AA.....44	501-88AB.....44	502-93A.....49	504-72FA.....7
501-11AB.....44	501-88D.....46	502-99.....45	504-72FAP.....18
501-11D.....46	501-89A.....47	502-99AB.....45	504-74A.....6
501-22.....44	501-91A.....48	502-99D.....46	504-74APL.....14
501-22A.....44	501-93A.....49	502-100A.....47	504-74B.....22
501-22AA.....44	502-22.....45	502-102A.....48	504-74C.....22
501-22AB.....44	502-22A.....45	502-104A.....49	504-74FA.....7
501-22D.....46	502-22AA.....45	502-110.....45	504-74FAP.....18
501-22DA.....46	502-22AB.....45	502-110AB.....45	504-75APL.....14
501-23.....47	502-22D.....46	502-110D.....46	504-75FA.....7
501-23A.....47	502-22DA.....46	502-111A.....47	504-76APL.....14
501-25.....48	502-33.....45	502-113A.....48	504-84A.....6
501-25A.....48	502-33A.....45	502-115A.....49	504-87FA.....7
501-27.....49	502-33AA.....45	502-121.....45	504-89FA.....7
501-27A.....49	502-33AB.....45	502-121AB.....45	504-90FA.....7
501-33.....44	502-33D.....46	502-121D.....46	504-94FA.....7
501-33A.....44	502-33DA.....46	502-132.....45	507-4.....118
501-33AA.....44	502-34A.....47	502-132AB.....45	507-5.....118
501-33AB.....44	502-36A.....48	502-143.....45	507-5A.....118
501-33D.....46	502-38A.....49	502-143AB.....45	507-5B.....118
501-33DA.....46	502-44.....45	502-154.....45	507-6.....118
501-34A.....47	502-44A.....45	502-154AB.....45	507-6A.....118
501-36A.....48	502-44AA.....45	502-165.....45	507-6F.....19
501-38A.....49	502-44AB.....45	502-165AB.....45	507-6FA.....19
501-44.....44	502-44DA.....46	503-6B.....18	507-6FBC.....19
501-44A.....44	502-45A.....47	503-6C.....18	507-6FPL.....19
501-44AA.....44	502-47A.....48	503-7C.....18	507-6Q.....19
501-44AB.....44	502-49A.....49	503-9C.....18	507-6QBC.....19
501-44DA.....46	502-55A.....45	504-1B.....18	507-7.....118
501-45A.....47	502-55AB.....45	504-2B.....18	507-8.....118
501-47A.....48	502-55DA.....46	504-5B.....18	507-8A.....118
501-49A.....49	502-56A.....47	504-6B.....18	507-9.....118
501-55A.....44	502-58A.....48	504-8A.....6	507-9A.....118
501-55AB.....44	502-60A.....49	504-14A.....6	507-9B.....118
501-55DA.....46	502-66.....45	504-15A.....6	507-10.....118
501-56A.....47	502-66AB.....45	504-15APL.....14	507-10A.....118

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
507-11 118	507-39 119	507-71B..... 121	507-113 122
507-11A 118	507-40 120	507-72..... 121	507-114 122
507-12 118	507-41 120	507-73..... 121	507-114A 122
507-12A 118	507-42 120	507-74..... 121	507-115 122
507-13 118	507-43 120	507-74A..... 121	507-115A 122
507-13A 118	507-44 120	507-75..... 121	507-116 122
507-14 118	507-45 120	507-76..... 121	507-117 122
507-14A 118	507-46 120	507-77A..... 121	507-117A 122
507-15 118	507-47 120	507-78A 121	507-118 122
507-16 118	507-48 120	507-79..... 121	507-118A 123
507-17 118	507-49 120	507-79A 121	507-119 123
507-17A 118	507-50 120	507-79B 121	507-120 123
507-17B 118	507-51 120	507-80 121	507-121 123
507-18 118	507-52 120	507-81..... 121	507-122 123
507-18A 118	507-53 120	507-82 121	507-123 123
507-19 118	507-54 120	507-83 121	507-124 123
507-19A 118	507-54A 120	507-84A 121	507-125 123
507-20 118	507-55A 120	507-85A 121	507-126 123
507-20A 119	507-55B 120	507-86 121	507-128 123
507-21 119	507-55 120	507-87..... 121	507-129 123
507-21A 119	507-56 120	507-87A 121	507-130 123
507-22 119	507-57 120	507-88 121	507-131 123
507-22A 119	507-57A 120	507-88A 121	507-132 123
507-22B 119	507-58 120	507-88B 121	507-133 123
507-23 119	507-58A 120	507-89 121	507-133A 123
507-23A 119	507-58B 120	507-90 122	507-134 123
507-24 119	507-58C 120	507-91..... 122	507-135 123
507-24A 119	507-59 120	507-92..... 122	507-136 123
507-25 119	507-59A 120	507-93..... 122	507-137 123
507-25A 119	507-59B 120	507-94 122	507-138 123
507-26 119	507-59F 19	507-94A 122	507-139 123
507-26A 119	507-59FA 19	507-95 122	507-140 123
507-27 119	507-60 120	507-96 122	507-141 123
507-27A 119	507-61 120	507-97..... 122	507-141A 123
507-28 119	507-62 120	507-98 122	507-142 123
507-28A 119	507-62A 120	507-99 122	507-142A 123
507-28B 119	507-62B 120	507-100 122	507-142B 123
507-29 119	507-63 120	507-101 122	507-143 123
507-30 119	507-63A 120	507-102 122	507-143A 123
507-31 119	507-63B 120	507-103 122	507-144 123
507-32 119	507-64 120	507-104 122	507-145 123
507-33 119	507-64A 121	507-105 122	507-146 123
507-34 119	507-65 121	507-106 122	507-147 123
507-34A 119	507-65A 121	507-107 122	507-148 124
507-34B 119	507-66 121	507-108 122	507-149 124
507-35 119	507-67 121	507-108A 122	507-150 124
507-35A 119	507-68 121	507-109 122	507-151 124
507-35B 119	507-69 121	507-110 122	507-152 124
507-36 119	507-70 121	507-111 122	507-153 124
507-37 119	507-71 121	507-111A 122	507-154 124
507-38 119	507-71A 121	507-112 122	507-155 124

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
507-156.....124	507-196.....125	507-243.....127	507-291.....128
507-157.....124	507-196A.....125	507-244.....127	507-292.....128
507-158.....124	507-197.....125	507-245.....127	507-293.....128
507-159.....124	507-198.....125	507-246.....127	507-293A.....128
507-160.....124	507-199.....125	507-247.....127	507-294.....128
507-160A.....124	507-200.....125	507-248.....127	507-294A.....128
507-161.....124	507-201.....125	507-249.....127	507-295.....128
507-162.....124	507-202.....125	507-250.....127	507-296.....128
507-163.....124	507-203.....125	507-251.....127	507-297.....128
507-164.....124	507-204.....125	507-252.....127	507-298.....128
507-165.....124	507-205.....126	507-253.....127	507-301.....128
507-166.....124	507-206.....126	507-254.....127	507-302.....128
507-167.....124	507-207.....126	507-255.....127	507-303.....128
507-168.....124	507-208.....126	507-256.....127	507-304.....128
507-169.....124	507-209.....126	507-257.....127	507-305.....128
507-170.....124	507-210.....126	507-258.....127	507-306A.....128
507-171.....124	507-211.....126	507-259.....127	507-307A.....128
507-172.....124	507-211A.....126	507-260.....127	507-316.....128
507-173.....124	507-212.....126	507-261.....127	507-317.....129
507-174.....124	507-213.....126	507-262.....127	507-318.....129
507-174A.....124	507-214.....126	507-263.....127	507-319.....129
507-175.....124	507-215.....126	507-264.....127	507-321.....129
507-176.....124	507-216.....126	507-264A.....127	507-322.....129
507-177.....124	507-217.....126	507-264B.....127	507-323.....129
507-178.....124	507-218.....126	507-264C.....127	507-324.....129
507-178A.....124	507-219.....126	507-265.....127	507-325.....129
507-178B.....124	507-220.....126	507-266.....127	507-326.....129
507-179.....124	507-221.....126	507-267.....127	507-327.....129
507-179A.....124	507-222.....126	507-268.....127	507-328.....129
507-179B.....125	507-223.....126	507-269.....127	507-329.....129
507-180.....125	507-224.....126	507-270.....127	507-330.....129
507-180A.....125	507-225.....126	507-271.....127	507-331.....129
507-180B.....125	507-226.....126	507-272.....127	507-332.....129
507-181.....125	507-227.....126	507-273.....127	507-333.....129
507-182.....125	507-228.....126	507-274.....127	507-334.....129
507-183.....125	507-228A.....126	507-275.....127	507-335.....129
507-184.....125	507-229.....126	507-276.....128	507-336.....129
507-185.....125	507-230.....126	507-277.....128	507-360.....129
507-186.....125	507-231.....126	507-278.....128	507-366.....129
507-187.....125	507-231A.....126	507-279.....128	507-367.....129
507-187A.....125	507-232.....126	507-280.....128	507-369.....129
507-188.....125	507-233.....126	507-281.....128	507-370.....129
507-188A.....125	507-234.....126	507-282.....128	507-373.....129
507-189.....125	507-235.....126	507-283.....128	507-374.....129
507-190.....125	507-236.....126	507-284A.....128	507-376.....129
507-191.....125	507-237.....126	507-285A.....128	507-377.....129
507-192.....125	507-238.....126	507-286.....128	507-378.....129
507-193.....125	507-239.....126	507-287.....128	507-382.....129
507-194.....125	507-240.....127	507-288.....128	507-383.....130
507-195.....125	507-241.....127	507-289.....128	507-384.....130
507-195A.....125	507-242.....127	507-290.....128	507-385.....130

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
507-386 130	703-22 27	710-20 23	865-10 28
507-388 130	703-22A 27	710-20B 23	865-12 28
507-389 130	703-24 27	710-21B 23	865-14 28
507-391 130	703-26 27	710-22 23	865-16 28
507-392 130	703-28 27	710-22E 23	869-4 29
507-393 130	703-30 27	710-23 25	869-6 29
507-400 130	704-2 60	710-24 25	869-8 29
507-401 130	704-3 60	711-1 25	869-10 29
507-402 130	704-4 60	711-2 25	869-12 29
507-403 130	704-5 60	711-3 25	869-14 29
507-404 130	704-6 60	711-4 25	869-15 29
507-405 130	706-3A 61	711-8 24	869-18 29
701-4 26	706-3B 61	711-9 24	875-1 29
701-6 26	706-3G 59	711-10 24	875-2 29
701-8 26	706-5G 59	711-11 24	875-3 29
701-10 26	706-5GA 59	711-12 24	875-4 29
701-12 26	706-7G 59	711-13 24	875-5 29
701-14 26	706-7GA 59	711-14 24	875-6 29
701-16 26	706-8G 59	711-16 24	875-7 29
701-18 26	706-11G 59	711-18 24	875-8 29
702-3 26	706-14G 59	711-21 24	875-10 29
702-5 26	706-15G 59	712-1 25	875-14 29
702-7 26	706-16G 59	712-2 25	875-16 29
702-9 26	706-17G 59	712-3 25	903-1 22
702-11 26	706-18G 59	712-4 25	903-2 22
702-13 26	706-19G 59	712-8 24	913L46 151
702-15 26	706-21G 59	712-9 24	913L47 151
702-17 26	708-5 60	712-10 24	913L48 151
702-19 26	708-10 60	712-11 24	913L49 151
703-1 27	708-11 60	712-12 24	913L50 151
703-1A 27	710-1 23	712-13 24	913L51 151
703-2 27	710-2 23	712-14 24	913L52 151
703-3 27	710-3 23	712-16 24	913L53 151
703-4 27	710-3A 23	712-18 24	913L54 151
703-5 27	710-3B 23	712-21 24	913L66 150
703-6 27	710-4 23	801-10 18	913L67 150
703-7 27	710-4B 23	801-30 18	913L68 150
703-8 27	710-5 23	801-45 18	913L69 150
703-9 27	710-6 23	801-176 61	913L70 150
703-10 27	710-7 23	857-1 28	913RL48 149
703-11 27	710-8 23	857-2 28	913RL49 149
703-12 27	710-9 23	857-3 28	913RL50 149
703-13 27	710-10 23	857-4 28	913RL51 149
703-14 27	710-11 23	857-5 28	913RL52 149
703-15 27	710-12 23	857-6 28	1050-3-9 52
703-16 27	710-13 23	857-8 28	1050-4-9 52
703-17 27	710-15 23	857-10 28	1050-4-9C 52
703-18 27	710-16 23	865-2 28	1050-5-9 52
703-19 27	710-17 23	865-4 28	1050-5-9A 52
703-20 27	710-18 23	865-6 28	1050-5-9C 52
703-20A 27	710-18B 23	865-8 28	1050-6-9 52

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
1050-6-9A 52	1097-43C 32	1099-87 31	1100-65F 56
1050-7-9 52	1097-54 32	1099-87A 31	1100-66E 57
1050-7-9A 52	1097-54A 32	1099-98A 31	1100-66F 57
1050-8-9 52	1097-54C 32	1100-10 50	1100-66S 57
1050-8-9A 52	1097-65 32	1100-10C 50	1100-66T 57
1050-9-9A 52	1097-65A 32	1100-21 50	1100-66W 58
1090-25A 72	1097-65C 32	1100-21C 50	1100-66X 58
1090-30A 72	1097-76 32	1100-21E 56	1100-76 50
1090-30 72	1097-76A 32	1100-21F 56	1100-76A 50
1090-35A 72	1097-76C 32	1100-22E 57	1100-76C 50
1090-35 72	1097-87 32	1100-22F 57	1100-76E 56
1090-40A 72	1097-87A 32	1100-22S 57	1100-76F 56
1090-40 72	1097-98A 32	1100-22T 57	1100-77E 57
1090-45 72	1098-109A 30	1100-22W 58	1100-77F 57
1090-50 72	1098-120A 30	1100-22X 58	1100-77S 57
1090-55 72	1098-131A 30	1100-32 50	1100-77T 57
1090-60 72	1098-32 30	1100-32C 50	1100-77W 58
1090-65 72	1098-32A 30	1100-32E 56	1100-77X 58
1090-70 72	1098-32C 30	1100-32F 56	1100-87A 50
1090-75 72	1098-43 30	1100-33E 57	1100-87C 50
1090-80 72	1098-43A 30	1100-33F 57	1100-87E 56
1090-85 72	1098-43C 30	1100-33S 57	1100-87F 56
1090-90 72	1098-54 30	1100-33T 57	1100-88E 57
1090-95 72	1098-54A 30	1100-33W 58	1100-88F 57
1090-100 72	1098-54C 30	1100-33X 58	1100-88S 57
1091-3A 73	1098-65 30	1100-43 50	1100-88T 57
1091-3 73	1098-65A 30	1100-43A 50	1100-88W 58
1091-5A 73	1098-65C 30	1100-43C 50	1100-88X 58
1091-5 73	1098-76 30	1100-43E 56	1100-98A 50
1091-10A 73	1098-76A 30	1100-43F 56	1100-98E 56
1091-10 73	1098-76C 30	1100-44E 57	1100-98F 56
1091-15A 73	1098-87 30	1100-44F 57	1100-99E 57
1091-15 73	1098-87A 30	1100-44S 57	1100-99F 57
1091-20 73	1098-98A 30	1100-44T 57	1100-99S 57
1091-25 73	1099-109A 31	1100-44W 58	1100-99T 57
1091-30 73	1099-120A 31	1100-44X 58	1100-99W 58
1091-45 73	1099-131A 31	1100-54 50	1100-99X 58
1091-50 73	1099-142A 31	1100-54A 50	1100-109A 50
1097-5 32	1099-32 31	1100-54C 50	1100-109E 56
1097-8 32	1099-43 31	1100-54E 56	1100-109F 56
1097-10 32	1099-43A 31	1100-54F 56	1100-120A 50
1097-10A 32	1099-43C 31	1100-55E 57	1100-120E 56
1097-10C 32	1099-54 31	1100-55F 57	1100-120F 56
1097-21 32	1099-54A 31	1100-55S 57	1100-131A 50
1097-21A 32	1099-54C 31	1100-55T 57	1101-21 51
1097-21C 32	1099-65 31	1100-55W 58	1101-21C 51
1097-32 32	1099-65A 31	1100-55X 58	1101-32 51
1097-32A 32	1099-65C 31	1100-65 50	1101-32C 51
1097-32C 32	1099-76 31	1100-65A 50	1101-43 51
1097-43 32	1099-76A 31	1100-65C 50	1101-43A 51
1097-43A 32	1099-76C 31	1100-65E 56	1101-43C 51

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
1101-54.....51	1103-75D.....66	1106-19.....63	1165-39.....68
1101-54A.....51	1103-79B.....65	1106-22.....63	1165-44.....68
1101-54C.....51	1103-79C.....65	1106-25.....63	1165-49.....68
1101-65.....51	1103-79D.....66	1106-28.....63	1165-54.....68
1101-65A.....51	1103-83B.....65	1106-31.....63	1165-60.....68
1101-65C.....51	1103-83C.....65	1107-10B.....67	1165-64.....68
1101-76.....51	1103-83D.....66	1107-17B.....67	1165-69.....68
1101-76A.....51	1103-87B.....65	1107-23B.....67	1165-74.....68
1101-76C.....51	1103-87C.....65	1107-30B.....67	1165-79.....68
1101-87A.....51	1103-91B.....65	1107-34B.....67	1166-32.....68
1101-87C.....51	1103-91C.....65	1107-39B.....67	1166-34.....68
1101-98A.....51	1104-2A.....64	1107-46B.....67	1166-39.....68
1101-109A.....51	1104-6.....64	1107-51B.....67	1166-44.....68
1101-120A.....51	1104-6A.....64	1107-58B.....67	1166-49.....68
1101-131A.....51	1104-10.....64	1107-63B.....67	1166-54.....68
1101-142A.....51	1104-10A.....64	1107-70B.....67	1166-60.....68
1103-10B.....65	1104-14.....64	1107-75B.....67	1166-64.....68
1103-10C.....65	1104-14A.....64	1107-79B.....67	1166-69.....68
1103-10D.....66	1104-16A.....64	1107-83B.....67	1166-74.....68
1103-17B.....65	1104-18.....64	1126-24.....33	1166-79.....68
1103-17C.....65	1104-22.....64	1126-44.....33	1167-32.....69
1103-17D.....66	1104-22A.....64	1126-54.....33	1167-34.....69
1103-23B.....65	1104-26.....64	1126-71.....33	1167-39.....69
1103-23C.....65	1104-30.....64	1126-77.....33	1167-44.....69
1103-23D.....66	1104-34.....64	1126-84.....33	1167-49.....69
1103-30B.....65	1104-38.....64	1126-88.....33	1167-54.....69
1103-30C.....65	1104-42.....64	1126-90.....33	1167-60.....69
1103-30D.....66	1104-46.....64	1126-92.....33	1167-64.....69
1103-34B.....65	1104-50.....64	1126-94.....33	1167-69.....69
1103-34C.....65	1104-60.....64	1126-96.....33	1167-74.....69
1103-34D.....66	1104-70.....64	1126-98.....33	1167-79.....69
1103-39B.....65	1104-80.....64	1126-110.....33	1168-32.....69
1103-39C.....65	1105-3.....62	1126-120.....33	1168-34.....69
1103-39D.....66	1105-6.....62	1126-130.....33	1168-39.....69
1103-46B.....65	1105-9.....62	1126-140.....33	1168-44.....69
1103-46C.....65	1105-12.....62	1130-9.....34	1168-49.....69
1103-46D.....66	1105-15.....62	1130-12.....34	1168-54.....69
1103-51B.....65	1105-18.....62	1130-15.....34	1168-60.....69
1103-51C.....65	1105-21.....62	1130-18.....34	1168-64.....69
1103-51D.....66	1105-24.....62	1130-21.....34	1168-69.....69
1103-58B.....65	1105-27.....62	1130-24.....34	1168-74.....69
1103-58C.....65	1105-30.....62	1130-27.....34	1168-79.....69
1103-58D.....66	1105-33.....62	1130-30.....34	1326-3.....4
1103-63B.....65	1105-36.....62	1130-33.....34	1326-3APL.....14
1103-63C.....65	1105-39.....62	1130-36.....34	1326-3BC.....3
1103-63D.....66	1105-46.....62	1130-39.....34	1326-3PL.....13
1103-70B.....65	1106-4.....63	1130-42.....34	1326-12FA.....8
1103-70C.....65	1106-7.....63	1130-45.....34	1326-13.....4
1103-70D.....66	1106-10.....63	1130-48.....34	1326-13A.....6
1103-75B.....65	1106-13.....63	1165-32.....68	1326-13APL.....14
1103-75C.....65	1106-16.....63	1165-34.....68	1326-13BC.....3

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
1326-13BCA 2	1501-104 156	1505-306 161	5003-S 37
1326-13PL 13	1501-105 156	1505-307 161	5004 35
1326-14 4	1501-106 156	1505-308 161	5004-S 37
1326-14A 6	1501-107 156	1505-309 161	5005 35
1326-14APL 14	1501-108 156	1505-310 161	5005-S 37
1326-14BC 3	1501-109 156	1505-311 161	5006 35
1326-14BCA 2	1501-110 156	1506-101 163	5006-S 37
1326-16 4	1501-111 156	1506-102 163	5007 35
1326-16A 6	1504-101 157	1506-103 163	5007-S 37
1326-16APL 14	1504-102 157	1506-104 163	5008 35
1326-16BC 3	1504-103 157	1506-105 163	5008-S 37
1326-16BCA 2	1504-104 157	1506-106 163	5009 35
1326-16FA 8	1504-105 157	1506-107 163	5009-S 37
1326-17 4	1504-106 157	1506-108 163	5010 35
1326-17A 6	1504-107 157	1506-112 163	5010-S 37
1326-17BC 3	1504-301 158	1508-101 164	5011 35
1326-17BCA 2	1504-301A 158	1508-102 164	5011-S 37
1326-18 4	1504-302 158	1508-103 164	5012 35
1326-20 4	1504-302A 158	1508-104 164	5012-S 37
1326-25 4	1504-303 158	1508-105 164	5013 35
1327-5 4	1504-303A 158	1508-106 164	5013-S 37
1327-5APL 14	1504-304 158	1508-107 164	5014 35
1327-5PL 13	1504-305 158	1508-108 164	5014-S 37
1327-6 4	1504-401 159	1508-109 164	5015 35
1327-6A 6	1504-402 159	1508-110 164	5015-S 37
1327-6APL 14	1504-403 159	1513-100 165	5016 35
1327-6FPL 17	1504-403A 159	1513-101 165	5016-S 37
1327-6PL 13	1504-404 159	1513-102 165	5017 35
1327-7 4	1504-405 159	1513-103 165	5017-S 37
1327-7APL 14	1504-410 162	1513-104 165	5018 35
1327-7PL 13	1504-411 162	1513-106 165	5018-S 37
1327-8 4	1504-412 162	1513-106D 165	5019 35
1327-8APL 14	1504-413 162	1513-108 165	5019-S 37
1327-8FPL 17	1504-414 162	1513-110 165	5020 35
1327-8PL 13	1505-101 160	1513-111 165	5020-S 37
1327-9 4	1505-102 160	1516-99 166	5021 35
1327-10 4	1505-103 160	1516-100 166	5021-S 37
1327-12 4	1505-104 160	1516-101 166	5022 35
1327-12FA 8	1505-105 160	1516-102 166	5022-S 37
1327-14FA 8	1505-106 160	1516-103 166	5023 35
1327-15 4	1505-107 160	1516-103A 166	5023-S 37
1327-19 4	1505-108 160	1516-104 166	5024 35
1327-25 4	1505-108D 160	1516-104A 166	5024-S 37
1336-50 60	1505-109 160	1516-105 166	5025 35
1336-50B 60	1505-110 160	1516-105A 166	5025-S 37
1336-51 60	1505-111 160	1516-106 166	5026 35
1501-99 156	1505-112 160	5001 35	5026-S 37
1501-100 156	1505-113 160	5001-S 37	5027 35
1501-101 156	1505-114 160	5002 35	5027-S 37
1501-102 156	1505-302 161	5002-S 37	5028 35
1501-103 156	1505-304 161	5003 35	5028-S 37

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
5101.....35	5126-S.....37	5224.....36	5321-S.....38
5101-S.....37	5127.....35	5224-S.....38	5322.....36
5102.....35	5127-S.....37	5225.....36	5322-S.....38
5102-S.....37	5128.....35	5225-S.....38	5323.....36
5103.....35	5128-S.....37	5226.....36	5323-S.....38
5103-S.....37	5201.....36	5226-S.....38	5324.....36
5104.....35	5201-S.....38	5227.....36	5324-S.....38
5104-S.....37	5202.....36	5227-S.....38	5325.....36
5105.....35	5202-S.....38	5228.....36	5325-S.....38
5105-S.....37	5203.....36	5228-S.....38	5326.....36
5106.....35	5203-S.....38	5301.....36	5326-S.....38
5106-S.....37	5204.....36	5301-S.....38	5327.....36
5107.....35	5204-S.....38	5302.....36	5327-S.....38
5107-S.....37	5205.....36	5302-S.....38	5328.....36
5108.....35	5205-S.....38	5303.....36	5328-S.....38
5108-S.....37	5206.....36	5303-S.....38	5401-S.....39
5109.....35	5206-S.....38	5304.....36	5402-S.....39
5109-S.....37	5207.....36	5304-S.....38	5403-S.....39
5110.....35	5207-S.....38	5305.....36	5404-S.....39
5110-S.....37	5208.....36	5305-S.....38	5405-S.....39
5111.....35	5208-S.....38	5306.....36	5406-S.....39
5111-S.....37	5209.....36	5306-S.....38	5407-S.....39
5112.....35	5209-S.....38	5307.....36	5408-S.....39
5112-S.....37	5210.....36	5307-S.....38	5409-S.....39
5113.....35	5210-S.....38	5308.....36	5410-S.....39
5113-S.....37	5211.....36	5308-S.....38	5411-S.....39
5114.....35	5211-S.....38	5309.....36	5501-S.....39
5114-S.....37	5212.....36	5309-S.....38	5502-S.....39
5115.....35	5212-S.....38	5310.....36	5503-S.....39
5115-S.....37	5213.....36	5310-S.....38	5504-S.....39
5116.....35	5213-S.....38	5311.....36	5505-S.....39
5116-S.....37	5214.....36	5311-S.....38	5506-S.....39
5117.....35	5214-S.....38	5312.....36	5507-S.....39
5117-S.....37	5215.....36	5312-S.....38	5508-S.....39
5118.....35	5215-S.....38	5313.....36	5509-S.....39
5118-S.....37	5216.....36	5313-S.....38	5510-S.....39
5119.....35	5216-S.....38	5314.....36	5511-S.....39
5119-S.....37	5217.....36	5314-S.....38	5601-S.....40
5120.....35	5217-S.....38	5315.....36	5602-S.....40
5120-S.....37	5218.....36	5315-S.....38	5603-S.....40
5121.....35	5218-S.....38	5316.....36	5604-S.....40
5121-S.....37	5219.....36	5316-S.....38	5605-S.....40
5122.....35	5219-S.....38	5317.....36	5606-S.....40
5122-S.....37	5220.....36	5317-S.....38	5607-S.....40
5123.....35	5220-S.....38	5318.....36	5608-S.....40
5123-S.....37	5221.....36	5318-S.....38	5609-S.....40
5124.....35	5221-S.....38	5319.....36	5610-S.....40
5124-S.....37	5222.....36	5319-S.....38	5611-S.....40
5125.....35	5222-S.....38	5320.....36	5701-S.....40
5125-S.....37	5223.....36	5320-S.....38	5702-S.....40
5126.....35	5223-S.....38	5321.....36	5703-S.....40

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
5704-S.....40	HHW-7.....145	M9X503.....180	M17/30 RG62.....109
5705-S.....40	HHW-10.....145	M9X504.....180	M17/31 RG63.....109
5706-S.....40	HHW-15.....145	M9X505.....180	M17/31 RG79.....109
5707-S.....40	HHW-20.....145	M9X506.....180	M17/33 RG64.....109
5708-S.....40	M9X001.....174	M9X507.....180	M17/34 RG65.....109
5709-S.....40	M9X002.....174	M9X508.....180	M17/45 RG108.....109
5710-S.....40	M9X003.....174	M9X509.....180	M17/47 RG114.....109
5711-S.....40	M9X004.....174	M9X510.....180	M17/52 RG119.....109
91342-1.....153	M9X005.....178	M9X511.....180	M17/52 RG120.....110
91342-2.....153	M9X006.....178	M9X512.....180	M17/54 RG122.....110
91342-3.....153	M9X007.....178	M9X513.....180	M17/56 RG130.....110
91342-4.....153	M9X008.....178	M9X514.....180	M17/56 RG131.....110
91342-12.....152	M9X009.....178	M9X515.....180	M17/60 RG142.....110
91342-34.....152	M9X010.....178	M9X516.....180	M17/62 RG144.....110
91343-1.....153	M9X011.....178	M9X517.....180	M17/64 RG35.....110
91343-2.....153	M9X012.....178	M9X518.....180	M17/64 RG164.....110
91343-2A.....153	M9X013.....177	M9X519.....180	M17/65 RG165.....110
91343-3.....153	M9X014.....177	M9X600.....175	M17/65 RG166.....110
91343-4.....153	M9X015.....177	M9X602.....175	M17/67 RG177.....110
91343-5.....153	M9X016.....177	M9X604.....175	M17/72 RG211.....110
91343-6.....153	M9X017.....177	M9X606.....175	M17/73 RG212.....110
91343-11.....152	M9X018.....177	M9X609.....175	M17/74 RG213.....110
91343-910.....152	M9X019.....177	M9X610.....176	M17/74 RG215.....110
91343-5678.....152	M9X020.....177	M9X612.....176	M17/75 RG214.....110
91344-1.....154	M9X037.....175	M9X614.....176	M17/75 RG365.....110
91344-2.....154	M9X038.....175	M9X616.....176	M17/77 RG216.....110
91344-3.....154	M9X039.....175	M9X619.....175	M17/78 RG217.....110
91344-4.....154	M9X040.....175	M9X620.....176	M17/78-00001.....110
91344-5.....154	M9X042.....175	M9X810.....181	M17/79 RG218.....110
91344-6.....154	M9X043.....176	M9X811.....181	M17/79 RG219.....110
91344-1213.....152	M9X044.....176	M9X812.....181	M17/81-00001.....110
91344-1415.....152	M9X045.....176	M9X813.....181	M17/81-00002.....110
91344-1617.....152	M9X046.....176	M9X814.....181	M17/84 RG223.....110
91346.....148	M9X048.....176	M9X815.....181	M17/86-00001.....110
91346-3.....154	M9X058.....179	M9X816.....181	M17/86-00002.....110
91346-18.....152	M9X059.....179	M9X817.....181	M17/87-00001.....110
91347.....148	M9X060.....179	M17/2 RG6.....109	M17/90 RG71.....111
91348.....148	M9X061.....179	M17/6 RG11.....109	M17/92 RG115.....111
91348-2.....154	M9X062.....179	M17/6 RG12.....109	M17/92-00001.....111
91349.....148	M9X063.....180	M17/15 RG22.....109	M17/93 RG178.....111
91350.....148	M9X064.....180	M17/15 RG111.....109	M17/93-00001.....111
91351.....148	M9X065.....180	M17/16 RG23.....109	M17/94 RG179.....111
91352.....148	M9X066.....180	M17/16 RG24.....109	M17/95 RG180.....111
91353.....148	M9X067.....180	M17/19 RG25.....109	M17/96 RG209.....111
91354.....148	M9X080.....174	M17/21 RG26.....109	M17/97 RG210.....111
080EK025.....147	M9X081.....174	M17/22 RG27.....109	M17/100 RG133.....111
137EK050.....147	M9X082.....177	M17/22-00001.....109	M17/109 RG301.....111
200EK075.....147	M9X083.....178	M17/23 RG28.....109	M17/110 RG302.....111
270EK087.....147	M9X500.....180	M17/24 RG34.....109	M17/111 RG303.....111
380EK150.....147	M9X501.....180	M17/28 RG58.....109	M17/112 RG304.....111
HHW-5.....145	M9X502.....180	M17/29 RG59.....109	M17/113 RG316.....111

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
M17/116 RG307 111	M17/135-00005 113	M17/186-00001 115	M17/225-00001 117
M17/119 RG174 111	M17/135-00006 113	M17/187-00001 115	M17/225-00002 117
M17/124 RG328 111	M17/136-00001 113	M17/188-00001 115	M17/226-00001 117
M17/125 RG329 111	M17/137-00001 113	M17/189-00001 115	M17/226-00002 117
M17/126 RG391 111	M17/138-00001 113	M17/189-00002 115	M17/227-00001 117
M17/126 RG392 111	M17/139-00001 113	M17/190-00001 115	M17/227-00002 117
M17/127 RG393 111	M17/140-00001 113	M17/191-00001 115	M17/228-00001 117
M17/128 RG400 111	M17/151-00001 113	M17/192-00001 115	M17/228-00002 117
M17/129 RG401 111	M17/151-00002 113	M17/192-00002 115	M22759/9-8 70
M17/129-00001 111	M17/152-00001 113	M17/193-00001 115	M22759/9-10 70
M17/130 RG402 111	M17/153-00001 113	M17/193-00002 115	M22759/9-12 70
M17/130-00001 111	M17/154-00001 113	M17/194-00001 115	M22759/9-14 70
M17/130-00002 112	M17/154-00002 113	M17/195-00001 115	M22759/9-16 70
M17/130-00003 112	M17/155-00001 113	M17/196-00001 115	M22759/9-18 70
M17/130-00004 112	M17/156-00001 113	M17/197-00001 115	M22759/9-20 70
M17/130-00005 112	M17/157-00001 113	M17/198-00001 115	M22759/9-22 70
M17/130-00006 112	M17/158-00001 113	M17/199-00001 115	M22759/9-24 70
M17/130-00007 112	M17/159-00001 113	M17/200-00001 115	M22759/9-26 70
M17/130-00008 112	M17/160-00001 113	M17/201-00001 115	M22759/9-28 70
M17/130-00009 112	M17/161-00001 114	M17/201-00002 116	M22759/10-8 70
M17/130-00010 112	M17/161-00002 114	M17/201-00003 116	M22759/10-10 70
M17/130-00011 112	M17/162-00001 114	M17/202-00001 116	M22759/10-12 70
M17/131 RG403 112	M17/163-00001 114	M17/203-00001 116	M22759/10-14 70
M17/132 RG404 112	M17/164-00001 114	M17/205-00018 116	M22759/10-16 70
M17/132-00001 112	M17/164-00002 114	M17/205-00050 116	M22759/10-18 70
M17/133 RG405 112	M17/165-00001 114	M17/206-00018 116	M22759/10-20 70
M17/133-00001 112	M17/165-00002 114	M17/206-00030 116	M22759/10-22 70
M17/133-00002 112	M17/166-00001 114	M17/208-00001 116	M22759/10-24 70
M17/133-00003 112	M17/167-00001 114	M17/209-00001 116	M22759/10-26 70
M17/133-00004 112	M17/168-00001 114	M17/209-00002 116	M22759/10-28 70
M17/133-00005 112	M17/168-00002 114	M17/210-00001 116	M22759/11-8 71
M17/133-00006 112	M17/169-00001 114	M17/211-00001 116	M22759/11-10 71
M17/133-00007 112	M17/170-00001 114	M17/211-00002 116	M22759/11-12 71
M17/133-00008 112	M17/171-00001 114	M17/212-00001 116	M22759/11-14 71
M17/133-00009 112	M17/172-00001 114	M17/213-00001 116	M22759/11-16 71
M17/133-00010 112	M17/173-00001 114	M17/214-00001 116	M22759/11-18 71
M17/133-00011 112	M17/174-00001 114	M17/215-00001 116	M22759/11-20 71
M17/133-00012 112	M17/175-00001 114	M17/216-00001 116	M22759/11-22 71
M17/133-00013 112	M17/176-00002 114	M17/217-00001 116	M22759/11-24 71
M17/133-00014 112	M17/176-00003 114	M17/218-00001 116	M22759/11-26 71
M17/133-00015 112	M17/177-00001 114	M17/218-00002 116	M22759/11-28 71
M17/133-00016 112	M17/178-00001 114	M17/220-00001 116	M22759/12-8 71
M17/133-00017 113	M17/179-00001 114	M17/220-00002 116	M22759/12-10 71
M17/134-00001 113	M17/180-00001 114	M17/221-00001 117	M22759/12-12 71
M17/134-00002 113	M17/181-00001 115	M17/221-00002 117	M22759/12-14 71
M17/134-00003 113	M17/181-00002 115	M17/222-00001 117	M22759/12-16 71
M17/134-00004 113	M17/182-00001 115	M17/222-00002 117	M22759/12-18 71
M17/135-00001 113	M17/182-00002 115	M17/223-00001 117	M22759/12-20 71
M17/135-00002 113	M17/183-00001 115	M17/223-00002 117	M22759/12-22 71
M17/135-00003 113	M17/184-00001 115	M17/224-00001 117	M22759/12-24 71
M17/135-00004 113	M17/185-00001 115	M17/224-00002 117	M22759/12-26 71

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
M22759/12-28.....71	M22759/34-24.....77	M22759/45-14.....80	M22759/86-02.....84
M22759/20-20.....74	M22759/35-20.....77	M22759/45-16.....80	M22759/86-03.....84
M22759/20-22.....74	M22759/35-22.....77	M22759/45-18.....80	M22759/86-4.....84
M22759/20-24.....74	M22759/35-24.....77	M22759/45-20.....80	M22759/86-04.....84
M22759/20-26.....74	M22759/35-26.....77	M22759/45-22.....80	M22759/86-6.....84
M22759/20-28.....74	M22759/41-1.....78	M22759/45-24.....80	M22759/86-8.....84
M22759/21-20.....74	M22759/41-01.....78	M22759/45-26.....80	M22759/86-10.....84
M22759/21-22.....74	M22759/41-2.....78	M22759/45-28.....80	M22759/86-12.....84
M22759/21-24.....74	M22759/41-02.....78	M22759/46-20.....80	M22759/86-14.....84
M22759/21-26.....74	M22759/41-4.....78	M22759/46-22.....80	M22759/86-16.....84
M22759/21-28.....74	M22759/41-6.....78	M22759/46-24.....80	M22759/86-18.....84
M22759/22-20.....75	M22759/41-8.....78	M22759/46-26.....80	M22759/86-20.....84
M22759/22-22.....75	M22759/41-10.....78	M22759/46-28.....80	M22759/86-22.....84
M22759/22-24.....75	M22759/41-12.....78	M22759/80-10.....81	M22759/86-24.....84
M22759/22-26.....75	M22759/41-14.....78	M22759/80-12.....81	M22759/86-26.....84
M22759/22-28.....75	M22759/41-16.....78	M22759/80-14.....81	M22759/87-1.....85
M22759/23-20.....75	M22759/41-18.....78	M22759/80-16.....81	M22759/87-01.....85
M22759/23-22.....75	M22759/41-20.....78	M22759/80-18.....81	M22759/87-2.....85
M22759/23-24.....75	M22759/41-22.....78	M22759/80-20.....81	M22759/87-02.....85
M22759/23-26.....75	M22759/41-24.....78	M22759/80-22.....81	M22759/87-03.....85
M22759/23-28.....75	M22759/41-26.....78	M22759/80-24.....81	M22759/87-4.....85
M22759/32-12.....76	M22759/42-20.....78	M22759/80-26.....81	M22759/87-04.....85
M22759/32-14.....76	M22759/42-22.....78	M22759/81-20.....81	M22759/87-6.....85
M22759/32-16.....76	M22759/42-24.....78	M22759/81-22.....81	M22759/87-8.....85
M22759/32-18.....76	M22759/42-26.....78	M22759/81-24.....81	M22759/87-10.....85
M22759/32-20.....76	M22759/43-1.....79	M22759/81-26.....81	M22759/87-12.....85
M22759/32-22.....76	M22759/43-01.....79	M22759/82-20.....82	M22759/87-14.....85
M22759/32-24.....76	M22759/43-2.....79	M22759/82-22.....82	M22759/87-16.....85
M22759/32-26.....76	M22759/43-02.....79	M22759/82-24.....82	M22759/87-18.....85
M22759/32-28.....76	M22759/43-4.....79	M22759/82-26.....82	M22759/87-20.....85
M22759/32-30.....76	M22759/43-6.....79	M22759/83-1.....82	M22759/87-22.....85
M22759/33-20.....76	M22759/43-8.....79	M22759/83-01.....82	M22759/87-24.....85
M22759/33-22.....76	M22759/43-10.....79	M22759/83-2.....82	M22759/87-26.....85
M22759/33-24.....76	M22759/43-12.....79	M22759/83-02.....82	M22759/88-1.....86
M22759/33-26.....76	M22759/43-14.....79	M22759/83-03.....82	M22759/88-01.....86
M22759/33-28.....76	M22759/43-16.....79	M22759/83-04.....82	M22759/88-2.....86
M22759/33-30.....76	M22759/43-18.....79	M22759/84-1.....83	M22759/88-02.....86
M22759/34-1.....77	M22759/43-20.....79	M22759/84-01.....83	M22759/88-03.....86
M22759/34-01.....77	M22759/43-22.....79	M22759/84-2.....83	M22759/88-4.....86
M22759/34-2.....77	M22759/43-24.....79	M22759/84-02.....83	M22759/88-04.....86
M22759/34-02.....77	M22759/43-26.....79	M22759/84-03.....83	M22759/88-6.....86
M22759/34-4.....77	M22759/44-12.....79	M22759/84-04.....83	M22759/88-8.....86
M22759/34-6.....77	M22759/44-14.....79	M22759/85-1.....83	M22759/88-10.....86
M22759/34-8.....77	M22759/44-16.....79	M22759/85-01.....83	M22759/88-12.....86
M22759/34-10.....77	M22759/44-18.....79	M22759/85-2.....83	M22759/88-14.....86
M22759/34-12.....77	M22759/44-20.....79	M22759/85-02.....83	M22759/88-16.....86
M22759/34-14.....77	M22759/44-22.....79	M22759/85-03.....83	M22759/88-18.....86
M22759/34-16.....77	M22759/44-24.....79	M22759/85-04.....83	M22759/88-20.....86
M22759/34-18.....77	M22759/44-26.....79	M22759/86-1.....84	M22759/88-22.....86
M22759/34-20.....77	M22759/44-28.....79	M22759/86-01.....84	M22759/88-24.....86
M22759/34-22.....77	M22759/45-12.....80	M22759/86-2.....84	M22759/88-26.....86

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Catalog No.....Page	Catalog No.....Page	Catalog No.....Page	Catalog No.....Page
M22759/89-20-.....87	M81044/13-24-.....90	M81381/12-24-.....93	XMTU-71/20.....146
M22759/89-22-.....87	M81044/13-26-.....90	M81381/13-20-.....93	XMTU-92/25.....146
M22759/89-24-.....87	M81044/13-28-.....90	M81381/13-22-.....93	XMTU-120/35.....146
M22759/89-26-.....87	M81044/13-30-.....90	M81381/13-24-.....93	XTPA 080.....155
M22759/90-20-.....87	M81381/7-10-.....91	M81381/13-26-.....93	XWSA-43/9.....146
M22759/90-22-.....87	M81381/7-12-.....91	M81381/13-28-.....93	XWSA-71/15.....146
M22759/90-24-.....87	M81381/7-14-.....91	M81381/17-12-.....94	XWSA-92/25.....146
M22759/90-26-.....87	M81381/7-16-.....91	M81381/17-14-.....94	XWSA-119/28.....146
M22759/91-10-.....88	M81381/7-18-.....91	M81381/17-16-.....94	XWSA-132/38.....146
M22759/91-12-.....88	M81381/7-20-.....91	M81381/17-18-.....94	XWSA-155/51.....146
M22759/91-14-.....88	M81381/7-22-.....91	M81381/17-20-.....94	XWSA-200/56.....146
M22759/91-16-.....88	M81381/7-24-.....91	M81381/17-22-.....94	
M22759/91-18-.....88	M81381/7-26-.....91	M81381/17-24-.....94	
M22759/91-20-.....88	M81381/8-10-.....91	M81381/17-26-.....94	
M22759/91-22-.....88	M81381/8-12-.....91	M81381/21-10-.....94	
M22759/91-24-.....88	M81381/8-14-.....91	M81381/21-12-.....94	
M22759/91-26-.....88	M81381/8-16-.....91	M81381/21-14-.....94	
M22759/92-26-.....88	M81381/8-18-.....91	M81381/21-16-.....94	
M22759/92-10-.....88	M81381/8-20-.....91	M81381/21-18-.....94	
M22759/92-12-.....88	M81381/8-22-.....91	M81381/21-20-.....94	
M22759/92-14-.....88	M81381/8-24-.....91	M81381/21-22-.....94	
M22759/92-16-.....88	M81381/8-26-.....91	M81381/21-24-.....94	
M22759/92-18-.....88	M81381/9-20-.....92	M81381/21-26-.....94	
M22759/92-20-.....88	M81381/9-22-.....92	M81381/22-2-.....95	
M22759/92-22-.....88	M81381/9-24-.....92	M81381/22-4-.....95	
M22759/92-24-.....88	M81381/9-26-.....92	M81381/22-6-.....95	
M81044/9-0-.....89	M81381/9-28-.....92	M81381/22-8-.....95	
M81044/9-2-.....89	M81381/9-30-.....92	M81381/22-10-.....95	
M81044/9-4-.....89	M81381/11-2-.....92	M81381/22-12-.....95	
M81044/9-6-.....89	M81381/11-4-.....92	M81381/22-14-.....95	
M81044/9-8-.....89	M81381/11-6-.....92	M81381/22-16-.....95	
M81044/9-10-.....89	M81381/11-8-.....92	M81381/22-18-.....95	
M81044/9-12-.....89	M81381/11-10-.....92	M81381/22-20-.....95	
M81044/9-14-.....89	M81381/11-12-.....92	M81381/22-22-.....95	
M81044/9-16-.....89	M81381/11-14-.....92	M81381/22-24-.....95	
M81044/9-18-.....89	M81381/11-16-.....92	M81381/22-01-.....95	
M81044/9-20-.....89	M81381/11-18-.....92	M81381/22-02-.....95	
M81044/9-22-.....89	M81381/11-20-.....92	XHTU-12/3.....145	
M81044/9-24-.....89	M81381/11-22-.....92	XHTU-19/6.....145	
M81044/12-12-.....90	M81381/11-24-.....92	XHTU-30/8.....145	
M81044/12-14-.....90	M81381/12-2-.....93	XHTU-45/12.....145	
M81044/12-16-.....90	M81381/12-4-.....93	XHTU-52/15.....145	
M81044/12-18-.....90	M81381/12-6-.....93	XHTU-72/22.....145	
M81044/12-20-.....90	M81381/12-8-.....93	XHTU-92/25.....145	
M81044/12-22-.....90	M81381/12-10-.....93	XHTU-120/35.....145	
M81044/12-24-.....90	M81381/12-12-.....93	XMTU-12/3.....146	
M81044/12-26-.....90	M81381/12-14-.....93	XMTU-22/6.....146	
M81044/12-28-.....90	M81381/12-16-.....93	XMTU-27/7.....146	
M81044/12-30-.....90	M81381/12-18-.....93	XMTU-34/7.....146	
M81044/13-20-.....90	M81381/12-20-.....93	XMTU-40/12.....146	
M81044/13-22-.....90	M81381/12-22-.....93	XMTU-56/17.....146	

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Index

Symbols

16 Mbps Token Ring	16
100BaseTX	9-25
100BaseVG ANYLAN	9-25
100 Mbps TPDDI	15-25
155ATM	9-25
622ATM	9-25

A

abrasion resistant	33,59,62,64-65,68-69,145-146,153,156,164
Adhesive and Mastic Tapes	144
aerial	105,145
Aerospace harnesses	164
AES/EBU	9-10
Air Plenum	12-18
Alarm and Security Cables	2
Allowable Shield and Jacket Materials for Each Basic Type Wire	99
analog video	11-12
ANSI/TIA/EIA 568 (category 5e)	9-10
ANSI X3T9.5 100 Mbps	15-16
ANSI X3T9.5 100 Mbps TP-PMD	16
antenna systems	61
Antenna Wire	61
Apparatus wire	34
Appliance Lead Wire	33
Appliance wire	33-34
appliance wiring	30
Area	167-168
Area of Circle	167
Area of Parallelogram	167
Area of Triangle	167
ASTM designation D-752	26
AS9120 / 2009	1
audio	17
Audio and Data Cable	5-6
Audio and Security Cables	3-4
audio systems	6,13-14

B

Bare Solid Soft Drawn Copper Wire	42
Basic Wire Specifications	97
Braid	1,41
Breakout Cables	177-178
broadband video	11-12
broadcast systems	6
brush leads	60
building interconnections	179-181
Burglar Alarm	2
burglar alarm systems	2-3

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

burglar alarm wire.....	2
Business machine wire.....	29

C

c(UL)/c(ETL) listed CMG FT4.....	9-10
Cable Breakout Boot	144,152-154
Cable Design Formulas	206-207
Cable End Caps	144
Cable Entry Seals.....	144
Cabling Factors.....	206
Cal-Trans	22
Cal-Trans Loop Detector Lead-In Cable	22
Cal-Trans type 2	22
Capabilities.....	1
Conductor Types.....	1
Custom Services	1
Insulation Types	1
CAT 5E 350 MHz Shielded	10,16
CAT 5E 350 MHz UTP	9,15
CAT 6 600 MHz UTP	11-12
CATV	19
CATV-CCTV.....	19
CCTV.....	19
CDDI.....	15-16
chemical resistant.....	30-31,33-40,172
Circuit Identification Colors for Basic Wires in Cable.....	100
Circumference of circle.....	167
CL2	2-8,19
CL2P.....	19
CL3P.....	13-14,17
CL3 (R).....	7
Class A Cable.....	59
Class H Shielded & Jacketed Type E Cables	56
CM.....	2-7,9-11
CMG FT4.....	11
CMP.....	12-17
CMR	9-11
COAX CABLE CROSS-REFERENCE.....	131-132
COAXIAL CABLE	19,101
DEFINITIONS.....	102
Dielectric Properties	105
Inner Conductors	103
Jackets.....	105
MANUFACTURING	108
Outer Conductors	104
Primary Dielectrics	104
PROTECTIVE COVERINGS	105
THEORY AND APPLICATION.....	101
Color Code Charts.....	21
Color of Insulation for Identification of Wire Sizes	99
Commercial Heavy Wall Tubing	145

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Commercial Medium Wall Tubing	146
communication	7-20,25,39-40,101,108,171-172
Comparative Properties of Insulating and Jacketing Compounds	182
COMPARISON CHART FOR MILITARY SPECIFICATION WIRES & CABLES	192-205
COMPARISON CHART FOR UL WIRES & CABLES	185-191
Composite Video	9-10
computer hook-up wire	29
computer room wiring	174-178
computer systems	13-17
Conductor Types	1
control cable	60
CONVERSION TABLE OF TEMPERATURES	255-256
Conversion Tables and Equivalencies	168
corona	34
corrosion resistant	145-146,153-166
cross-linked modified ETFE	76-80
CSA 150V	32
CSA 300V	30
CSA 600V	31
CSA AWM	29
CSA Hook-Up Wire	28
CSA TEW	28-32
CSA TR-64	28
Current Carrying Capacity of Copper Conductors	183
Custom Services	1

D

Data Grade UTP	15-16
data recording	39-40
data trunk	179-181
DECIMAL EQUIVALENTS	254
Decimal Equivalents of Millimeters	168
Derating Factors for Bundled Conductors	184
Detecta-Duct®	22
Diameter of Circle	167
Diameter of Shield	207
dielectric stress	30-31
Digital Video	9-10
direct burial	107,145,181,236
Distribution Cables	175-176
DOD-2003-1	152

E

EIA/TIA 568B.2-1	12
EIA/TIA TSB-36 Category 5E	15-16
Electrical	59
Electric Welding Cable	26
electronic equipment	36
electronic wiring	28,171
End caps	147

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Ethernet.....	9-10
ethylene glycol resistant	59
ETL verified	9-10,12
Extra flexible	26
Extruded PTFE Hook-Up Wire	50-52

F

Fast Ethernet	9-10
FIBER OPTIC CABLE	171
THEORY AND CONSTRUCTION	171
CABLE CONSTRUCTION CONSIDERATIONS	172
FIBER TYPES	172
FUNDAMENTAL PRINCIPLE	172
SYSTEMS COMPONENTS.....	171
TRANSMISSION CONSIDERATIONS	173
Fire Alarm Cable.....	7-8
fire alarm systems	17-18
Fire resistant.....	64
Fixture wire	34
flame-retardant	34,153,159
flame-resistant	33-40,63-65,153,159
flammability.....	70
flexibility	18,33,62-63,68-69,74-75,155
Flexible	26,41,60,155
Flexible Braid	41
Flexible Strand.....	60
flexible thermoplastic adhesive tape.....	155
flexing	61
Flexoprene®	23,27
Flexoprene® Portable Cord	27
Flexoprene® Welding Cable	26
flow monitoring	39-40
fluid resistant	62,64,66
Four Conductor MIL-W-16878/4	58
FPL (R).....	7-8
FPLP.....	17-18
Fractional Inches & Millimeters.....	168
fungus resistant	28-29,59,63,65-67

G

Gigabit Ethernet	10
GLOSSARY OF WIRE & CABLE TERMINOLOGY	208-253
grounding bonds.....	41
guidance controls	18

H

Harness repair.....	159
heat resistant.....	34,56,65,92-93,95,145-146,148,155,183
Heat Shrinkable End Caps With or Without Sealant & Valves	147

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
 (310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
 E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
 (602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
 E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Heat Shrinkable Products.....	144
Heat stable	34
heavy duty	59
Heavy duty harnessing.....	156
Heavy Duty Outdoor Use - Communication & Electronic Control Cords	24
Heavy Wall Splice Tubing - Military/Industrial OEM Grade	145
heavy wall tubing	145
High-Ratio Grommets.....	144
high breaking strength.....	74-75
High insulation resistance.....	64
high reliability.....	70-71,74-75
high temperature	33,62-64,68-71,102,164
high tensile strength	61
hook-up wire.....	29,44-45

I

ICEA S-90-661	9-10
IMSA Spec. No. 51-5 requirements	22
Index of Catalog Numbers.....	263-275
Indoor/outdoor installations	181
Inductance Loop Detector Wire DETECTA-DUCT®	22
Inside Telephone Multi-Pair.....	9-11
Inside Telephone Multi-Pair Category 5 Overall Shield.....	16
Inside Telephone Multi-Pair Category 5 Unshielded Pairs.....	15
Inside Telephone Multi-Pair Category 6 Unshielded Pairs.....	12
instrumentation.....	3,5-7,35-38,102
instrumentation control	35-38
Instrumentation Control Cable.....	35-38
Instrumentation Control Cable with Overall Shield	37-38
instrument lead wire	18
Insulated Hook-Up Wire.....	30-32
Insulation Types	1
intercom.....	17
Intercommunication set cord	60
intercom systems.....	2-3,6-8,13-14
Interconnecting cables.....	35-38
interconnecting cables.....	2-3
Internal appliance wire	28
internal wiring	29
ISDN	9-10
ISO/ICE 11801	9-10
ISO 9001:2008	1

J

Jacket Material and Color.....	98
Joint and cable repair	145-146

K

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

L

LAN.....	9-10,15-16
light-duty power cord	27
long haul networking.....	179
Loop detector lead-in cable	22
Loose Tube Cables	179-181
low energy communication	7-8,13-14,17
low smoke emission	70-71,74-75
low temperatures	34,155
Low Tension.....	59
low voltage relay control systems	2-3

M

magnetic cranes	23
magnetic switches	60
maintenance of trailing cables	156
Mathematical Formulas	167
MATV	19,230
maximum flexibility.....	18
mechanical protection.....	107,145-146,148,153,160,165
Medium/Heavy Wall Tubing.....	144
Microminim®.....	18
MIL-A-8243 deice fluid.....	156,158-165
MIL-C-372 bore cleaner.....	156
MIL-C-10392B	60
MIL-C-10392C	60
MIL-C-55021.....	56
MIL-DTL-17 Attenuation	133-135
MIL-DTL-17 Cable Descriptions	109-116
MIL-DTL-5086	43
MIL-DTL-5898F	60
MIL-DTL-8777D (ASG).....	62
MIL-DTL-12995	61
MIL-DTL-13169B	61
MIL-DTL-13486	59
MIL-DTL-16878	44-49,53-54
MIL-DTL-22759	53,65,65-80,81-88
MIL-DTL-22759/1	65
MIL-DTL-22759/2	65
MIL-DTL-22759/3	66
MIL-DTL-22759/4	67
MIL-DTL-22759/5	68
MIL-DTL-22759/6	68
MIL-DTL-22759/7	69
MIL-DTL-22759/8	69
MIL-DTL-22759/9	70
MIL-DTL-22759/10	70
MIL-DTL-22759/11	71
MIL-DTL-22759/12	71
MIL-DTL-22759/16	72

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-22759/17	72
MIL-DTL-22759/18	73
MIL-DTL-22759/19	73
MIL-DTL-22759/20	74
MIL-DTL-22759/21	74
MIL-DTL-22759/22	75
MIL-DTL-22759/23	75
MIL-DTL-22759/32	76
MIL-DTL-22759/33	76
MIL-DTL-22759/34	77
MIL-DTL-22759/35	77
MIL-DTL-22759/41	78
MIL-DTL-22759/42	78
MIL-DTL-22759/43	79
MIL-DTL-22759/44	79
MIL-DTL-22759/45	80
MIL-DTL-22759/46	80
MIL-DTL-22759/80A	81
MIL-DTL-22759/81A	81
MIL-DTL-22759/82A	82
MIL-DTL-22759/83A	82
MIL-DTL-22759/84A	83
MIL-DTL-22759/85A	83
MIL-DTL-22759/86A	84
MIL-DTL-22759/87A	85
MIL-DTL-22759/88A	86
MIL-DTL-22759/89A	87
MIL-DTL-22759/90A	87
MIL-DTL-22759/91A	88
MIL-DTL-22759/92A	88
MIL-DTL-23053/1	144,156
MIL-DTL-23053/4	157-159
MIL-DTL-23053/5	160-162
MIL-DTL-23053/6	163
MIL-DTL-23053/8	164
MIL-DTL-23053/13	165
MIL-DTL-23053/16	166
MIL-DTL-25038/1	64
MIL-DTL-25038/3	64
MIL-DTL-25136	61
MIL-DTL-27500 (NEMA WC27500) Cable Designation	96
MIL-DTL-81044/9	89
MIL-DTL-81044/12	90
MIL-DTL-81044/13	90
MIL-DTL-81381/7	91
MIL-DTL-81381/8	91
MIL-DTL-81381/9	92
MIL-DTL-81381/11	92
MIL-DTL-81381/12	93
MIL-DTL-81381/13	93
MIL-DTL-81381/17	94

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

MIL-DTL-81381/21	94
MIL-DTL-81381/22	95
MIL-F-16884 marine fuel	156
MIL-F-46162 diesel fuel	156
MIL-G-3056 gasoline	157,166
MIL-H-5606 hydraulic	156-166
MIL-I-23699 lube oil	158-166
MIL-L-3056 gasoline	156
MIL-L-7808 lube oil	156-166
MIL-L-23699 lube oil	156
MIL-T-5624 JP4	156-166
MIL-W-3861	42
MIL-W-13169B	61
MIL-W-6370C	61
MIL-W-16878	56
MIL-W-16878 Cable Designation	54
MIL-W-16878E/4 Type E (NEMA HP-3)	50
MIL-W-16878E/5 Type EE (NEMA HP-3)	51
MIL-W-16878E/6 Type ET (NEMA HP-3)	52
MIL-W-16878 Rev. F Supersession of Duplicate Strandings to MIL-DTL-22759	53
Military/Industrial Grade End Caps	147
Military Heavy Wall Tubing	145
moisture resistant	22,28-29,33-40,62-64,66-67,146-147,155,179
Monitoring	39-40
Motor Connection Kits	144
Motor Lead Wire	34
MS 25471 (ASG)	62
MS 27110 (ASG)	63
MS 90294	67
multimedia	11-12
Multiple Pair Control Cable	39-40

N

National Electric Code	2-3,7-10,13,17-20
NEC article 725	2-3,7-8,13-14,17,19
NEC article 725 type CL3	2-3,5-9
NEC article 725 type CL3P	14
NEC article 760	7-8,18
NEC article 760 type FPL	8
NEC article 800	2-3,7-8
NEC article 800 type CM	2-3,5-9
NEMA HP-3	50-52
NEMA WC-66 (Category 6)	11
NEMA WC27500	96
NEMA WC63	15-16
non-burning	72-73
NTSC/PAL Component	9-10

O

office wiring	174-178
---------------------	---------

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

oil resistant	28-29,38,64,66,156-159,160-166
overload stability	70,74-75
ozone resistant	34,179

P

Patch cables	174
Percent of Shield Coverage	207
Pigtail	60
Plenum wiring	176-177
portable power cord	26-27
Premise Horizontal Cable	9-10
pressure monitoring	39-40
Property Values	207
protection in high temperature	164
protection of wire splices	163
PTFE Insulated Hook-Up Wire	30-32
Public address systems	2-3
PVC Communication & Electronic Control Cords	24

Q

QQ-B-575 (A-A-59569)	41
QQ-W-343 (A-A-59551)	42

R

Ratio Cable Breakout Boot	152
Ratio Tubing	144
Recovered Wall Thickness	167
relays	60
remote control circuits	2-3
remote signaling circuits	6
Repair and rework of cable jackets	162
repairing cable jackets	146
resilient	26
resist deformation	29
resists aging	34
Retractable Cords	23-25
RG/U Cable Descriptions	118-130
RG Attenuation	137-143
Riser wiring	175,178
RoHS	1,242
RS-422	9-10
rubber jacket	26
Rubber Portable Flexible Cord	26

S

SAE-AS22759	65-88
SAE AS50861	43
SAE AS81044	89-90

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

SAE-AS81765/1	144-145,147-153
safety control wiring	7-8,13-14,17
salt water resistant	59
self-extinguishing	28-29,72
sensors	18
severe temperatures	166
Shielded & Jacketed Electrical & Electronic Instrument Wire	46-49
Shielded Communication Cords	25
Shielded Fire Alarm Cable	18
Shielded Multi-Conductor	7-9,14
Shielded Pairs	5
shielding	41
Shield Material	97
shock protection	157
short run office wiring	174
Shrink Tube	144,156-166,169
Shrink Tube Usage Requirement Table	169-170
Shunt leads	60
signal cable	22,60
Simplex & Duplex Cables	174
Single Conductor MIL-W-16878/4	56
smoke emission	70
solvent resistant	28-29,56,63,66-67,165
Sound and Intercom Shielded Pairs	17
sound systems	6-8
space savings	32
Special Purpose Miniature Flexible Cables	60
Splice protection	159
SRML	34,246
SS-S-550 5% NaCl	156-166
Strain relief	157-164
Strain Relief & Boots for Harness Systems	148
strain relief boots	148
Strain relief of soldered connections	163
stripability	33
Surface Area of Sphere	167

T

T1	9-10
Table I - Basic Wire Specifications	97
Table I A - Shield Material	97
Table I B - Jacket Material and Color	98
Table II - Allowable Shield and Jacket Materials for Each Basic Type Wire	99
Table III A - Circuit Identification Colors for Basic Wires in Cable	100
Table III B - Circuit Identification Colors for Basic Wires in Cable	100
Table III C - Color of Insulation for Identification of Wire Sizes	99
TAGT/TGGT	33
tamper proof cover	158
Technical Data & Conversion Tables	167
telecommunications	172,179,181
telemetry	35-40

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

telephone station wire.....	2
Temperature Conversions.....	167
temperature extremes	30-31
temperature monitoring	39-40
terminating pipe and conduit	147
Test Lead Wire.....	25,61
thermal/cryogenic performance	72-73
thermal cycling	34
thermal stability	66-67
thermoplastic adhesive tape.....	155
thin wall insulation	32
Three Conductor MIL-W-16878/4.....	57
TIA/EIA 568B.2-1.....	11
Tinned Copper Flexible Braid	41
Tinned Solid Soft Drawn Copper Wire.....	42
Token Ring.....	9-10,15-16
Total Weight of Cabled Conductor	206
Tough.....	26
Trademarks.....	262
Traffic Signal Cable.....	22
Transition Boot.....	144,148-151
truck trailers	23
tubed loop wire	22
Twisting Loss	207
Two Conductor MIL-W-16878/4.....	57
Type B/N.....	46-49
Type B/nylon 600 volt.....	46-49
Type C/N.....	46-49
Type C/nylon 1000 volt	46-49
Type D	45
Type D/N.....	45-49
Type D/nylon 3000 volt	46-49
Type I.....	59
Type SO.....	27
Types SVO & SJOOW	27

U

UL/CSA Hook-Up Wire	28
UL/ETL listed	9-10
UL/ETL verified Category 5E.....	9-10
UL 444.....	9-10
UL flexible cord - subject 62	27
UL flexible cord.....	26
UL Style 1007.....	28
UL Style 1015.....	28
UL Style 1028.....	29-32
UL Style 1061.....	29
UL Style 1180.....	30
UL Style 1199.....	31
UL Style 1213.....	32
UL subject 62.....	26

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com



Standard Wire & Cable Co.

Ultra-Flex Micro-Miniature Wire & Cable	18
ultraviolet radiation	34
UL Type OFNP.....	174,176-177
UL Type OFNR	174-175,178-181
UL Type OFNR - Indoor/Outdoor.....	181
unbalanced intercom systems	2-3
underground	145-146
Unshielded Fire Alarm Cable.....	17
Unshielded Multi-Conductor	2,4,8,13

V

Very Flexible Sealing Tape XTPA 080.....	155
vibration protection	157
Volume of Prism or Cylinder	167
Volume of Pyramid or Cone.....	167
Volume of Sphere	167
VV-F-800 diesel fuel	156
VW-1 Vertical Flame Test.....	28

W

water tightness	153
weather resistant	59,101,153,179
Weight of Conductor.....	206
Weight of Insulation	206
Weight of Jacket	206
Weight of Shield	207
Weight of Tape	206
Welding Cable	26
WIRE & CABLE TERMINOLOGY.....	208
WIRE DATA - SOLID BARE COPPER.....	257-258
WIRE DATA - STRANDED TINNED COPPER	259-261
Wrap Around Sleeves.....	144,146

X

XHTU/A	145
XMTU/A.....	146
XTPA 080.....	155
XWSA.....	146

Y

Z

Rancho Dominguez

2050 E. Vista Bella Way, Rancho Dominguez, CA 90220
(310) 609-1811 • (800) 326-0006 • FAX: (310) 609-1862
E-Mail: salesrd@standard-wire.com

Phoenix

3120 West Thomas Road, Bldg. #801, Phoenix, AZ 85017
(602) 269-2501 • (800) 325-6478 • FAX: (602) 278-7134
E-Mail: salesphx@standard-wire.com

TERMS AND CONDITIONS

The following terms and conditions shall apply to all goods and services sold unless otherwise agreed to by Standard Wire & Cable Co. in writing:

Terms: 1% 10, net 30 days upon approved credit.

Minimum Order: Our minimum order is \$100.00 U.S. combined material value.

Order Quantities. Material quantities ordered are subject to a shipping and billing tolerance of plus or minus 10%.

Payment: All payments must be made within Standard Wire & Cable Co.'s terms and in good funds in U.S. dollars and will be deemed made when such funds are received by Standard Wire & Cable Co. VISA, MasterCard and American Express are also accepted on domestic orders.

Export: All foreign orders are either payable in advance or by letter of credit unless an open account has been established with credit approval.

Freight Policy: FOB Rancho Dominguez, California (U.S.A.) or Phoenix, Arizona (U.S.A.).

Warranty: Standard Wire & Cable Co.'s products are warranted to be free from defects in material and workmanship at the time of sale. Standard Wire & Cable Co.'s obligation under this warranty is strictly limited to the replacement of the product. Under no circumstances is Standard Wire & Cable Co. liable for any loss, damage, expenses, or consequential damage of any kind arising out of the use or inability to use these products. Standard Wire & Cable Co. makes no warranty as to the fitness or suitability of any goods or services for buyer's particular use.

Returned Goods: No return may be made unless Standard Wire & Cable Co. has issued a Return Material Authorization (RMA) to the buyer prior to the return. As a condition of accepting any such return, Standard Wire & Cable Co. may require that the original packaging materials accompany the goods at the time of return.

Technical Assistance: We will be pleased to supply technical assistance in providing you with the most cost-effective solution to your wire and cable requirements.

Copyright: This catalog supersedes all previous Standard Wire & Cable Co. publications and is copyrighted. All reproduction rights are reserved.

No part of this Technical Handbook and Catalog may be reproduced without the express written consent of Standard Wire & Cable Co.