

TPC WIRE & CABLE

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Providing the Total Wire & Cable Solution to the

CRANE INDUSTRY

Festoon • Reel • Cable Carrier • Crane Service



TPC WIRE & CABLE CORP.

A Premier Farnell Company



TPC WIRE & CABLE PROVIDES

- High-performance problem-solving products
- Cost and time-saving products for industrial applications
- Personal sales support
- In-depth inventories
- Hard-to-find cord and cable products
- Knowledgeable customer service
- A safer electrical environment
- Longer lasting products
- Custom engineered products

Electrical cord and cable is a vital link in your facility's electrical system

Electrical equipment requires quality cord and cable that can stand up to today's industrial environments.

Many cord and cable applications are subject to one or more of the following conditions:

- Impact & Vibration
- Crushing & Abrasion
- Pulling & Flexing
- Oil, chemical & water deterioration
- Extreme heat & cold
- Unsafe areas

Too often, maintenance must use ORDINARY cord and cable in these areas because that's all that's available. These products do not hold up because they are not designed for maintenance environments.

As you know . . . the real cost of cord and cable maintenance includes not only the cost of material, but also the labor and downtime that result from unnecessary repair and replacement of damaged or worn-out cord and cable.

Ideal for Abusive Environments

High Flex • Chemical • High Heat

In the mobile electrification world, it is important to address the abusive environments in which the electrical cable will be subject. In most cases, the cable package will fail before the cable carrying apparatus fails. Therefore, choosing a high quality, high performance electrical cable and like accessories are at the forefront to save labor, material, and downtime costs. TPC Wire & Cable's line includes cables designed for high flex, chemical, high heat, and/or abusive environments. With our team of engineers, if the cable does not exist, we will design and produce the cable to match your needs.



Photo courtesy of Conductrix-Wampfler

cable and flat cable), spring cable reels, motorized cable reels, and cat track systems.

TPC's heavy-duty cable is the choice preference for applications that call for heavy abuse for such operations that include: grab cranes, container cranes, bridge cranes, and skid systems. Using our dedicated mechanical assembly shop, we can deliver the complete cable package with connectors – ready to go off the spool. Our thorough knowledge of mobile electrification applications allows our experienced engineers and sales people to help you with custom cables to address your specific needs.



Photo courtesy of A+A Manufacturing (Gortrac)

Whether it is a cable reel drag, lift, stretch, or retrieve application, TPC has the right cable selection for you to choose that will not only survive the environment, but also prevent "cork screwing".

TPC provides custom engineered products designed with application and environment information from the customer. These products are built specifically for an individual customer and represent a real problem-solving service.

The cable, connectors, and accessories presented in our catalog have been specifically designed for use in applications where performance and reliability are of the utmost importance. These products are used in steel mills, bulk material handling facilities, coke plants, and a large variety of other crane applications.

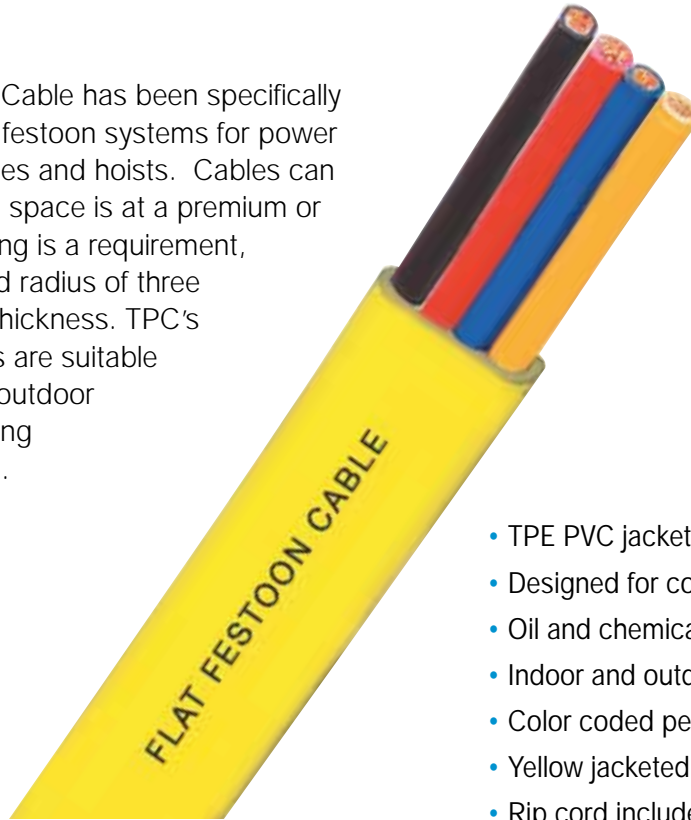


Photo courtesy of Gleason Reel

FLAT FESTOON CABLE

- 600 Volt
- Oil and Sunlight Resistant
- 105°C Rated

TPC's Flat Festoon Cable has been specifically designed for use in festoon systems for power and control on cranes and hoists. Cables can also be used where space is at a premium or where extreme flexing is a requirement, recommended bend radius of three to five times cable thickness. TPC's Flat Festoon Cables are suitable for either indoor or outdoor applications operating at -40° C to 105° C.



- TPE PVC jacket
- Designed for continuous flexing applications
- Oil and chemical resistant
- Indoor and outdoor rated
- Color coded per ICEA method 1, Table E-2
- Yellow jacketed
- Rip cord included

ORDERING INFORMATION

PART NO.	SIZE AWG/COND.	BUNCH STRANDING	VOLTS	CABLE DIM. THICKNESS x WIDTH (IN.)	WT. (LBS.) PER 1000'
61918	16/8c	65/34	600	.20 x 1.110	192
61912	16/12c	65/34	600	.20 x 1.605	286
61944	14/4c	41/30	600	.217 x .730	142
61948	14/8c	41/30	600	.217 x 1.22	252
61942	14/12c	41/30	600	.217 x 1.81	375
61924	12/4c	65/30	600	.236 x .71	174
61928	12/8c	65/30	600	.236 x 1.650	383
61904	10/4c	105/30	600	.276 x .820	254
61984	8/4c	168/30	600	.36 x 1.15	438
61964	6/4c	266/30	600	.43 x 1.45	679
61994	4/4c	420/30	600	.49 x 1.67	959

FLAT FESTOON CABLE

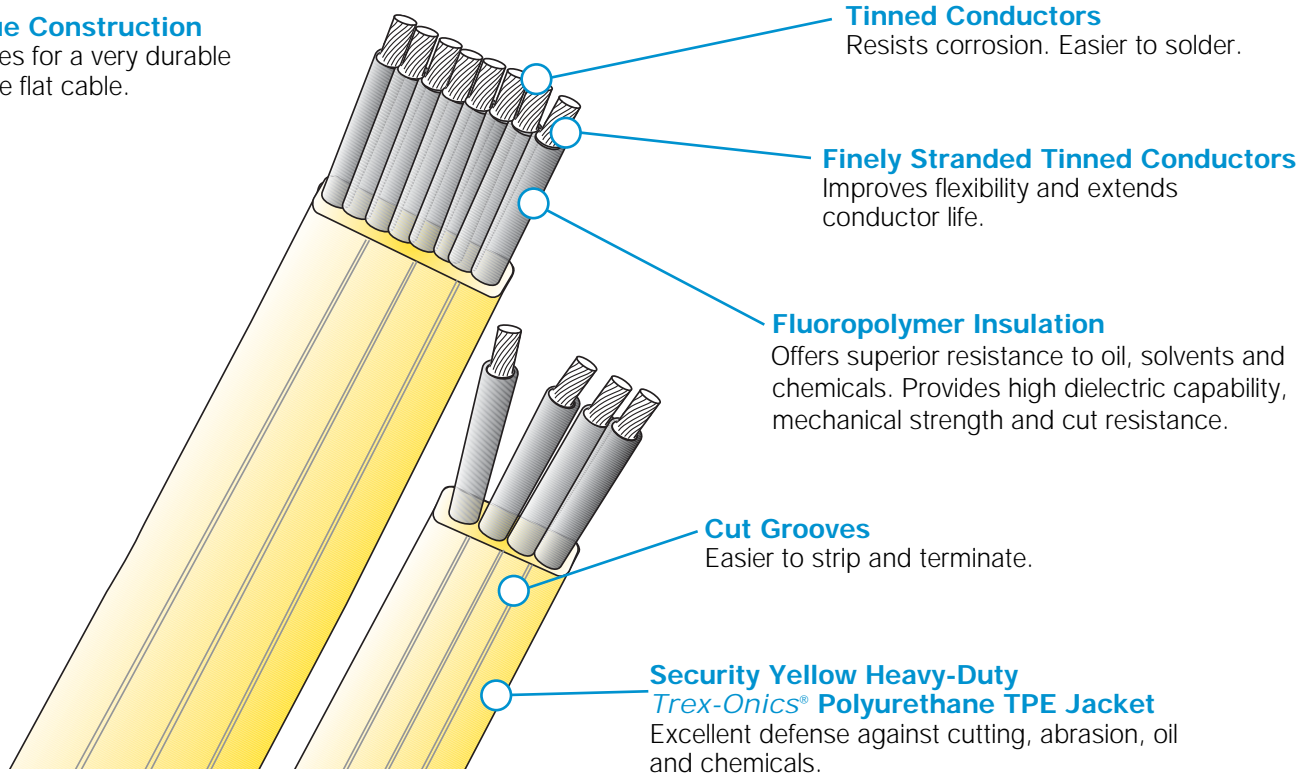
• 600 Volt

• 90° C

• RoHS Compliant

Unique Construction

Provides for a very durable long life flat cable.



ORDERING INFORMATION

PART NO.	CORD SIZE AWG/COND.	CONDUCTOR STRANDING	INSULATION THICKNESS (IN.)	AMPACITY (1)	DIMENSIONAL DATA	COLOR CODE	WT. (LBS.) PER 1000'
61114	16/4	65/34	.015"	16	.19" x .485"	Black, Red, Blue, Orange	94
61118	16/8	65/34	.015"	15	.19" x .87"	Black, Red, Blue, Orange, Yellow, Brown, Red/Black, Blue/Black	130
61112	16/12	65/34	.015"	14	.19" x 1.255"	Black, Red, Blue, Orange, Yellow, Brown, Red/Black, Blue/Black, Orange/Black, Yellow/Black, Brown/Black, Black/Red	198
61148	14/8	105/34	.015"	20	.204" x .982"	Black, Red, Blue, Orange, Yellow, Brown, Red/Black, Blue/Black	206
61142	14/12	105/34	.015"	17	.204" x 1.423"	Black, Red, Blue, Orange, Yellow, Brown, Red/Black, Blue/Black, Orange/Black, Yellow/Black, Brown/Black, Black/Red	287
61124	12/4	65/30	.015"	30	.22" x .60"	Black, Red, Blue, Orange	112
61104	10/4c	105/30	.018"	41	.246" x .709"	Black, Red, Blue, Orange	210
61164	6/4	266/30	.022"	72	.350" x 1.13"	Black, Red, Blue, Orange	462

NOTES: (1) Ampacities calculated at 30° C ambient and 90° C conductor temperature

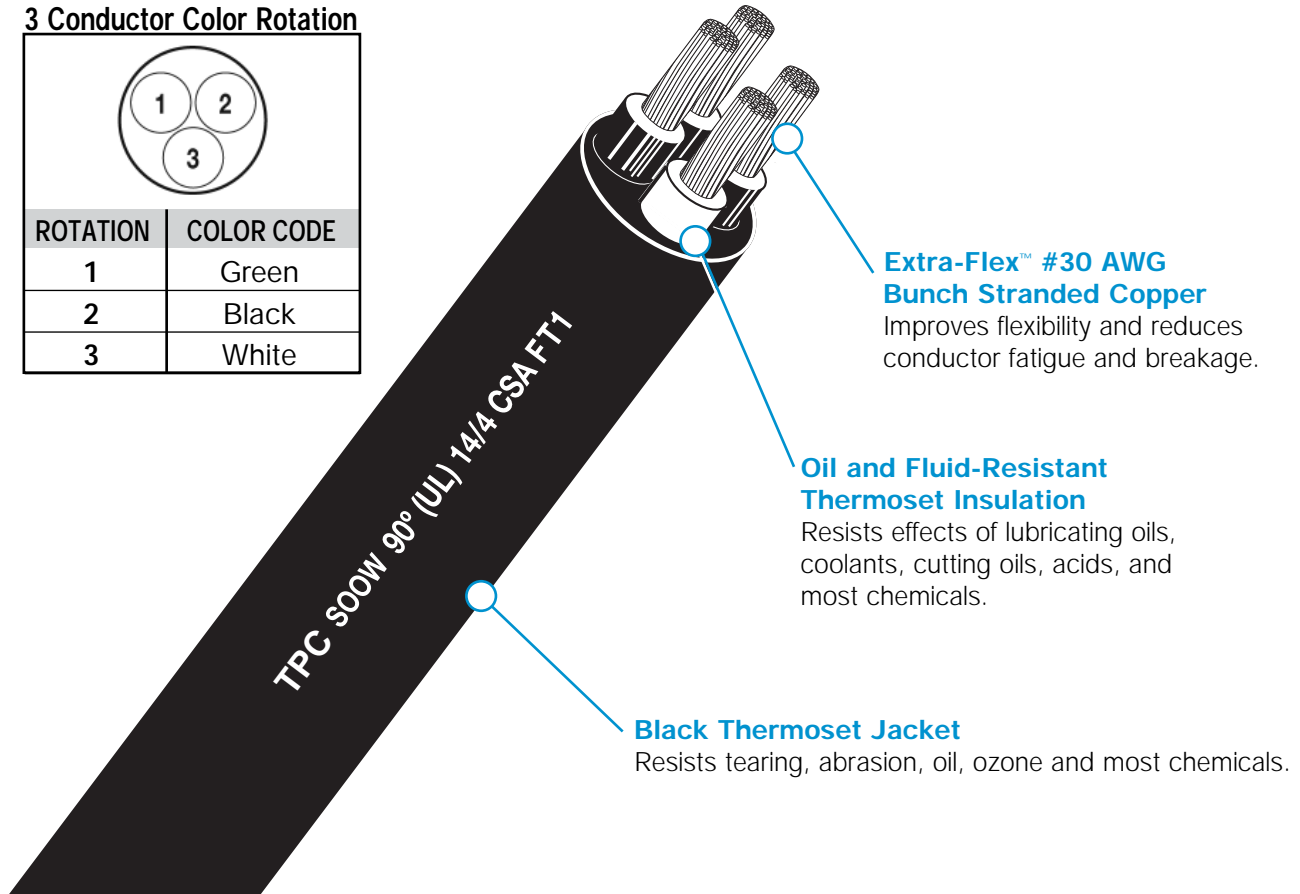
SOOW PORTABLE CORD



- UL Listed
- CSA Certified
- 600 Volt
- FT-1
- SOOW Rated
- 90°C to -40°C
- UV Resistant
- Extra Hard Usage
- RoHS Compliant

3 Conductor Color Rotation

ROTATION	COLOR CODE
1	Green
2	Black
3	White



Extra-Flex™ #30 AWG Bunch Stranded Copper
Improves flexibility and reduces conductor fatigue and breakage.

Oil and Fluid-Resistant Thermoset Insulation
Resists effects of lubricating oils, coolants, cutting oils, acids, and most chemicals.

Black Thermoset Jacket
Resists tearing, abrasion, oil, ozone and most chemicals.

ORDERING INFORMATION

PART NO.	CORD SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOM. O.D. (IN.)	WT. (LBS.) PER 1000'
77193	16/3	26 x 30	13	.027	.060	.389	105
77198	16/4	26 x 30	10	.027	.060	.414	120
77194	14/3	41 x 30	18	.040	.080	.525	180
77199	14/4	41 x 30	15	.040	.080	.565	210
77195	12/3	65 x 30	25	.040	.095	.595	235
77200	12/4	65 x 30	20	.040	.095	.645	290

NOTES: (1)Maximum allowable current per conductor when one conductor is utilized as ground or neutral. Ampacities are based on an ambient temperature of 30° C with a conductor temperature of 90° C.

ULTRA-GARD™ PORTABLE CORD

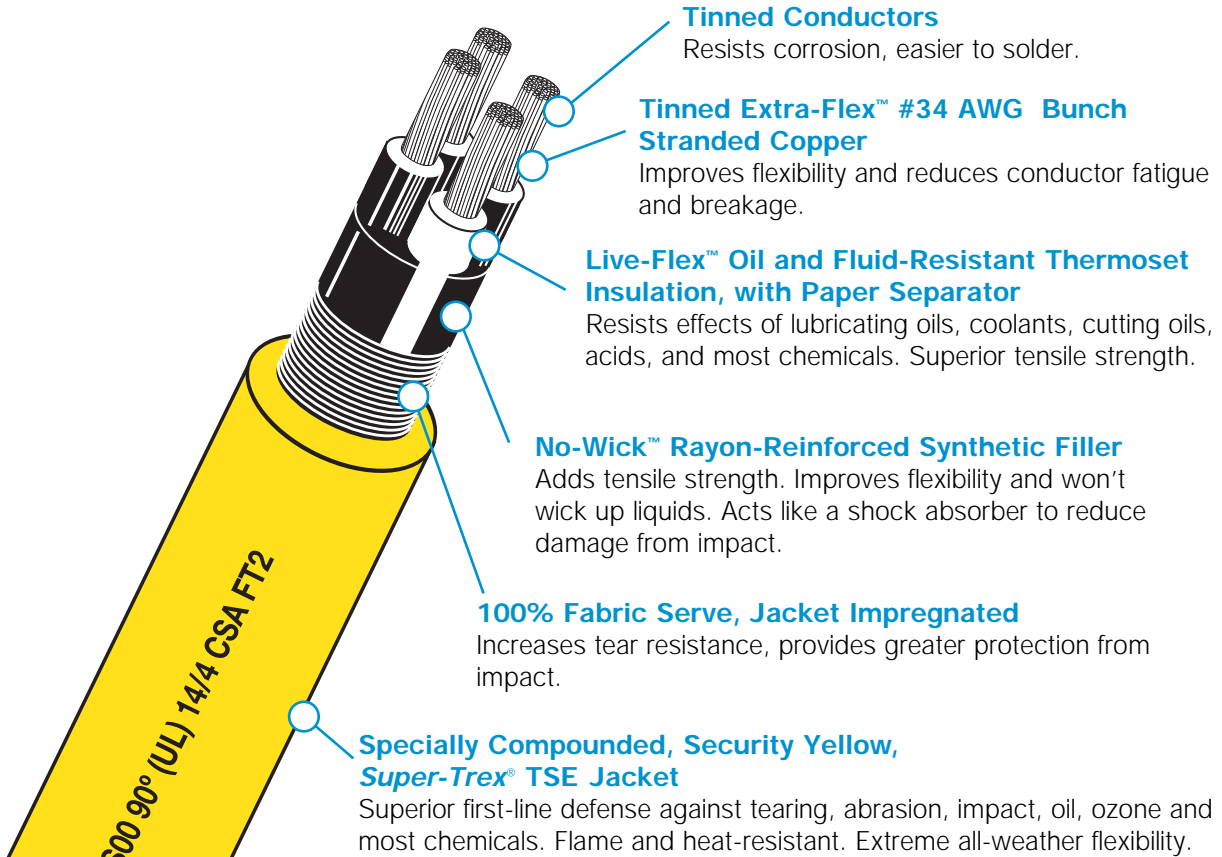


- UL Listed
- CSA Certified
- SOO Rated

- MSHA Approved
- 90°C to -30°C
- 600 Volt

- UV Resistant
- Extra Hard Usage
- FT-2

- RoHS Compliant



ORDERING INFORMATION

PART NO.	CORD SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	MAX. O.D. (IN.)	WT. (LBS.) PER 1000'
87192	18/3	41 x 34	10	.030	.060	.380	80
87197	18/4	41 x 34	7	.030	.060	.408	100
87191	16/2	65 x 34	13	.030	.060	.388	85
87193	16/3	65 x 34	13	.030	.060	.408	105
87193AU*	16/3	65 x 34	13	.030	.060	.408	105
87198	16/4	65 x 34	10	.030	.060	.435	120
87202	16/5	65 x 34	8	.030	.080	.520	175
87202AU*	16/5	65 x 34	8	.030	.060	.520	175
87206	16/6	65 x 34	8	.030	.080	.560	210
87207	16/7	65 x 34	7	.030	.080	.630	240
87208	16/8	65 x 34	7	.030	.080	.640	275
87194	14/3	104 x 34	18	.045	.080	.548	180
87199	14/4	104 x 34	15	.045	.080	.590	210
87195	12/3	165 x 34	25	.045	.095	.623	235
87200	12/4	165 x 34	20	.045	.095	.675	290
87196	10/3	259 x 34	30	.045	.095	.685	310
87201	10/4	259 x 34	25	.045	.095	.738	385

NOTES: (1) Maximum allowable current per conductor when one conductor is utilized as ground or neutral. Ampacities are based on an ambient temperature of 30° C with a conductor temperature of 90° C. *Automotive Standard Conductor Color Code.

TRIPLE-GARD™ PORTABLE CORD



- UL Listed
- CSA Certified
- SOO Rated

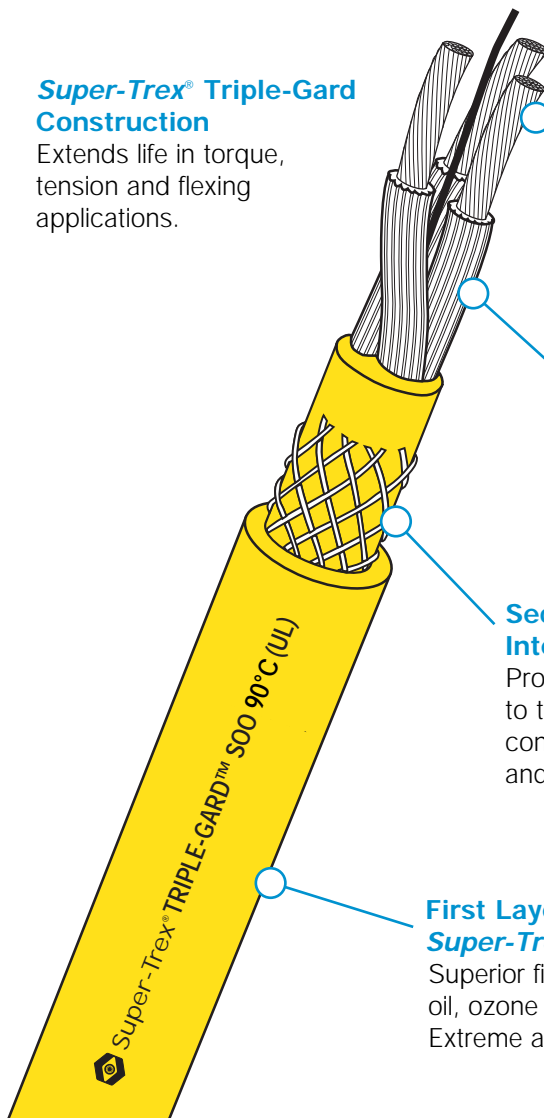
- 90°C to -40°C
- FT-2
- 600 Volt

- UV Resistant
- Extra Hard Usage
- RoHS Compliant

- Triple Layered Construction

Super-Trex® Triple-Gard Construction

Extends life in torque, tension and flexing applications.



Tinned Conductors

Resists corrosion, easier to solder.

2-1/2 Times More Stranding

Improves flexibility. Reduces conductor fatigue and breakage.

Third Layer — Specially Ribbed Oil Resistant Live-Flex™ Conductor Insulation

Resists effects of lubricating oils, coolants, cutting oils, acids, and most chemicals. Superior tensile strength.

Second Layer — Rayon Reinforced Braid and Integral Fill Design

Provides added strength. Improves cable resistance to tearing, abrasion, twisting and pulling. Locks the conductors into the jacket. Helps prevent cork-screwing and premature conductor failure.

First Layer — Specially Compounded, Security Yellow Super-Trex® TSE Jacket

Superior first-line defense against tearing, abrasion, impact, oil, ozone and most chemicals. Flame and heat-resistant. Extreme all-weather flexibility

ORDERING INFORMATION

PART NO.	CORD SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
85194	14/3	104 x 34	18	.045	.080	.548	185
85199	14/4	104 x 34	15	.045	.080	.590	245
85195	12/3	165 x 34	25	.045	.095	.623	265
85200	12/4	165 x 34	20	.045	.095	.675	320
85196	10/3	259 x 34	30	.045	.095	.685	335
85201	10/4	259 x 34	25	.045	.095	.745	400

NOTES: (1) Maximum allowable current per conductor when one conductor is utilized as ground or neutral. Ampacities are based on an ambient temperature of 30° C with a conductor temperature of 90° C.

MULTI-CONDUCTOR P&R CABLE

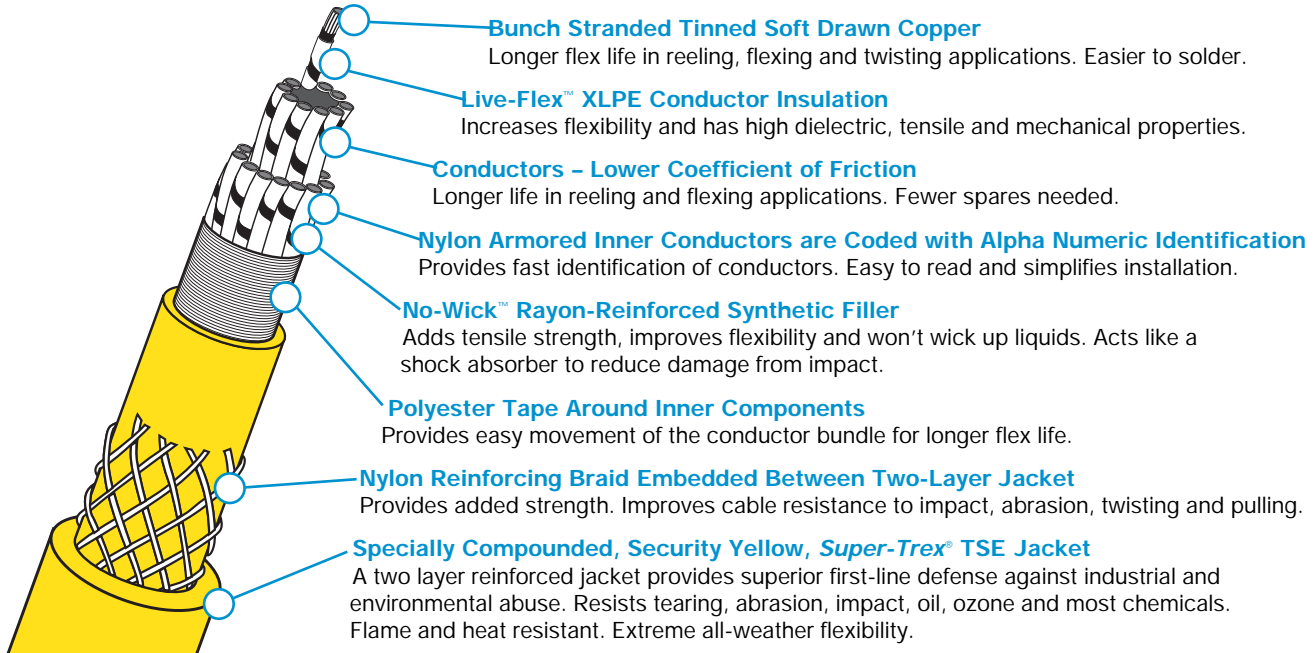


- UL Type TC
- CSA Certified
- UV Resistant

- 16 AWG MSHA Approved
- Payout & Retractable (P&R) Construction

- 600 Volt
- 90°C Dry
- 75°C Wet

- FT-1
- RoHS Compliant
- WTTC



ORDERING INFORMATION

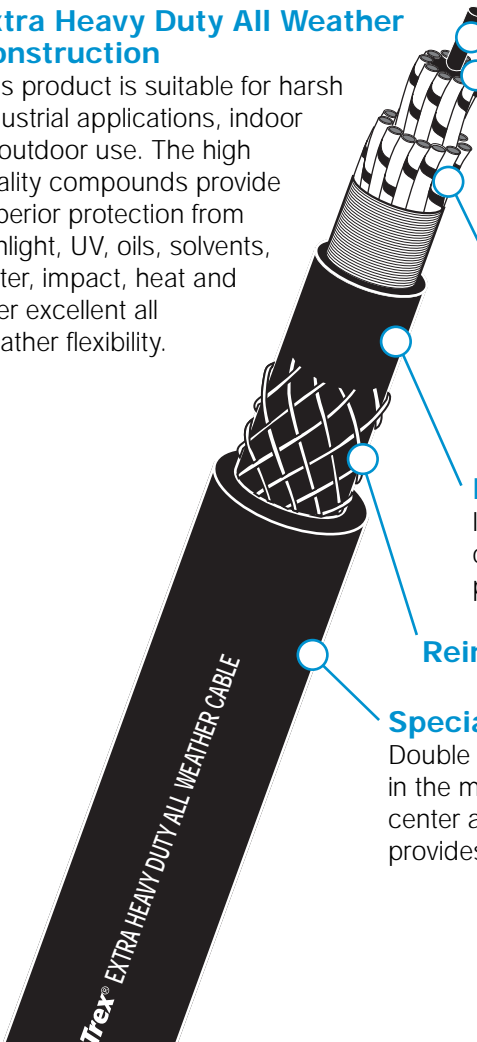
PART NO.	CABLE SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY	JACKET THICKNESS (IN.)	NOM. O.D. (IN.)	CABLE WT. (LBS.) per 1000'
COLOR CODED CONDUCTORS						
88820	16/6	65/34	14.4	.115	.555	168
88822	16/8	65/34	12.6	.115	.615	206
88823	16/10	65/34	9	.115	.690	255
88824	16/12	65/34	9	.135	.705	290
88825	16/16	65/34	9	.135	.750	353
88826	16/20	65/34	9	.135	.820	412
88827	16/24	65/34	8.1	.135	.885	484
88828	16/33	65/34	7.2	.155	1.030	657
88829	16/36	65/34	7.2	.155	1.050	693
88830	16/41	65/34	6.3	.155	1.090	734
88831	16/49	65/34	6.3	.155	1.170	849
ALPHA NUMERIC BLACK CONDUCTORS						
88811	14/7	41/30	17.5	.115	.625	240
88812	14/8	41/30	17.5	.115	.660	265
88813	14/10	41/30	12.5	.115	.750	324
88814	14/12	41/30	12.5	.135	.760	379
88815	14/16	41/30	12.5	.135	.820	467
88816	14/20	41/30	12.5	.135	.890	535
88817	14/24	41/30	11.3	.135	.965	630
88800	12/6	65/30	24	.115	.655	291
88802	12/8	65/30	21	.115	.735	358
88804	12/12	65/30	15	.135	.850	515
88806	12/20	65/30	15	.135	1.000	763
88808	12/30	65/30	13.5	.155	1.190	1119
88832	10/6	105/30	32	.115	.760	382
88834	10/8	105/30	28	.115	.860	484
88836	10/12	105/30	20	.135	.990	697

EXTRA HEAVY DUTY ALL WEATHER REELING CABLE

- Extra Heavy Duty
- Aramid Reinforced
- -40° to 90°C Dry
- 600 Volt
- Designed for Harsh Industrial Applications
- All Weather Usage

Extra Heavy Duty All Weather Construction

This product is suitable for harsh industrial applications, indoor or outdoor use. The high quality compounds provide superior protection from sunlight, UV, oils, solvents, water, impact, heat and offer excellent all weather flexibility.



Central Strength Member

Rubber insulated aramid strength member provided additional overall strength to the cable, reduces stress on conductors.

Flexible Tinned Copper Conductors

Provide longer flex life in reeling applications, tinned copper conductors resist corrosion and are easy to solder.

Flexible Heat and Moisture Resistant Insulation

Provides protection to the individual conductors while allowing them to remain flexible, provides long flex life in heavy duty reeling applications.

Integral Fill Design

Inner jacket compound fills interstices of cable and locks conductors into place preventing corkscrewing and premature cable failure.

Reinforced with Aramid Braid

Specially Compounded Super-Trex® TSE™ Jacket

Double pass aramid reinforced jacket provides superior tensile strength in the most demanding reeling applications. The combination of a center aramid strength member with the reinforced aramid jacket provides 6,000 pounds of break strength.

Color Code

BLACK conductor insulation with white alpha-numeric print and one GREEN ground

ORDERING INFORMATION

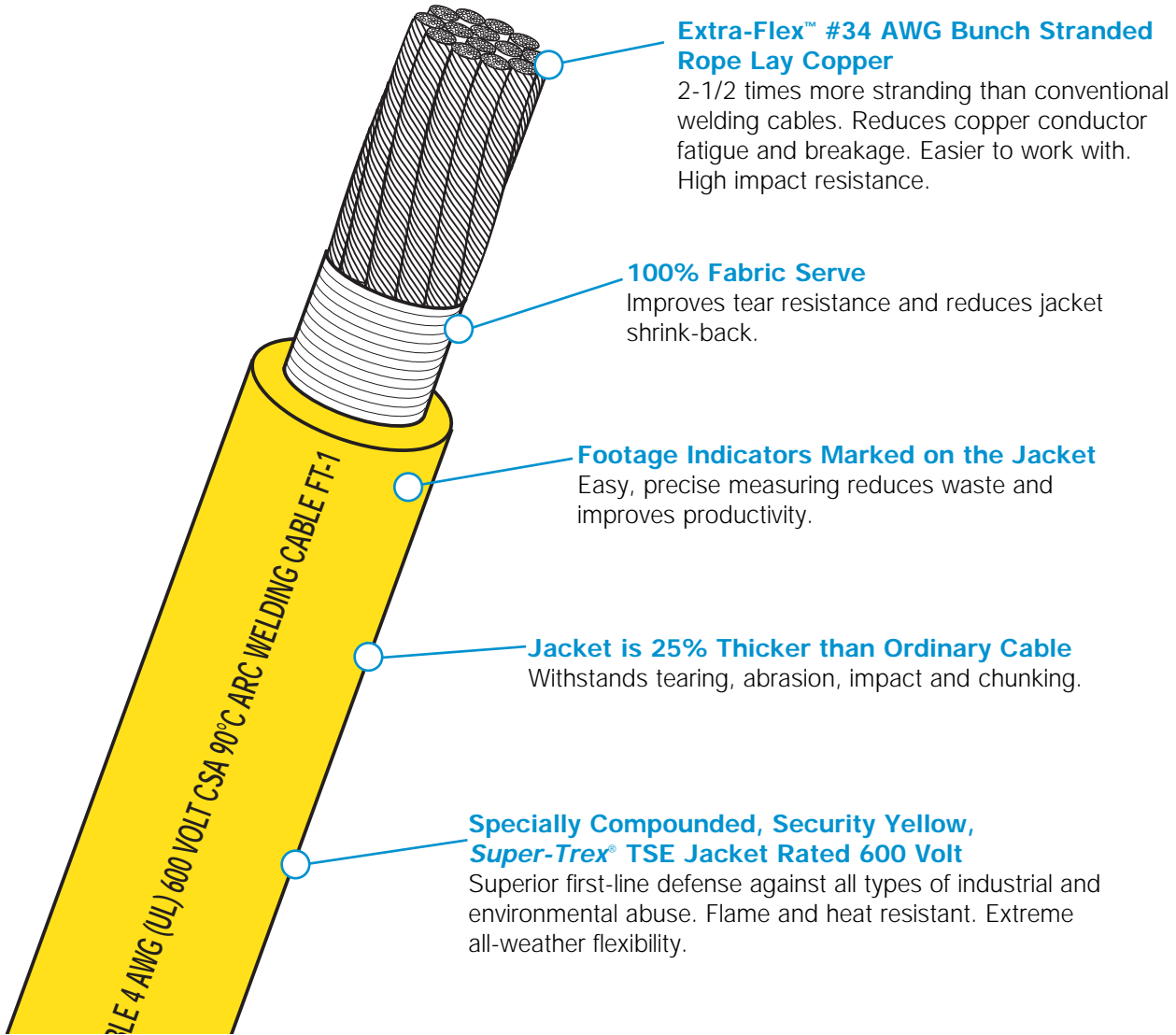
PART NO.	CABLE SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	JACKET THICKNESS (IN.)	INSULATION THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
88847	14/24	19 x 27	11	.120	.030	1.135	836
88857	12/24	19 x 25	13	.120	.030	1.278	1296
88867	10/24	37 x 26	18	.120	.030	1.352	1503
88842	14/12	19 x 27	12	.120	.033	0.930	704
88852	12/12	19 x 25	15	.120	.033	0.982	939
88862	10/12	37 x 26	20	.120	.033	1.114	704
88879	12/30	19 x 25	13	.26	.03	1.75	2175
88859	2.5mm ² x 44	50 x 30	9	.12	.03	1.55	1849

NOTES: (1) Ampacity is based on NEC Table 310.16 and derated 50% for 12 conductors (further derating will be required for multiple layers on reel)

600 VOLT WELDING CABLE




- UL Listed
- CSA Certified
- Rated 90°C
- Extra Hard Usage
- UV Resistant
- 600 Volt
- FT-1
- RoHS Compliant

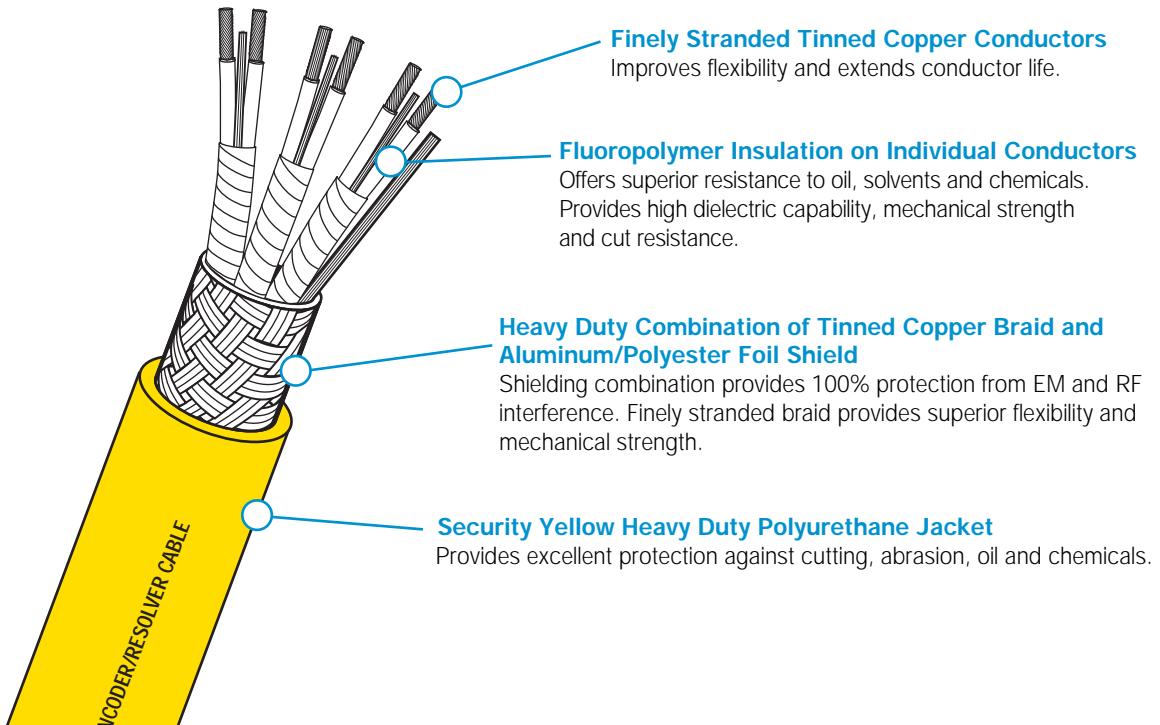


ORDERING INFORMATION

PART NO.	CABLE SIZE (AWG)	CONDUCTOR STRANDING	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
86310	6	660 x 34	.080	.370	132
86311	4	1045 x 34	.093	.450	202
86312	2	1650 x 34	.103	.540	305
86314	1/0	2640 x 34	.115	.620	416
86315	2/0	3300 x 34	.115	.700	558
86317	4/0	5225 x 34	.158	.900	906

300 VOLT INDIVIDUALLY SHIELDED ENCODER/RESOLVER CABLE

- 
 - UL Recognized 90°C
 - CSA Certified 80°C
- 300 Volt
 - RoHS Compliant



ORDERING INFORMATION

Part No.	Cond. Size (AWG)/ No. of Pairs	Conductor Stranding	Ampacity (1)	Insulation Thickness (IN.)	Ind. Pairs Drain Wire	Overall Drain Wire	Jacket Thickness (IN.)	Nom. Dia. (IN.)	Wt. (LBS.) per 1000 ft.
68602	20/2	19/32	13.5	0.006	22 AWG	22 AWG	0.045	0.305	53
68603	20/3	19/32	10.8	0.006	22 AWG	22 AWG	0.045	0.315	66
68604	20/4	19/32	9.5	0.006	22 AWG	22 AWG	0.045	0.350	83
68606	20/6	19/32	6.7	0.006	22 AWG	22 AWG	0.045	0.410	117
68607	20/7	19/32	6.7	0.006	22 AWG	22 AWG	0.045	0.410	125
68609	20/9	19/32	6	0.006	22 AWG	22 AWG	0.045	0.500	189
68702	22/2	19/34	11	0.006	24 AWG	24 AWG	0.045	0.275	43
68703	22/3	19/34	9	0.006	24 AWG	24 AWG	0.045	0.300	52
68704	22/4	19/34	8	0.006	24 AWG	24 AWG	0.045	0.315	62
68706	22/6	19/34	8	0.006	24 AWG	24 AWG	0.045	0.370	86
68707	22/7	19/34	6	0.006	24 AWG	24 AWG	0.045	0.370	92
68709	22/9	19/34	6	0.006	24 AWG	24 AWG	0.045	0.450	138
68802	24/2	19/36	8	0.006	26 AWG	26 AWG	0.045	0.275	33
68803	24/3	19/36	7	0.006	26 AWG	26 AWG	0.045	0.265	42
68804	24/4	19/36	6	0.006	26 AWG	26 AWG	0.045	0.300	48
68806	24/6	19/36	6	0.006	26 AWG	26 AWG	0.045	0.330	64
68807	24/7	19/36	4	0.006	26 AWG	26 AWG	0.045	0.330	68
68809	24/9	19/36	4	0.006	26 AWG	26 AWG	0.045	0.400	97

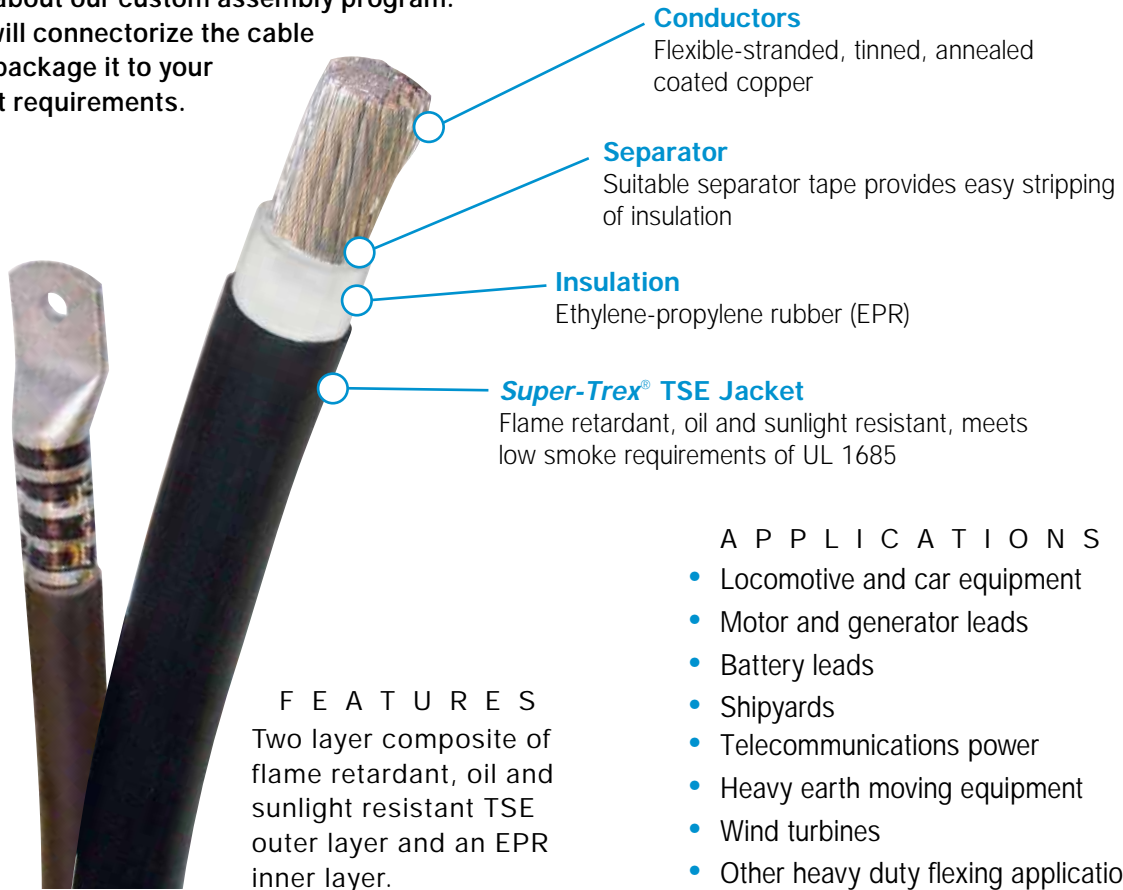
NOTE: (1) Ampacities are based on 30° C ambient and 90° C conductor temperature. These values are to be used as a guideline and may vary according to the actual cable application.

DLO CABLE

- UL Listed
 - VW-1
 - FT-4
- RHH, RHW-2
 - CSA Listed
 - For "CT" Use
- Low Smoke per UL1685
 - Rated 2000 Volt, 90°C
 - Sunlight Resistant

TPC 2000V Diesel Locomotive Cable is a single conductor Portable Power Cable suitable for use in industrial applications needing flexibility, excellent weatherability and good flex life.

Ask about our custom assembly program.
We will connectorize the cable and package it to your exact requirements.



Conductors
Flexible-stranded, tinned, annealed coated copper

Separator
Suitable separator tape provides easy stripping of insulation

Insulation
Ethylene-propylene rubber (EPR)

Super-Trex® TSE Jacket
Flame retardant, oil and sunlight resistant, meets low smoke requirements of UL 1685

FEATURES
Two layer composite of flame retardant, oil and sunlight resistant TSE outer layer and an EPR inner layer.

A P P L I C A T I O N S

- Locomotive and car equipment
- Motor and generator leads
- Battery leads
- Shipyards
- Telecommunications power
- Heavy earth moving equipment
- Wind turbines
- Other heavy duty flexing applications

O R D E R I N G I N F O R M A T I O N

PART NO.	SIZE AWG/ kcmil	MIN. WIRES PER COND.	AMPACITY(1) (90°C)	NOM. INSUL. THICKNESS (IN.)	NOM. JACKET THICKNESS (IN.)	NOM. O.D. (IN.)	APPROX. WT. (LBS.) PER 1000'
76020	2/0	323	300	0.090	0.045	0.765	610
76030	3/0	418	350	0.090	0.045	0.820	720
76040	4/0	532	405	0.090	0.052	0.920	910
76262	262	646	467	0.105	0.052	1.010	1110
76313	313	777	522	0.105	0.052	1.080	1300
76373	373	925	591	0.105	0.052	1.150	1510
76444	444	1110	652	0.105	0.052	1.220	1770
76323	535	1332	728	0.120	0.052	1.330	2120
76646	646	1591	815	0.120	0.052	1.420	2480
76777	777	1924	904	0.120	0.052	1.525	2940

NOTE: (1) Ampacity based upon NEC 2008 Table 310.17 single conductor in free air, Ambient Air Temperature of 30°C, Conductor Temperature of 90°C.

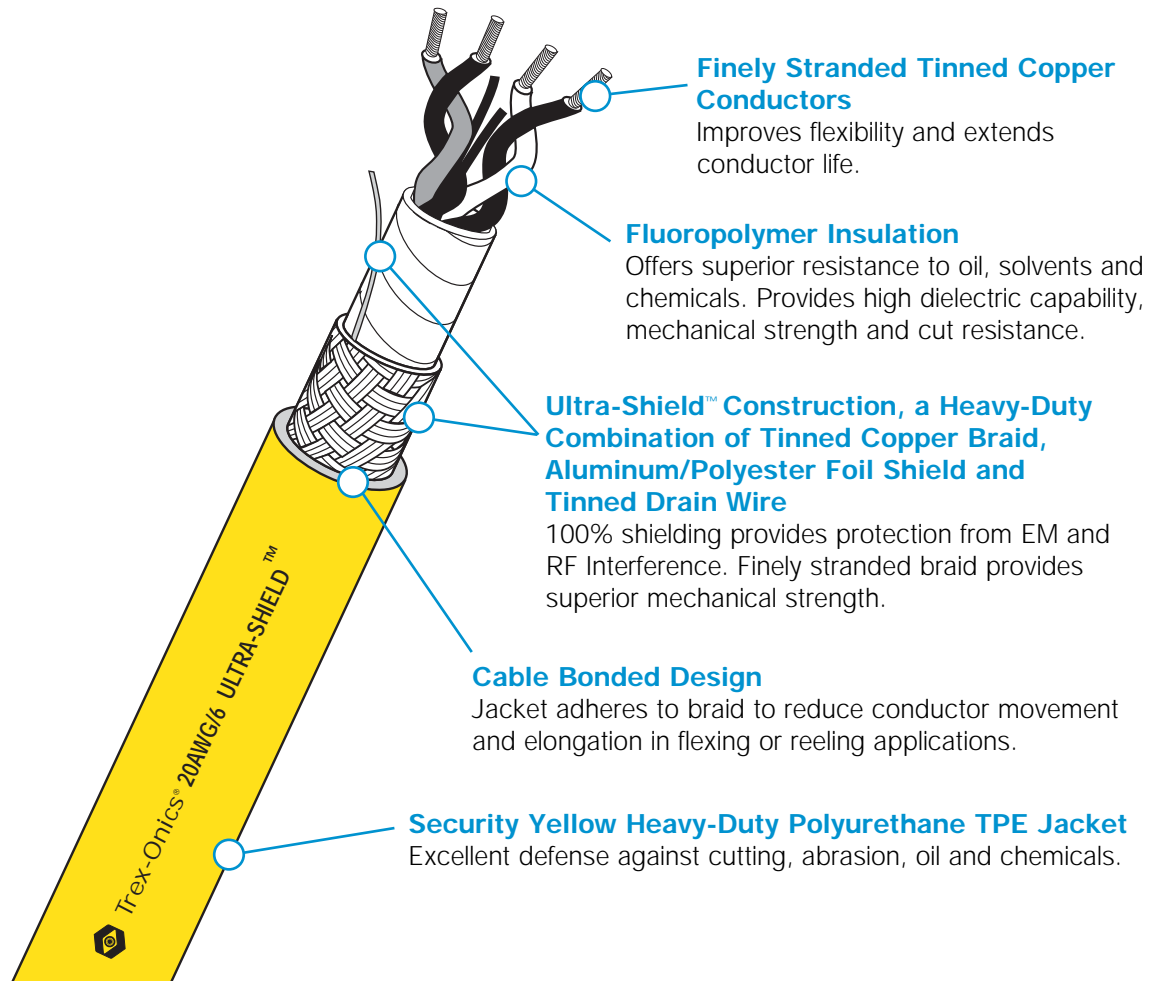
MULTI-PAIR CONTROL CABLES



- UL Recognized 90°C
- CSA Certified 80°C

- 600 Volt
- Compact Design

- RoHS Compliant



ORDERING INFORMATION

PART NO.	CONDUCTOR SIZE (AWG)	NO. OF PAIRS	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	OVERALL DRAIN WIRE	JACKET THICKNESS (IN.)	NOM. O.D. (IN.)	WT. (LBS.) PER 1000'
66202	18	2	19/30	19.0	.010	22 AWG	.050	.380	88
66203	18	3	19/30	16.5	.010	22 AWG	.050	.380	93
66204	18	4	19/30	16.5	.010	22 AWG	.055	.420	110
66206	18	6	19/30	16.5	.010	22 AWG	.060	.510	175
66209	18	9	19/30	12.0	.010	22 AWG	.070	.600	240
66212	18	12	19/30	12.0	.010	22 AWG	.080	.670	298
66302	20	2	19/32	13.5	.010	22 AWG	.045	.335	66
66303	20	3	19/32	11.5	.010	22 AWG	.045	.335	70
66306	20	6	19/32	11.5	.010	22 AWG	.060	.450	130
66309	20	9	19/32	8.5	.010	22 AWG	.060	.520	172
66312	20	12	19/32	8.5	.010	22 AWG	.070	.600	225
66424	24	4	19/36	7.0	.010	26 AWG	.045	.305	53

NOTE: (1) Ampacities are based on 30° C ambient and 90° C conductor temperature. These values are to be used as a guideline and may vary according to the actual cable application.

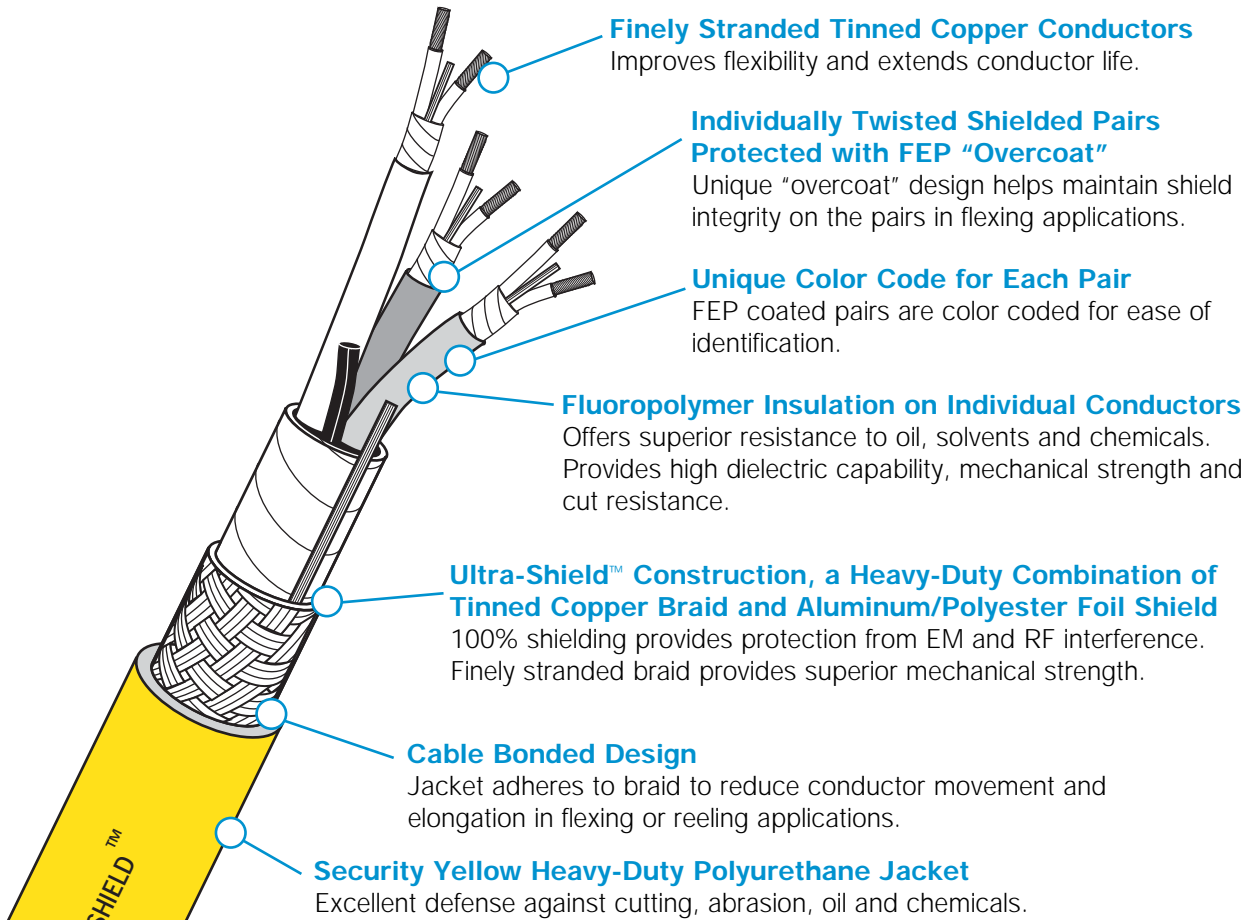
TREX-ONICS® INDIVIDUALLY SHIELDED, MULTI-PAIR CONTROL CABLE



- UL Recognized 90°C
- CSA Certified 80°C

- Compact Design
- MSHA Approved

- 600 Volt
- RoHS Compliant



ORDERING INFORMATION

PART NO.	CONDUCTOR SIZE (AWG)	NO. OF PAIRS	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	INDIV. PAIRS DRAIN WIRE	OVERALL DRAIN WIRE	JACKET THICKNESS (IN.)	NOM O.D. (IN.)	WT. (LBS.) PER 1000'
68302	18	2	19/30	19.0	.010	23 AWG	22 AWG	.060	.440	110
68303	18	3	19/30	16.5	.010	27 AWG	22 AWG	.060	.490	142
68304	18	4	19/30	16.5	.010	27 AWG	22 AWG	.065	.540	163
68306	18	6	19/30	16.5	.010	27 AWG	22 AWG	.075	.650	245
68309	18	9	19/30	12.0	.010	27 AWG	22 AWG	.080	.790	320
68312	18	12	19/30	12.0	.010	27 AWG	22 AWG	.080	.840	405
68502	20	2	19/32	13.5	.010	22 AWG	22 AWG	.050	.405	74
68503	20	3	19/32	10.8	.010	22 AWG	22 AWG	.050	.430	92
68504	20	4	19/32	9.5	.010	22 AWG	22 AWG	.055	.465	118
68506	20	6	19/32	6.7	.010	22 AWG	22 AWG	.060	.555	161
68509	20	9	19/32	6.7	.010	22 AWG	22 AWG	.070	.700	247
68512	20	12	19/32	6.0	.010	22 AWG	22 AWG	.075	.715	264
68402	24	2	19/36	8.0	.010	27 AWG	26 AWG	.045	.330	62
68403	24	3	19/36	7.0	.010	27 AWG	26 AWG	.050	.360	79
68404	24	4	19/36	7.0	.010	27 AWG	26 AWG	.055	.385	86
68406	24	6	19/36	7.0	.010	27 AWG	26 AWG	.060	.470	126
68409	24	9	19/36	5.0	.010	27 AWG	26 AWG	.065	.570	160
68412	24	12	19/36	5.0	.010	27 AWG	26 AWG	.070	.600	215

NOTES: (1) Ampacities are based on 30° C ambient and 90° C conductor temperature. These values are to be used as a guideline and may vary according to the actual cable application.

OVERALL SHIELDED CONTINUOUS FLEX MULTI-CONDUCTOR CABLE



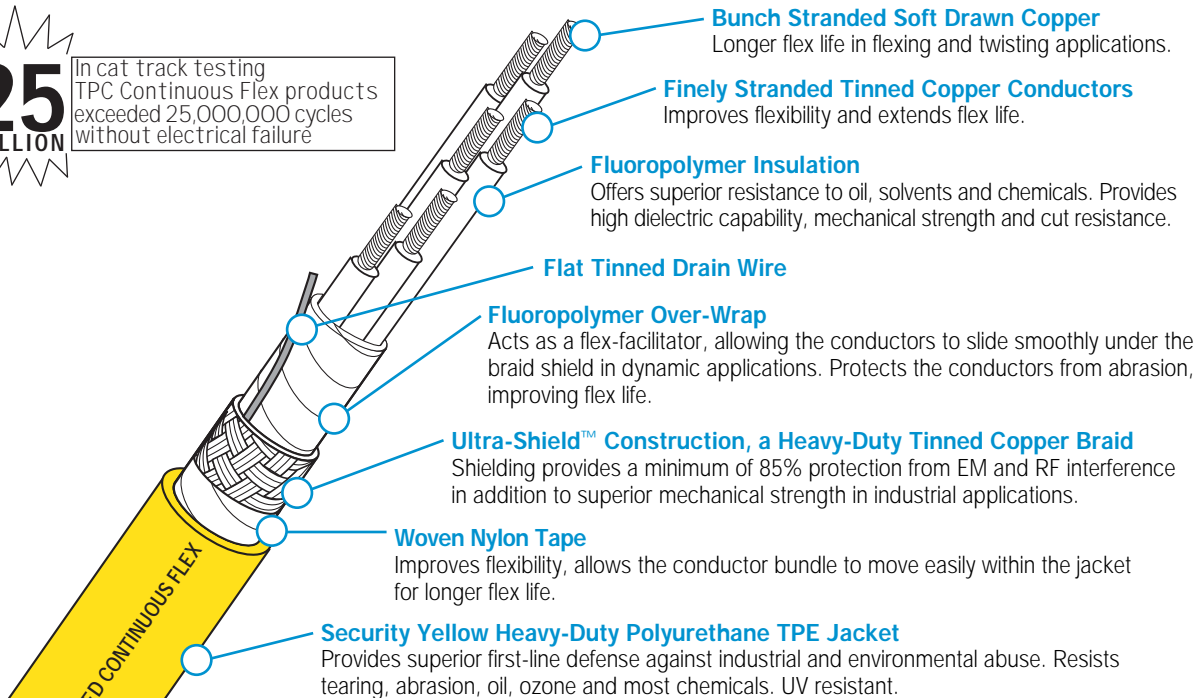
- UL Recognized 90°C
- CSA Certified 80°C

- Designed for Continuous Flex Applications
- MSHA Approved

- 600 Volt
- 90°C
- RoHS Compliant



In cat track testing TPC Continuous Flex products exceeded 25,000,000 cycles without electrical failure



ORDERING INFORMATION

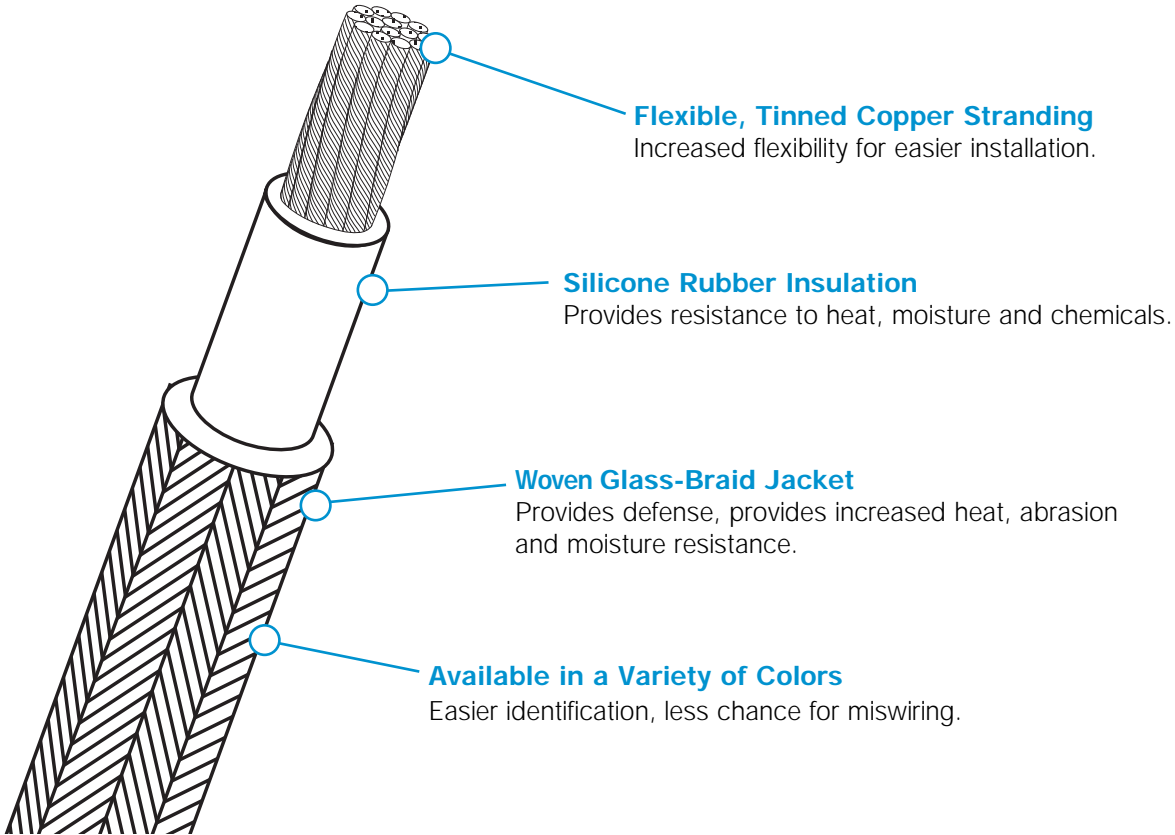
PART NO.	CABLE AWG/COND.	STRANDING NO./AWG	AMPACITY (1)	DRAIN WIRE	NOMINAL O.D.	INSULATION THICKNESS (IN.)	WT. (LBS.) Per 1000'
61705	16/5	65/34	20.0	20AWG	.385	.010	110
61709	16/9	65/34	17.0	20AWG	.435	.010	158
61712	16/12	65/34	12.0	20AWG	.465	.010	185
61719	16/19	65/34	12.0	20AWG	.575	.010	286
61725	16/25	65/34	11.0	20AWG	.640	.010	360
61731	16/31	65/34	9.6	20AWG	.655	.010	412
61402	18/2	41/34	18.0	20AWG	.250	.010	50
61403	18/3	41/34	18.0	20AWG	.265	.010	54
61404	18/4	41/34	14.4	20AWG	.280	.010	58
61406	18/6	41/34	14.4	20AWG	.320	.010	88
61409	18/9	41/34	13.0	20AWG	.400	.010	110
61412	18/12	41/34	9.0	20AWG	.415	.010	145
61418	18/18	41/34	9.0	20AWG	.485	.010	210
61424	18/24	41/34	8.1	20AWG	.560	.010	265
61433	18/33	41/34	7.2	20AWG	.615	.010	322
61449	18/49	41/34	6.3	20AWG	.875	.010	496
61465	18/65	41/34	6.3	20AWG	.980	.010	628
61502	20/2	26/34	13.5	22AWG	.235	.010	40
61506	20/6	26/34	10.8	22AWG	.290	.010	68
61509	20/9	26/34	9.5	22AWG	.360	.010	89
61512	20/12	26/34	6.8	22AWG	.375	.010	110
61518	20/18	26/34	6.8	22AWG	.430	.010	148
61524	20/24	26/34	6.0	22AWG	.495	.010	192
61526	20/26	26/34	6.0	22AWG	.500	.010	196
61602	24/2	19/36	8.0	24AWG	.210	.010	28
61604	24/4	19/36	6.4	24AWG	.225	.010	32
61606	24/6	19/36	6.4	24AWG	.255	.010	41
61609	24/9	19/36	5.6	24AWG	.300	.010	51

NOTES: (1) Ampacities are based on 30° C ambient and 90° C conductor temperature. These values are to be used as a guideline and may vary according to the actual cable application.

THERMO-TREX® 500



- 600 Volt
- UL Recognized
- CSA Certified
- Extreme Temperatures up to 775°F
- RoHS Compliant
- Continuous Temperatures up to 392°F



ORDERING INFORMATION

PART NO. BLACK	PART NO. WHITE	PART NO. RED	CONDUCTOR			AMPACITY (1)	NOMINAL O.D. (IN.)	WEIGHT (LBS.) PER 1000'
			SIZE (AWG)	CONDUCTOR STRANDING				
41001	41002	41003	18	16/30	27	.121	12.5	
41004	41005	41006	16	26/30	37	.131	16.0	
41007	41008	41009	14	41/30	51	.147	22.0	
41010	41011	41012	12	65/30	66	.166	31.5	
41013	41014	41015	10	105/30	90	.226	51.0	
41016	41017	41018	8	133/29	125	.314	89.0	
41019	41020**	41021**	6	133/27	167	.357	128.5	
41022	41023**	41024**	4	133/25	226	.411	187.5	
41025	41026**	41027**	2	133/23	305	.500	273.0	
41028	41029**	41030**	1	259/25	362	.560	362.0	
41031	41032**	41033**	1/0	259/24	422	.625	442.0	
41034	41035**	41036**	2/0	259/23	492	.669	554.0	
41037	41038**	41039**	3/0	259/22	574	.710	674.0	
41040	41041**	41042**	4/0	259/21	671	.820	829.0	

NOTES: (1) Ampacity is based on a single conductor in free air, 40°C (104°F) ambient, 200°C (392°F) conductor temperature.
Ampacity ratings for Thermo-Trex high-temperature wire are significantly higher than normally insulated wire because the insulating materials used in Thermo-Trex can withstand much higher conductor temperatures without breaking down.

**Non-stock

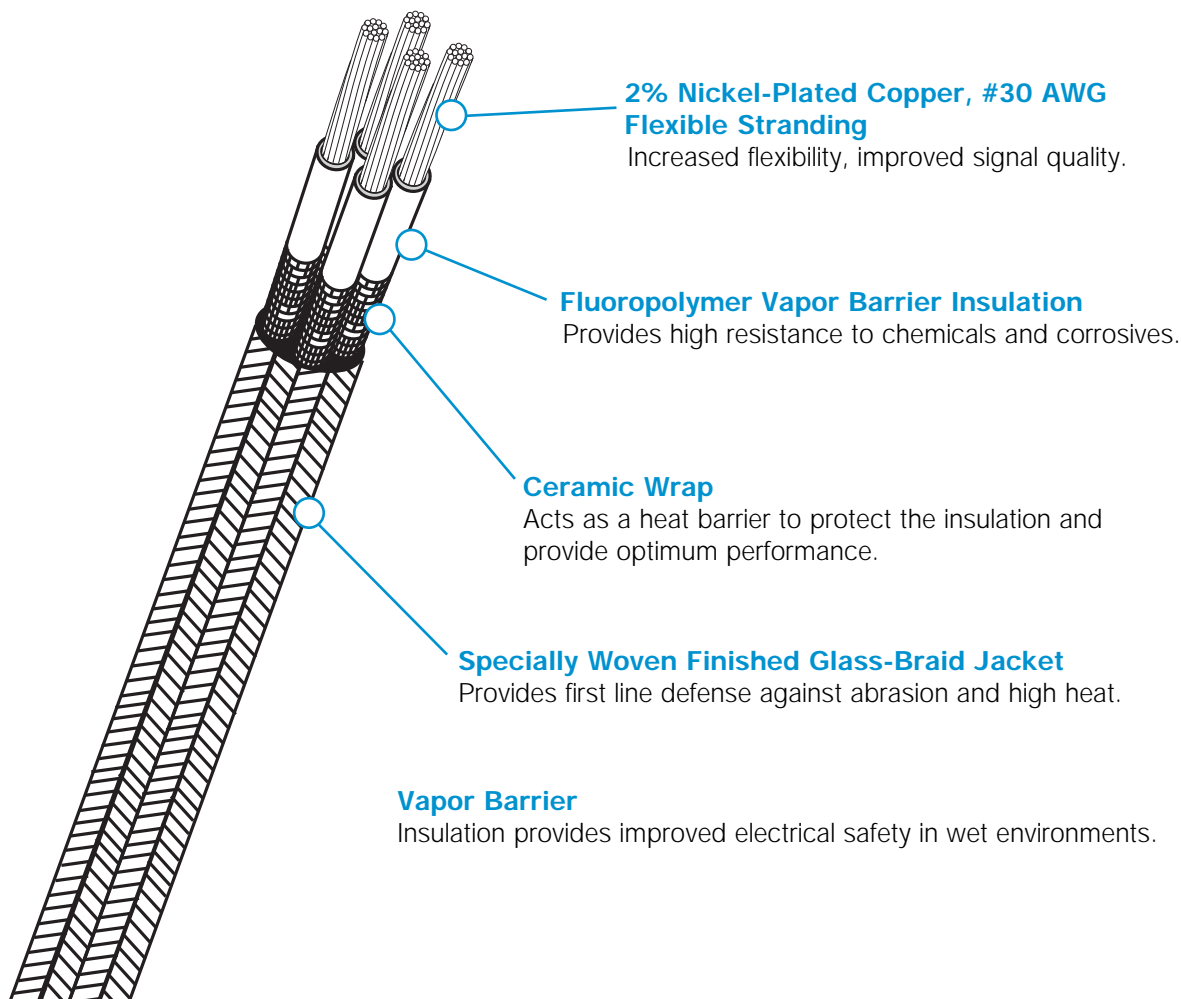
THERMO-TREX[®] 850



- 600 Volt
- UL Recognized
- CSA Certified

- Extreme Temperatures up to 850°F
- RoHS Compliant

- Continuous Temperatures up to 500°F



ORDERING INFORMATION

PART NO.	CONDUCTOR SIZE (AWG)	CONDUCTOR STRANDING	AMPACITY (1)	NOMINAL O.D. (IN.)	WEIGHT (LBS.) PER 1000'
41062	18	16/30	27	.110	13
41065	16	26/30	37	.120	18
41068	14	41/30	51	.140	24
41071	12	65/30	66	.160	34
41074	10	105/30	90	.185	51
41084	16/4	26/30	16	.332	84
41087	16/12	26/30	10	.566	224
41089	12/4	65/30	22	.423	158

NOTES: (1) Ampacity is based on a single conductor in free air, 40°C (104°F) ambient, 200°C (392°F) conductor temperature. Ampacity ratings for Thermo-Trex high-temperature wire are significantly higher than normally insulated wire because the insulating materials used in Thermo-Trex can withstand much higher conductor temperatures without breaking down.

EXTREME TEMPERATURE CABLE (-70°C to +150°C)

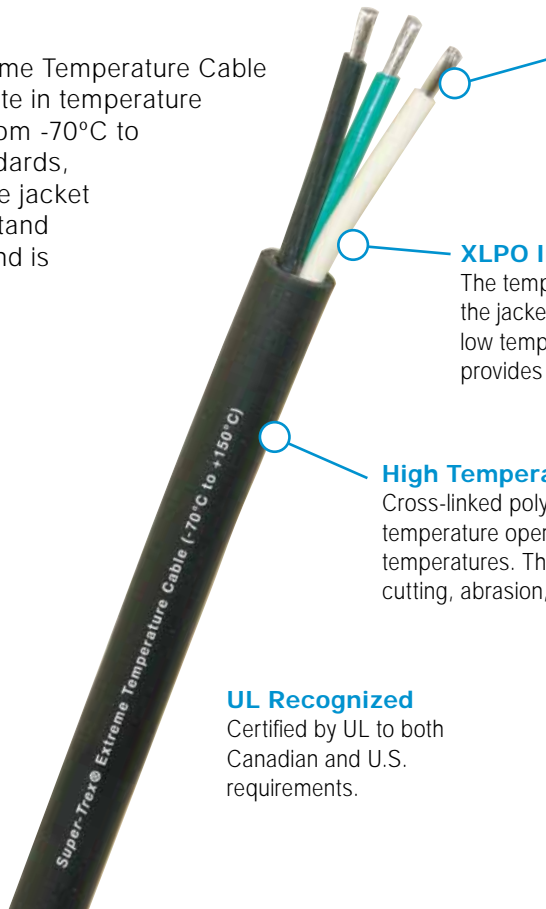


• 1000V Rated

• RoHS Compliant

• FT1 Flame Rating

Super-Trex® Extreme Temperature Cable is designed to operate in temperature extremes ranging from -70°C to 150°C per ISO standards, (UL/cUL 105°C). The jacket is designed to withstand mechanical abuse and is resistant to UV light, water, oil and chemicals.



Stranded Tinned Copper Conductors

Stranded tinned copper conductors resist corrosion, improves flexibility and helps reduce conductor fatigue and breakage in flexing applications.

XLPO Insulation on Individual Conductors

The temperature rating of the insulation is matched to the jacket to provide maximum protection in high and low temperatures applications. The heavy duty design provides extra cut through protection.

High Temperature XLPO Jacket

Cross-linked polyolefin jacket protects the cable from high temperature operation and remains flexible at extreme cold temperatures. The heavy duty jacket provides protection from cutting, abrasion, water, oils, chemicals and is UV resistant.

UL Recognized

Certified by UL to both Canadian and U.S. requirements.

CONDUCTOR	COLOR
1	White
2	Black
3	Green
4	Red

ORDERING INFORMATION

Part No.	Cable Size AWG/Cond.	Conductor Stranding	Ampacity (1)	Nom. Dia. (IN.)	Jacket Thickness (IN.)	Wt. (LBS.) per 1000 ft.
87840	14/3	41/30	34	0.426	.065	106
87841	14/4	41/30	27	0.460	.065	130
87835	12/3	65/30	43	0.465	.065	141
87836	12/4	65/30	34	0.503	.065	172
87830	10/3	105/30	55	0.492	.065	192
87831	10/4	105/30	44	0.536	.065	238
87825**	8/3	168/30	76	0.685	.060	306
87826**	8/4	168/30	61	0.790	.080	482
87820**	6/3	259/30	96	0.814	.080	448
87821**	6/4	259/30	77	0.889	.080	593
87815**	4/3	413/30	120	0.933	.080	653
87816**	4/4	413/30	96	1.022	.080	871
87810**	2/3	665/30	160	1.074	.080	991
87811**	2/4	665/30	128	1.179	.080	1328

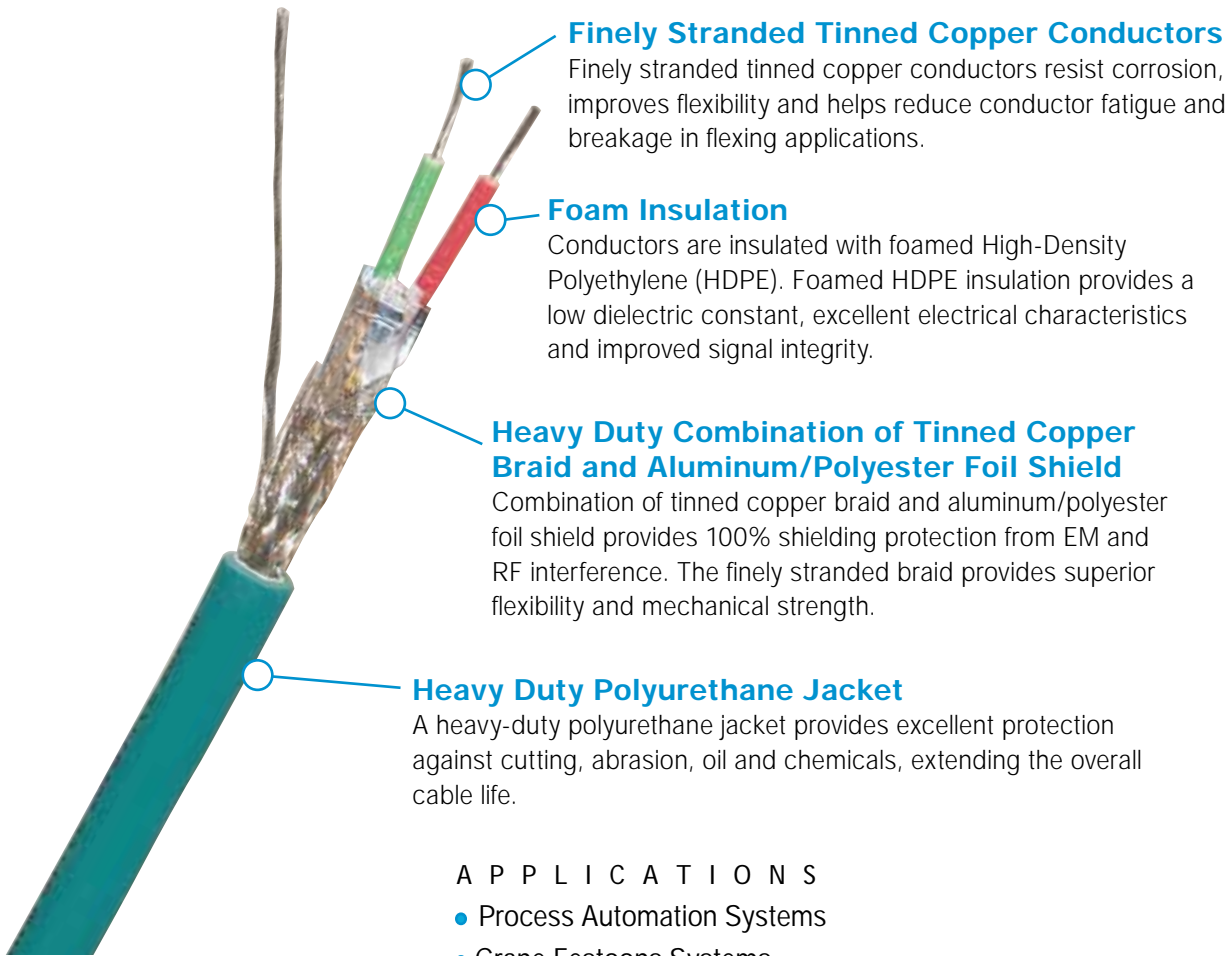
NOTES: (1)Ambient temperature rating of 40° C, 150° C conductor temperature. Based on at least 3 current carrying conductors. Reference Table 310.18 of the NEC.

**Call for availability

PROFIBUS[®] FESTOON/TRAILING CABLE

UL • -40°C to +80°C • RoHS

Trex-Onics[®] Festoon/Trailing PROFIBUS Cable is designed for use in industrial festoon applications where a superior cable is required. TPC's PROFIBUS Festoon/Trailing cable is designed for applications requiring flexibility and portability and resisting exposure to oils and chemicals. The polyurethane jacket provides superior protection against cuts and abrasion.



Finely Stranded Tinned Copper Conductors

Finely stranded tinned copper conductors resist corrosion, improves flexibility and helps reduce conductor fatigue and breakage in flexing applications.

Foam Insulation

Conductors are insulated with foamed High-Density Polyethylene (HDPE). Foamed HDPE insulation provides a low dielectric constant, excellent electrical characteristics and improved signal integrity.

Heavy Duty Combination of Tinned Copper Braid and Aluminum/Polyester Foil Shield

Combination of tinned copper braid and aluminum/polyester foil shield provides 100% shielding protection from EM and RF interference. The finely stranded braid provides superior flexibility and mechanical strength.

Heavy Duty Polyurethane Jacket

A heavy-duty polyurethane jacket provides excellent protection against cutting, abrasion, oil and chemicals, extending the overall cable life.

A P P L I C A T I O N S

- Process Automation Systems
- Crane Festoons Systems

S P E C I F I C A T I O N S

TEMPERATURE RANGE
-40° C to +80° C

VOLTAGE
30 Volts

VELOCITY OF PROPAGATION
78% Nominal

IMPEDANCE
122.1 Ohms Differential
78.8 Ohms Single-Ended

CAPACITANCE
10.7 pF/ft Mutual
16.5 pF/ft Single-Ended

A T T E N U A T I O N	
Frequency (MHz)	dB/100 Feet (Nominal)
4	0.95
16	1.92
100	4.94
300	8.87
500	11.73

O R D E R I N G I N F O R M A T I O N

Part No.	Cond. Size	Cond. Stranding	Nom. Insul. Thickness	Nom. Jacket Thickness	Nom. Dia.
60092	23 AWG	21/36	0.082 in.	0.05 in.	0.29 in.

TREX-ONICS® INDUSTRIAL ETHERNET CAT5E CABLE

- TIA/EIA 568-B.2
- 300 Volt

- 80° C
- Industrial Use Cable

- RoHS Compliant
- Available Shielded or Unshielded

Shielded and Unshielded Cable Design

Shielded and unshielded cables in stock so you can select the cable that is right for your application.

Unique Conductor Lay Lengths

Conductor pairs are cabled with unique lay lengths to ensure signal integrity.

Stranded Tinned Copper Conductors

Provide longer flex life and improves cable flexibility. Resists corrosion. Easier to solder.

Center Spline (on shielded cable only)

Keeps conductors separated and in proper lay.

Insulation

High density polyethylene compounds are used for the conductor insulation to provide excellent dielectric properties that meet CAT5E requirements.

(Shielded cable shown)

Double Jacket Design

Product is constructed with an inner and outer jacket. The inner jacket provides protection to the conductor bundle from impact and keeps the lay lengths of the cable in tact to ensure signal integrity. The outer Trex-Onics TPE jacket provides protection from environmental abuse and offers excellent defense against cutting, abrasion, oil and chemicals.

Specially Compounded Jacket

Trex-Onics TPE jacket provides excellent protection against cutting, abrasion, oil and chemicals. Unique teal color for easy identification.

ELECTRONIC SPECIFICATIONS

Freq. (MHz)	Attenuation (dB/100m) max.	NEXT (dB) min.	PSNEXT (dB) min.	ACR (dB/100m) min.	PSACR (dB/100m) min.	ELFEXT (dB/100m) min.	PSELFEXT (dB/100m) min.	RL (dB) min.
.772	2.2	67.0	64.0	64.8	61.8	66.0	63.0	-
1	2.4	65.3	62.3	62.9	59.9	63.8	60.8	20.0
4	4.9	56.3	53.3	51.4	48.4	51.7	48.7	23.0
8	7.0	51.8	48.8	44.8	41.8	45.7	42.7	24.5
10	7.8	50.3	47.3	42.5	39.5	43.8	40.8	25.0
16	9.8	47.3	44.3	37.5	34.5	39.7	36.7	25.0
20	11.2	45.8	42.8	34.6	31.6	37.7	34.7	25.0
25	12.5	44.3	41.3	31.8	28.8	35.8	32.8	24.2
31.25	14.0	42.9	39.9	28.9	25.9	33.9	30.9	23.3
62.5	20.4	38.4	35.4	18.0	15.0	27.8	24.8	20.7
100	26.4	35.3	32.3	8.9	5.9	23.8	20.8	19.0

COLOR CODE

PAIR 1	Blue / White with Blue Stripe
PAIR 2	Orange / White with Orange Stripe
PAIR 3	Green / White with Green Stripe
PAIR 4	Brown / White with Brown Stripe

DC RESISTANCE
9.38 Ω/100m (28.6 Ω/kft) Max.

DCR UNBALANCED
5% Max.

MUTUAL CAPACITANCE
55.8 pF/m (17 pFm/ft) Max.

CAPACITANCE UNBALANCE
330 pF/100m (1 pF/ft) Max.

CHARACTERISTIC IMPEDANCE
100 Ω +/- 15 Ω (1-100 MHz)

INPUT IMPEDANCE
100 Ω +/- 15 Ω (1-100 MHz)

PROP. DELAY (SKEW)
45 ns/100m Max.

VELOCITY OF PROPAGATION
69% Nom.

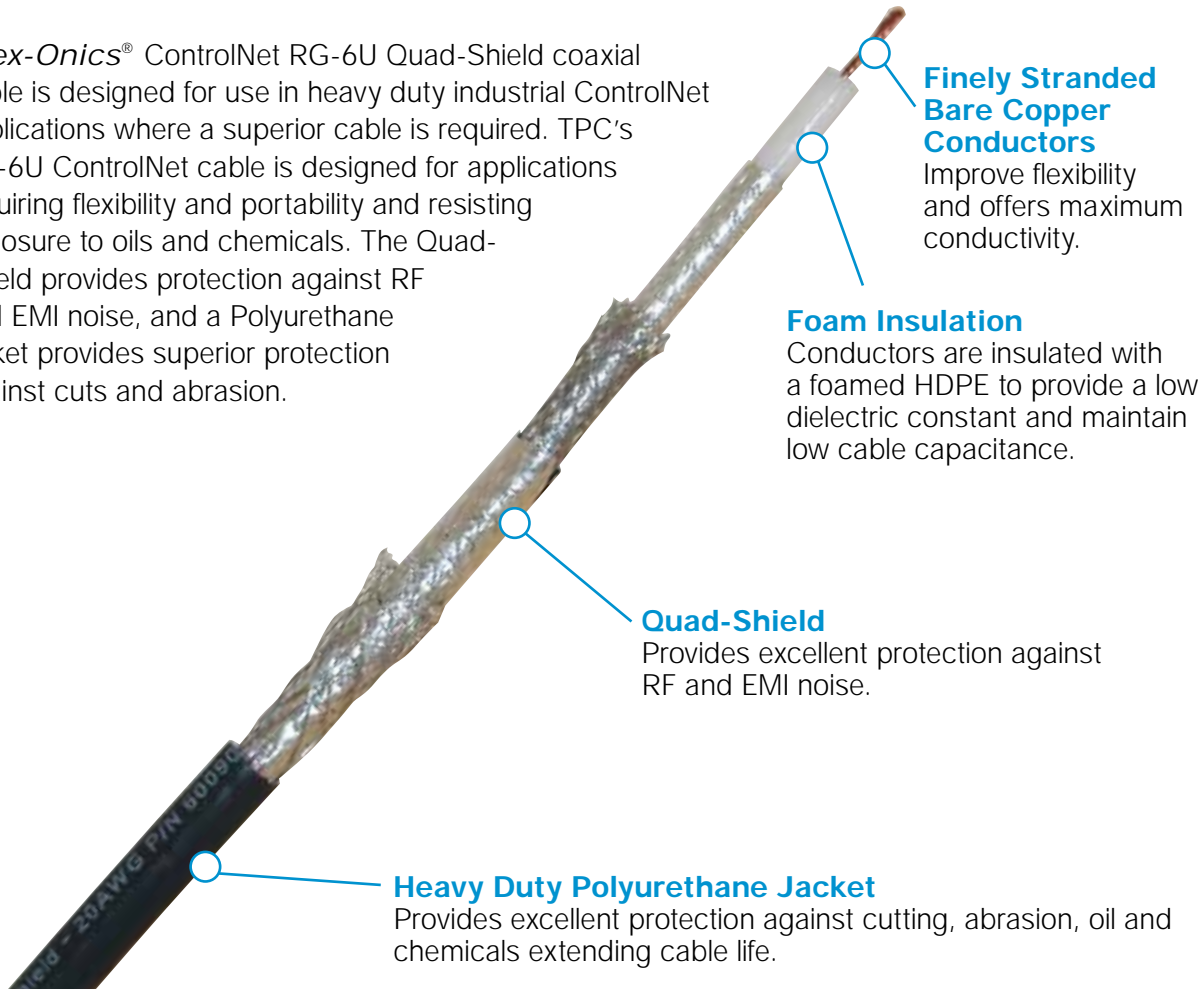
ORDERING INFORMATION

Part No.	Cable AWG	Strand AWG	No. of Pairs	Center Spline	Inner Jacket O.D.	Shield	Tape Separator	Finished O.D.
60065S (Shielded)	24	(7/32)	4 (8 cond.)	Polyolefin	.235"	YES	Fluoropolymer	.330"
60065 (Unshielded)	24	(7/32)	4 (8 cond.)	None	.195"	NO	None	.260"

TREX-ONICS® CONTROLNET RG-6U QUAD-SHIELD COAXIAL CABLE

- UL Recognized
- ODVA Conformity
- FT2
- RoHS

Trex-Onics® ControlNet RG-6U Quad-Shield coaxial cable is designed for use in heavy duty industrial ControlNet applications where a superior cable is required. TPC's RG-6U ControlNet cable is designed for applications requiring flexibility and portability and resisting exposure to oils and chemicals. The Quad-Shield provides protection against RF and EMI noise, and a Polyurethane jacket provides superior protection against cuts and abrasion.



Finely Stranded Bare Copper Conductors

Improve flexibility and offers maximum conductivity.

Foam Insulation

Conductors are insulated with a foamed HDPE to provide a low dielectric constant and maintain low cable capacitance.

Quad-Shield

Provides excellent protection against RF and EMI noise.

Heavy Duty Polyurethane Jacket

Provides excellent protection against cutting, abrasion, oil and chemicals extending cable life.

A P P L I C A T I O N S

- Human Machine Interfaces
- PC Based Controllers
- Video Monitors
- PLC's
- Closed Circuit Systems
- Satellite Systems
- Industrial Communications

S P E C I F I C A T I O N S

TEMPERATURE RANGE	-40°C to 80°C
VOLTAGE	30 Volts
IMPEDANCE	75 ± 5 Ohms
CAPACITANCE	17 pF/ft Nominal
VELOCITY OF PROPAGATION	79% Nominal

O R D E R I N G I N F O R M A T I O N

Part No.	Cond. Size	Cond. Stranding	Nom. Insul. Thickness	Nom. Jacket Thickness	Nom. Dia.	Wt. per 1000 ft.
60090	20 AWG	105/40	0.182 in.	0.027 in.	0.300 in.	29.5 lbs.

PENDANT BOXES

Pendant Drop Assembly

- Environmentally sealed Mil-C type connector provides easy connect/disconnect
- Mates directly to our Pendant Control Assemblies with connector termination
- Assembled using TPC's high performance Super-Trex P&R Cable
- Stainless steel mesh strain relief extends the life of the assembly
- Dual-ended male/female drop assemblies also available



Pendant with Mesh Strain Relief

- Pre-wired for immediate installation saving valuable time and money
- Stainless steel mesh strain relief extends the life of the assembly
- Assembled with TPC's high performance Super-Trex® P&R Cable
- Custom cable lengths to meet your specific application
- Available in 2, 4, 6 and 8 push button configurations



CONNECTOR ASSEMBLIES

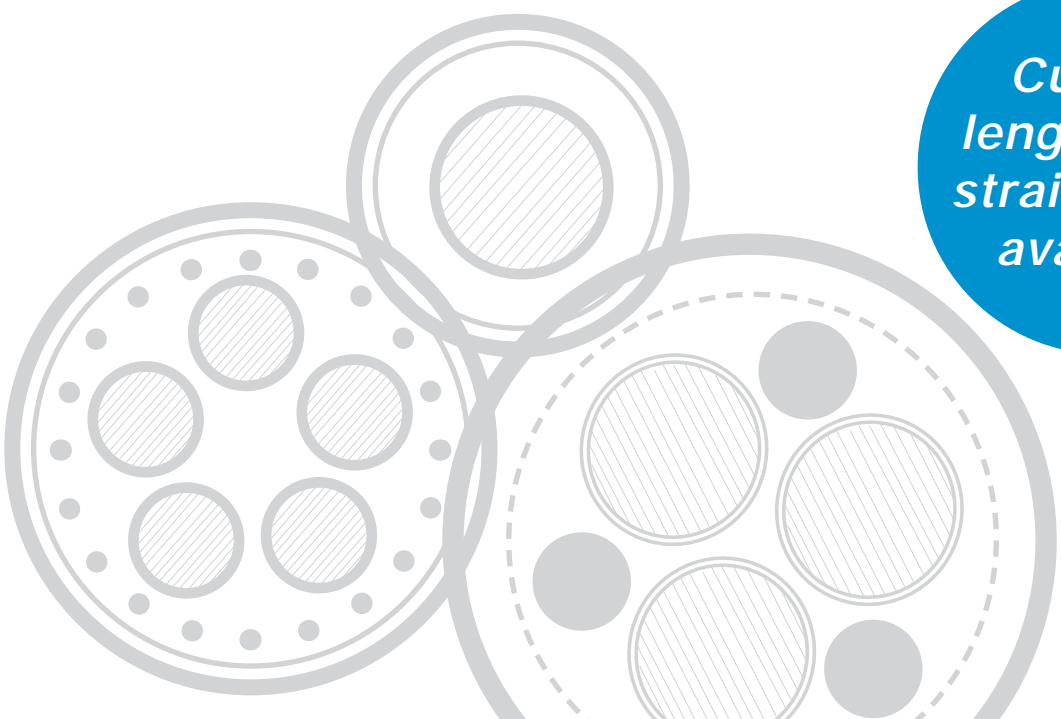
High performance cables designed for the most demanding industrial applications. Cable designs include . . .

- Custom Data Communications Cables
- Chemical Resistant Cables
- Composite Cables
- Custom Thermocouple Cables
- High Temperature Cables
- High Tension Reeling Cables
- Aramid Reinforced Cables
- Low Temperature Cables
- Water Resistant Cables

A major part of TPC's capabilities is working with customers to custom design and develop cables specifically for their application needs.

TPC's expertise in materials, design and manufacturing provides superior cable performance resulting in longer cable life and reduced equipment downtime.

TPC's cable design engineers can assemble the critical components of your cable into a final design that will give you a longer lasting cost effective alternative to constantly replacing cables.

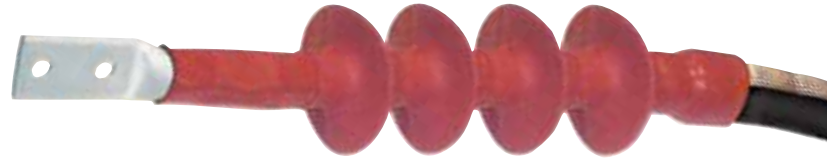


*Custom
lengths and
strain reliefs
available*

CONNECTOR ASSEMBLIES

Type SH Termination

Standard or Custom Terminations Available
 Type SH medium voltage single conductor power cable can be connectorized with Type SH terminations to fit your specific requirements. Cable can be cut to any length.



Heavy Duty Lug Termination

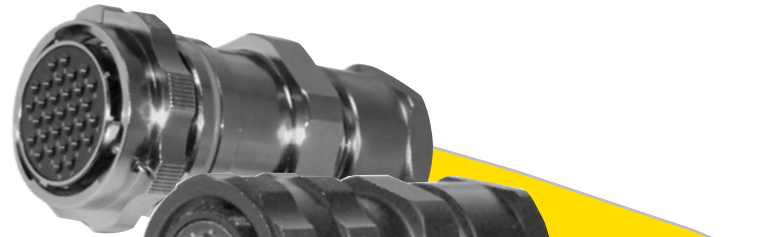
Crimp Connections from 10 AWG to 750MCM
 Standard or custom lugs and terminals. Custom cutting to specific lengths. Custom marking and packaging available.



Control/Power Assemblies

Industrial Circular Connectors
 Available in three styles. A-Line Style is bayonet design for medium duty applications. V-Line Style uses a ratcheting threaded design for heavy duty applications. X-Line uses a threaded coupling for heavy duty applications.

A-Line



V-Line

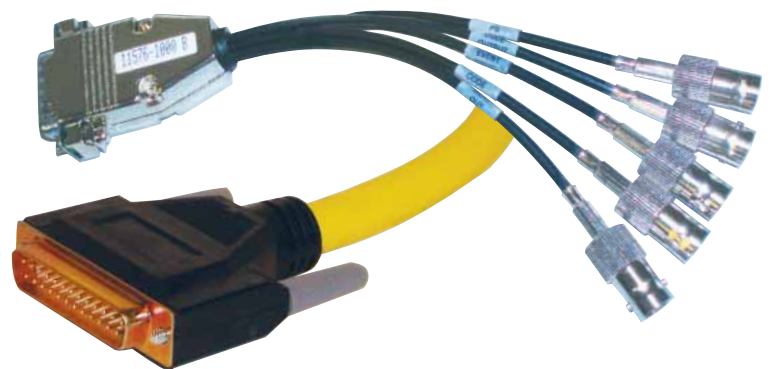


X-Line



Custom and Molded D-Sub Assemblies

D-sub assemblies available in various configurations and pinouts for customer specific applications. Environmental protection and durability provided with molded versions.



Custom Designed Lugs

Image at right is made of titanium for corrosion prevention. Strain relief covering cable jacket to prevent copper stranding fatigue and breaking in flexing applications.



ALUMINUM GRIP-SEALS™ FOR FLAT FESTOON CABLE

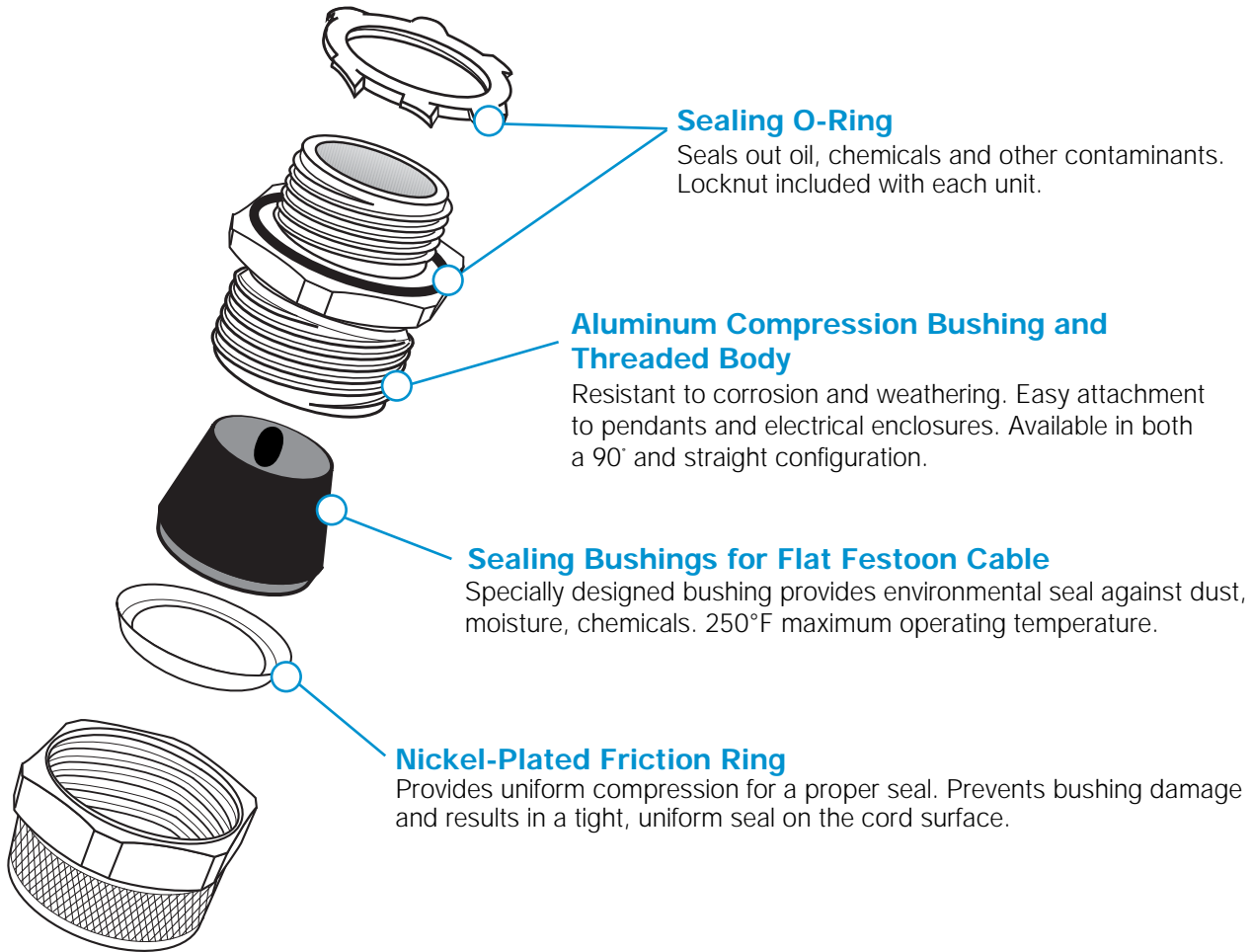


- UL Listed
- CSA Certified

- NEMA Standard FBI-1983

- Straight and 90° Configurations

- Liquid Tight Seal
- RoHS Compliant

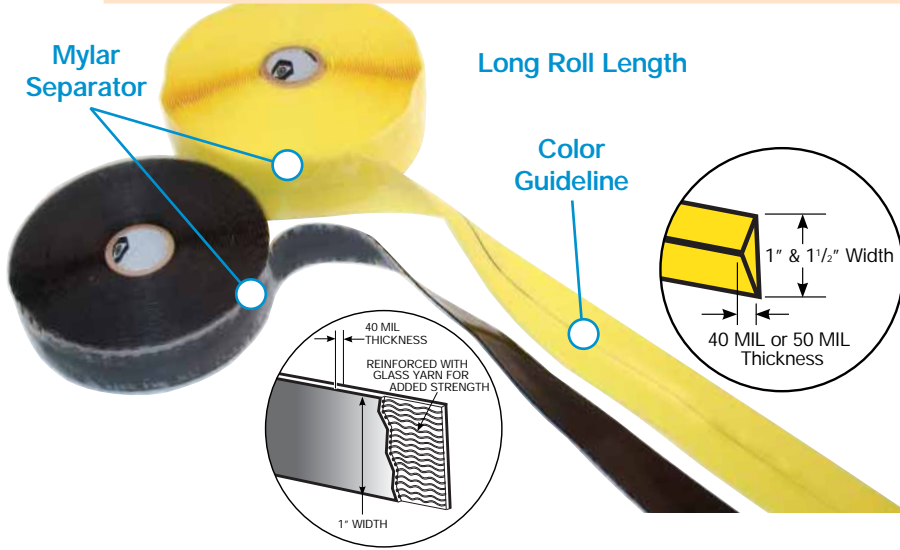


ORDERING INFORMATION

PART NO.	CONFIGURATION	CONDUIT SIZE	CABLE (INCHES)	SIZE/COND.	NO. OF BUSHINGS
55038	Straight	1"	0.190 - 0.870	16/8	1
55032	Straight	1-1/2"	0.204 - 1.420	14/12	1
55034	Straight	1	0.220 - 0.600	12/4	1
55036	Straight	1-1/2"	0.350 - 1.130	6/4	1

VULKO-WRAP™ INSULATING MATERIAL

- Self-Vulcanizing Wrap
- High Dielectric Strength
- Temperature Rating (-60°F to +400°F)
- Reinforced with Glass Yarn Fiber
- RoHS Compliant



OTHER APPLICATIONS

- Bus Bar Insulation
- Corrosive Areas
- Electroplating Dangers
- Food Related Equipment
- HVAC Equipment
- Insulation For Radioactive Environments
- Lift Truck Battery Cable Terminals
- Motor Leads
- Temporary Repair of Low Pressure Air and Hydraulic Lines
- Transformer Tap Lead Insulation
- Washdown Areas

High Dielectric Strength

Can be used for all electrical connections.

Specially Compounded, Synthetic Silicone Elastomer

Resistant to oil, water, ozone, and many chemicals. Wide temperature range from -60° F to +400° F.

Vulcanizes Immediately

Requires no heat – becomes fully bonded in 24 hours at room temperature. Remains pliable over time.

No Adhesives – Adheres Only to Itself

Easy to remove – leaves no residue. Covered fittings are immediately reusable.

Triangular Shape with Color Guideline

Allows even thickness for uniform high dielectric strength.

Stretches to Approximately 2-1/2 Times its Length

Conforms to irregular shapes and uneven surfaces. Can be used on parts which move or vibrate.

Width 1" to 1-1/2"

Covers more surface than ordinary tape with a single wrap.

Available in 40 MIL or 50 MIL Thickness

Extra thick design allows wrapping over sharp and irregular surfaces without tearing or puncturing.

SPECIFICATIONS Meets U.S. Military Spec. MIL-I-46852, superseded by CID A-A-59163.

DIELECTRIC STRENGTH (Per ASTM D-149): 300 volts per mil of finished wrap thickness for 40 mil and 275 volts per mil of finished wrap thickness for 50 mil.

TENSILE/BREAK STRENGTH (Per ASTM D-412): 700 PSI Min.; 17 lbs. for 40 mil; 42 lbs. for 50 mil.

ELONGATION (Per ASTM D-412): 300% minimum.

SHELF LIFE Product should be stored at 70°F or less for maximum shelf life. Store in original packaging in clean dry environment when not in use.

PRODUCT LIMITATION Vulko-Wrap has a low abrasion and cut resistance. A protective overwrap is recommended for applications exposed to dragging or impact.

SPECIFICATIONS Meets U.S. Military Spec. MIL-I-22444C.

DIELECTRIC STRENGTH (Per ASTM D-149) 500 volts per mil of finished wrap thickness for 40 mil.

ELONGATION (Per ASTM D-412) 15% minimum.

SHELF LIFE Product should be stored at 70°F or less for maximum shelf life. Store in original packaging in clean dry environment when not in use.

REINFORCEMENT Reinforcing braid embedded in center of material provides enhanced mechanical strength while still allowing the product to cover irregular shapes.

ORDERING INFORMATION

PART NO.	NOMINAL THICKNESS	NOMINAL WIDTH	NOMINAL LENGTH	WRAP COLOR	GUIDE LINE COLOR	DIELECTRIC STRENGTH PER MIL
98412	40 Mils	1 In. (2.54 cm)	36 Ft. (1100 cm)	Yellow	Red	300 Volts
98512	50 Mils	1-1/2 In. (3.81 cm)	36 Ft. (1100 cm)	Yellow	Black	275 Volts
98412BK	40 Mils	1 In. (2.54 cm)	36 Ft. (1100 cm)	Black	Green	300 Volts
98512BK	50 Mils	1-1/2 In. (3.81 cm)	36 Ft. (1100 cm)	Black	Yellow	275 Volts
18412 Reinforced	40 Mils	1 In. (2.54 cm)	36 Ft. (1100 cm)	Black	None	500 Volts

TOOLS

A variety of tools to cut, strip and prepare cable of all sizes.

Heavy Duty Cable Stripper

Part No. **91470**
For cable O.D. from
.25" to 2.25"



Wire Stripper

Part No. **Y510B**
For cable O.D. from
.0395" to .1260"



Cable Cutter

Part No. **PVC100**
For cable O.D. from
.25" to .75"



Small Cable Stripper

Part No. **91100**
For cable O.D. from
.25" to .75"



Cable Strippers

Available in two sizes:
Part No. **91400**
For cable O.D. from
.25" to .675"
Part No. **91450**
For cable O.D. from
.375" to .875"



Large Cable Stripper

Part No. **91200**
For cable O.D. from
.75" to 1.25"

USA 800-521-7935
FAX 216-525-4392
CANADA 800-545-0122
MEXICO 001-800-290-5614
ONLINE www.tpcwire.com



TPC WIRE & CABLE CORP.

A Premier Farnell Company

7061 E. PLEASANT VALLEY RD.
INDEPENDENCE, OHIO 44131

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