

TPC WIRE & CABLE

TPC WIRE & CABLE

TPC WIRE & CABLE



Providing the Total Wire & Cable Solution for

GOVERNMENT



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.

When Quality Matters, Choose TPC Wire & Cable

The products presented in our catalog have been specifically designed for use in applications where performance and reliability are of the utmost importance. At TPC Wire and Cable Corp, success is measured in the reduction of customer downtime and lower overall maintenance costs. Our commitment to our customer is the cornerstone of our business approach and what distinguishes TPC from the ordinary wire and cable supplier.

- TPC has been providing Government customers with quality product for over 30 years.
- We provide FOB destination on all orders to the Government Market.
- GSA level pricing is available.

- TPC services a diverse Government Market including:

- Military Installations
- Air Force Bases
- Army Bases and Depots
- Naval and Commercial Shipyards
- Government Contractors
- Military Vehicle Manufacturers
- Aerospace Industry

- Our products are currently listed on the DOD E-Mall through multiple small business partners.
- Through the use of Cost Value Analysis, TPC welding cable, on average, lasts 8-10 times longer than our competition.

- As an ISO-9001 company, our quality inspection process is a critical part of the customer experience and ensures customers get the perfect product every time.
- Custom engineered products are available, designed with application and environment information from the customer. These products are built specifically for an individual customer application and represent a true problem solving service.
- We provide electrical cable products, assemblies and accessories high in quality, performance and dependability.



600 VOLT WELDING CABLE

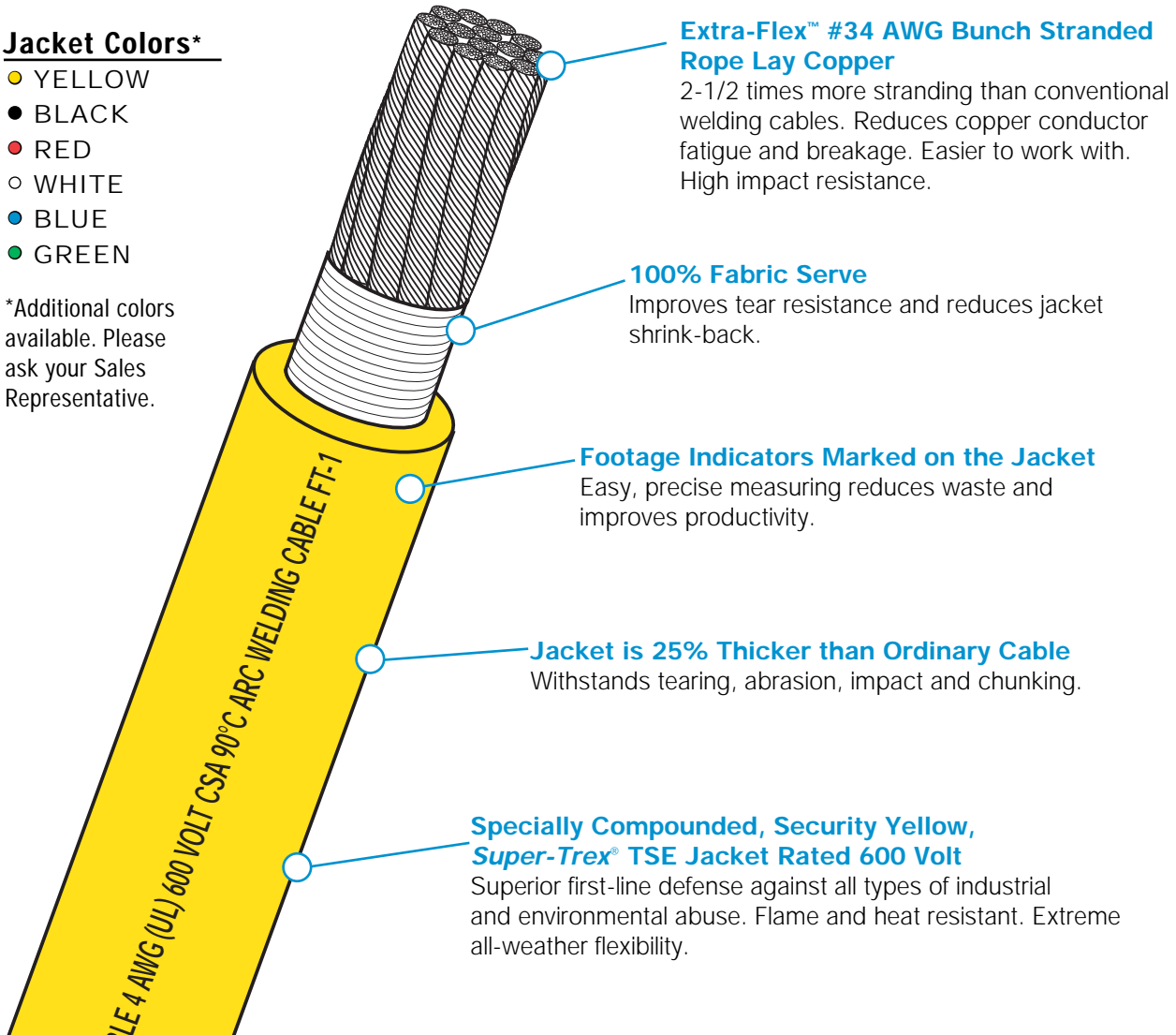


- UL Listed
- CSA Certified
- Rated 90°C
- Extra Hard Usage
- UV Resistant
- 600 Volt
- FT-1
- RoHS Compliant

Jacket Colors*

- YELLOW
- BLACK
- RED
- WHITE
- BLUE
- GREEN

*Additional colors available. Please ask your Sales Representative.



ORDERING INFORMATION

PART NO.		CABLE SIZE (AWG)	CONDUCTOR STRANDING	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
YELLOW	BLUE					
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	86315BL	2/0	3300 x 34	.115	.700	558
86317	—	4/0	5225 x 34	.158	.900	906

YELLOW, RED OR BLACK DC WELDING CABLE



- CSA Certified
- 90°C

- Extra Hard Usage
- Extra Flexible

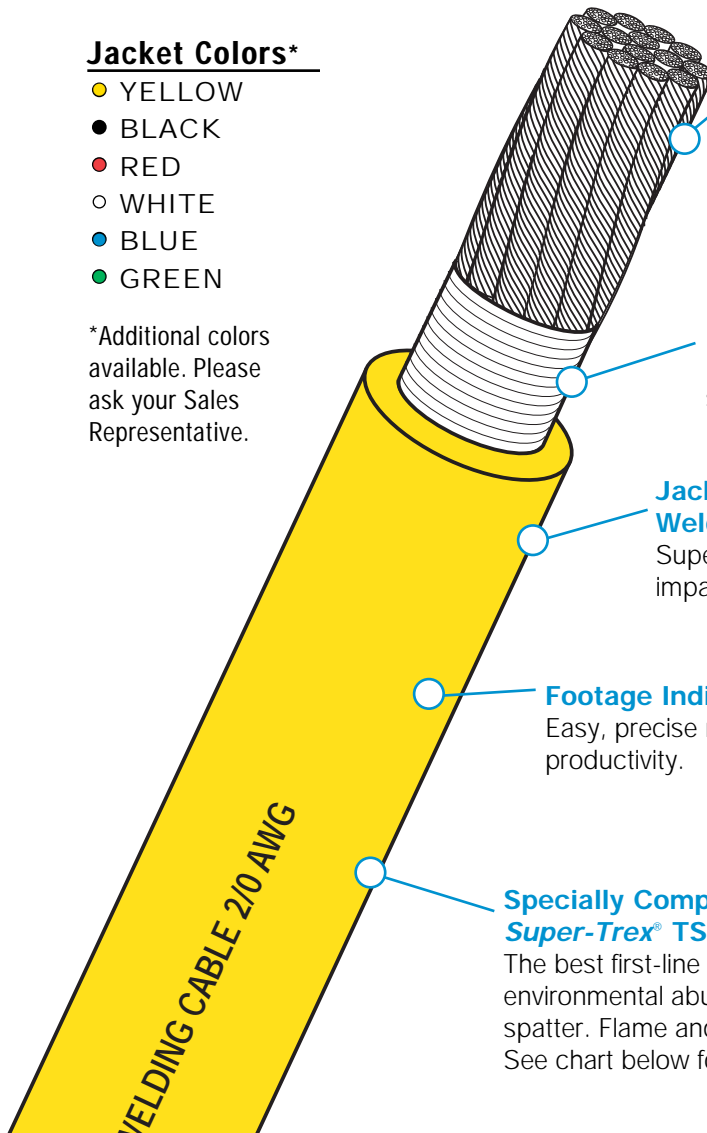
- UV Resistant
- FT-1

- RoHS Compliant
- 150 Volts Max.

Jacket Colors*

- YELLOW
- BLACK
- RED
- WHITE
- BLUE
- GREEN

*Additional colors available. Please ask your Sales Representative.



Extra-Flex™ #34 AWG Soft Drawn Bunch Stranded Rope Lay Copper

2-1/2 times more stranding than conventional welding cables. Reduces copper conductor fatigue and breakage. Easier to work with. High impact resistance.

100% Fabric Serve

Improves tear resistance and reduces jacket shrinkage.

Jacket is 25% Thicker Than Ordinary Welding Cable

Superior resistance to tearing, abrasion and impact.

Footage Indicators Marked on the Jacket

Easy, precise measuring reduces waste, improves productivity.

Specially Compounded, Security Yellow Super-Trex® TSE Jacket

The best first-line defense against all types of industrial and environmental abuse. Resists oil, ozone, most chemicals and weld spatter. Flame and heat resistant. Extreme all-weather flexibility. See chart below for sizes available with red or black jacket.

ORDERING INFORMATION

PART NO.			CABLE SIZE (AWG)	CONDUCTOR STRANDING	AMPACITY (1)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
YELLOW	RED	BLACK						
86301	—	—	4	1045 x 34	150	.093	.450	209
86302	86302R	86302BK	2	1650 x 34	200	.103	.540	318
86303	—	—	1	2090 x 34	250	.103	.580	379
86304	—	—	1/0	2640 x 34	350	.120	.660	484
86305	86305R	86305BK	2/0	3300 x 34	450	.115	.700	579
86306	—	—	3/0	4256 x 34	550	.140	.800	709
86307	—	—	4/0	5225 x 34	600	.158	.900	935

NOTE: (1) Ampacity is for a low voltage intermittent welding lead. Based on 30° C ambient 90° C insulation.

WELD ASSEMBLY SMART PART NUMBERING SYSTEM

FEATURES & BENEFITS

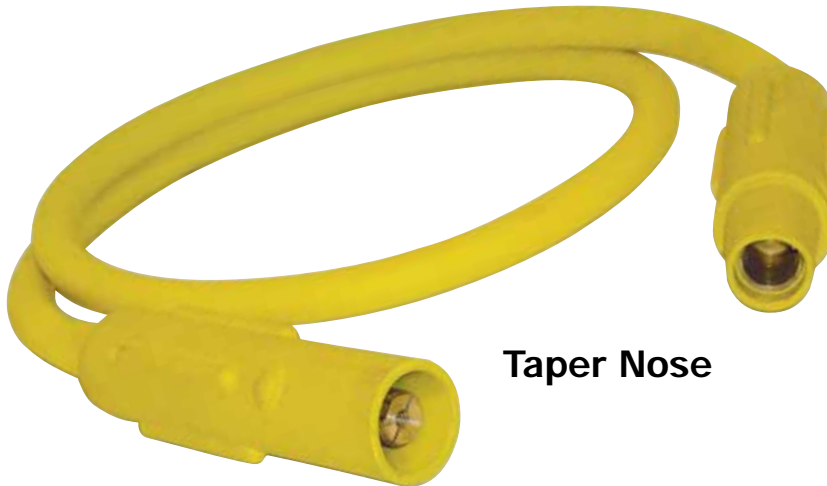
- Based on TPC Cost Value Analyses, TPC welding cable lasts 8 times longer than the competition*
- Mated connection forms a splash tight seal, good for outdoor use.
- Molded connectors form an environmentally sealed bond.
- Can be used for any temporary and portable power distribution and most welding applications.
- Quick connect/disconnect design allows ease of use.
- Crack proof, all rubber construction.

SPECIFICATIONS

Taper Nose will mate with any series 16, E1016, J Series or taper nose style plugs for welding applications.

Ball Nose will mate with any series 18, E1018, Standard Series or ball nose style plugs for welding applications.

- Can be retrofitted to existing locations and power distribution systems.
- Sizes for both are 2 AWG through 4/0.



Taper Nose



Ball Nose

APPLICATIONS

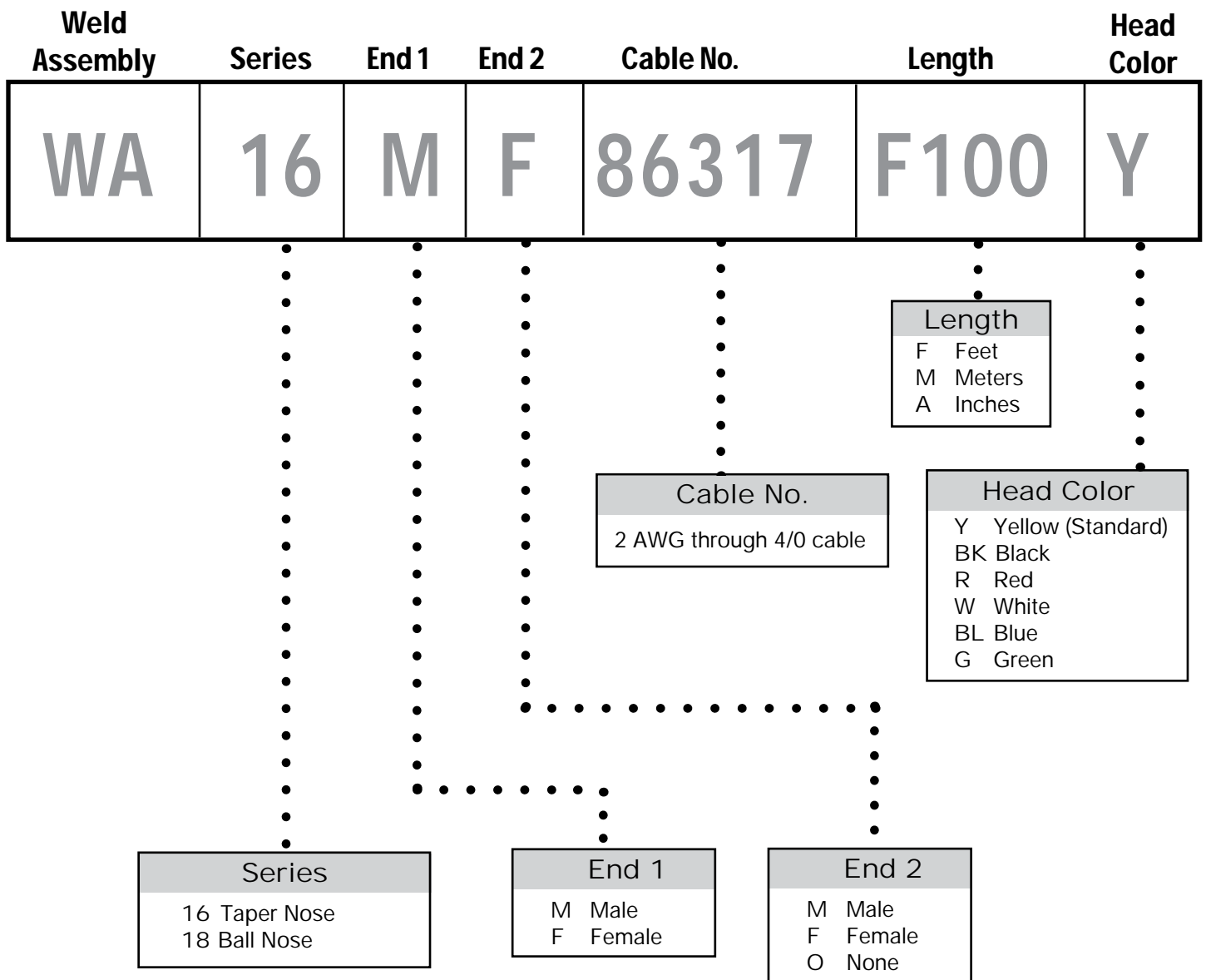
- Government shipyards
- Commercial and Navy shipbuilding and repair sites
- Motor and generator applications
- Construction sites
- Utility applications
- Mining applications
- Temporary power for concerts, carnivals, conventions, theme parks, etc.

MOLDED HEAD COLORS

- **Yellow** (Standard)
- **Black**
- **Red**
- **White**
- **Blue**
- **Green**

**Data available for customer use*

WELD ASSEMBLY SMART PART NUMBERING SYSTEM

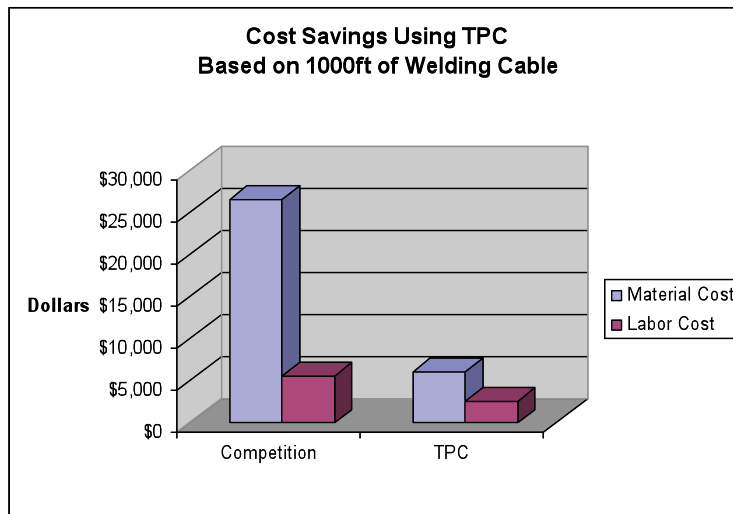


In the example shown above, **WA16MF86317F100Y** is a taper nose style weld assembly, male to female molded plugs with 100 ft. of 86317 (4/0 600 V welding cable) and yellow heads.

WHEN QUALITY MATTERS

Welding Cable - Cost Value Analysis

- TPC's welding cables typically last 8 – 10 times longer than commercially available welding cables.
- Based on annual orders totaling 1000 ft. of welding cable, a typical customer can save up to \$20,440 annually.
- Reduce cable replacement labor costs by up to 90%.
- Reduce down time by 80%.
- Increase in production hours up to 75%.
- TPC weld cables have typically been in service for over 13 months without repair or replacement.



VALUE ANALYSIS COMPUTATION – PER 1000FT

MATERIAL COST	COMPETITOR	TPC
Average Cost Per Foot	\$3.32/ft.	\$6.12/ft.
Replace Cable	\$3,320.00	\$6,120.00
# of Replacements	8	1
Total Material	\$26,560.00	\$6,120.00
# of Units	1 ft.	1 ft.
Total Cost	\$26,560.00	\$6,120.00

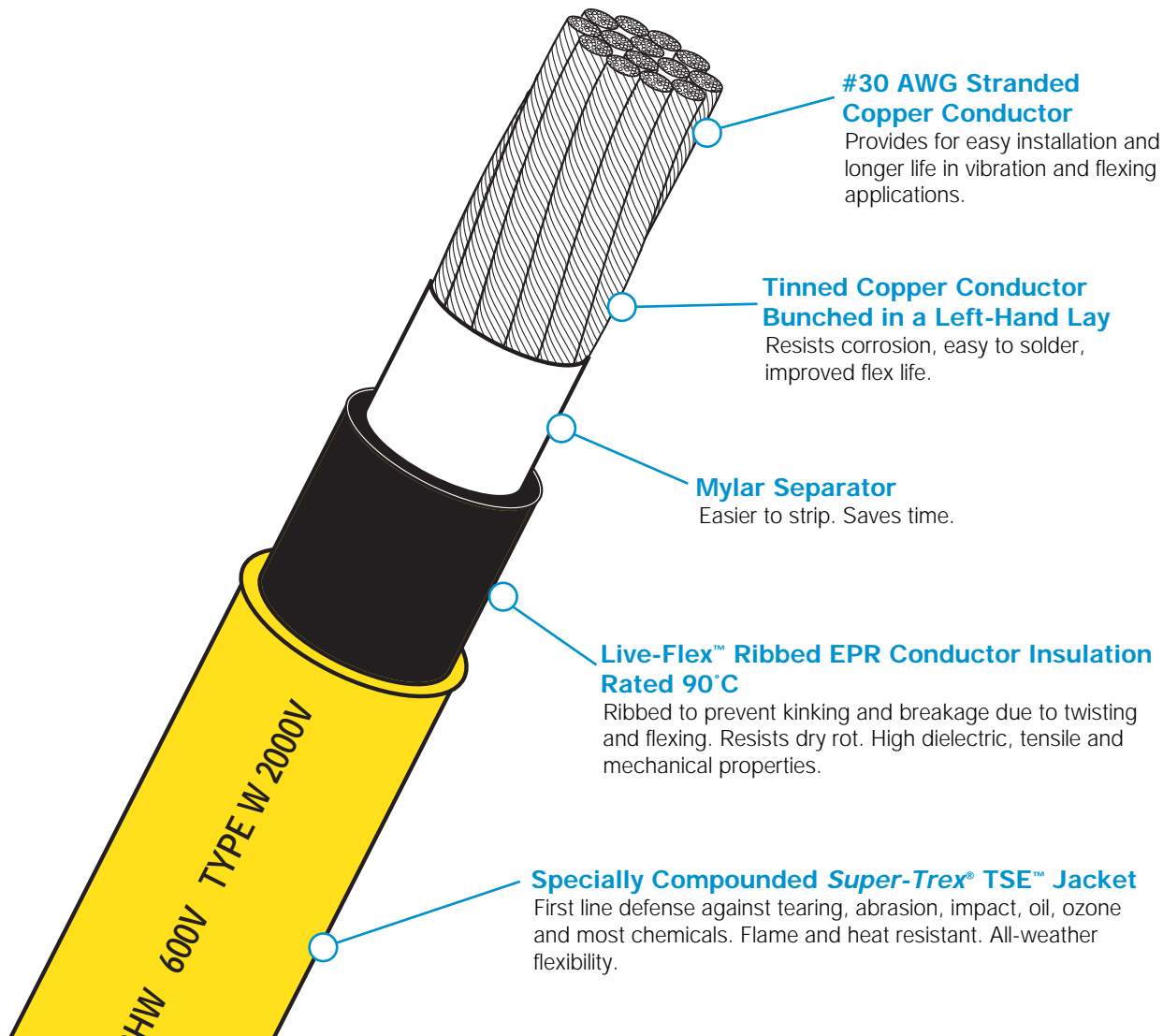
SUPER-TREX[®] RHH/RHW SINGLE CONDUCTOR POWER CABLE



- 2000 Volt
- TYPE W

- 600 Volt RHH/RHW
- UV Resistant

- 90°C Dry-75°C Wet
- RoHS Compliant



ORDERING INFORMATION

PART NO.	CONDUCTOR		AMPACITY (1)		INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WEIGHT (LBS.) PER 1000'
	SIZE MCM	CONDUCTOR STRANDING	WET** 75° C	DRY** 90° C				
86324	#2	665 x 30	170	190	.060	.095	.660	440
86325	2/0	1330 x 30	265	300	.080	.095	.820	750
86326	4/0	2107 x 30	360	405	.080	.095	.965	1080
86319	250	2496 x 30	405	455	.095	.095	1.035	1310
86321	350	3458 x 30	505	570	.095	.095	1.140	1720
86323	500	5054 x 30	620	700	.095	.095	1.325	2320

NOTE: (1) Ambient Temperature Rating of 30° C **Conductor Temperature

ULTRA-GARD™ PORTABLE CORD

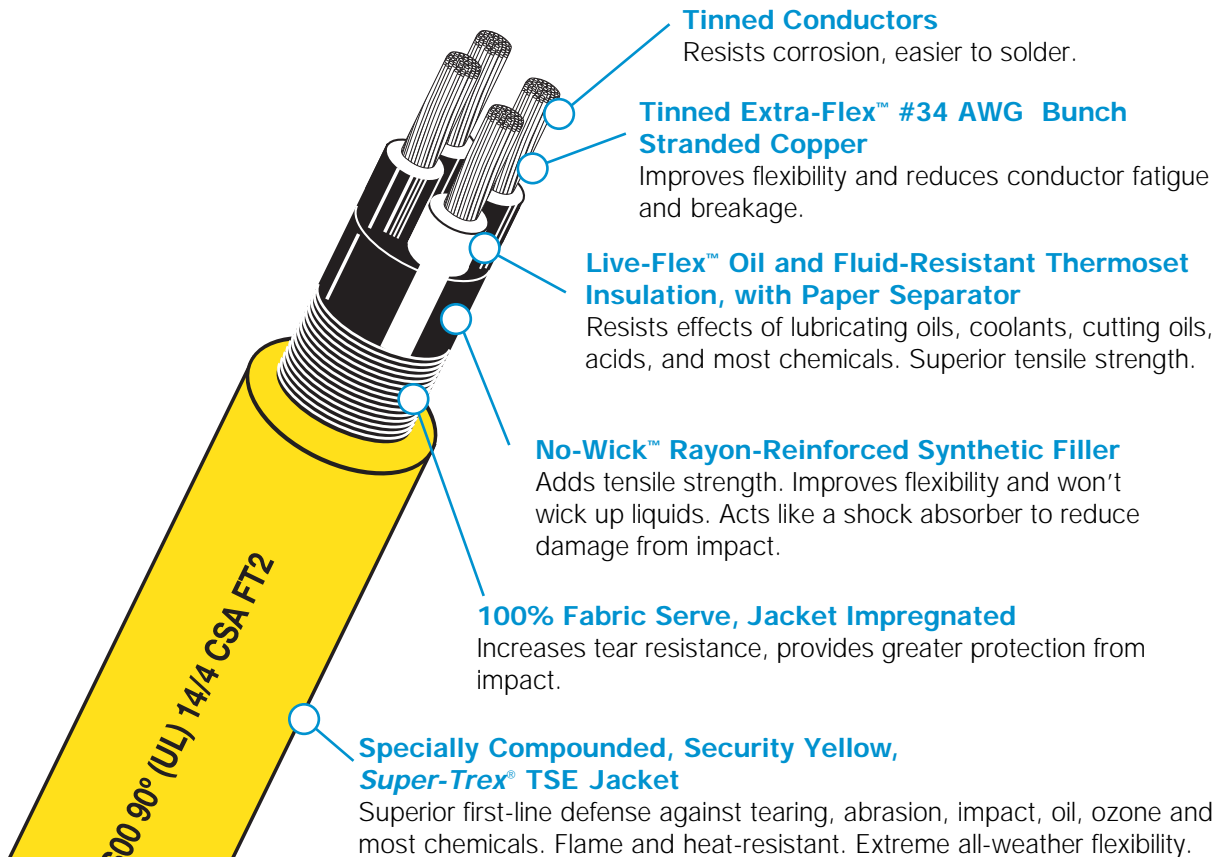


- UL Listed
- CSA Certified
- SOO Rated

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

- UV Resistant
- Extra Hard Usage
- FT-2

- RoHS Compliant



ORDERING INFORMATION

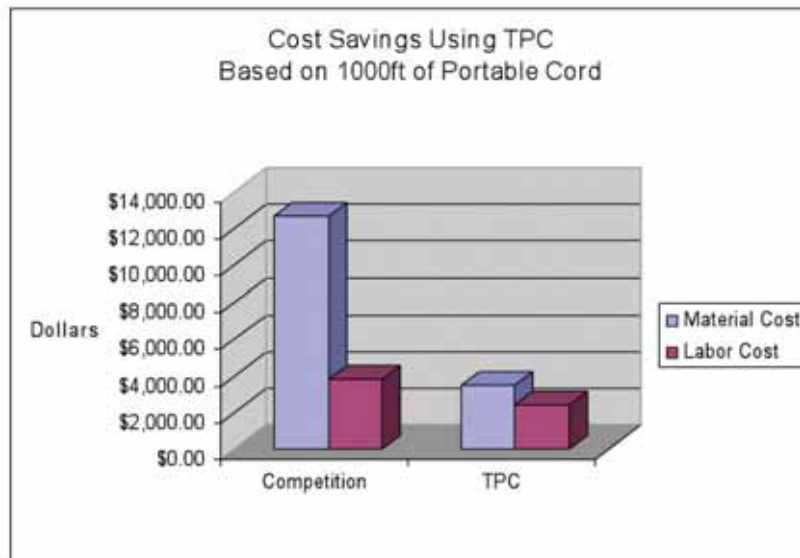
PART NO.	CORD SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	MAX. O.D. (IN.)	WT. (LBS.) PER 1000'
87192	18/3	41 x 34	10	.030	.060	.380	80
87197	18/4	41 x 34	7	.030	.060	.408	100
87191	16/2	65 x 34	13	.030	.060	.388	85
87193	16/3	65 x 34	13	.030	.060	.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.

WHEN QUALITY MATTERS

Portable Cord - Cost Value Analysis

- TPC's portable cords (Ultra & Triple-Gard™ lines) typically last 6 – 9 times longer than commercially available portable cord cables.
- Based on annual orders totaling 1000 ft. of portable cord cable, a typical customer can save up to \$9,171 annually.
- Reduce cable replacement labor costs by up to 70%.
- Increase in production hours up to 96%.
- Total material and labor cost savings = 95%.
- TPC portable cord cables have typically been in service up to 35 months without repair or replacement.



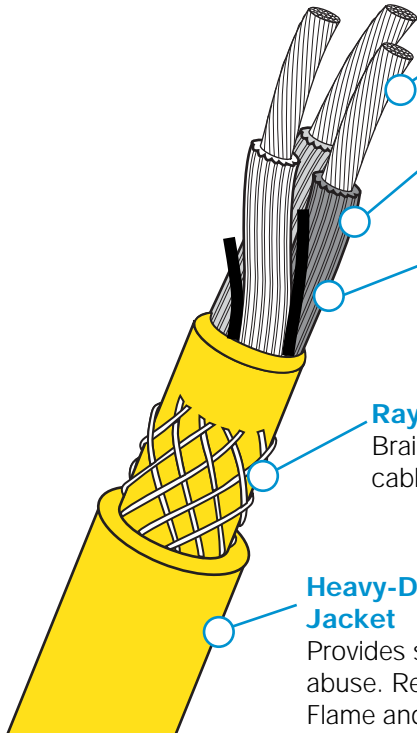
VALUE ANALYSIS COMPUTATION – PER 1000FT

MATERIAL COST	COMPETITOR	TPC
Average Cost Per Foot	\$1.63/ft.	\$3.51/ft.
Replace Cable	\$1,630.00	\$3,510.00
# of Replacements	7.78	1
Total Material	\$12,681.00	\$3,510.00
# of Units	1 ft.	1 ft.
Total Cost	\$12,681.00	\$3,510.00

TYPE-TC/TYPE W POWER CABLE



- UL Listed
- Type W – 2000 Volt
- TC-ER (Tray Cable - Exposed Run)
- 90°C
- UV Resistant



Bunch Stranded Soft Drawn Copper
Longer flex life in flexing and twisting applications.

Conductors are Color Coded
Provides fast identification of conductors. Easy to read and simplifies installation.

Live-Flex™ FREP Conductor Insulation
Flame retardant EP insulation designed for Tray Cable applications. High dielectric, tensile and mechanical properties.

Rayon Tire Cord Reinforcing
Braid embedded in jacket provides added strength. Improves cable resistance to impact, abrasion, twisting and pulling.

Heavy-Duty Security Yellow Super-Trex® TSE Double Pass Jacket
Provides superior first-line defense against industrial and environmental abuse. Resists tearing, abrasion, oil, impact, ozone and most chemicals. Flame and heat resistant. Extreme all-weather flexibility.

ORDERING INFORMATION

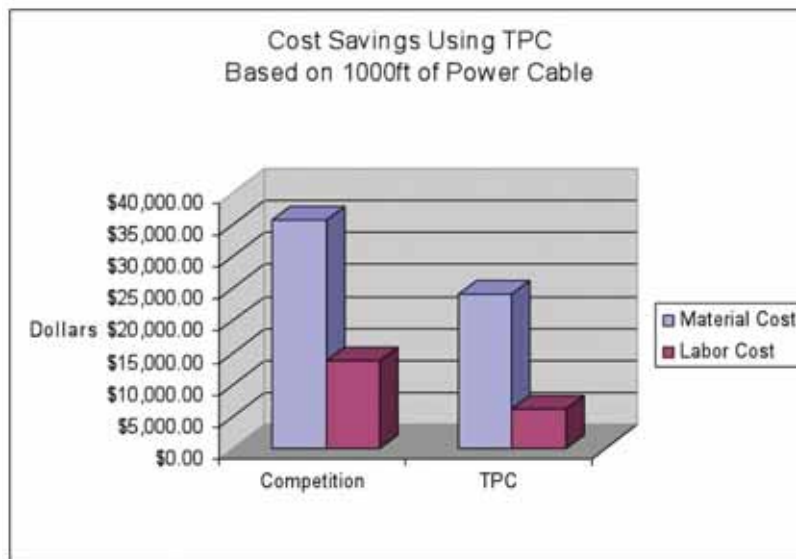
	PART NO.	CABLE SIZE AWG/COND	CONDUCTOR STRANDING	AMPACITY (1)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'	FLAME RATING
2 COND. CSA Certified	85404	8/2	133 (7x19)	74	.141	.950	512	FT 1
	85406	6/2	259 (7x37)	99	.141	1.025	626	FT 4
	85407	4/2	259 (7x37)	130	.141	1.150	823	FT 4
	85408	2/2	259 (7x37)	174	.141	1.265	1094	FT 4
	85411	1/0-2	1064 (19x56)	234	.156	1.602	1766	FT 4
3 COND. CUL	85203*	8/3	133 (7x19)	65	.141	1.00	598	FT 1
	85205	6/3	259 (7x37)	87	.141	1.080	742	FT 4
	85257	4/3	259/28	114	.141	1.225	997	FT 4
	85259	2/3	259/26	152	.141	1.34	1353	FT 4
	85255	1/0-3	1045x30	205	.141	1.70	2328	FT 4
4 & 6 COND. CUL/CSA MSHA Approved	B L A C K J A C K E T							
	85108	4/4	259 (7 x 37)	114	.141	1.31	1229	FT 5
	85110	2/4	259 (7 x 37)	152	.141	1.46	1684	FT 5
	85204	8/4	133 (7 x 19)	65	.141	1.07	706	FT 1
	85206	6/4	259 (7 x 37)	87	.141	1.18	914	FT 4
	85208	4/4	259 (7 x 37)	114	.141	1.31	1229	FT 4
	85210	2/4	259 (7 x 37)	152	.141	1.46	1684	FT 4
	85244	2/0-4	323/.0201	237	.156	1.91	3444	FT 4
	85115	2/5	259 (7 x 37)	152	.170	1.660	2135	FT 4
	85215	6/5	259 (7 x 37)	69	.141	1.280	1077	FT 4
85606	6/6	259 (7 x 37)	69	.141	1.39	1262	FT 4	

NOTES: (1) Ampacities are based on an ambient temperature of 30° C with a conductor temperature of 90° C. NEC 2005 Table 400.5(B) *Not TC rated.

WHEN QUALITY MATTERS

Power Cable (2000V) - Cost Value Analysis

- TPC’s power cable (at least 2000V rated) typically last 2 – 3 times longer than commercially available power cables.
- Based on annual orders totaling 1000 ft. of power cable, a typical customer can save up to \$11,620.00 annually.
- Reduce cable replacement labor costs by up to 20%.
- Increase in production hours up to 52%.
- Total material and labor cost savings = 25%.
- TPC power cables have typically been in service up to 29 months without repair or replacement.



VALUE ANALYSIS COMPUTATION – PER 1000FT

MATERIAL COST	COMPETITOR	TPC
Average Cost Per Foot	\$7.14/ft.	\$12.04/ft.
Replace Cable	\$7,140.00	\$12,040.00
# of Replacements	5	2
Total Material	\$35,700.00	\$24,080.00
# of Units	1 ft.	1 ft.
Total Cost	\$35,700.00	\$24,080.00

REDUCED DIAMETER CONTROL CABLE



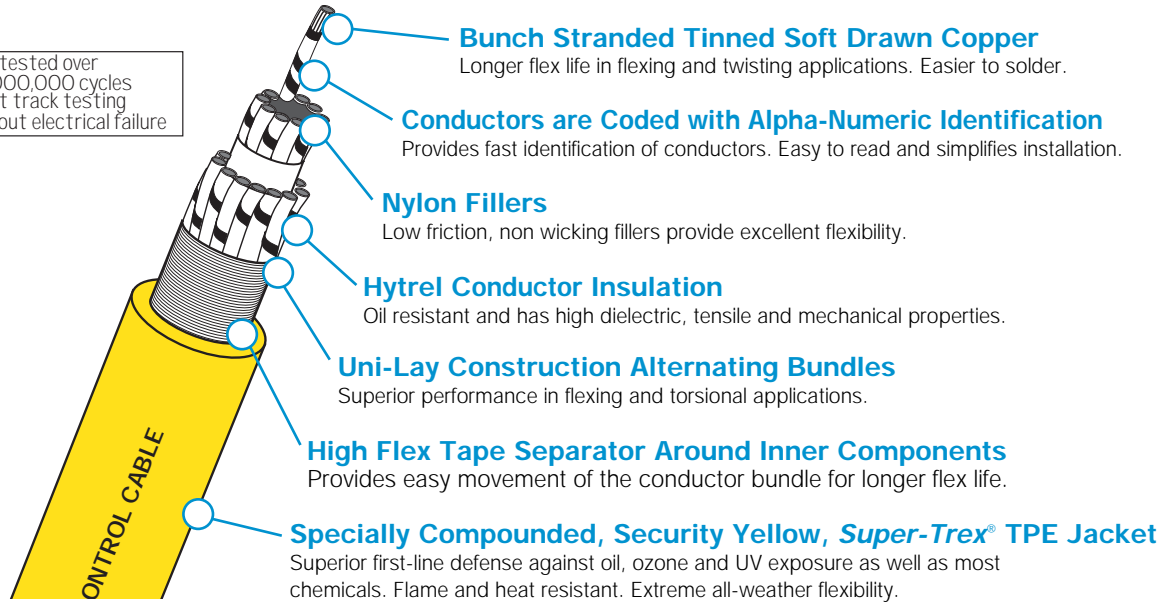
- UL Listed
- CSA Certified

- 600 Volt
- 90°C

- RoHS Compliant

20
MILLION

Flex tested over 20,000,000 cycles in cat track testing without electrical failure



ORDERING INFORMATION

	PART NO. (CONDUCTOR)		CORD SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'	
	STD.	RED								BLUE
16 AWG FT-4 TC Rated Exposed Run	—	88505R	88505B	16/5	65 x 34	14	.010	.060	.358	88
	88512	88512R	88512B	16/12	65 x 34	12	.010	.070	.510	191
	88516	—	—	16/16	65 x 34	12	.010	.070	.550	239
	—	88519R	88519B	16/19	65 x 34	12	.010	.075	.596	281
	88522	—	—	16/22	65 x 34	12	.010	.080	.650	327
	88525	88525R	88525B	16/25	65 x 34	12	.010	.080	.700	376
	88531	—	—	16/31	65 x 34	10	.010	.080	.725	425
	—	88533R	88533B	16/33	65 x 34	10	.010	.080	.745	448
	88541	—	—	16/41	65 x 34	10	.010	.100	.870	608
	—	88547R	88547B	16/47	65 x 34	10	.010	.085	.890	653
88549	—	—	16/49	65 x 34	10	.010	.100	.900	714	
88560	—	—	16/60	65 x 34	8	.010	.100	.975	783	
18 AWG FT-4 TC Rated Exposed Run	88905	—	—	18/5	41 x 34	10	.010	.060	.321	68
	88912	—	—	18/12	41 x 34	9	.010	.070	.444	137
	88919	—	—	18/19	41 x 34	9	.010	.075	.538	208
	88925	—	—	18/25	41 x 34	9	.010	.080	.613	273
	88933	—	—	18/33	41 x 34	7	.010	.080	.645	318
	88949	—	—	18/49	41 x 34	7	.010	.090	.787	473
	88965	—	—	18/65	41 x 34	6	.010	.100	.892	614
20 AWG FT-1	88305	—	—	20/5	26 x 34	9.0	.010	.050	.275	52
	88312	—	—	20/12	26 x 34	8.6	.010	.050	.362	94
	88319	—	—	20/19	26 x 34	8.6	.010	.060	.453	148
	88325	—	—	20/25	26 x 34	7.3	.010	.060	.507	175
	88333	—	—	20/33	26 x 34	7.3	.010	.065	.541	226
	88347	—	—	20/47	26 x 34	6.1	.010	.070	.663	335
	88365	—	—	20/65	26 x 34	6.1	.010	.100	.820	515

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

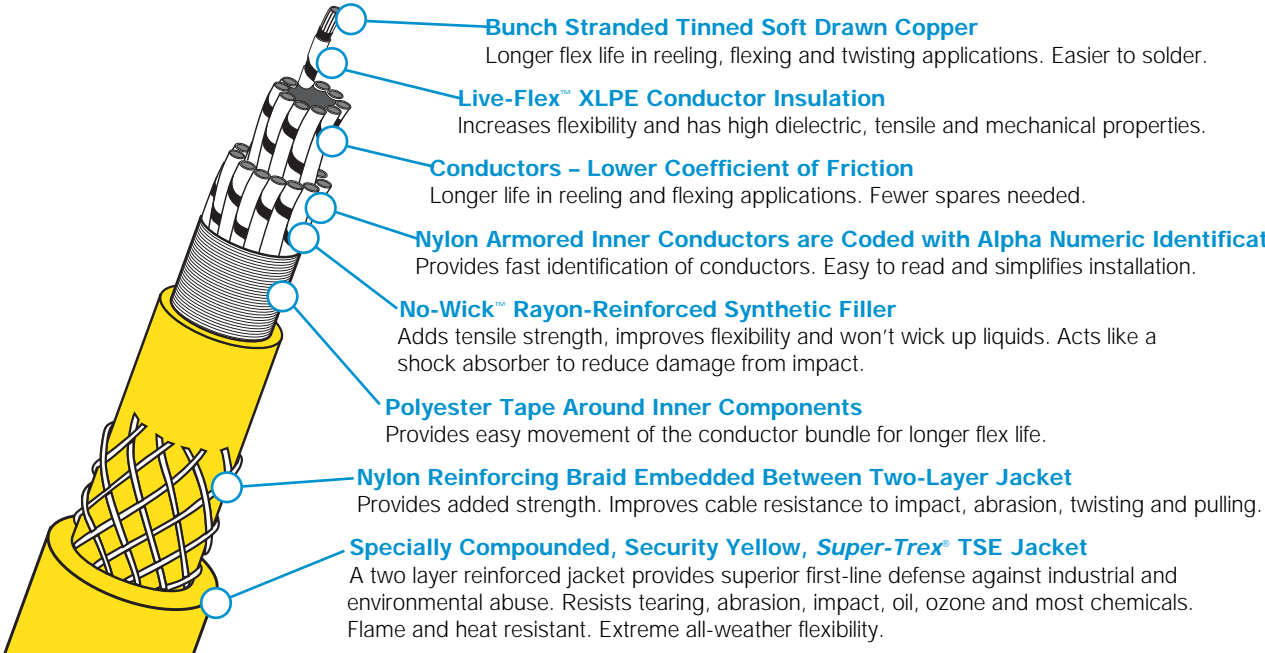


- UL Type TC
- CSA Certified
- UV Resistant

- 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

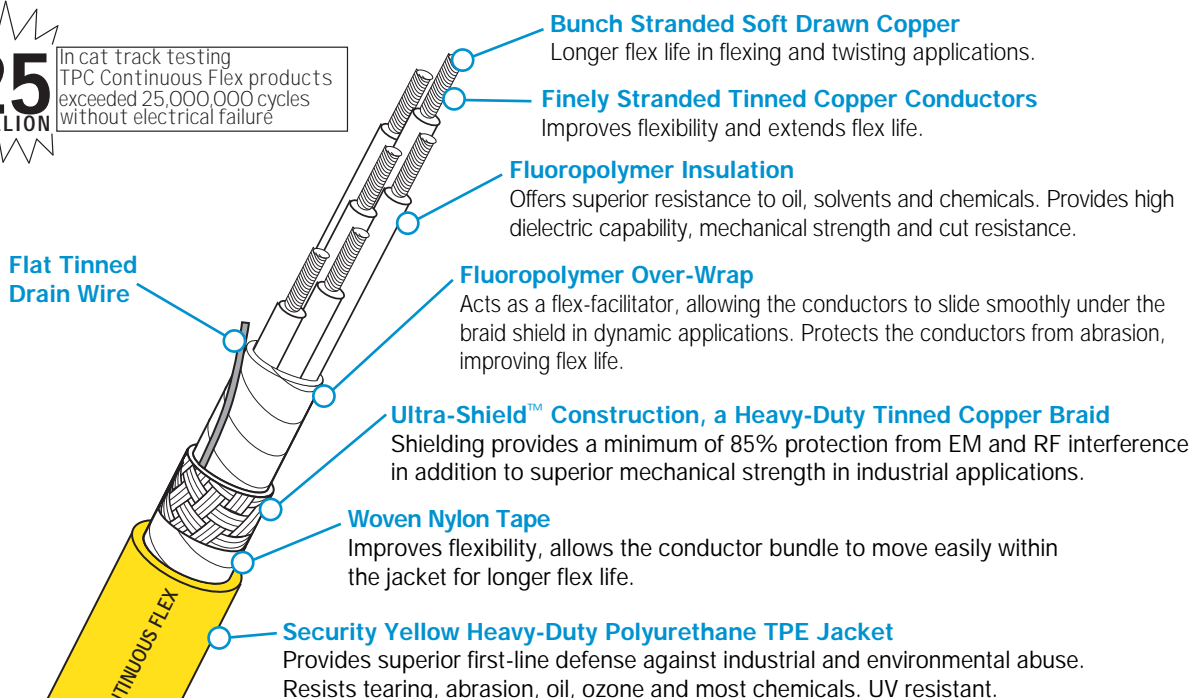
OVERALL SHIELDED CONTINUOUS FLEX MULTI-CONDUCTOR CABLE



- UL Recognized 90°C
- CSA Certified 80°C
- Designed for Continuous Flex Applications
- MSHA Approved
- 600 Volt
- 90°C
- RoHS Compliant

25
MILLION

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

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.

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

- Cat Tracks
- Computer Interface
- Digital Remote Control
- Heat, Pressure and Flow Meters
- Instrumentation
- Load Cell Monitors
- Programmable Controllers Proximity Switches
- Programmable Limit Switches
- Robotic Applications
- Servo Motors
- Tachometers
- Telecommunications
- Torque-Tool Monitoring Equipment
- Variable Speed Motors

Chemical Resistance Of Common Insulating Materials

	Rubber	Silicone	Fluoropolymer
OXIDATION RESISTANCE	F	E	O
OIL RESISTANCE	P	F-G	O
UV RESISTANCE	F	O	O
WATER RESISTANCE	G	G-E	E
ACID RESISTANCE	F-G	F-G	E
ALKALI RESISTANCE	F-G	F-G	E
GASOLINE KEROSENE	P	P-F	E
BENZOL TOLUENE	P	P	E
DEGREASER SOLVENT	P	P-G	E
ALCOHOL RESISTANCE	G	G	E

O = OUTSTANDING F = FAIR E = EXCELLENT
 P = POOR G = GOOD

Trex-Onics Multi-Conductor

- | | |
|------------------------|------------------------|
| 1. Black | 34. Black/White/Orange |
| 2. White | 35. White/Red/Orange |
| 3. Red | 36. Orange/White/Blue |
| 4. Green | 37. White/Red/Blue |
| 5. Orange | 38. Black/White/Green |
| 6. Blue | 39. White/Black/Green |
| 7. White/Black | 40. Red/White/Green |
| 8. Red/Black | 41. Green/White/Blue |
| 9. Green/Black | 42. Orange/Red/Green |
| 10. Orange/Black | 43. Blue/Red/Green |
| 11. Blue/Black | 44. Black/White/Blue |
| 12. Black/White | 45. White/Black/Blue |
| 13. Red/White | 46. Red/White/Blue |
| 14. Green/White | 47. Green/Orange/Red |
| 15. Blue/White | 48. Orange/Red/Blue |
| 16. Black/Red | 49. Blue/Red/Orange |
| 17. White/Red | 50. Black/Orange/Red |
| 18. Orange/Red | 51. White/Black/Orange |
| 19. Blue/Red | 52. Red/Orange/Black |
| 20. Red/Green | 53. Green/Red/Blue |
| 21. Orange/Green | 54. Orange/Black/Blue |
| 22. Black/White/Red | 55. Blue/Black/Orange |
| 23. White/Black/Red | 56. Black/Orange/Green |
| 24. Red/Black/White | 57. White/Orange/Green |
| 25. Green/Black/White | 58. Red/Orange/Green |
| 26. Orange/Black/White | 59. Green/Black/Blue |
| 27. Blue/Black/White | 60. Orange/Green/Blue |
| 28. Black/Red/Green | 61. Blue/Green/Orange |
| 29. White/Red/Green | 62. Black/Red/Blue |
| 30. Red/Black/Green | 63. White/Orange/Blue |
| 31. Green/Black/Orange | 64. Red/Black/Blue |
| 32. Orange/Black/Green | 65. Green/Orange/Blue |
| 33. Blue/White/Orange | |

Trex-Onics Jacket Chemical Resistance

ACIDS	
Acetic, 5%	Good
Formic, 20%	Variable
Hydrochloric, 10%	Fair
Olcic	Fair-Good
Sulfuric, 20%	Fair

ALCOHOLS	
Ethanol	Variable
Isopropanol	Fair-Poor
Isopropanol, 50%	Fair-Poor
Methanol	Variable

ALKALI	
Sodium Hydroxide, 20%	Fair

ORGANICS	
Acetone	Poor
ASTM Fuel A	Good
ASTM Fuel B	Fair
ASTM Fuel C	Fair-Variable
ASTM Fuel #1	Good
ASTM Fuel #2	Good
ASTM Fuel #3	Good-Fair
Benzene	Variable
Brake Fluid Type A	Variable
Brake Fluid (H.D.)	Fair-Good
Butane	Good
Carbon Tetrachloride	Variable
Cyclohexanone	NR
Dimethyl Formamid	NR
Dimethyl Sulfoxide	NR
I, 4-Dioxane	NR
Diethyl Phthalate	Fair
Ethyl Ether	Fair-Good
Ethylene Glycol	Good

ORGANICS (continued)	
Ethylene Glycol 50% Water	Good
Gasoline, 100 Octane	Fair
Hexane	Fair-Good
Kerosene	Good
Methylene Chloride	Variable
Methyl Ethyl Keytone	Variable
N-Methyl-2-Pyrrolidene	NR
Oil, Texas Crude	Fair-Good
Oil, Detergent 20W	Good
Oil, Non-Detergent 20W	Good
Oil, Skydrol Type B	NR
Oil, Skydrol Type 500A	Fair-Variable
Oil, Skydrol Type 500B	Fair-Variable
Oil, Transmission Type A	Good
Perchloroethylene	Variable
Pyridine	NR
Tetrahydrofuran	NR
Toluene	Variable
Trichloroethylene	Variable
Turpentine	Good

MISCELLANEOUS	
Chlorox (5%)	Good
Calcium Chloride	Good
Saturated Solution	
FREON-113	Variable
FREON-11B	Variable
FREON-112	Good
Hydrogen Disulfide (5%)	Excellent
Sodium Chloride	Good
Saturated Solution	
Synthetic Perspiration	Good
Tide (1%)	Good
Water	Good

CODING
 EXCELLENT
 Little or no change in constant exposure — application is recommended.
 GOOD
 Only slight loss in properties on constant exposure — application is recommended.
 FAIR
 Some swelling could occur in constant exposure but recommended for infrequent contact.
 VARIABLE
 In constant exposure not recommended. Infrequent contact recommended.
 NR
 Not recommended, product could deteriorate in moderate exposure.

ELECTRICAL CHARACTERISTICS

PART NO.	NOM. IMPEDANCE (PER 1,000 FT.)	NOM. CAPACITANCE (COND TO COND)	NOM. CAPACITANCE (COND TO SHIELD)
61705	37.5	44	79.2
61709	37.5	44	79.2
61712	37.5	44	79.2
61719	37.5	44	79.2
61725	37.5	44	79.2
61731	37.5	44	79.2
61402	47	35	62
61404	47	35	62
61406	47	35	62
61409	47	35	62
61412	47	35	62
61418	47	35	62
61424	47	35	62
61502	53	31.5	56
61506	53	31.5	56
61509	53	31.5	56
61512	53	31.5	56
61518	53	31.5	56
61524	53	31.5	56
61602	69	24	42.5
61604	69	24	42.5
61606	69	24	42.5
61609	69	24	42.5

These values are to be used as a guideline and may vary according to the actual cable application.

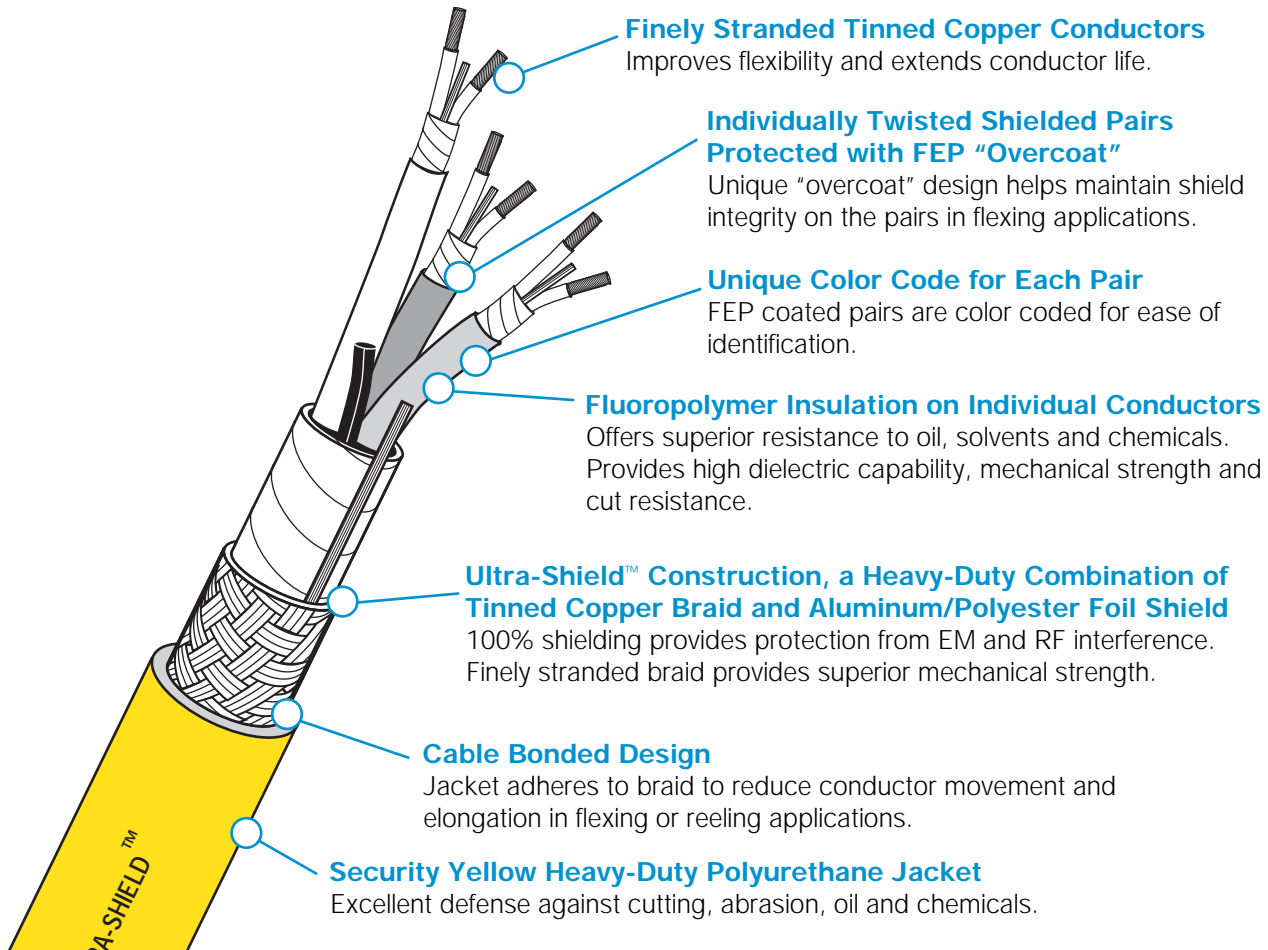
TREX-ONICS® INDIVIDUALLY SHIELDED, MULTI-PAIR CONTROL CABLE



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

- Compact Design
- MSHA Approved

- 600 Volt
- RoHS Compliant



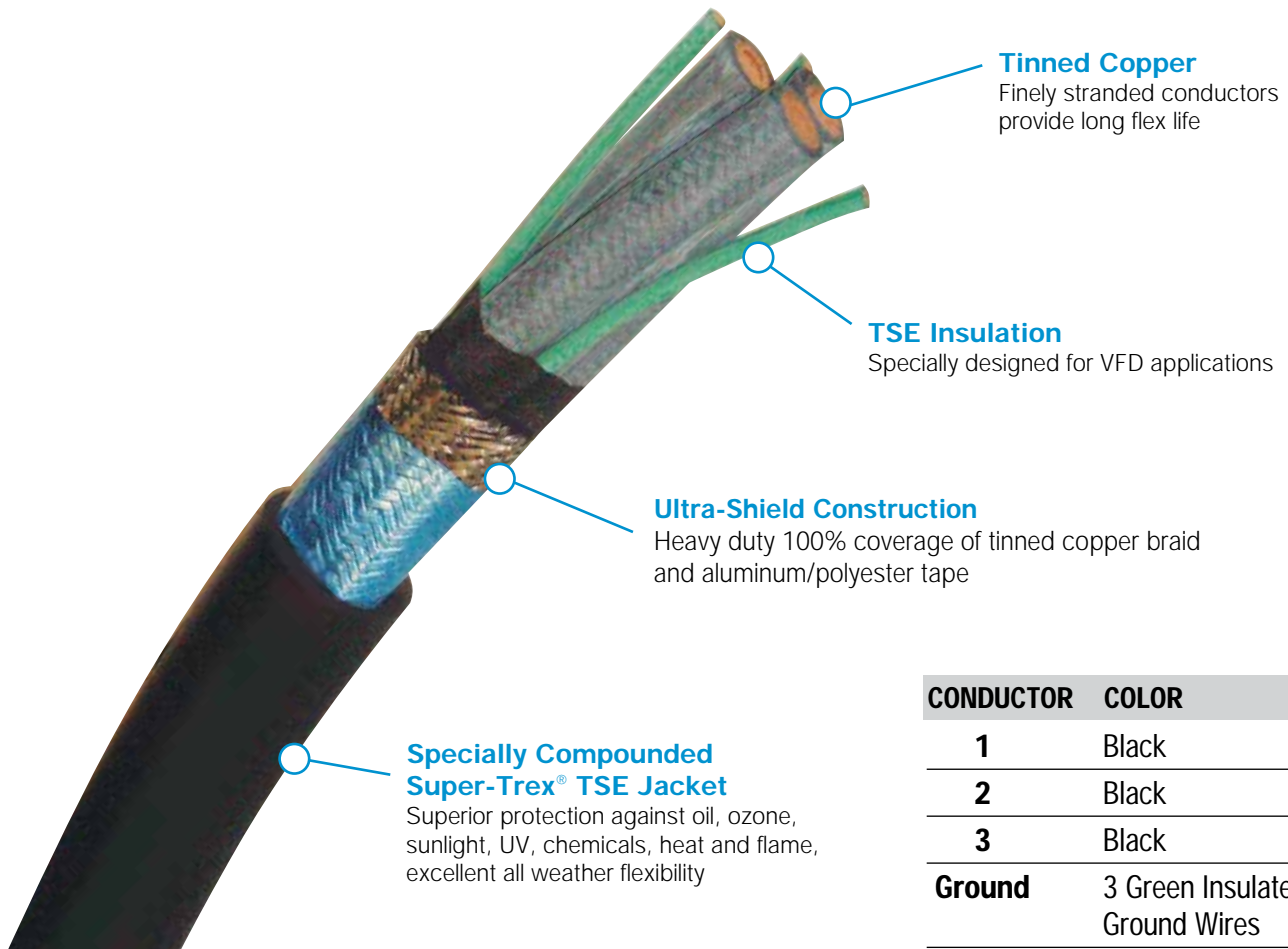
ORDERING INFORMATION

PART NO.	CONDUCTOR SIZE (AWG)	NO. OF PAIRS	CONDUCTOR STRANDING	AMPACITY*	INSULATION THICKNESS (IN.)	INDIA. 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

*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.

MARINE-SHIPBOARD VFD POWER CABLE

- Rated 2000 Volt
- UL Listed
- CSA Listed
- IEEE 1580 Type P
- Type TC - ER
- US Coast Guard Rated
- 110°C Rated



CONDUCTOR	COLOR
1	Black
2	Black
3	Black
Ground	3 Green Insulated Ground Wires

ORDERING INFORMATION

PART NO.	POWER COND. SIZE AWG/COND.	POWER COND. STRANDING	GROUND SIZE*	GROUND COND. STRANDING	AMPACITY**	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
89006	#6 - 3c	61 x .0201	3 x 12AWG	19 x .0185	87	0.910	570
89002	#2 - 3c	133 x .0223	3 x 10AWG	37 x .0167	152	1.25	1,425
89010	1/0 - 3c	266 x .0201	3 x 10AWG	37 x .0167	205	1.42	1,800
89020	2/0 - 3c	342 x .0201	3 x 10AWG	37 x .0167	237	1.58	2,150
89040	4/0 - 3c	532 x .0201	3 x 8AWG	37 x .0201	316	2.05	3,460
89262	262 - 3c	646 x .0201	3 x 6AWG	61 x .0201	362	2.19	4,177
89373	373 - 3c	925 x .0201	3 x 6AWG	61 x .0201	449	2.49	5,416
89444	444 - 3c	1,110 x .0201	3 x 6AWG	61 x .0201	497	2.68	6,705
89535	535 - 3c	1,330 x .0201	3 x 6AWG	61 x .0201	555	2.96	7,485
89646	646 - 3c	1,591 x .0201	3 x 4AWG	133 x .0177	617	3.16	8,920
89777	777 - 3c	1,924 x .0201	3 x 4AWG	133 x .0177	686	3.40	10,400

*Ground sized in accordance with NEC Table 250.122 & UL 1277 whichever is larger

** Ampacity based NEC Table B.310.3 Ambient Air Temperature of 30°C; Conductor Temperature of 90°C

Also available with overall Armor & Sheath — call for price and availability

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.

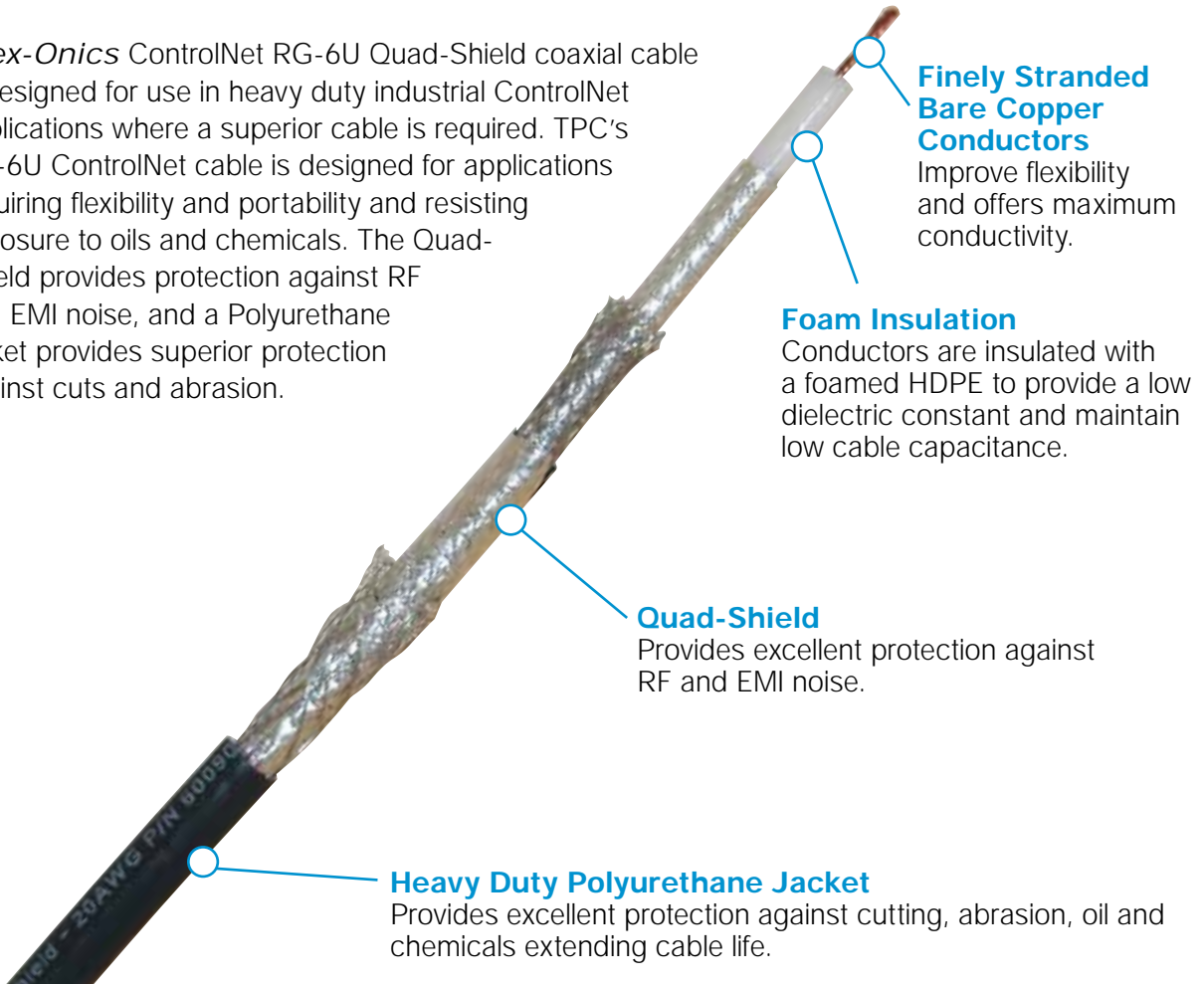
ORDERING INFORMATION

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

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.

CHEM-GARD™ 200



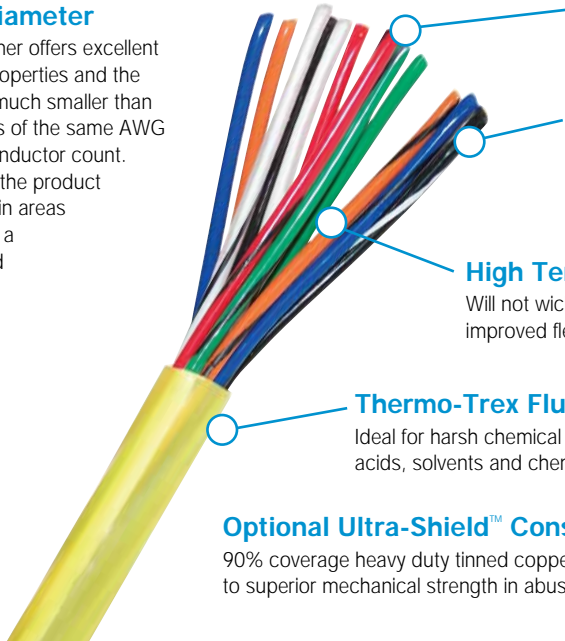
- UL Recognized
- 600 Volt
- CSA Approved

- 200°C/392°F
- FT1 – CSA Flame Test
- VW1 – UL Flame Test

- Rated to -60°C
- Both Chem-Gard 200 & 150 are RoHS Compliant

Small Diameter

Fluoropolymer offers excellent electrical properties and the product is much smaller than most cables of the same AWG size and conductor count. This allows the product to be used in areas that require a tighter bend radius.



Finely Stranded Nickel Plated Copper Conductors

For improved flexibility in dynamic applications and protection from corrosion and oxidation in chemical and high temperature environments.

Fluoropolymer Conductor Insulation

Extremely chemical resistant and mechanically durable for additional protection against cutting, abrasion and chemicals. Conductors slide easily within jacket for maximum flex life.

High Temperature Fluoropolymer Fillers

Will not wick up contaminants into cable. Allows conductors to move freely within jacket for improved flexibility in dynamic applications.

Thermo-Trex Fluoropolymer Jacket

Ideal for harsh chemical environments. Excellent defense against cutting and abrasion. Resistant to oils, acids, solvents and chemicals. Designed for continuous temperature environments up to 200°C (392°F).

Optional Ultra-Shield™ Construction

90% coverage heavy duty tinned copper braid shielding provides protection from EM and RF interference in addition to superior mechanical strength in abusive environments.

ORDERING INFORMATION

UNSHIELDED High Temp Non-Shielded Braid – 200°C *(Additional configurations available)*

	Part No.	Configuration AWG/Cond.	Stranding (Strands/AWG)	Braid Shield	Conductor	Insulation	Cable OD	Ampacity ¹	Drain Wire	Wt. (LBS.) per 1,000'
Multi-Conductor	42604	16/4	65/34	None	Nickel	Fluoropolymer	.230	26.0	None	59
	42612	16/12	65/34	None	Nickel	Fluoropolymer	.370	16.0	None	152
	42404	14/4	105/34	None	Nickel	Fluoropolymer	.270	43.0	None	86.5
	42204	12/4	65/30	None	Nickel	Fluoropolymer	.345	54.0	None	133.5
Single Conductor Product Available in Black, White, Red or Green	42881	18 BLACK	41/34	None	Nickel	Fluoropolymer	.068	24.0	None	6.8
	42882	18 WHITE	41/34	None	Nickel	Fluoropolymer	.068	24.0	None	6.8
	42883	18 RED	41/34	None	Nickel	Fluoropolymer	.068	24.0	None	6.8
	42884	18 GREEN	41/34	None	Nickel	Fluoropolymer	.068	24.0	None	6.8
	42661	16 BLACK	65/34	None	Nickel	Fluoropolymer	.078	32.0	None	10.4
	42662	16 WHITE	65/34	None	Nickel	Fluoropolymer	.078	32.0	None	10.4
	42663	16 RED	65/34	None	Nickel	Fluoropolymer	.078	32.0	None	10.4
	42664	16 GREEN	65/34	None	Nickel	Fluoropolymer	.078	32.0	None	10.4
	42441	14 BLACK	105/34	None	Nickel	Fluoropolymer	.094	54.0	None	15.5
	42442	14 WHITE	105/34	None	Nickel	Fluoropolymer	.094	54.0	None	15.5
	42443	14 RED	105/34	None	Nickel	Fluoropolymer	.094	54.0	None	15.5
	42444	14 GREEN	105/34	None	Nickel	Fluoropolymer	.094	54.0	None	15.5
	42221	12 BLACK	65/30	None	Nickel	Fluoropolymer	.124	68.0	None	24.6
	42222	12 WHITE	65/30	None	Nickel	Fluoropolymer	.124	68.0	None	24.6
	42223	12 RED	65/30	None	Nickel	Fluoropolymer	.124	68.0	None	24.6
	42224	12 GREEN	65/30	None	Nickel	Fluoropolymer	.124	68.0	None	24.6

SHIELDED High Temp Shielded Braid – 200°C *(Additional configurations available)*

Part No.	Configuration AWG/Cond.	Stranding (Strands/AWG)	Braid Shield	Conductor	Insulation	Cable OD	Ampacity ¹	Drain Wire	Wt. (LBS.) per 1,000'
42061	16/4	65/34	Nickel	Nickel	Fluoropolymer	.245	26.0	20AWG	77
42063	12/4	65/30	Nickel	Nickel	Fluoropolymer	.370	52.0	20AWG	154
42065	16/12	65/34	Nickel	Nickel	Fluoropolymer	.385	16.0	20AWG	176

¹Ampacities are based on conductors in free air, 40°C (104°F) ambient, 200°C (392°F) conductor temperature.

CHEM-GARD™ 150

ORDERING INFORMATION

UNSHIELDED Non-Shielded Configurations – 150°C *(Additional configurations available)*

Part No.	Configuration AWG/Cond.	Stranding (Strands/AWG)	Braid Shield	Conductor	Insulation	Cable OD	Ampacity ²	Drain Wire	Wt. (LBS.) per 1,000'
42126	16/4	65/34	None	Tinned	Fluoropolymer	.225	21.0	None	59
42128	12/4	65/30	None	Tinned	Fluoropolymer	.335	48.0	None	128
42130	16/12	65/34	None	Tinned	Fluoropolymer	.365	13.0	None	150

SHIELDED Shielded Configurations – 150°C *(Additional configurations available)*

Part No.	Configuration AWG/Cond.	Stranding (Strands/AWG)	Braid Shield	Conductor	Insulation	Cable OD	Ampacity ²	Drain Wire	Wt. (LBS.) per 1,000'
42114	18/3	65/36	Tinned	Tinned	Fluoropolymer	.205	16.0	20AWG	35.5
42116	16/4	65/34	Tinned	Tinned	Fluoropolymer	.245	21.0	20AWG	77
42118	12/4	65/30	Tinned	Tinned	Fluoropolymer	.370	48.0	20AWG	154
42120	16/12	65/34	Tinned	Tinned	Fluoropolymer	.385	13.0	20AWG	176

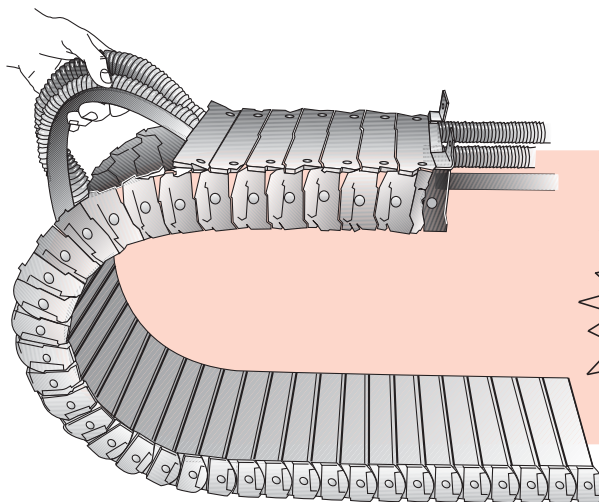
²Ampacities are based on conductors in free air, 40°C (104°F) ambient, 150°C (302°F) conductor temperature.

CONDUCTOR COLOR CODES

1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue
7	White/Black
8	Red/Black
9	Green/Black
10	Orange/Black
11	Blue/Black
12	Black/White

CHEMICAL RESISTANCE

	Fluoropolymer	FEP
Oxidation Resistance	Excellent	Excellent
Oil	Excellent	Excellent
UV Rays	Excellent	Excellent
Water	Excellent	Excellent
Acid	Excellent	Excellent
Alkali	Excellent	Excellent
Gasoline/Kerosene	Excellent	Excellent
Benzol Toluene	Excellent	Excellent
Degreaser Solvent	Excellent	Excellent
Alcohol	Excellent	Excellent



7
MILLION

In cat track testing
Chem-Gard 16/12 completed
over 7,000,000 cycles
without electrical failure

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

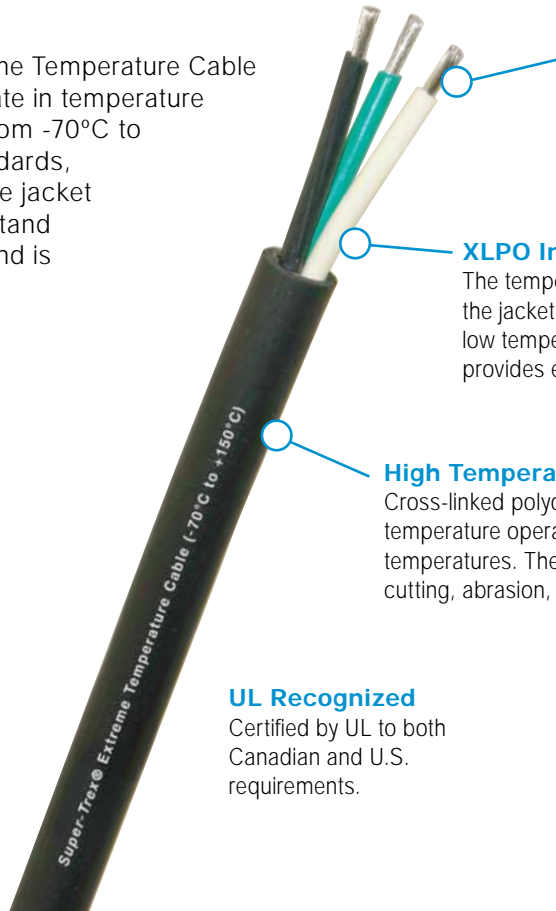


• 1000V Rated

• 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

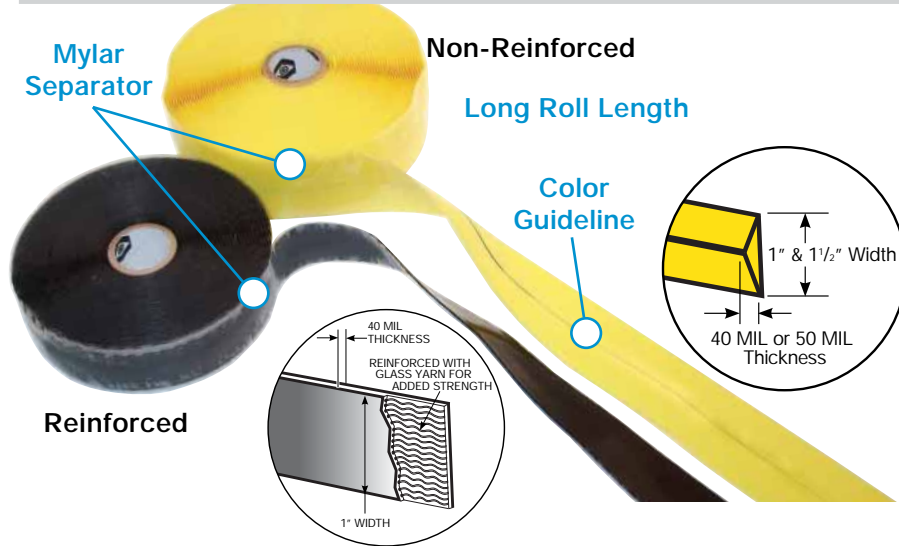
Part No.	Cable Size AWG/Cond.	Conductor Stranding	Ampacity*	Nom. Dia. (in.)	Jacket Thickness (in.)	Wt. (lbs.) per 1000 ft.
87840	14/3	41/30	34	0.426	.065	106
87841	14/4	41/30	27	0.460	.065	130
87835	12/3	65/30	43	0.465	.065	141
87836	12/4	65/30	34	0.503	.065	172
87830	10/3	105/30	55	0.492	.065	192
87831	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

*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

VULKO-WRAP™ INSULATING MATERIAL

- Self-Vulcanizing Wrap
- High Dielectric Strength
- Temperature Rating (-60°F to +400°F)
- RoHS Compliant



OTHER APPLICATIONS

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

For Non-Reinforced

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.

For Reinforced

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.

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.

Non-Reinforced Product 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

ORDERING INFORMATION

PART NO.	THICKNESS WIDTH & LGTH.	COLOR	DIELECTRIC STRENGTH	MEETS MIL SPEC	NO. OF WRAPS	FINISHED THICKNESS	VOLTAGE PROTECTION
98412 Non-Reinforced	40 Mil 1 in. x 36 ft.	Yellow	300 Volts/Mil	MIL-I-46852	1	20 mil	5,500
					2	40 mil	11,000
					3	60 mil	16,500
98512 Non-Reinforced	50 Mil 1 in. x 36 ft.	Yellow	275 Volts/Mil	MIL-I-46852	1	25 mil	6,875
					2	50 mil	13,750
					3	75 mil	20,625
98412BK Non-Reinforced	40 Mil 1 in. x 36 ft.	Black	300 Volts/Mil	MIL-I-46852	1	20 mil	5,500
					2	40 mil	11,000
					3	60 mil	16,500
98512BK Non-Reinforced	50 Mil 1 1/2 in. x 36 ft.	Black	275 Volts/Mil	MIL-I-46852	1	25 mil	6,875
					2	50 mil	13,750
					3	75 mil	20,625
18412 Reinforced	40 Mil 1 in. x 36 ft.	Black	500 Volts/Mil	MIL-I-22444C	1	36 mil	18,000
					2	72 mil	36,000
					3	108 mil	54,000

Assumes 50% overlap and stretching the wrap 2.5 times. Assumes 25% overlap and stretching the wrap 10%.

CUSTOM DESIGNED AND ENGINEERED

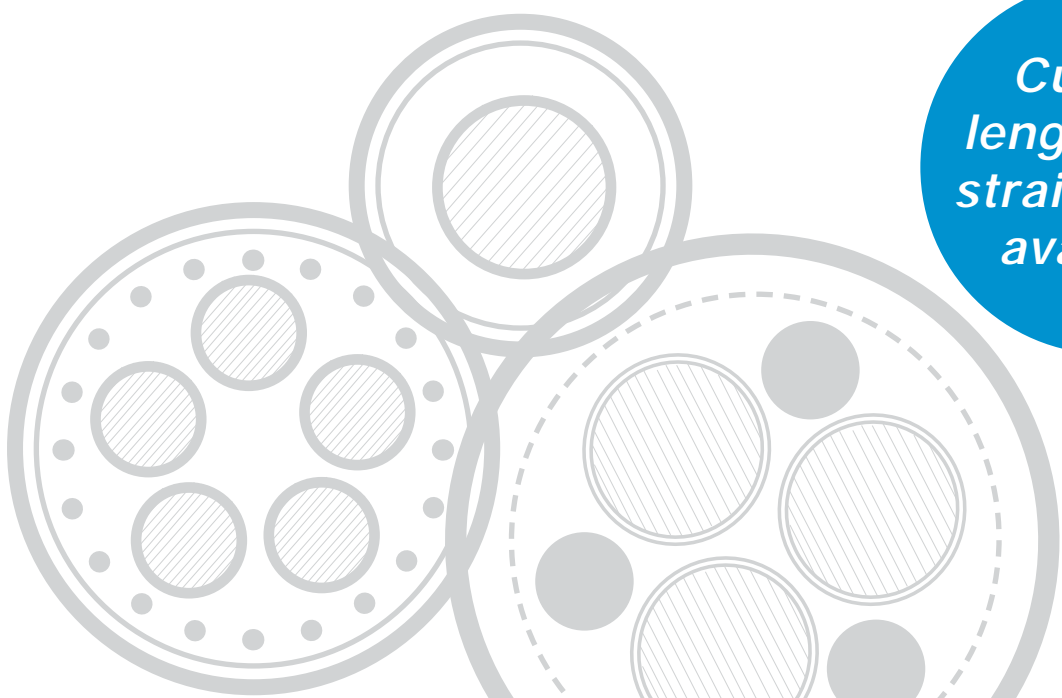
High performance cables designed for the most demanding industrial applications. Cable designs include . . .

- 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

The diagram shows three overlapping circular cross-sections of cables. The top one is a simple two-layer concentric circle. The middle one is a larger circle containing several smaller circles (cores) and a ring of dots. The bottom one is a large circle with a dashed outer boundary and several internal circles of varying sizes and patterns (some solid, some hatched).

CUSTOM CABLE

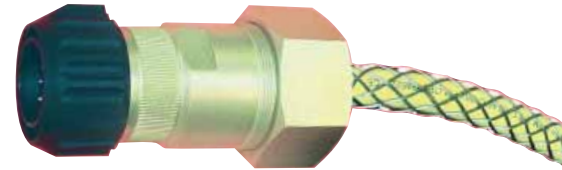
A major part of TPC's capabilities is working with customers to custom design and develop cables specifically for their application needs. TPC's expertise in materials, design and manufacturing provides superior cable performance resulting in longer cable life and reduced equipment downtime.



HDLC ASSEMBLIES

Heavy Duty Locking Connectors

Three quarter turn reverse bayonet coupling system is easy to connect and disconnect. Positive locking indent prevents accidental uncoupling. Inserts are environmentally sealed to protect the connection from oil, water and chemical contamination. 18 AWG to 1/0 – up to 65 pins/contacts.



MILITARY ASSEMBLIES

Designed for a Wide Range of Industrial Applications

Assembled with custom TPC backend hardware for environmental sealing and superior strain relief. Molded backends available.



RECTANGULAR ASSEMBLIES

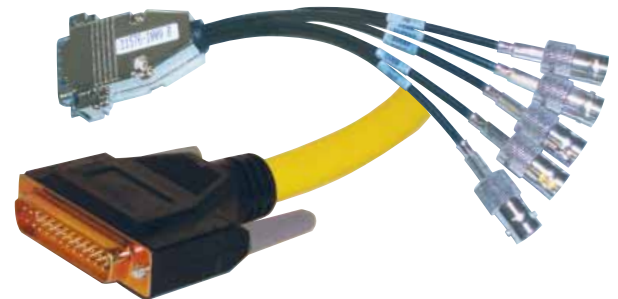
Mechanically Attached and Molded Designs for Industrial Applications

With Super-Trex or Trex-Onics cable for proven performance where flexing, abrasion, impact and oil can cause premature cable failure. Custom lengths available.



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.



TOOLS

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

Cable Cutter

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



Wire Stripper

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



Heavy Duty Cable Stripper

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



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"



Small Cable Stripper

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



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
ONLINE www.tpcwire.com



TPC WIRE & CABLE CORP.

A Premier Farnell Company

7061 E. PLEASANT VALLEY RD.
INDEPENDENCE, OHIO 44131

WARRANTY AND DISCLAIMER: Seller makes no warranties, express or implied, with respect to this product, and seller disclaims any implied warranties of merchantability or fitness for any particular purpose. Further, seller will not be responsible for any consequential, incidental or indirect damages (including, but not limited to, any loss of profit) from any cause whatsoever.

TPC970 (REV. 3/10) PRINTED IN U.S.A. ©Copyright 2010 by Premier Farnell, LLC. All rights reserved. No portion of this publication, whether in whole or in part, can be reproduced without the express written consent of Premier Farnell, LLC.