



Providing the Total Wire & Cable Solution for

UTILITIES



TPC WIRE & CABLE CORP.
EXPECT HIGH PERFORMANCE®



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.

TPC Wire & Cable Solutions for Utilities



hoosing a high quality, high performance electrical cable and like accessories are of critical importance to save labor, material and down-time costs. TPC's line of cables, connectors and accessories are designed to withstand flexing, chemicals, extreme temperatures, abrasion or other abusive conditions.

With over 3,000 part numbers in stock and our in-house engineering staff, TPC is a single-source supplier of electrical cable, connectors and accessories that can accommodate virtually all industries. Our deep inventories and custom cut program allows you to purchase exactly the amount of cable you need for your specific application. TPC will cut the cable to length and package it to your requirements.

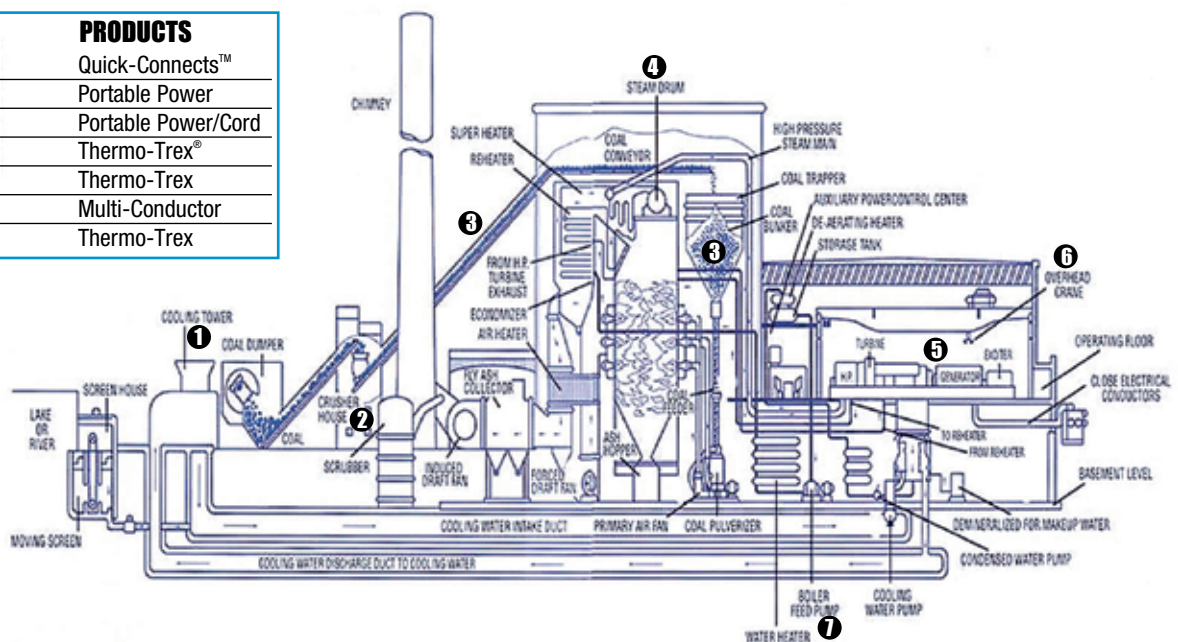
At TPC, research and development is a continuous process. Superior performance is a function of our high quality compounds and components, and matching the right cable to customer specific applications. As an ISO-9001 company, our quality inspection process is a critical part of the customer experience and ensures customers get the perfect cable every time.

Custom engineered products are also 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.

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. At TPC success is measured in the reduction of customer down-time 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 Solutions for Coal Fired Power Plant

APPLICATIONS	PRODUCTS
1 Cooling Tower	Quick-Connects™
2 Coal Crusher	Portable Power
3 Conveyor	Portable Power/Cord
4 Steam drum	Thermo-Trex®
5 Turbine	Thermo-Trex
6 Crane	Multi-Conductor
7 Pump	Thermo-Trex



TYPE SH MEDIUM VOLTAGE SINGLE CONDUCTOR POWER CABLE

- 5,000 Volt - Yellow
- 15,000 Volt - Orange

- 25,000 Volt - Red
- 35,000 Volt - Black

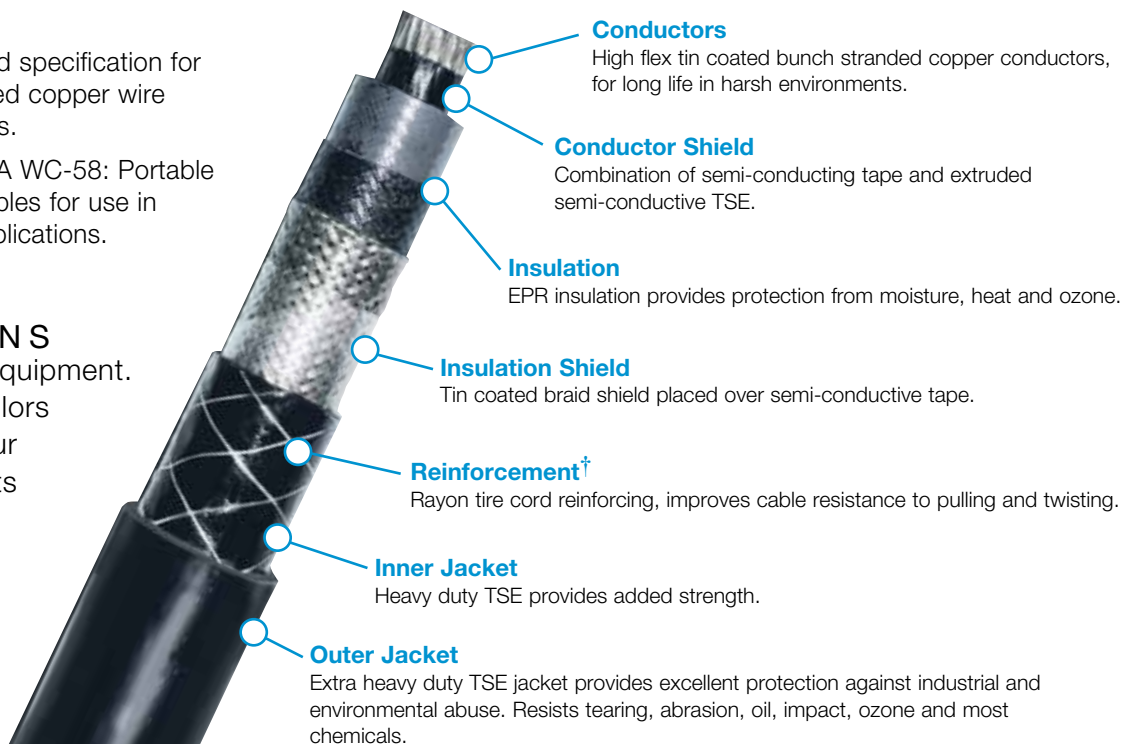
- 90°C
- CSA Approved*

RATINGS

- ASTM B-33: Standard specification for tinned soft or annealed copper wire for electrical purposes.
- ICEA S-75-381/NEMA WC-58: Portable and power feeder cables for use in mines and similar applications.

APPLICATIONS

Mobile substation equipment.
Other series and colors available through our Engineered Products Department.



ORDERING INFORMATION

	PART NO.	CABLE SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	CABLE WT. (LBS.) PER 1000'
5kV YELLOW	70502	2	259	190	.110	.125	.975	674
	70535	350	888	550	.120	.170	1.49	674
	70540	4/0	532	400	.110	.155	1.300	1393
15kV ORANGE	70102	2	259	195	.210	.155	1.203	881
	70110*	1/0	266	260	.210	.155	1.325	1147
	70140*	4/0	532	400	.210	.170	1.497	1594
	70125*	250	608	440	.210	.170	1.550	1760
	70135*†	350	888	550	.210	.170	1.765	2364
	70150*†	500	1221	685	.210	.170	1.900	2937
25kV RED	70201*	#1	259	225	.260	.170	1.45	1170
	70210*	1/0	266	260	.295	.170	1.500	1350
	70240*†	4/0	532	395	.295	.190	1.713	1909
	70235*†	350	888	545	.295	.190	1.886	2517
	70250*†	500	1221	680	.295	.205	2.048	3168
	70275†	750	1850	870	.295	.205	2.253	4253
35kV BLACK	70316†	1/0	266	260	.340	.170	1.725	1632
	70325†	250	608	440	.340	.210	1.96	2429
	70340†	4/0	532	395	.340	.190	1.895	2235
	70335†	350	888	545	.340	.205	2.100	2901
	70350†	500	1221	680	.340	.205	2.280	3396

NOTES: (1) Allowable ampacity per conductor of insulated single conductor in air based on conductor temperature of 90°C and ambient air temperature of 40°C. NEC 2008 Table 310.69.

*CSA Approved †These cables include rayon reinforcement

TYPE SH MEDIUM VOLTAGE POWER ASSEMBLIES

We stock the product so you don't have to!

TPC Wire & Cable carries deep inventories of Type SH cables and allows you to buy just the amount you need for your specific application.

Custom Cutting and Packaging Service

TPC will cut the cable to length for you and pack the product to your specific requirements. You will receive the product in the lengths you require ready to be installed.

Available

2 AWG to 750 MCM



*35kv is NOT CSA approved

Applications

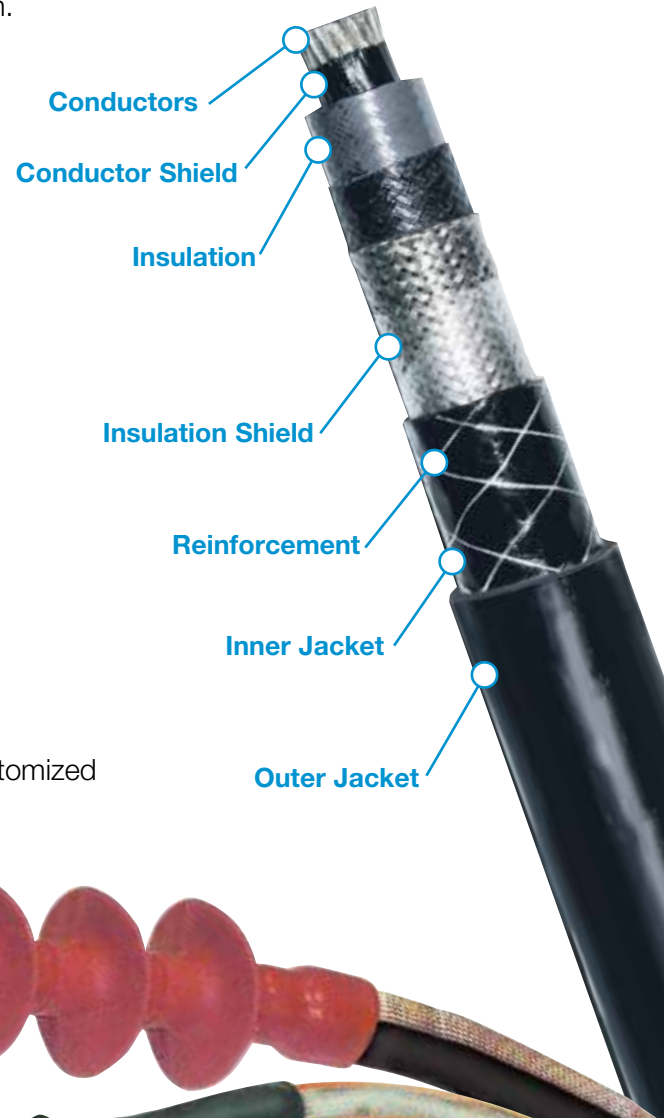
- Suitable for mobile substation equipment.
- Anywhere a flexible medium voltage cable is needed.

Buy it Connectorized

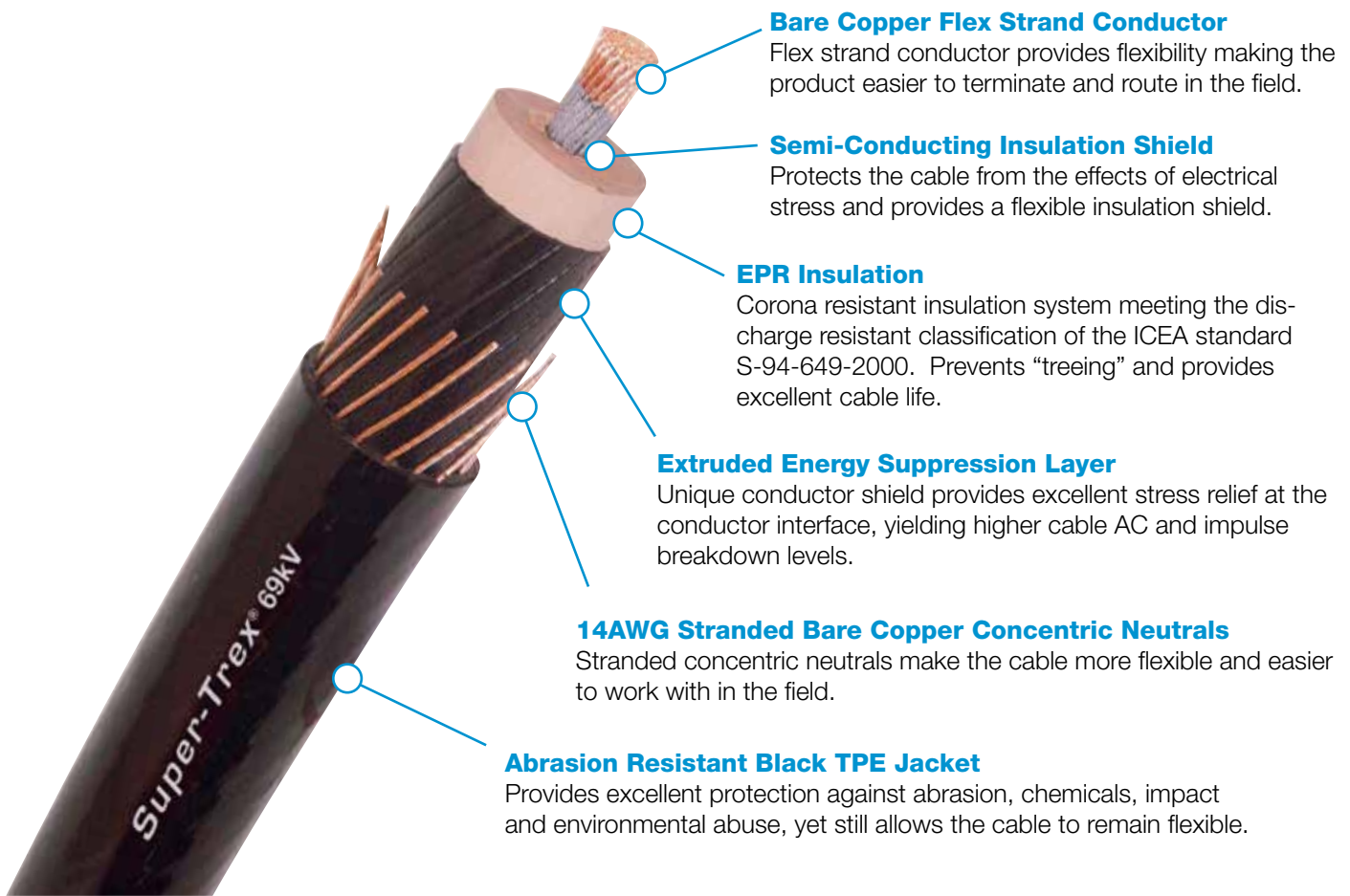
- Factory installed medium voltage terminations – standard or customized to meet your specific requirements.
- Factory installed load break elbows.
- Cut, packaged and shipped ready for installation.

Ratings

- ASTM B-33: Standard specification for tinned soft or annealed copper wire for electrical purposes
- ICEA S-75-381/NEMA WC-58: Portable and power feeder cables for use in mines and similar applications
- 90°C and CSA approved



SUPER-TREX[®] EXTRA-FLEX 69KV CABLE AND CABLE ASSEMBLIES



Bare Copper Flex Strand Conductor

Flex strand conductor provides flexibility making the product easier to terminate and route in the field.

Semi-Conducting Insulation Shield

Protects the cable from the effects of electrical stress and provides a flexible insulation shield.

EPR Insulation

Corona resistant insulation system meeting the discharge resistant classification of the ICEA standard S-94-649-2000. Prevents “treeing” and provides excellent cable life.

Extruded Energy Suppression Layer

Unique conductor shield provides excellent stress relief at the conductor interface, yielding higher cable AC and impulse breakdown levels.

14AWG Stranded Bare Copper Concentric Neutrals

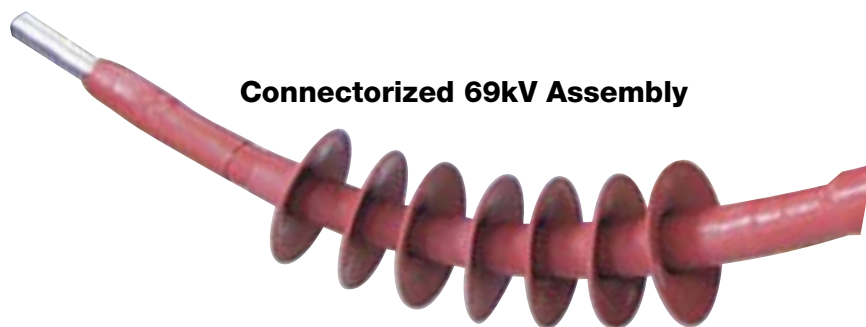
Stranded concentric neutrals make the cable more flexible and easier to work with in the field.

Abrasion Resistant Black TPE Jacket

Provides excellent protection against abrasion, chemicals, impact and environmental abuse, yet still allows the cable to remain flexible.

ORDERING INFORMATION

PART NO.	DESCRIPTION	STRANDING	VOLTAGE	INSULATION (MILS)	JACKET (MILS)	NOM. O.D. (IN.)	WEIGHT (LBS/1000 ft.)
69040	Super-Trex 4/0 – 69kV	259 (7x37)	69,000	650	110	2.54	3,400



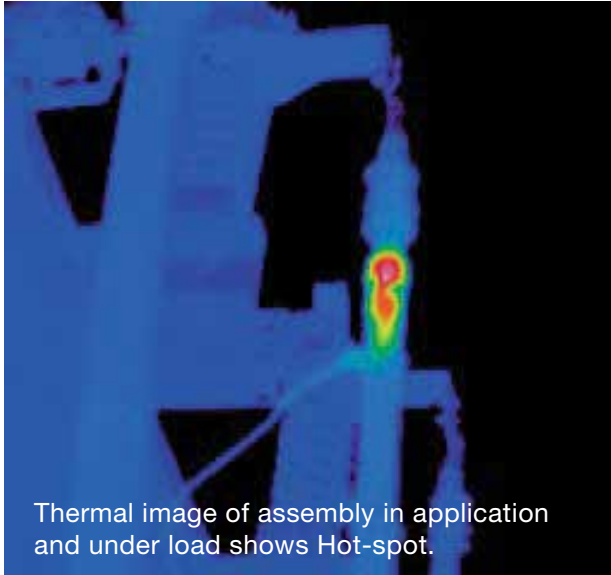
Connectorized 69kV Assembly

Ask about our termination program where you can purchase 69kV cable assemblies – completely tested and ready to install.

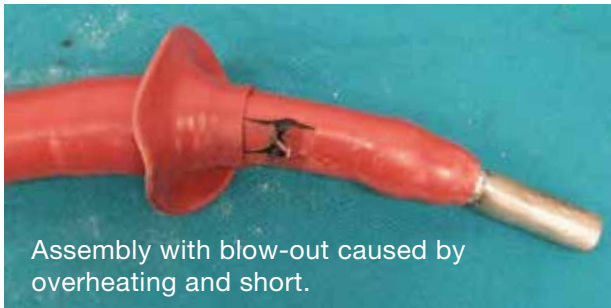
MEDIUM/HIGH VOLTAGE CABLE ASSEMBLY TESTING – 5KV-69KV

TPC Wire & Cable Corp. tests all Medium and High Voltage assemblies prior to leaving our facility. All assemblies are tested in accordance with the ANSI/NEMA WC 58-2008, 6.17 electrical test requirements. A full testing report is provided to certify the testing and to ensure the highest quality workmanship and traceability of the ready to install assembly.

Avoid Untested Cable Assemblies



Thermal image of assembly in application and under load shows Hot-spot.



Assembly with blow-out caused by overheating and short.



Actual failure determined to have been caused by damage to insulation during installation of the termination kit.

Damaging an assembly is easy to do but hard to detect until it is too late. TPC provides 100% AC or DC Hi-pot testing on all assemblies before they leave our facility – giving you 100% peace of mind.



TEST REPORT	
LOCATION:	TPC Wire & Cable 8200 Tyler Blvd. Mantoloking, NJ 08050
CONTACT:	Jay Hoffmeyer – TPC Wire & Cable
PART ANALYZED:	Cable Assemblies – 25KV – 750MCM MAC8405P100 – 8 Units – 100 ft long
LABORATORY CONDITIONS:	72.5°F / 55% RH
TESTS PERFORMED BY:	B. Warner & J. Retzer

DISCUSSION

Voltage Test per ANSI/NEMA WC 58-2008, 6.17 Electrical Tests on Completed Cables at the agreed upon AC test voltage (Test at rated cable voltage) 25KV.

6.17.1.2 AC Voltage Test

The 25KV AC voltage is to be applied to each sample between the conductor and shield for a period of 5 minutes. The Pass / Fail criteria for each sample will be its ability to withstand the test voltage over the test duration.

Sample #1, 25kv 750MCM - 100 ft long. Tested at 25KV AC for 5 minutes: **PASS** / FAIL

Sample #2, 25kv 750MCM - 100 ft long. Tested at 25KV AC for 5 minutes: **PASS** / FAIL

Sample #3, 25kv 750MCM - 100 ft long. Tested at 25KV AC for 5 minutes: **PASS** / FAIL

Sample #4, 25kv 750MCM - 100 ft long. Tested at 25KV AC for 5 minutes: **PASS** / FAIL

Sample #5, 25kv 750MCM - 100 ft long. Tested at 25KV AC for 5 minutes: **PASS** / FAIL

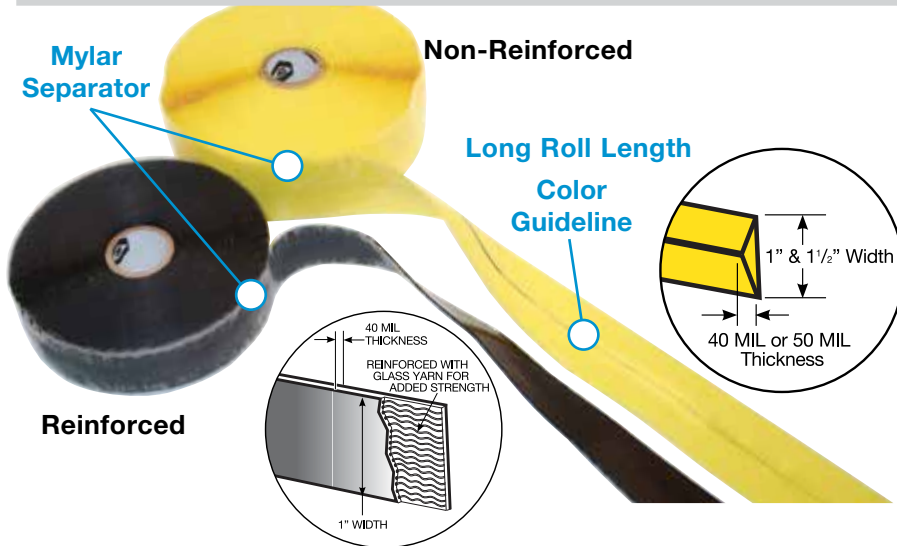
Sample #6, 25kv 750MCM - 100 ft long. Tested at 25KV AC for 5 minutes: **PASS** / FAIL

REFERENCE DOCUMENTS

- ANSI/NEMA WC 58-2008, 6.17 Electrical Tests on Completed Cables
- TPC Wire & Cable Purchase Order #37621

VULKO-WRAP™ INSULATING MATERIAL

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



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

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

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.

ORDERING INFORMATION

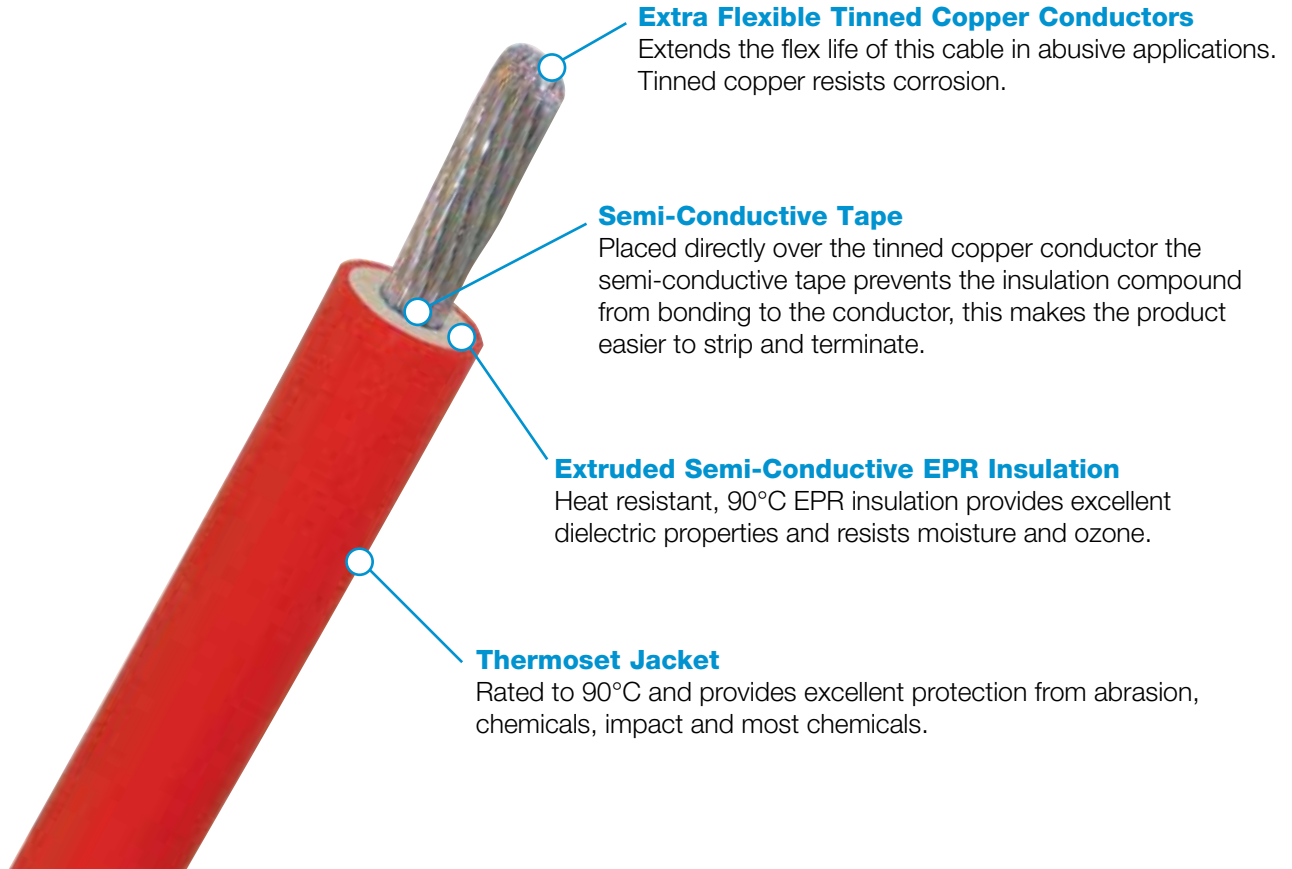
PART NO.	THICKNESS WIDTH & LGTH.	COLOR	DIELECTRIC STRENGTH	MEETS MIL SPEC	NO. OF WRAPS	FINISHED THICKNESS	VOLTAGE PROTECTION
98412 Non-Reinforced	40 Mil 1 in. x 36 ft.	Yellow	300 Volts/Mil	MIL-I-46852	1	20 mil	5,500
					2	40 mil	11,000
					3	60 mil	16,500
98512 Non-Reinforced	50 Mil 1 1/2 in. x 36 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%.

UNSHIELDED JUMPER CABLE

• 90°C

• 5,000 to 15,000 Volts



Extra Flexible Tinned Copper Conductors

Extends the flex life of this cable in abusive applications. Tinned copper resists corrosion.

Semi-Conductive Tape

Placed directly over the tinned copper conductor the semi-conductive tape prevents the insulation compound from bonding to the conductor, this makes the product easier to strip and terminate.

Extruded Semi-Conductive EPR Insulation

Heat resistant, 90°C EPR insulation provides excellent dielectric properties and resists moisture and ozone.

Thermoset Jacket

Rated to 90°C and provides excellent protection from abrasion, chemicals, impact and most chemicals.

ORDERING INFORMATION

PART NO.	CONDUCTOR SIZE	CONDUCTOR STRANDING	AMPACITY	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOM. O.D. (IN.)	WT. (LBS.) PER 1000'
78006	6	133	110	.210	.065	.820	360
78004	4	259	145	.210	.065	.880	449
78002	2	259	170	.210	.065	.940	563
78010	1/0	266	260	.210	.065	1.05	742
78020	2/0	323	300	.210	.065	1.10	869
78040	4/0	532	400	.210	.065	1.22	1181
78350	350	888	550	.210	.065	1.34	1692
78500	500	1221	685	.210	.065	1.46	2192

APPLICATION

Jumper cables should only be used on equipment and in applications where an unshielded flexible medium voltage cable is required. Caution should be taken to limit access to these areas and cables to authorized properly trained personnel. Since these cables are not shielded, they must be positioned away from contact with grounds, transformer cases, etc, to avoid possible high stress and capacitance leakage. Jumper cables are intended for temporary use and should not be used in place of shielded medium voltage cables.

TRIPLE-GARD™ PORTABLE CORD



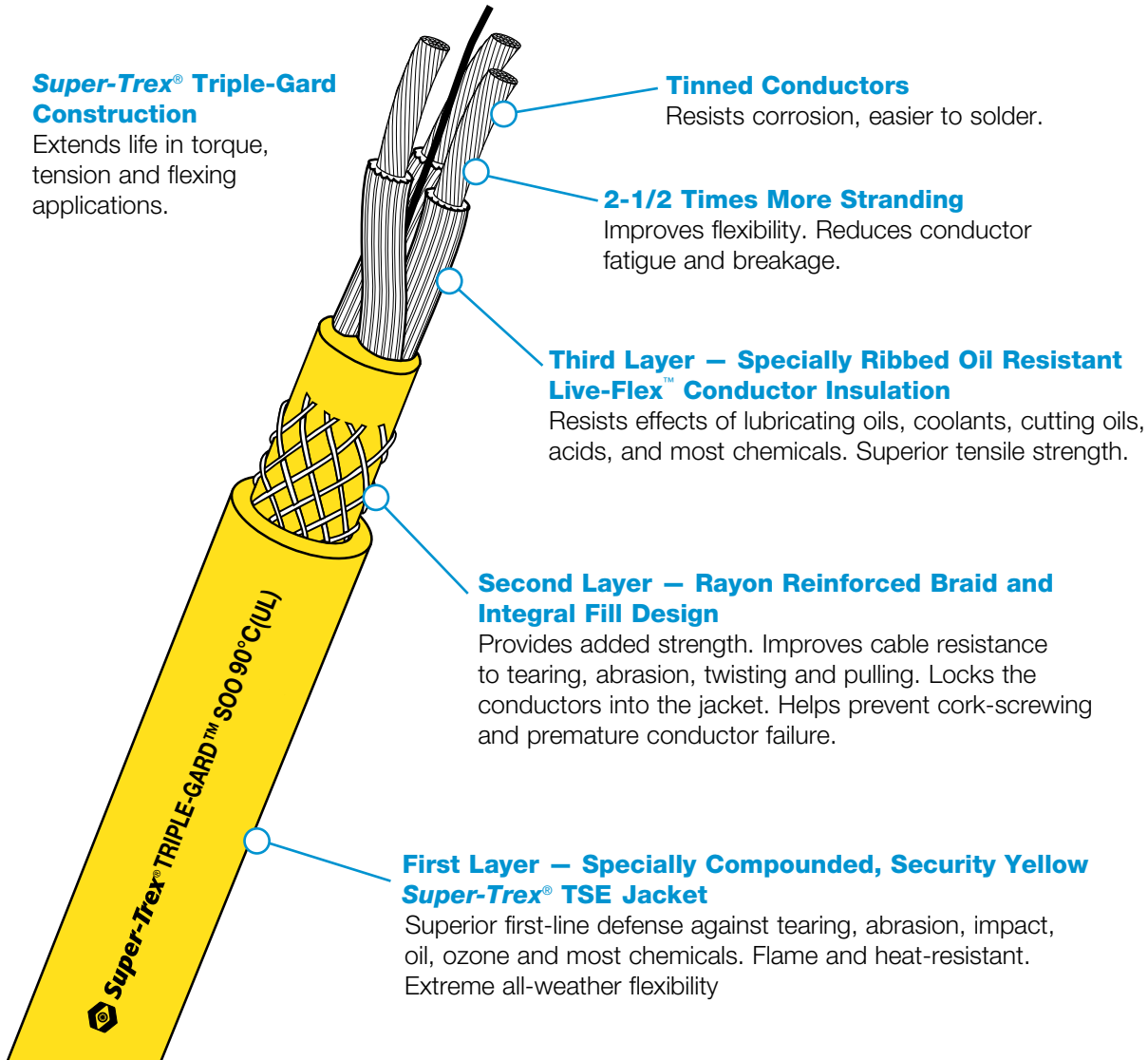
- UL Listed
- CSA Certified
- SOOW Rated
- 90°C to -40°C

- FT-2
- 600 Volt
- UV Resistant
- Extra Hard Usage

- Suitable for Class 1, 2, 3 – Division 1 & 2*
- Triple Layered Construction
- RoHS Compliant

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	15	.045	.080	.548	185
85199	14/4	104 x 34	15	.045	.080	.590	245
85195	12/3	165 x 34	20	.045	.095	.623	265
85200	12/4	165 x 34	20	.045	.095	.675	320
85196	10/3	259 x 34	25	.045	.095	.685	335
85201	10/4	259 x 34	25	.045	.095	.745	400

NOTES: (1)Based on an ambient temperature of 30° C and conductor temperature of 90° C per NEC 2011, Table 400.5(A)(1).

*When installed in accordance with NEC guidelines sections, 501.140, 502.140, 503.140.

BLACK TRIPLE-GARD™ PORTABLE CORD



- UL Listed
- CSA Certified
- SOOW Rated
- MSHA Approved

- UV Resistant
- 90°C to -30°C
- 600 Volt
- FT-1

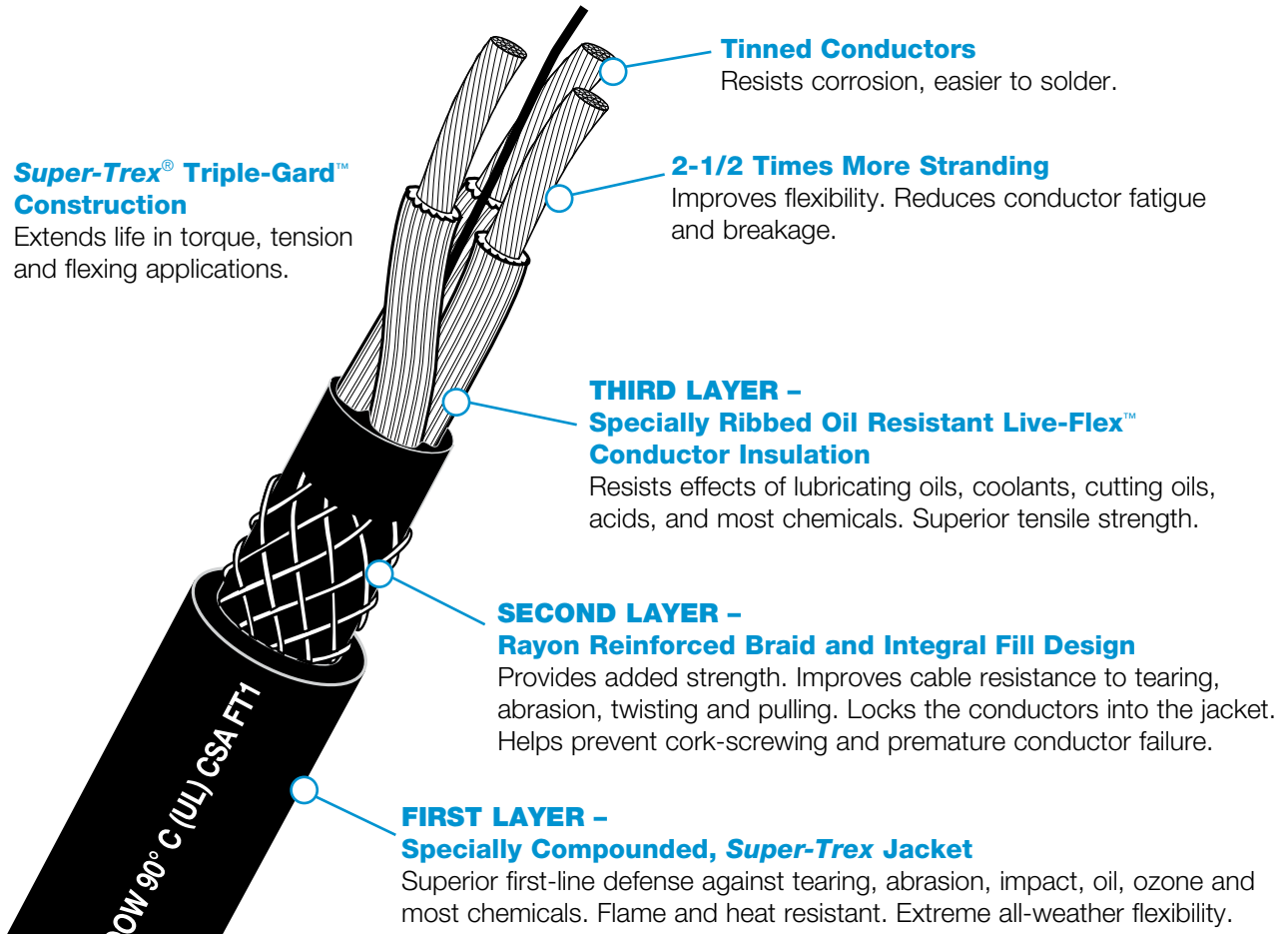
- RoHS Compliant
- Weather Resistant
- Extra Hard Usage

- Triple Layered Construction
- Suitable for Class 1, 2, 3 – Division 1 & 2*

SOOW - UL Listed for indoor/outdoor use

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, Super-Trex 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.	CABLE SIZE AWG/COND.	STRANDING NO. x AWG	AMPACITY (1)	INSULATION THICKNESS (IN.)	MIN. AVG. JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	CABLE WT. (LBS.) PER 1000'
85093**	16/3	65 x 34	10	.030	.060	.408	105
85098**	16/4	65 x 34	10	.030	.060	.435	130
85094	14/3	104 x 34	15	.045	.080	.548	185
85099	14/4	104 x 34	15	.045	.080	.590	245
85095	12/3	165 x 34	20	.045	.095	.623	265
85000	12/4	165 x 34	20	.045	.095	.675	320
85096	10/3	259 x 34	25	.045	.095	.685	335
85001	10/4	259 x 34	25	.045	.095	.745	400

NOTES: (1)Based on an ambient temperature of 30° C and conductor temperature of 90° C per NEC 2011, Table 400.5(A)(1).

*When installed in accordance with NEC guidelines sections, 501.140, 502.140, 503.140.

**16AWG products are designed with reinforced single pass jacket.

HIGH-FLEX ULTRA-COIL RETRACTILES



- UL Recognized
- 600 Volt

- 80° C
- RoHS Compliant

12" or 24" Pigtail Leads on Both Ends

Provides for easy termination without disrupting coil integrity.

Unique Construction

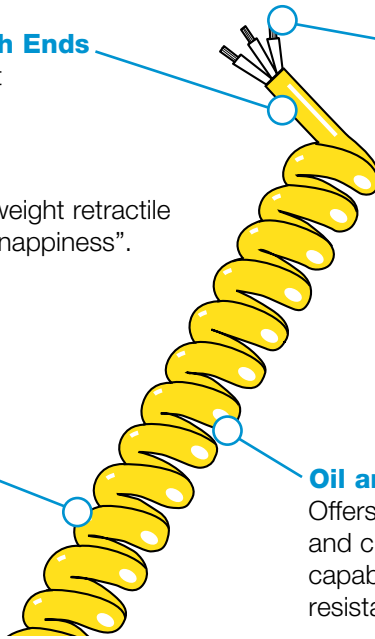
Provides for a very durable but light weight retractile design. Superior coil retention and "snappiness".

Performance Designed

For continuous cycle applications.

Security Yellow Heavy-Duty Trex-Onics® Polyurethane TPE Jacket

Excellent defense against cutting, abrasion, oil and chemicals. Designed for long term coil retention.



Tinned Conductors

Resists corrosion. Easier to solder.

Quick-Connect™ Compatible Design

Uniquely designed to allow the addition of TPC Molded Micro or Mini Quick-Connects in either 3 or 4 conductor configurations.

Oil and Fluid Resistant Insulation

Offers superior resistance to oil, solvents and chemicals. Provides high dielectric capability, mechanical strength and cut resistance.

ORDERING INFORMATION

PART NO.	CORD SIZE AWG/COND	COIL LENGTH (FT.)	CONDUCTOR STRANDING	AMPACITY	JACKET THICKNESS (IN.)	INSULATION THICKNESS (IN.)	NOM. OD. (IN.)	COIL INNER DIA. (IN.)	COIL OUTER DIA. (IN.)	LEAD LENGTH (IN.)
60831	18/3	1'-5'	41 x 34	8	.050	.012	.270	0.6	1.1	12
60832	18/3	2'-10'	41 x 34	8	.050	.012	.270	0.6	1.1	12
60833	18/3	3'-15'	41 x 34	8	.050	.012	.270	0.6	1.1	12
60834	18/3	4'-20'	41 x 34	8	.050	.012	.270	0.6	1.1	12
60841	18/4	1'-5'	41 x 34	6	.050	.012	.290	0.6	1.1	12
60842	18/4	2'-10'	41 x 34	6	.050	.012	.290	0.6	1.1	12
60843	18/4	3'-15'	41 x 34	6	.050	.012	.290	0.6	1.1	12
60844	18/4	4'-20'	41 x 34	6	.050	.012	.290	0.6	1.1	12
60871	18/12	1'-5'	41 x 34	6	.065	.016	.475	0.75	1.60	12
60872	18/12	2'-10'	41 x 34	6	.065	.016	.475	0.75	1.60	12
60873	18/12	3'-15'	41 x 34	6	.065	.016	.475	0.75	1.60	12
60874	18/12	4'-20'	41 x 34	6	.065	.016	.475	0.75	1.60	12
60631	16/3	1'-5'	65 x 34	13	.050	.016	.330	0.6	1.2	12
60632	16/3	2'-10'	65 x 34	13	.050	.016	.330	0.6	1.2	12
60633	16/3	3'-15'	65 x 34	13	.050	.016	.330	0.6	1.2	12
60634	16/3	4'-20'	65 x 34	13	.050	.016	.330	0.6	1.2	12
60641	16/4	1'-5'	65 x 34	10	.050	.016	.360	0.6	1.2	12
60642	16/4	2'-10'	65 x 34	10	.050	.016	.360	0.6	1.2	12
60643	16/4	3'-15'	65 x 34	10	.050	.016	.360	0.6	1.2	12
60644	16/4	4'-20'	65 x 34	10	.050	.016	.360	0.6	1.2	12
60681	16/8	1'-5'	65 x 34	10	.069	.016	.460	.75	1.6	24
60682	16/8	2'-10'	65 x 34	10	.069	.016	.460	.75	1.6	24
60683	16/8	3'-15'	65 x 34	10	.069	.016	.460	.75	1.6	24
60684	16/8	4'-20'	65 x 34	10	.069	.016	.460	.75	1.6	24
60441	14/4	1'-5'	105x34	15	.059	.018	.375	.60	1.4	24
60442	14/4	2'-10'	105x34	15	.059	.018	.375	.60	1.4	24
60443	14/4	3'-15'	105x34	15	.059	.018	.375	.60	1.4	24
60444	14/4	4'-20'	105x34	15	.059	.018	.375	.60	1.4	24
60241	12/4	1'-5'	165 x 34	20	.070	.018	.470	0.75	1.70	24
60242	12/4	2'-10'	165 x 34	20	.070	.018	.470	0.75	1.70	24
60243	12/4	3'-15'	165 x 34	20	.070	.018	.470	0.75	1.70	24
60244	12/4	4'-20'	165 x 34	20	.070	.018	.470	0.75	1.70	24

Trex-Onics High-Flex Ultra-Coil Retractable Specially Designed for Industrial Environments

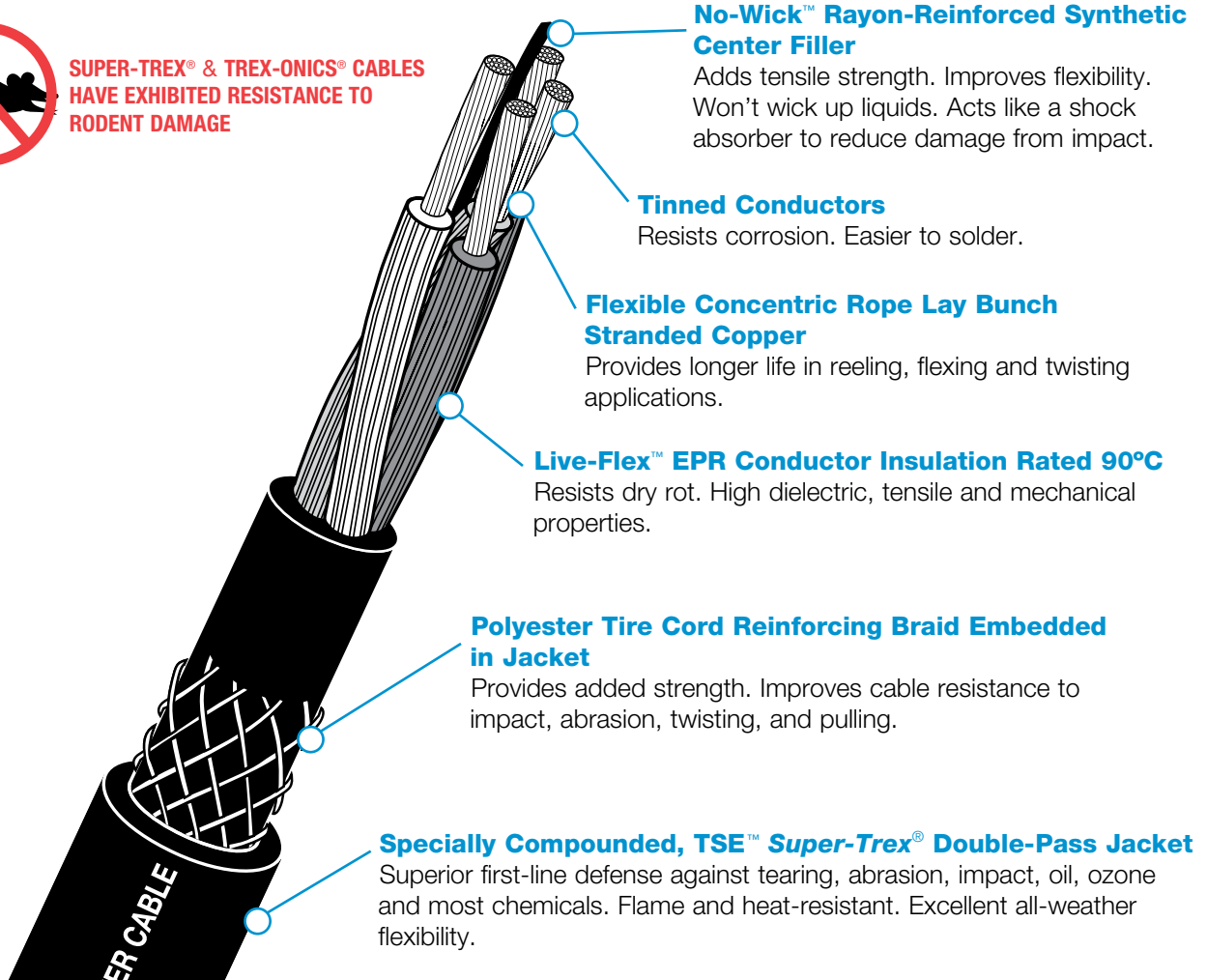
TYPE W PORTABLE POWER & AUTOMATION CABLE



- UL Listed
- IEEE 1202 Flame Rating
- Type W – 2000 Volt
- All Weather Design
- CUL
- FT-5
- -40°C – 90°C
- UV Resistant



**SUPER-TREX® & TREX-ONICS® CABLES
HAVE EXHIBITED RESISTANCE TO
RODENT DAMAGE**



ORDERING INFORMATION

PART NO.	CABLE SIZE AWG/COND	CONDUCTOR STRANDING	AMPACITY (1)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
87404	8/2	133 (7 x 19)	74	0.141	0.902	409
87304	8/4	133 (7 x 19)	65	0.141	1.027	643
87406	6/2	259 (7 x 37)	99	0.141	0.960	505
87306	6/4	259 (7 x 37)	87	0.141	1.100	818
87407	4/2	259 (7 x 37)	130	0.141	1.096	702
85108	4/4	259 (7 x 37)	114	0.141	1.270	1152
87408	2/2	259 (7 x 37)	174	0.141	1.220	1033
85110	2/4	259 (7 x 37)	152	0.141	1.380	1549
87411	1/0-2	266 (19 x 14)	234	0.156	1.520	1616
85224	2/0-4	323 (19 x 17)	237	0.156	1.880	2872

NOTE: (1)Based on an ambient temperature of 30° C and conductor temperature of 90° C per NEC 2011, Table 400.5(A)(2).

EXTRA HEAVY DUTY ALL WEATHER REELING CABLE

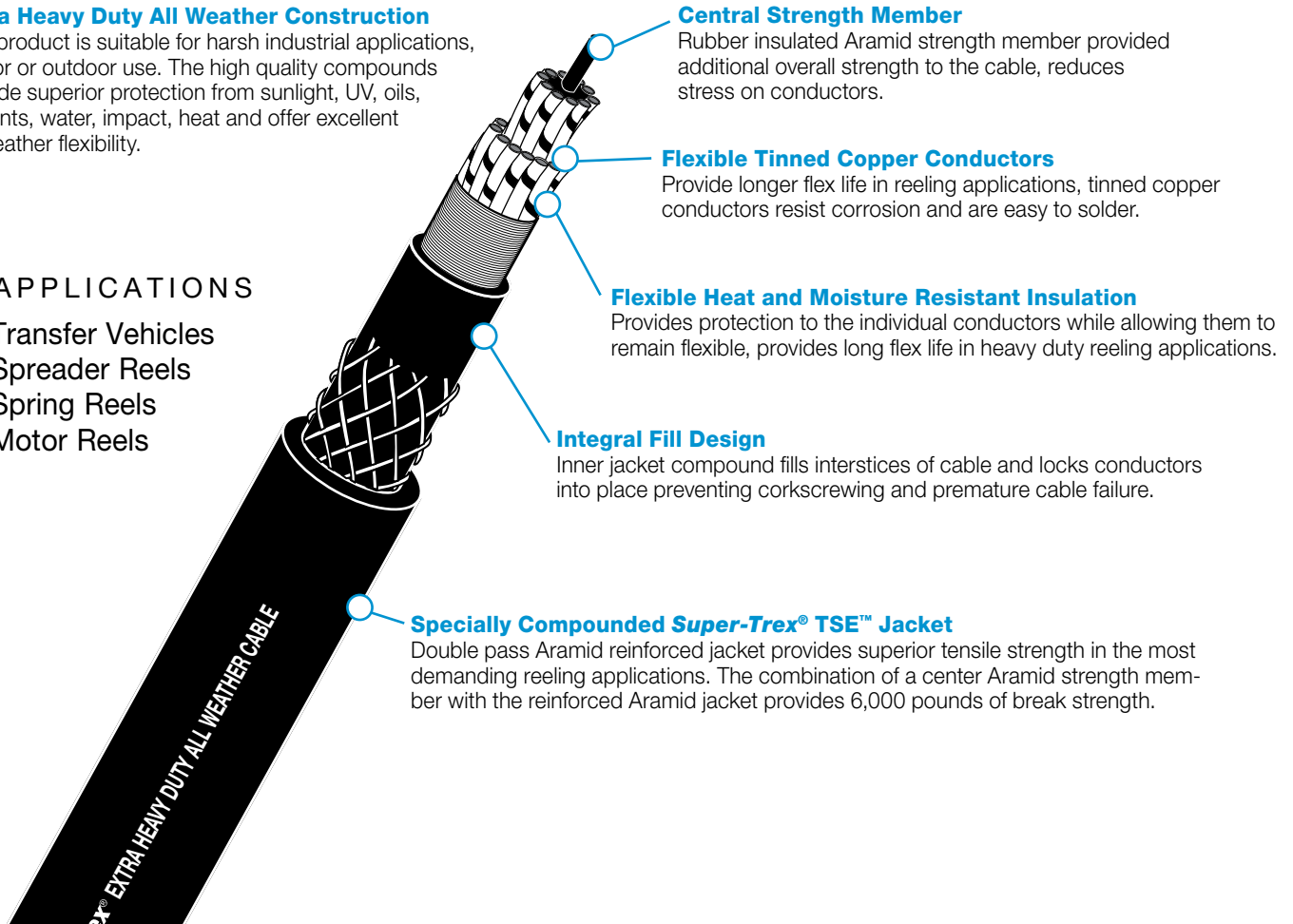
- Extra Heavy Duty
- -40° to 90°C Dry
- Designed for Harsh Industrial Applications
- Aramid Reinforced
- 600 Volt
- All Weather Usage

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.

APPLICATIONS

- Transfer Vehicles
- Spreader Reels
- Spring Reels
- Motor Reels



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.

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.

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	.260	.030	1.75	2175
88859	2.5mm ² x 44	50 x 30	9	.120	.030	1.55	1849

(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)

REDUCED DIAMETER CONTROL CABLE



- UL Listed
- CSA Certified

- 600 Volt
- 90°C

- RoHS Compliant

Flex tested over **20 million cycles** in cat track testing without electrical failure!

Bunch Stranded Tinned Soft Drawn Copper

Longer flex life in flexing and twisting applications. Easier to solder.

Conductor Insulation

Oil resistant and has high dielectric, tensile and mechanical properties.

Conductors are Coded with Alpha-Numeric Identification

Provides fast identification of conductors. Easy to read and simplifies installation.

Nylon Fillers

Low friction, non wicking fillers provide excellent flexibility.

Uni-Lay or Reverse Construction Alternating Bundles

Superior performance in flexing and torsional applications.

High Flex Tape Separator Around Inner Components

Provides easy movement of the conductor bundle for longer flex life.

Specially Compounded, Security Yellow, Super-Trex® Jacket

Superior first-line defense against oil, ozone and UV exposure as well as most chemicals. Flame and heat resistant. Extreme all-weather flexibility.

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

- Remote Control of Electrical Equipment
- Positioning Equipment
- Power Track Systems
- Automatic Welders
- Broach Machines
- Sensing Equipment
- Control Circuits
- Festoon Systems
- Machine Tools
- Transfer Vehicles
- Cranes

Not for Reeling or Forced Directional (Pulling) Applications.

(continued on next page)

REDUCED DIAMETER CONTROL CABLE

(continued from previous page)

ORDERING INFORMATION

12 AWG	PART NO.	CORD SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
FT-1 TC Rated	88708	12/8	65 x 30	21	.015	.060	.640	306
	88712	12/12	65 x 30	15	.015	.060	.710	410
	88722	12/22	65 x 30	13	.015	.085	.945	750

16 AWG	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							
FT-4 TC Rated Exposed Run	—	88505R	88505B	16/5	65 x 34	14	.010	.060	.358	88
	—	—	88508B	16/8	65 x 34	13	.010	.060	.449	95
	88512	88512R	88512B	16/12	65 x 34	9	.010	.070	.510	191
	88516	—	—	16/16	65 x 34	9	.010	.070	.550	239
	—	88519R	88519B	16/19	65 x 34	9	.010	.075	.596	281
	88522	—	—	16/22	65 x 34	8	.010	.080	.650	327
	88525	88525R	88525B	16/25	65 x 34	8	.010	.080	.700	376
	88531	—	—	16/31	65 x 34	7	.010	.080	.725	425
	—	88533R	88533B	16/33	65 x 34	7	.010	.080	.745	448
	88541	—	—	16/41	65 x 34	6	.010	.100	.870	608
	—	88547R	88547B	16/47	65 x 34	6	.010	.085	.890	653
	88549	—	—	16/49	65 x 34	6	.010	.100	.900	714
	88560	—	—	16/60	65 x 34	6	.010	.100	.975	783

18 AWG	PART NO.	CORD SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
FT-4 TC Rated Exposed Run	88905	18/5	41 x 34	11	.010	.060	.321	68
	88912	18/12	41 x 34	7	.010	.070	.444	137
	88919	18/19	41 x 34	7	.010	.075	.538	208
	88925	18/25	41 x 34	6	.010	.080	.613	273
	88933	18/33	41 x 34	5	.010	.080	.645	318
	88949	18/49	41 x 34	5	.010	.090	.787	473
	88965	18/65	41 x 34	5	.010	.100	.892	614

20 AWG	PART NO.	CORD SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (2)	INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000'
FT-1	88305	20/5	26 x 34	9	.010	.050	.275	52
	88312	20/12	26 x 34	8	.010	.050	.362	94
	88319	20/19	26 x 34	6	.010	.060	.453	148
	88325	20/25	26 x 34	6	.010	.060	.507	175
	88333	20/33	26 x 34	4	.010	.065	.541	226
	88347	20/47	26 x 34	4	.010	.070	.663	335
	88365	20/65	26 x 34	4	.010	.100	.820	515

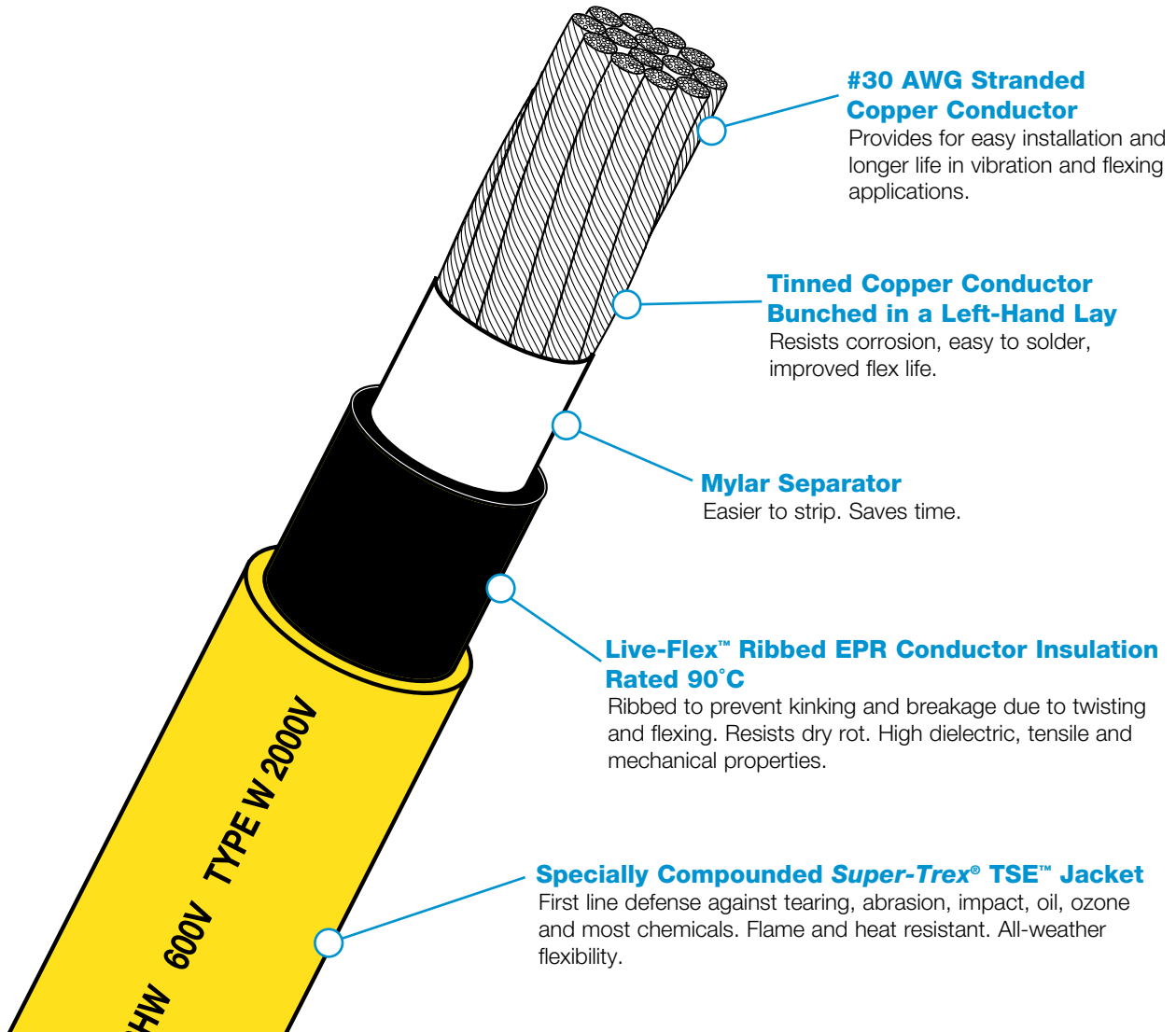
NOTES: (1)Based on an ambient temperature of 30° C and conductor temperature of 90° C per NEC 2011, Table 3.10.15(B)(16).

(2)Maximum allowable current per conductor. Ampacities are based on an ambient temperature of 30° C with a conductor temperature of 90° C, not more than 3 current carrying conductors.

RHH/RHW SINGLE CONDUCTOR POWER CABLE



- TYPE W – 2000 Volt
- Type RHH/RHW – 600 Volt
- 90°C Dry-75°C Wet
- UV Resistant
- RoHS Compliant



ORDERING INFORMATION

PART NO.	CONDUCTOR SIZE MCM	CONDUCTOR STRANDING	AMPACITY (1)		INSULATION THICKNESS (IN.)	JACKET THICKNESS (IN.)	NOMINAL O.D. (IN.)	WEIGHT (LBS.) PER 1000'
			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

NOTES: (1)Based on an ambient temperature of 30° C per NEC 2011, Table 310.15(B)(17).

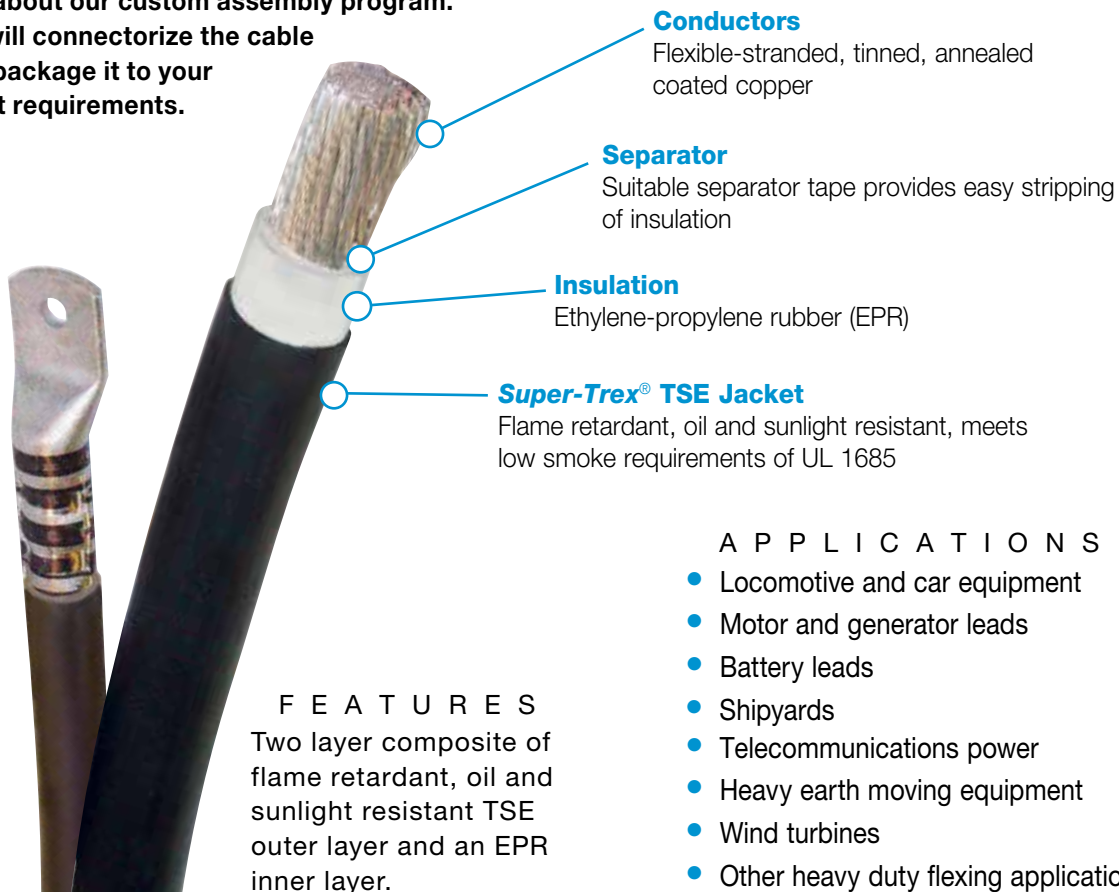
*Conductor Temperature

SUPER-TREX SINGLE CONDUCTOR POWER CABLE

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

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.



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

ORDERING INFORMATION

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	342	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

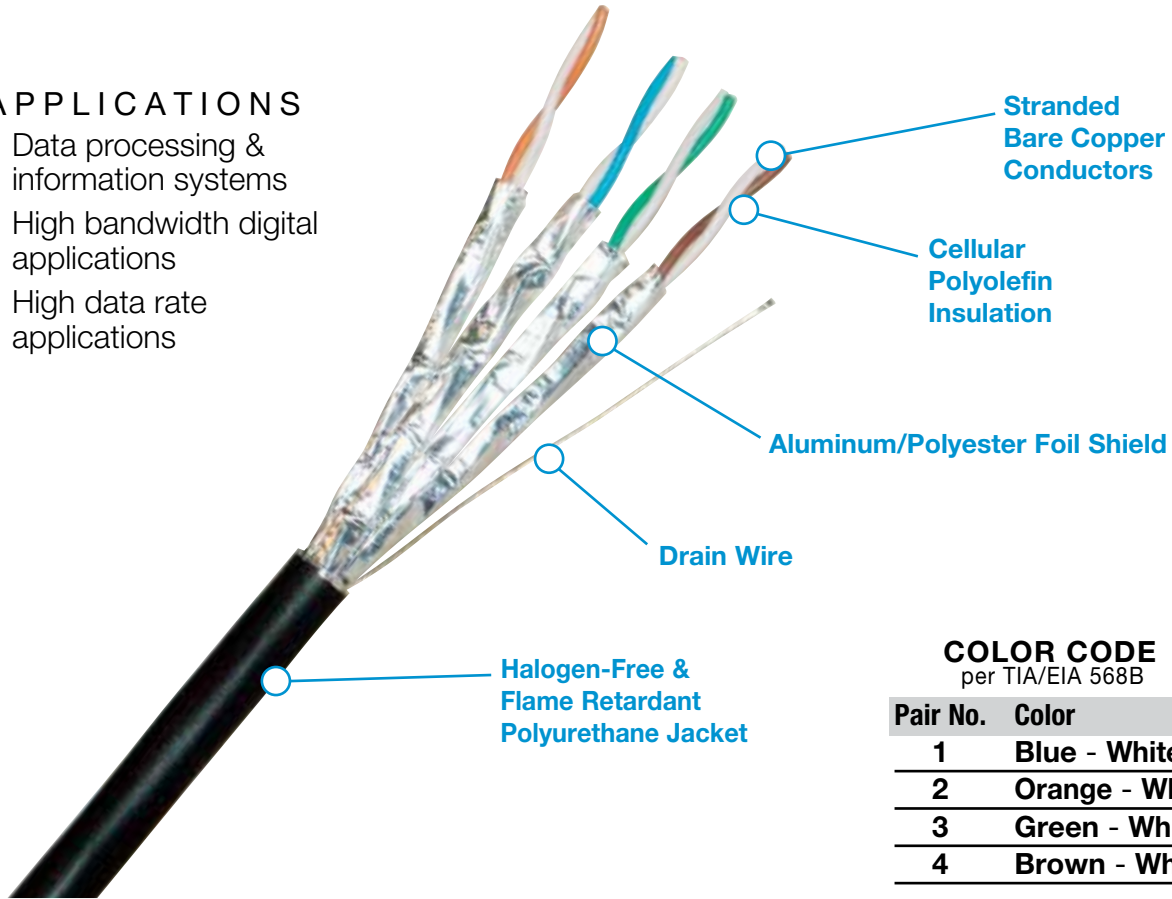
NOTE: (1)Based on an ambient temperature of 30° C and conductor temperature of 90° C per NEC 2011, Table 3.10.15(B)(17).

INDUSTRIAL ETHERNET CAT6_A CABLE

- ISO/IEC 11801
- IEC 61156
- 500 MHz
- RoHS Compliant
- IEC 60332-1
- Halogen-Free
- 300 Volt

APPLICATIONS

- Data processing & information systems
- High bandwidth digital applications
- High data rate applications



COLOR CODE

per TIA/EIA 568B

Pair No.	Color
1	Blue - White
2	Orange - White
3	Green - White
4	Brown - White

FEATURES & BENEFITS

Stranded Bare Copper Conductors improve flexibility and offer longer flex life

Cellular Polyolefin Insulation provides excellent dielectric and insulation properties

Aluminum/Polyester Foil Shield around each pair reduces electrical noise interference

Combination of Cellular Insulation and Shielded Pairs provides superior electrical performance to meet CAT6_A and ethernet/IP requirements

Halogen-Free and Flame Retardant Polyurethane jacket provides protection from environmental abuse and offers resistance to UV light, cutting, abrasion, oil and chemicals.

ORDERING INFORMATION

PART NO.	CONDUCTOR	NOMINAL INSULATION WALL (IN.)	OVERALL SHIELD	JACKET WALL (IN.)	NOMINAL O.D. (IN.)	WT. (LBS.) PER 1000 FT.
60062	26 AWG (7 X .0067")	0.010	No	0.039	0.275	27

MOLDED ASSEMBLIES FOR BOTH WELDING AND TEMPORARY POWER APPLICATIONS

FEATURES & BENEFITS

- **SUPER-TREX® Weld Cable – RHH/RHW Single Conductor Power**

First line defense against oils, ozone and UV exposure as well as most chemicals. Extreme all weather flexibility. Proven performance lasts up to 8 times longer than standard weld cables.*

- **Completely Molded Design**

All rubber construction reduces cable stress and provides an environmental seal between the cable and the connector head.

- **Mated Connection Provides a Cork and Bottle Seal**

Forms a water, oil and dust resistant seal, protects the connection from contamination.

- **Quick Disconnect**

¾ turn quick disconnect system, provides a secure connection. Compatible with both Series 16 Taper Nose and Series 18 Ball Nose.

- **Sized for 2AWG to 750 MCM Cables**

Designed to meet your application needs for both welding and temporary power.



LOCKING

- Safety latching to prevent unintended disconnection
- Tested to meet Navy specifications
- Completely interchangeable with existing connectors
- Type W 2000V portable extra hard usage
- Pull tested to 2000 lbs
- IP69K rated
- Rated up to 690 amps

APPLICATIONS

- Commercial and Navy shipbuilding and repair sites
- Ship to shore power
- Welding ground cables
- Motor and generator applications
- Construction sites
- Utility applications
- Mining applications
- Temporary power for concerts, carnivals, conventions, theme parks, etc.



BALL NOSE

- Mates with any series 18, E1018, Standard Series or ball nose style plugs for welding applications
- Available using #2, 2/0 and 4/0

MOLDED HEAD COLORS

■ **Yellow** (Standard)

■ **Black**

■ **Red**

□ **White**

■ **Blue**

■ **Green**

■ **Brown**

■ **Orange**



TAPER NOSE

- Mates with any series 16, E1016, J Series or taper nose style plugs for welding applications
- Available using #2, 2/0 and 4/0

**Data available for customer use*

TIME IS MONEY – LET US DO YOUR CUTTING, CRIMPING AND CABLE TERMINATION



In addition to our high performance wire and cable, TPC Wire & Cable provides a full range of crimping, termination and cutting capabilities.

Custom Solutions for Terminations

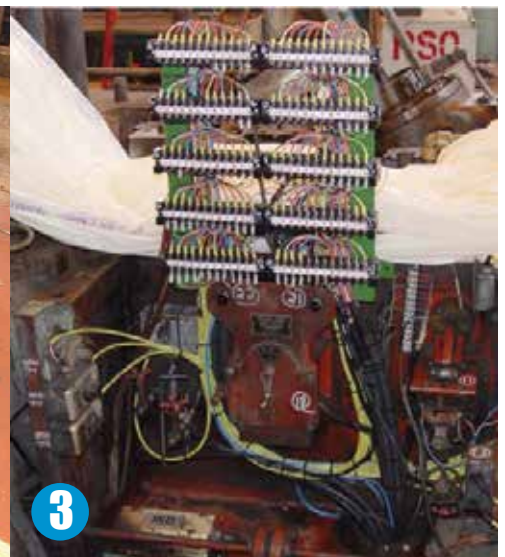
- Crimp connections ranging from 10AWG - 750MCM
- Standard or custom lugs and terminals
- Custom terminations for voltages ranging from low voltage welding to medium voltage utility cables
- Custom cutting to specified lengths
- Custom marking and packaging

Custom Solutions for Assemblies

TPC's engineered products department can design a custom solution for any cable assembly application. These products are built specifically for an individual customer and represent a real problem solving service.

The photos below represent typical working solutions for three common applications:

- 1** A linear variable displacement transformer (LVDT)
- 2** Temporary power for a front standard turbine control platform
- 3** Another front standard turbine control platform



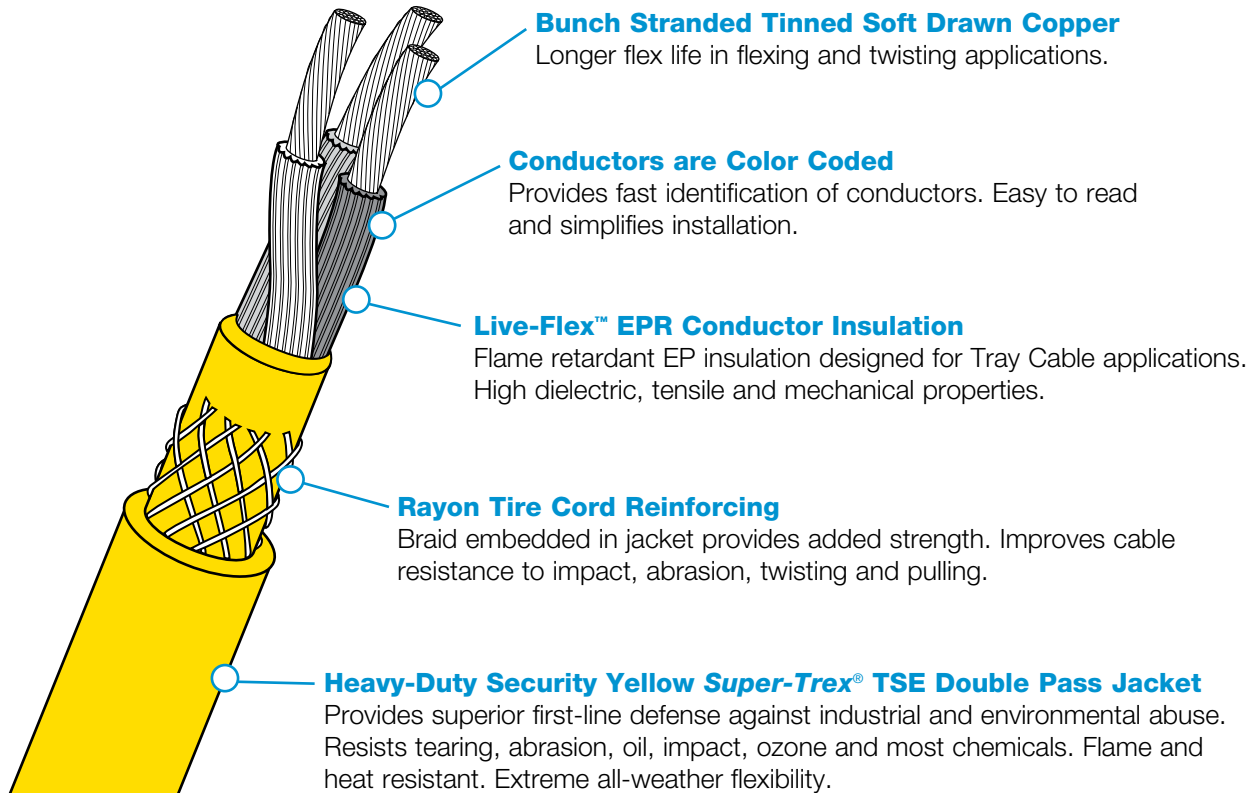
TYPE TC-ER/TYPE W POWER CABLE



- UL Listed
- Type W – 2000 Volt

- TC-ER (Tray Cable - Exposed Run)

- 90°C
- UV Resistant



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	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
	85115	2/5	259 (7 x 37)	121	.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

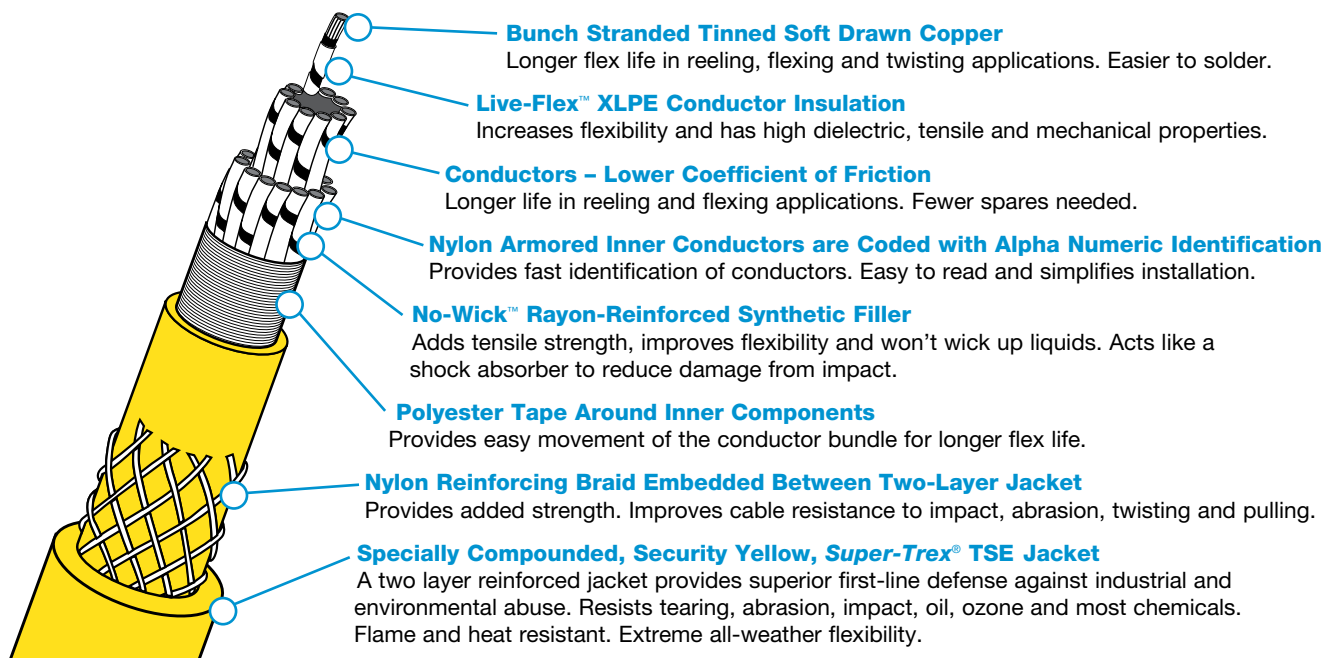
NOTE: (1)Based on an ambient temperature of 30° C and conductor temperature of 90° C per NEC 2011, Table 400.5(A)(2).

*Not TC rated.

MULTI-CONDUCTOR P&R CABLE



- UL Listed
- CSA Certified
- TC-ER – 600 Volt
- FT-1
- 90°C Dry
- 75°C Wet
- Class 1 Division 2*
- UV Resistant
- WTTC – 1000 Volt
- Payout & Retractable (P&R) Construction
- 16 AWG MSHA Approved
- RoHS Compliant



ORDERING INFORMATION

PART NO.	CABLE SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	JACKET THICKNESS (IN.)	NOM. O.D. (IN.)	CABLE WT. (LBS.) per 1000'
COLOR CODED CONDUCTORS						
88820	16/6	65/34	14	.115	.555	168
88822	16/8	65/34	12	.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	.135	.885	484
88828	16/33	65/34	7	.155	1.030	657
88829	16/36	65/34	7	.155	1.050	693
88830	16/41	65/34	6	.155	1.090	734
88831	16/49	65/34	6	.155	1.170	849
ALPHA NUMERIC BLACK CONDUCTORS						
88811	14/7	41/30	17	.115	.625	240
88812	14/8	41/30	17	.115	.660	265
88813	14/10	41/30	12	.115	.750	324
88814	14/12	41/30	12	.135	.760	379
88815	14/16	41/30	12	.135	.820	467
88816	14/20	41/30	12	.135	.890	535
88817	14/24	41/30	11	.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	.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

NOTES: (1)Based on an ambient temperature of 30° C and conductor temperature of 90° C per NEC 2011, Table 3.10.15(B)(16).

*When installed in accordance with NEC guidelines section 501.10 (B) for TC rated cables.

600 VOLT WELDING CABLE

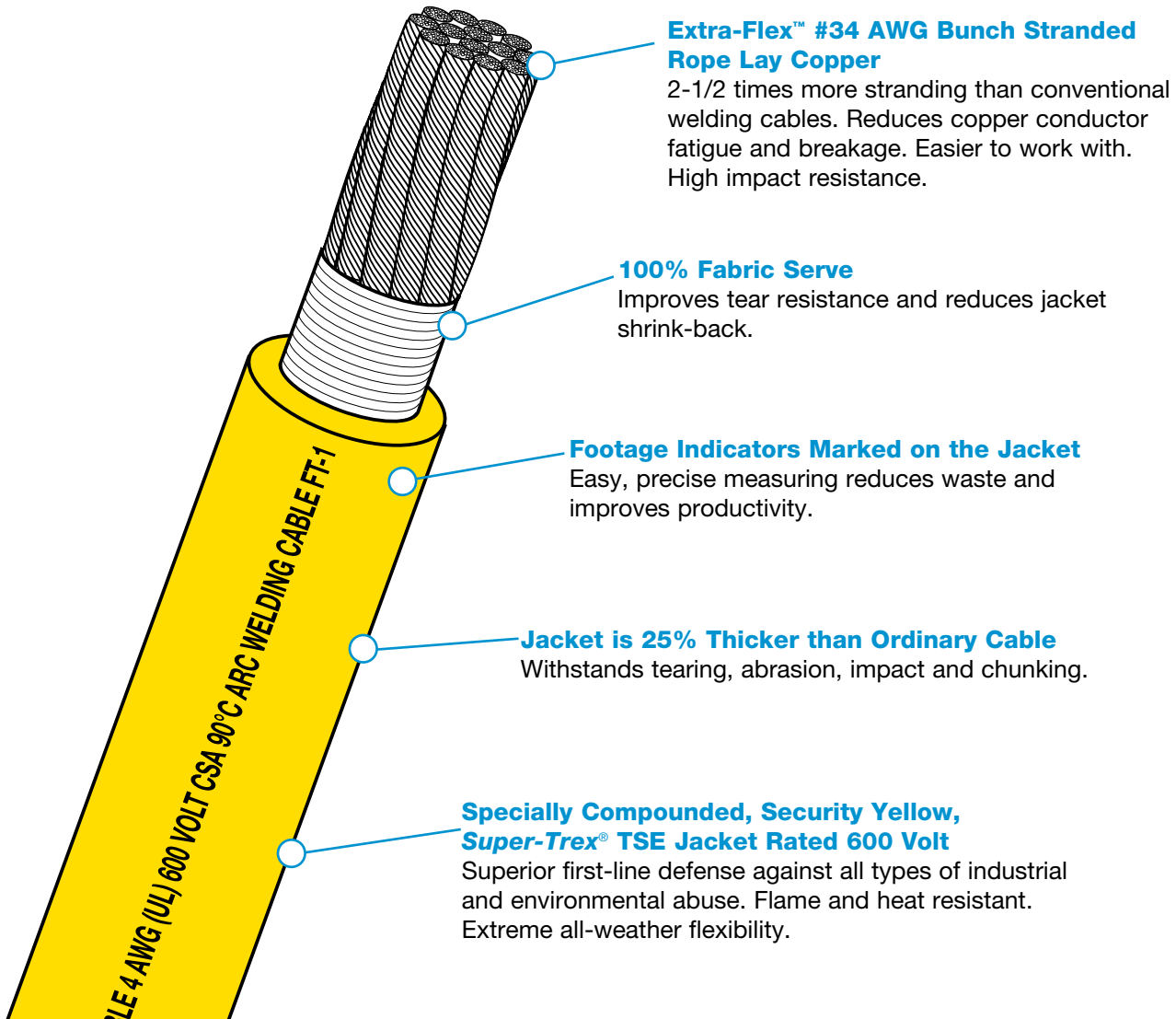


- UL Listed
- CSA Certified

- Rated 90°C
- Extreme 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

YELLOW, RED OR BLACK DC WELDING CABLE

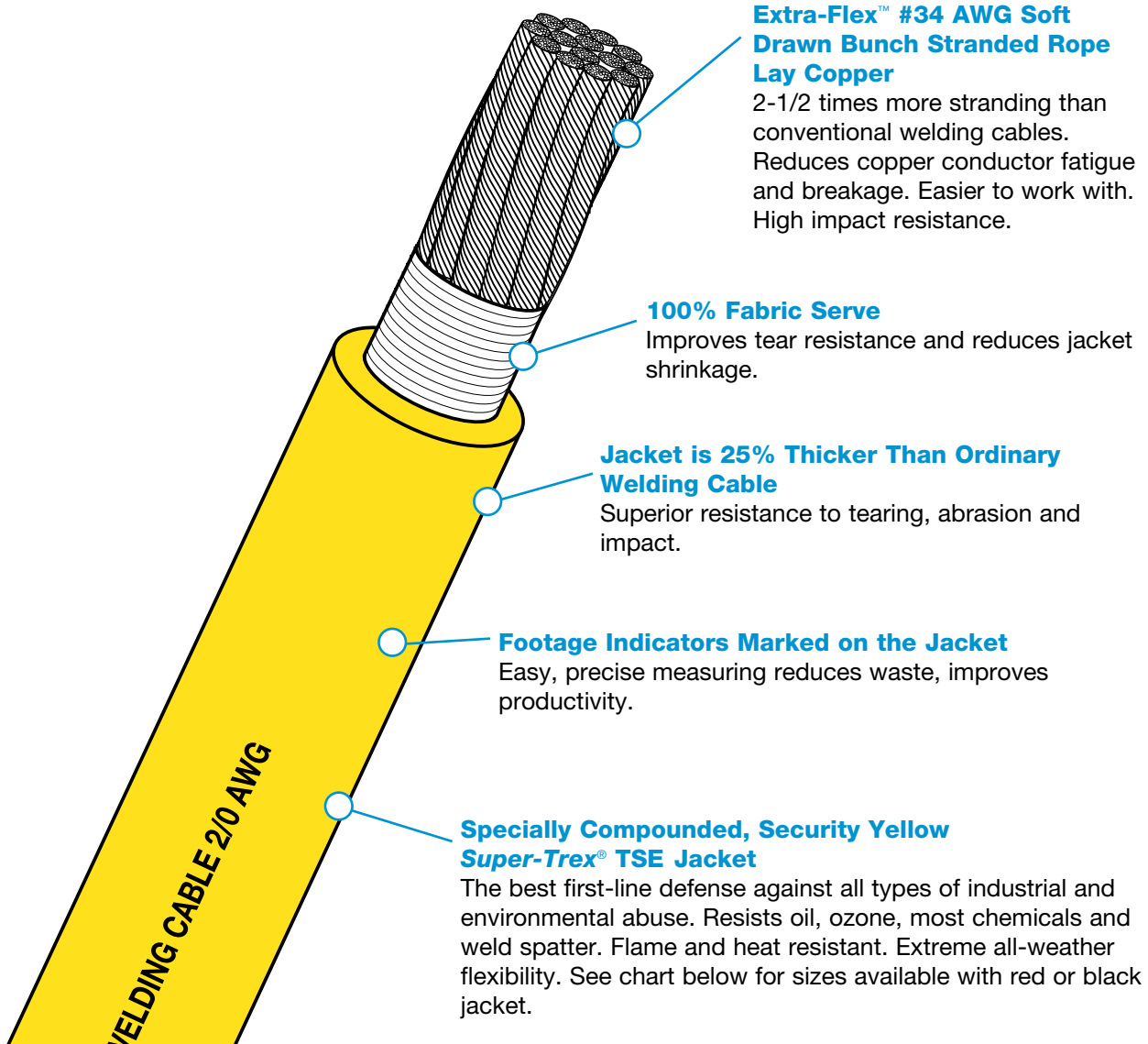


- CSA Certified
- 90°C

- Extreme Usage
- Extra Flexible

- UV Resistant
- FT-1

- RoHS Compliant
- 90 Volts Max.

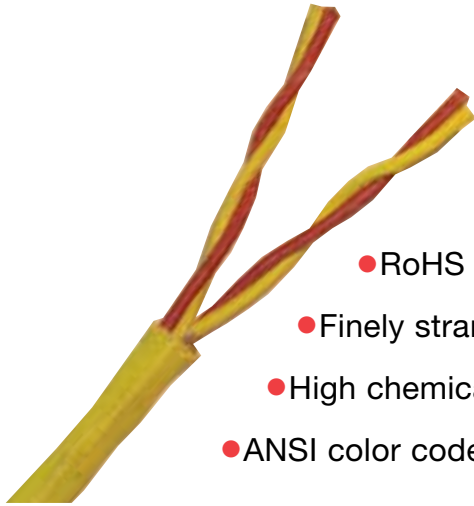


ORDERING INFORMATION

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.

THERMOCOUPLE EXTENSION WIRE



- RoHS Compliant
- Finely stranded conductors improve flexibility
- High chemical resistance: FEP, PFA & TT2800
- ANSI color coded conductors & jacket

ORDERING INFORMATION

TYPE JX		TYPE KX		CONFIGURATION	CONDUCTOR STRANDING	CONDUCTOR INSULATION	JACKET	WT. (LBS.) PER 1000'	AMBIENT TEMPERATURE RATING
PART NO.	CABLE O.D.	PART NO.	CABLE O.D.						
46500	.165	46530	.165	22/1PR	7/30	Fluoropolymer	PUR	21	
46501	.227	46531	.227	22/2PR	7/30	Fluoropolymer	PUR	31	
46502	.200	46532	.200	18/1PR	7/26	Fluoropolymer	PUR	33	90°C
46503	.285	46533	.285	18/2PR	7/26	Fluoropolymer	PUR	51	194°F
46504	.220	46534	.220	16/1PR	7/24	Fluoropolymer	PUR	41	
46505	.320	46535	.320	16/2PR	7/24	Fluoropolymer	PUR	62	
46506	.130	46536	.130	22/1PR	7/30	Fluoropolymer	FEP	15	
46507	.195	46537	.195	22/2PR	7/30	Fluoropolymer	FEP	21	
46508	.170	46538	.170	18/1PR	7/26	Fluoropolymer	FEP	26	150°C
46509	.255	46539	.255	18/2PR	7/26	Fluoropolymer	FEP	39	302°F
46510	.196	46540	.196	16/1PR	7/24	Fluoropolymer	FEP	34	
46511	.290	46541	.290	16/2PR	7/24	Fluoropolymer	FEP	54	
46512	.130	46542	.130	22/1PR	7/30	PFA	PFA	16	
46513	.195	46543	.195	22/2PR	7/30	PFA	PFA	21	
46514	.170	46544	.170	18/1PR	7/26	PFA	PFA	27	250°C
46515	.255	46545	.255	18/2PR	7/26	PFA	PFA	40	482°F
46516	.196	46546	.196	16/1PR	7/24	PFA	PFA	35	
46517	.290	46547	.290	16/2PR	7/24	PFA	PFA	54	
46518	.230	46548	.230	22/1PR	7/30	Mica	TT2000	29.1	
46519	.344	46549	.344	22/2PR	7/30	Mica	TT2000	54.4	
46520	.259	46550	.259	18/1PR	7/26	Mica	TT2000	39.1	450°C
46521	.389	46551	.389	18/2PR	7/26	Mica	TT2000	75.9	842°F
46522	.277	46552	.277	16/1PR	7/24	Mica	TT2000	47.4	
46523	.422	46553	.422	16/2PR	7/24	Mica	TT2000	89.8	
46524	.273	46554	.273	22/1PR	7/30	Mica/TFE/Glass	TT2800	38.2	
46525	.417	46555	.417	22/2PR	7/30	Mica/TFE/Glass	TT2800	76.5	
46526	.310	46556	.310	18/1PR	7/26	Mica/TFE/Glass	TT2800	51.4	530°C
46527	.460	46557	.460	18/2PR	7/26	Mica/TFE/Glass	TT2800	100.7	986°F
46528	.340	46558	.340	16/1PR	7/24	Mica/TFE/Glass	TT2800	59.1	
46529	.500	46559	.500	16/2PR	7/24	Mica/TFE/Glass	TT2800	116.4	

Additional thermocouple types and paired configurations available. Shielding also available.
Call your Sales Representative for price and delivery.

CHEM-GARD™ 150

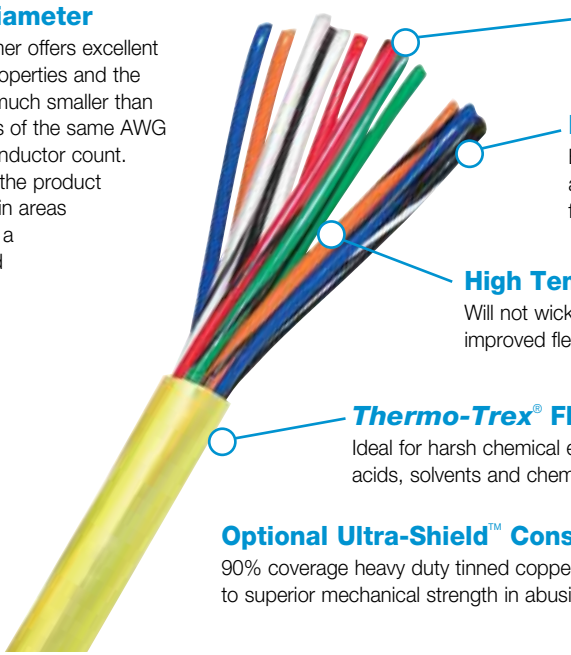
In
cat track testing
Chem-Gard 16/12
completed over
7 million cycles
without electrical
failure!



- UL Recognized
- 600 Volt
- CSA Approved
- 150°C/302°F
- FT1
- VW1
- Rated to -60°C
- 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.

COMPLIANCE

Passes Boeing Test Method BSS 7239 for Toxic Gas, Flaming and Non-Flaming Mode.
Passes Bombardier Specification SMP 800C Toxic Gas Generation, Flaming and Non-Flaming Mode.
ASTM E 662 – Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials (NFPA Designation No. 258).

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

	ETFE	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

ORDERING INFORMATION

UNSHIELDED MULTI-CONDUCTOR

Non-Shielded Configurations – 150°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'
42122	18/4	41/34	None	Tinned	Fluoropolymer	.200	16.0	None	41
42123	18/12	41/34	None	Tinned	Fluoropolymer	.315	10.0	None	98
42126	16/4	65/34	None	Tinned	Fluoropolymer	.225	21.0	None	59
42130	16/12	65/34	None	Tinned	Fluoropolymer	.365	13.0	None	152
42124	14/4	105/34	None	Tinned	Fluoropolymer	.270	37.0	None	86
42125	14/12	105/34	None	Tinned	Fluoropolymer	.383	23.0	None	210
42128	12/4	65/30	None	Tinned	Fluoropolymer	.335	48.0	None	133

NOTE: (1) Ampacities are based on conductors in free air, 40°C (104°F) ambient, 150°C (302°F) conductor temperature.

(continued on next page)

CHEM-GARD™ 150

(continued from previous page)

ORDERING INFORMATION

UNSHIELDED SINGLE CONDUCTOR

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

Available in Black, White, Red, Green, Brown, Orange, Yellow or Blue

PART NO.	CONFIGURATION AWG/COND.	STRANDING (STRANDS/AWG)	BRAID SHIELD	CONDUCTOR	INSULATION	CABLE OD	AMPACITY (1)	DRAIN WIRE	WT. (LBS.) PER 1,000'
42161	18 BLACK	41/34	None	Tinned	Fluoropolymer	.066	20.0	None	6.8
42162	18 WHITE	41/34	None	Tinned	Fluoropolymer	.066	20.0	None	6.8
42163	18 RED	41/34	None	Tinned	Fluoropolymer	.066	20.0	None	6.8
42164	18 GREEN	41/34	None	Tinned	Fluoropolymer	.066	20.0	None	6.8
42165	18 BROWN	41/34	None	Tinned	Fluoropolymer	.066	20.0	None	6.8
42166	18 ORANGE	41/34	None	Tinned	Fluoropolymer	.066	20.0	None	6.8
42167	18 YELLOW	41/34	None	Tinned	Fluoropolymer	.066	20.0	None	6.8
42168	18 BLUE	41/34	None	Tinned	Fluoropolymer	.066	20.0	None	6.8
42151	16 BLACK	65/34	None	Tinned	Fluoropolymer	.076	26.0	None	10.4
42152	16 WHITE	65/34	None	Tinned	Fluoropolymer	.076	26.0	None	10.4
42153	16 RED	65/34	None	Tinned	Fluoropolymer	.076	26.0	None	10.4
42154	16 GREEN	65/34	None	Tinned	Fluoropolymer	.076	26.0	None	10.4
42155	16 BROWN	65/34	None	Tinned	Fluoropolymer	.076	26.0	None	10.4
42156	16 ORANGE	65/34	None	Tinned	Fluoropolymer	.076	26.0	None	10.4
42157	16 YELLOW	65/34	None	Tinned	Fluoropolymer	.076	26.0	None	10.4
42158	16 BLUE	65/34	None	Tinned	Fluoropolymer	.076	26.0	None	10.4
42141	14 BLACK	105/34	None	Tinned	Fluoropolymer	.092	46.0	None	15.5
42142	14 WHITE	105/34	None	Tinned	Fluoropolymer	.092	46.0	None	15.5
42143	14 RED	105/34	None	Tinned	Fluoropolymer	.092	46.0	None	15.5
42144	14 GREEN	105/34	None	Tinned	Fluoropolymer	.092	46.0	None	15.5
42145	14 BROWN	105/34	None	Tinned	Fluoropolymer	.092	46.0	None	15.5
42146	14 ORANGE	105/34	None	Tinned	Fluoropolymer	.092	46.0	None	15.5
42147	14 YELLOW	105/34	None	Tinned	Fluoropolymer	.092	46.0	None	15.5
42148	14 BLUE	105/34	None	Tinned	Fluoropolymer	.092	46.0	None	15.5
42131	12 BLACK	65/30	None	Tinned	Fluoropolymer	.124	60.0	None	24.6
42132	12 WHITE	65/30	None	Tinned	Fluoropolymer	.124	60.0	None	24.6
42133	12 RED	65/30	None	Tinned	Fluoropolymer	.124	60.0	None	24.6
42134	12 GREEN	65/30	None	Tinned	Fluoropolymer	.124	60.0	None	24.6
42135	12 BROWN	65/30	None	Tinned	Fluoropolymer	.124	60.0	None	24.6
42136	12 ORANGE	65/30	None	Tinned	Fluoropolymer	.124	60.0	None	24.6
42137	12 YELLOW	65/30	None	Tinned	Fluoropolymer	.124	60.0	None	24.6
42138	12 BLUE	65/30	None	Tinned	Fluoropolymer	.124	60.0	None	24.6
42101	10 BLACK	105/30	None	Tinned	Fluoropolymer	.142	80.0	None	38.5
42102	10 WHITE	105/30	None	Tinned	Fluoropolymer	.142	80.0	None	38.5
42103	10 RED	105/30	None	Tinned	Fluoropolymer	.142	80.0	None	38.5
42104	10 GREEN	105/30	None	Tinned	Fluoropolymer	.158	80.0	None	38.5
42105	10 BROWN	105/30	None	Tinned	Fluoropolymer	.142	80.0	None	38.5
42106	10 ORANGE	105/30	None	Tinned	Fluoropolymer	.142	80.0	None	38.5
42107	10 YELLOW	105/30	None	Tinned	Fluoropolymer	.142	80.0	None	38.5
42108	10 BLUE	105/30	None	Tinned	Fluoropolymer	.142	80.0	None	38.5

SHIELDED MULTI-CONDUCTOR

Shielded Configurations – 150°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'
42114	18/3	41/34	Tinned	Tinned	Fluoropolymer	.205	16.0	20 AWG	46
42115	18/4	41/34	Tinned	Tinned	Fluoropolymer	.220	16.0	20 AWG	56
42119	18/12	41/34	Tinned	Tinned	Fluoropolymer	.345	10.0	20 AWG	123
42116	16/4	65/34	Tinned	Tinned	Fluoropolymer	.245	21.0	20 AWG	77
42120	16/12	65/34	Tinned	Tinned	Fluoropolymer	.385	13.0	20 AWG	176
42117	14/4	105/34	Tinned	Tinned	Fluoropolymer	.290	37.0	20 AWG	104
42118	12/4	65/30	Tinned	Tinned	Fluoropolymer	.370	48.0	20 AWG	154

NOTE: (1) Ampacities are based on conductors in free air, 40°C (104°F) ambient, 150°C (302°F) conductor temperature.

CHEM-GARD™ 200

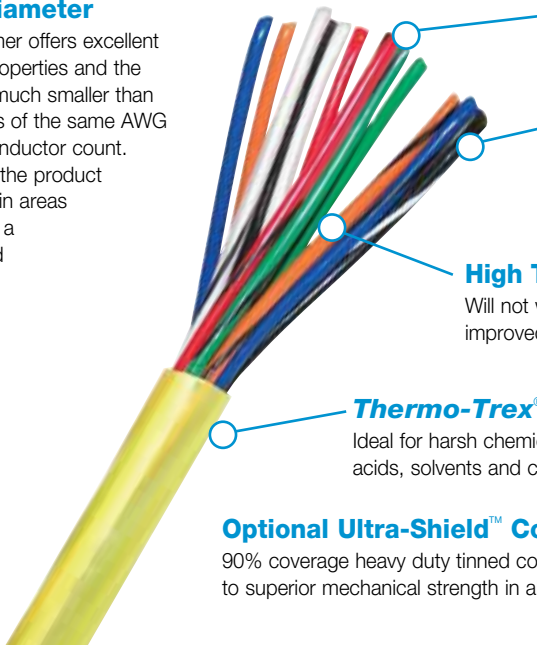
In
cat track testing
Chem-Gard 16/12
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- UL Recognized
- 600 Volt
- CSA Approved
- 200°C/392°F
- FT1
- VW1
- Rated to -60°C
- RoHS Compliant

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.

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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.

COMPLIANCE

Passes Boeing Test Method BSS 7239 for Toxic Gas, Flaming and Non-Flaming Mode.

Passes Bombardier Specification SMP 800C Toxic Gas Generation, Flaming and Non-Flaming Mode.

ASTM E 662 – Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials (NFPA Designation No. 258).

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

	ETFE	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

ORDERING INFORMATION

UNSHIELDED MULTI-CONDUCTOR

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'
42804	18/4	41/34	None	Nickel	Fluoropolymer	.200	19.0	None	42
42812	18/12	41/34	None	Nickel	Fluoropolymer	.305	12.0	None	105
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
42412	14/12	105/34	None	Nickel	Fluoropolymer	.425	26.0	None	210
42204	12/4	65/30	None	Nickel	Fluoropolymer	.345	54.0	None	133.5

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

(continued on next page)

CHEM-GARD™ 200

(continued from previous page)

ORDERING INFORMATION

UNSHIELDED SINGLE CONDUCTOR

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

Available in Black, White, Red, Green, Brown, Orange, Yellow or Blue

PART NO.	CONFIGURATION AWG/COND.	STRANDING (STRANDS/AWG)	BRAID SHIELD	CONDUCTOR	INSULATION	CABLE OD	AMPACITY (1)	DRAIN WIRE	WT. (LBS.) PER 1,000'
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
42885	18 BROWN	41/34	None	Nickel	Fluoropolymer	.068	24.0	None	6.8
42886	18 ORANGE	41/34	None	Nickel	Fluoropolymer	.068	24.0	None	6.8
42887	18 YELLOW	41/34	None	Nickel	Fluoropolymer	.068	24.0	None	6.8
42888	18 BLUE	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
42665	16 BROWN	65/34	None	Nickel	Fluoropolymer	.078	32.0	None	10.4
42666	16 ORANGE	65/34	None	Nickel	Fluoropolymer	.078	32.0	None	10.4
42667	16 YELLOW	65/34	None	Nickel	Fluoropolymer	.078	32.0	None	10.4
42668	16 BLUE	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
42445	14 BROWN	105/34	None	Nickel	Fluoropolymer	.094	54.0	None	15.5
42446	14 ORANGE	105/34	None	Nickel	Fluoropolymer	.094	54.0	None	15.5
42447	14 YELLOW	105/34	None	Nickel	Fluoropolymer	.094	54.0	None	15.5
42448	14 BLUE	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
42225	12 BROWN	65/30	None	Nickel	Fluoropolymer	.124	68.0	None	24.6
42226	12 ORANGE	65/30	None	Nickel	Fluoropolymer	.124	68.0	None	24.6
42227	12 YELLOW	65/30	None	Nickel	Fluoropolymer	.124	68.0	None	24.6
42228	12 BLUE	65/30	None	Nickel	Fluoropolymer	.124	68.0	None	24.6
42301	10 BLACK	105/30	None	Nickel	Fluoropolymer	.134	90.0	None	38.5
42302	10 WHITE	105/30	None	Nickel	Fluoropolymer	.134	90.0	None	38.5
42303	10 RED	105/30	None	Nickel	Fluoropolymer	.134	90.0	None	38.5
42304	10 GREEN	105/30	None	Nickel	Fluoropolymer	.134	90.0	None	38.5
42305	10 BROWN	105/30	None	Nickel	Fluoropolymer	.134	90.0	None	38.5
42306	10 ORANGE	105/30	None	Nickel	Fluoropolymer	.134	90.0	None	38.5
42307	10 YELLOW	105/30	None	Nickel	Fluoropolymer	.134	90.0	None	38.5
42308	10 BLUE	105/30	None	Nickel	Fluoropolymer	.134	90.0	None	38.5

SHIELDED MULTI-CONDUCTOR

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'
42066	18/3	41/34	Nickel	Nickel	Fluoropolymer	.208	19.0	20 AWG	46
42060	18/4	41/34	Nickel	Nickel	Fluoropolymer	.220	19.0	20 AWG	56
42064	18/12	41/34	Nickel	Nickel	Fluoropolymer	.345	12.0	20 AWG	123
42061	16/4	65/34	Nickel	Nickel	Fluoropolymer	.245	26.0	20 AWG	77
42065	16/12	65/34	Nickel	Nickel	Fluoropolymer	.385	16.0	20 AWG	176
42062	14/4	105/34	Nickel	Nickel	Fluoropolymer	.290	43.0	20 AWG	104
42063	12/4	65/30	Nickel	Nickel	Fluoropolymer	.370	54.0	20 AWG	154

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

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

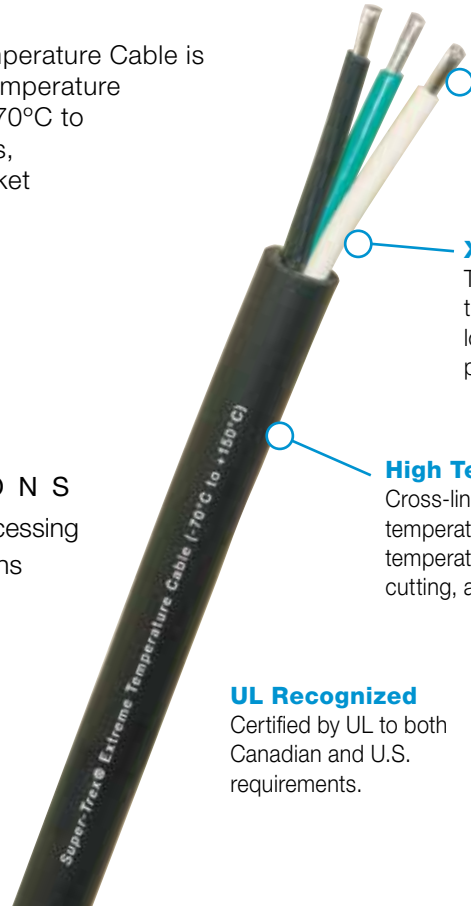


- 1000V Rated
- RoHS Compliant
- FT1 Flame Rating
- UV Light Resistant

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.

APPLICATIONS

- Deep Freeze Food Processing
- Extreme Hot Applications
- Outdoor Applications
- Construction Sites
- Industrial Ovens
- Arctic Pipeline
- Steel Mills
- Foundries
- Oil Fields



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

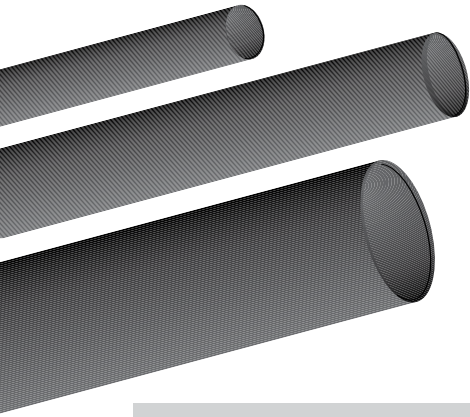
PART NO.	CABLE SIZE AWG/COND.	CONDUCTOR STRANDING	AMPACITY (1)	NOM. DIA. (IN.)	JACKET THICKNESS (IN.)	WT. (LBS.) PER 1000 FT.
87840	14/3	41/30	34	0.426	.065	106
87841	14/4	41/30	34	0.460	.065	130
87835	12/3	65/30	43	0.465	.065	141
87836	12/4	65/30	43	0.503	.065	172
87830	10/3	105/30	55	0.492	.065	192
87831	10/4	105/30	55	0.536	.065	238
87825*	8/3	168/30	76	0.685	.060	306
87826*	8/4	168/30	76	0.790	.080	482
87820*	6/3	259/30	96	0.814	.080	448
87821*	6/4	259/30	96	0.889	.080	593
87815*	4/3	413/30	120	0.933	.080	653
87816*	4/4	413/30	120	1.022	.080	871
87810*	2/3	665/30	160	1.074	.080	991
87811*	2/4	665/30	160	1.179	.080	1328

NOTES: (1)Based on an ambient temperature of 40° C and conductor temperature of 90° C per NEC 2011, Table 3.10.15(B)(18).

*Call for availability

ACCESSORIES

Hy-Trex™ High Ratio 6 to 1 Adhesive Shrink Tubing



Self-Sealing

Inner adhesive provides a watertight seal, ideal for wet and corrosive locations and underground applications.

Wide Application Range

Only three sizes needed to cover wire from #16 AWG through 2000 MCM cable.

Dielectric Strength up to 24,000 Volts

Ideal for high voltage applications.

Greater Strength

The inner adhesive provides excellent strain relief and tensile strength.

Versatile

Designed to adhere to cable jackets and other non-oily surfaces.

Universal

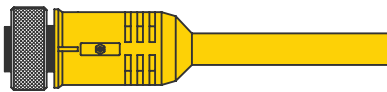
Adhesive 6 to 1 easily fits over and seals large, bulky connections saving time and added expense.

ORDERING INFORMATION

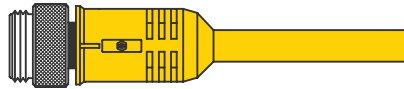
PART NO.	LENGTH	UNIT OF MEASURE	BEFORE SHRINKAGE		AFTER SHRINKAGE	
			I.D.	WALL THICKNESS	I.D.	WALL THICKNESS
75001	24"	Each	0.75"	0.040"	0.125"	0.103"
75002	24"	Each	2.00"	0.045"	0.330"	0.132"
75003	24"	Each	3.50"	0.048"	0.673"	0.145"

Quick-Connect™ Cord Sets

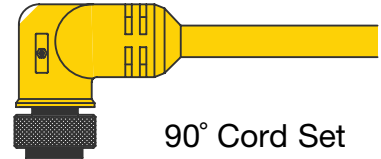
Quick-Connects make replacement of electrical and electronic control devices quick and simple



Female Cord Set



Male Cord Set



90° Cord Set

APPLICATIONS

- Small Motors
- Sensors
- Cooling Towers
- Turbines
- AC/DC

CONSTRUCTION FEATURES & BENEFITS

Plug Sets Made with Super-Trex® Type S00 Ultra-Gard™ Portable Cord, Rated 90°C

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

Extra Long Plug Body is Specially Compounded, Thermoset Elastomer

Provides long flex life, resists heat and oil deterioration.

Molded and Keyed, Vulcanized Thermoset Assembly

Provides rapid and secure connect and disconnect. Ensures a water, oil, and dust tight seal.

Hard Coated MIL SPEC. Anodized Aluminum Knurled Coupling Ring

Resists corrosion, provides quick and secure assembly.

Solid Brass Contact Pins are Nickel Coated and Gold Plated, Machine Crimped to Conductors

Provides long life, resists corrosion, easy positive engagement. Excellent for high/low voltage and low level signal applications.

Unique Stainless Steel Sleeve Over the Gold Plated Female Pins

Prevents pin deformation resulting in loss of signal and electrical continuity. Superior performance in high vibration and continuous motion environments. Probe proof.

Stainless Steel Friction Ring Between Coupler and Plug Body

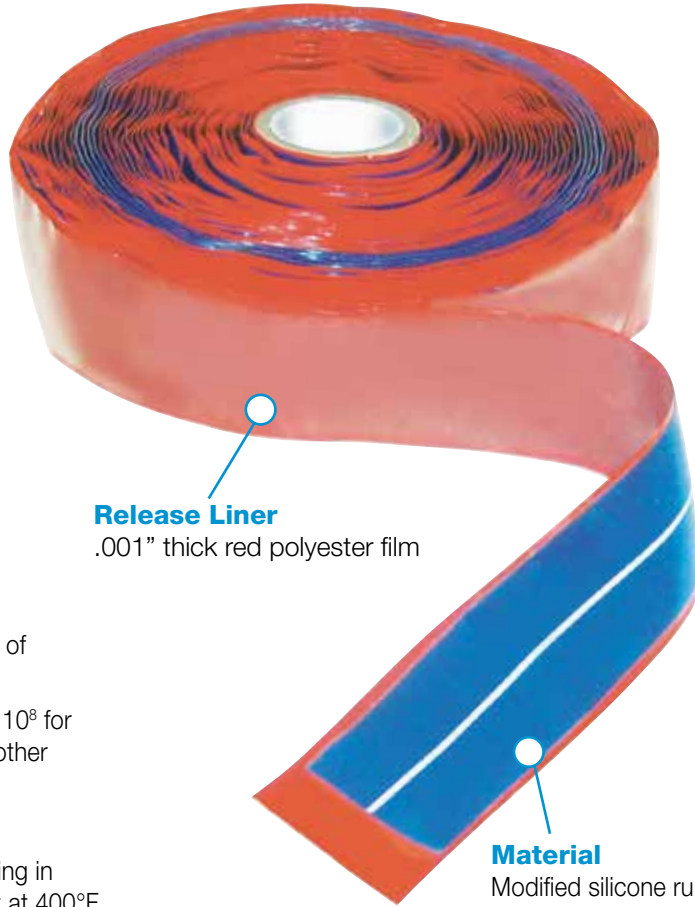
Increases pull-out strength, ensures uniform tightness.

Extra Long Grounding Pin

Ensures first-in, last-out contact for safety.

Approved for use inside and outside containment areas of Nuclear Power Plants

- Tested in accordance with IEEE 383-1974 as specified by NRC and is **qualified for use both inside and outside containment areas**
- Product is sold through a 10CFR50, **Appendix B Quality Program**, meeting the requirements of the NRC
- **High Dielectric Strength**, can be used for all electrical connections
- **No adhesives**, adheres only to itself. **Easy to remove** – leaves no residue. Covered fittings are immediately reusable
- **Vulcanizes immediately:** requires no heat – becomes fully bonded in 24 hours at room temperature. Remains pliable over time
- **Heat resistant:** up to 400°F continuous use
- Oil, water and ozone resistant



Release Liner
.001" thick red polyester film

Material
Modified silicone rubber (composition verified on every manufacturing run via DSC testing)

SPECIFICATIONS

- Qualified Life at 178°F for 40 years (Thermal Aging of >150°C for 381 hours, act. Energy of 1.22 eV)
- Radiation Exposure Total Integrated Dose of 2.0×10^8 for 5KV splices and a TID of $>1.18 \times 10^8$ Rads for all other splice configurations
- LOCA/HELB simulation
- Passed IEEE 383 flame testing, submergence testing in 90° water for 30 days, and a short time steam test at 400°F. Testing is documented in Nuclear Qualification Test report NQR-UCI-003XS, Rev.1

ORDERING INFORMATION

PART NO.	NOMINAL THICKNESS	NOMINAL WIDTH	NOMINAL LENGTH	WRAP COLOR	GUIDE LINE COLOR	DIELECTRIC STRENGTH PER MIL
UCI-003XS	40 Mils	1 In. (2.54 cm)	12 Yds.	Blue	White	300 Volts

CONTROL AND TEST DATA ACQUISITION SYSTEM ASSEMBLIES

High Performance Cable Assemblies for Any System

TPC can provide high quality, durable cable assemblies for your MOV and AOV monitoring systems. Monitoring and analyzing valve performance in Nuclear, Pulp and Paper, Chemical Processing, Oil & Gas Refining, Pipeline Transmission, Power Production, Water Treatment, and Brewery and Distillery production is critical to efficient plant operations. Having the right cable for your application can make the difference between an effective system and one that fails due to poor quality or worn cable assemblies.

TPC can help you get the most out of your monitoring system. **Custom lengths** and **multiple color options** are available for your specific plant layout.



Available in 7 Colors

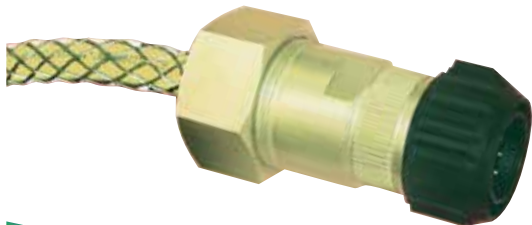


- GREEN
- BLUE
- RED
- YELLOW
- BLACK
- WHITE
- ORANGE



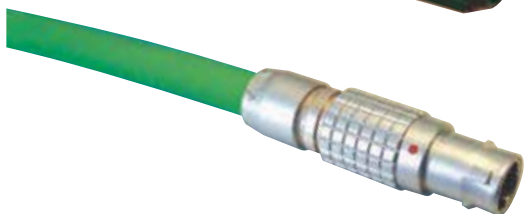
Military Assemblies

Designed for a wide range of industrial applications. Assembled with custom TPC backend hardware for environmental sealing and superior strain relief. Molded backends available.



HDLC Assemblies

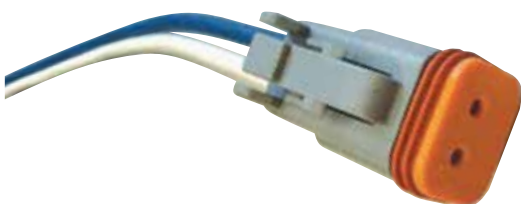
Heavy duty locking connectors. Three quarter turn reverse bayonet coupling system is easy to connect and disconnect. Positive locking indent prevents accidental uncoupling. Inserts are environmentally sealed to protect the connection from oil, water and chemical contamination. 18 AWG to 1/0 – up to 65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



Lemo (circular)

These connectors are found in a variety of challenging application environments, including:

- Hot cell applications operated by manipulators
- Closed circuit television
- Security/surveillance
- Ethernet converters



Duetsch

These connectors comply with the strictest radioactive standards required for nuclear plant operations. Connectors are available for each level of security:

- High level radiation
 - Power and control system
 - Temperature system
- Low level radiation
 - Control system

WHEN QUALITY MATTERS

TPC Cost Value Analysis (CVA) for Nuclear Power Plant

Application

Control Rod Vent Fan Motors (CRVFM's)

Description of the Application

CRVFM's are not used during a plant shutdown. This unused power source is a convenient way to tap into an existing 480 volt power circuit. Electricians would spend many hours to disconnect the hardwired connections and connect temporary cable for power taps to energize portable equipment.

Reasons for Repair and Replacement of the Previous Product

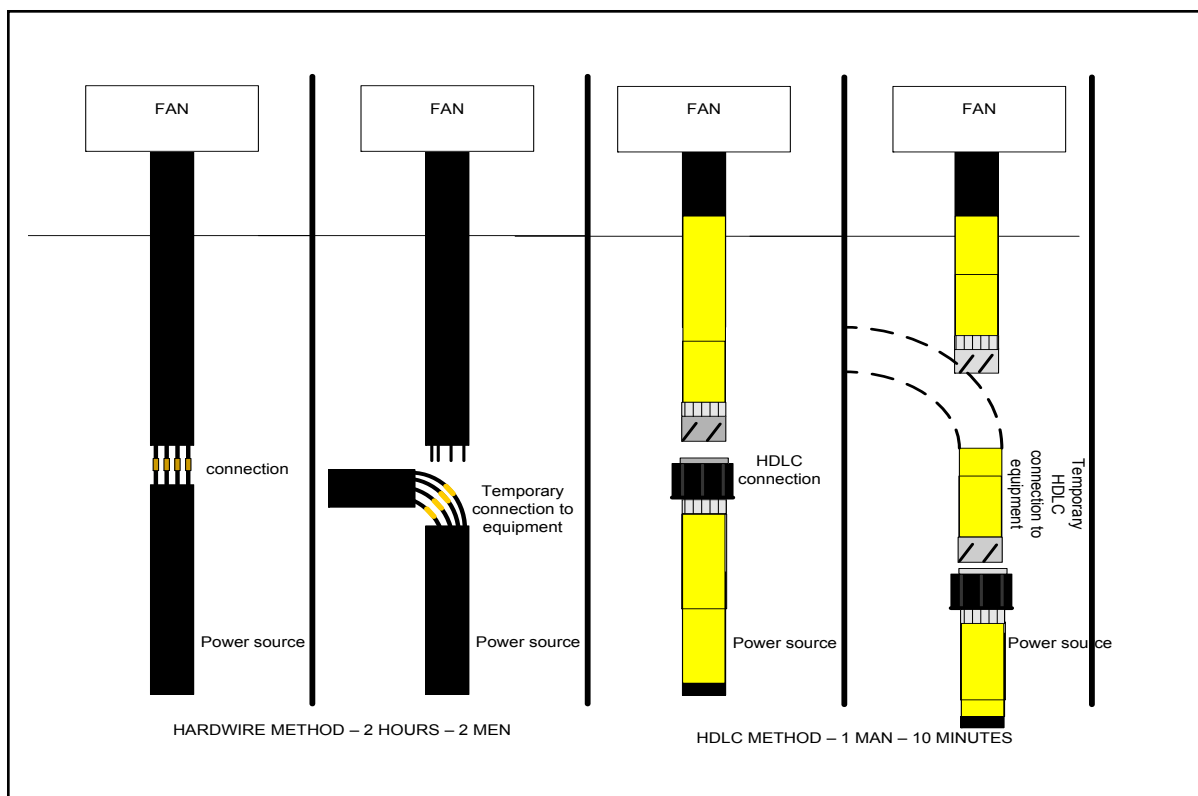
The TPC HDLC's now connect CRVFM circuits vs. hardwire methods. Temporary power is now plug and play reducing overall station dose to As Low As Reasonably Achievable.

Status of TPC Product Performance

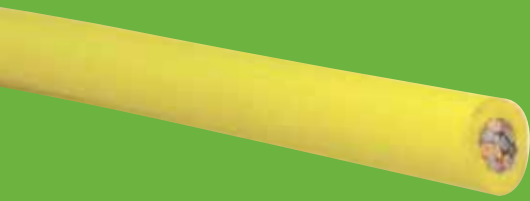
HDLC's were permanently installed for 02/10 shutdown which greatly reduces installation time and radiation dose limit structured by the NRC (ALARA).

VALUE ANALYSIS COMPUTATION

Material Cost Savings Using TPC	(\$10,170.00)
Labor Cost Savings Using TPC	\$805.14
TOTAL Material and Labor Cost Savings	(\$9,364.86)
TOTAL ALARA Hours Saved	11.004

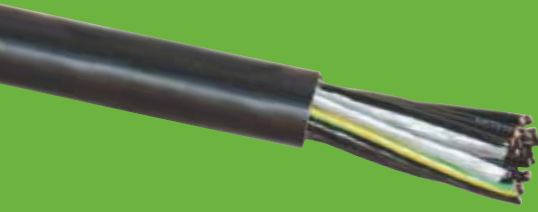


DESIGNED FOR ABUSIVE INDUSTRIAL ENVIRONMENTS



SUPER-TREX®

A very rugged line of cables which includes both single and multi-conductor configurations ranging from 600 volts to 2000 volts. These products are designed primarily for power and control applications where cables may be exposed to tension, reeling, flexing, cutting, abrasion, impact and heat.



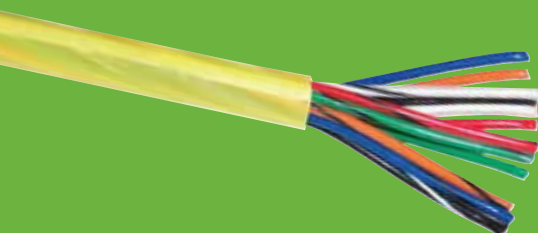
TREX-ONICS®

Designed for constant flexing applications such as cable carriers and robotics, this product line is designed to provide a high level of resistance to abrasion and cutting. Trex-Onics products include power cables and shielded multi-conductor cables for instrumentation, control and communications.



THERMO-TREX®

High temperature cables and accessories designed for temperatures ranging from 400°F up to an extreme of 3000°F. This line includes power and control cables as well as a line of thermo-couple cables.



CHEM-GARD™

Designed for a broad range of applications where heat, cold or extreme chemical exposure can affect cable performance. Chem-Gard uses a fluoropolymer insulation and jacket that gives the cable a temperature performance range from -60°C to +200°C. The fluoropolymer jacket also allows the cable to survive in very acidic, alkali or solvent based environments. Chem-Gard's unique design makes it an excellent choice for flexing and high cycling applications.

USA **800-521-7935**

FAX **866-528-2930**

CANADA **800-545-0122**

MEXICO **001-877-283-1696**

CHILE **1230-020-0229**

COLOMBIA **0-1-800-915-7519**

PERU **0800-54863**

WWW.TPCWIRE.COM

TPC WIRE & CABLE CORP.
9600 VALLEY VIEW ROAD
MACEDONIA, OHIO 44056

Ask About

CVA | cost value analysis



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