

**Factory
Mutual
System**

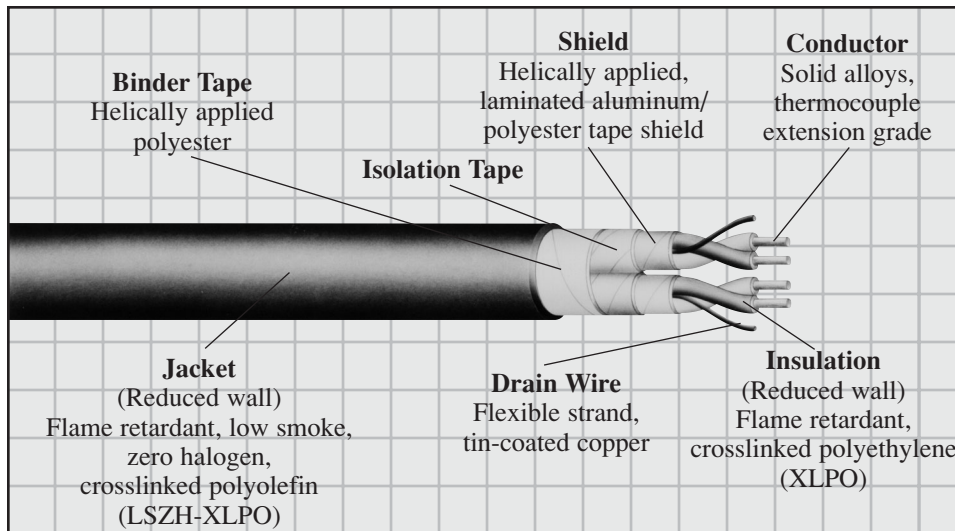
X-Link® TC

Thermocouple Extension Cable

Multi-Shielded Pairs
Without Overall Shield
(XLPO/LSZH-XLPO)

90°C*, 600 Volt
NEC Type TC
UL Listed

Spec. RSS-3-089



Scope

X-Link® TC is the smallest thermoset, UL listed, 600 volt Type TC Thermocouple Extension cable available in the industry today. X-Link® TC is 30% to 40% smaller in diameter than standard 600 volt cable. It may be installed in metal trays, ducts, conduits, or in direct burial applications. It is ideal for applications in substations, cogeneration, waste/energy and industrial facilities. *Designed for use on circuits where shielding over individual pairs is required but additional overall shielding is not critical.*

Construction

Conductor:

Solid alloys per ANSI MC 96.1 (Extension Grade, standard limits of error)

Insulation:

20 mils of flame retardant crosslinked polyolefin meeting performance requirements of ICEA S-95-658 and UL 44 Class XL

Pair Assembly:

Two insulated conductors twisted with a flexible strand, tin-coated copper drain wire, a helically applied aluminum/polyester laminated tape shield and an isolation tape

Cabling:

Required number of pairs cabled

Circuit Identification:

Individual pair single conductors color coded to ANSI requirements by means of pigmented insulation with printed pair numbers on both singles for pair identification

Fillers:

(Where required)

Binder Tape:

Helically applied polyester

Jacket:

Reduced wall, black, flame retardant, low smoke, zero halogen, crosslinked polyolefin jacket (Note: colored jackets are not available)

† 2/c #16 and larger

* Rated 90°C for normal operation in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Features

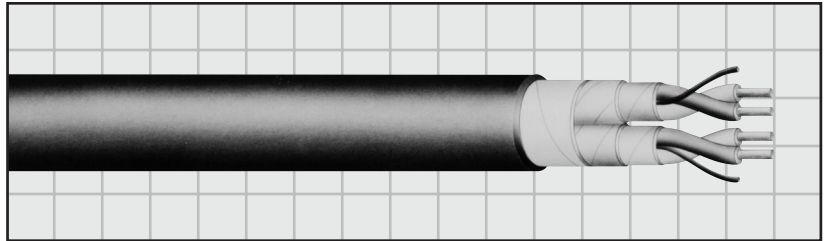
- Thermoset insulation and jacket for enhanced thermal stability
- Small diameter & light weight
- Economical
- More cables per tray or conduit
- 600 volt rating allows cables to be run in trays without separation (300 vs 600 volt)
- Flame retardant
- Flexible
- Heat, sunlight, oil and abrasion resistant
- Easily pulled (low friction jacket)
- Jackets have printed sequential footage markers for improved inventory control
- Jacket strippability facilitates termination
- Reduced halogen design
- Low smoke jacket
- Lead free jacket
- Superior insulation and jacket moisture resistance

Performance Standards

- UL listed, Type TC (UL 1277) in accordance with the NEC
- UL listed sunlight resistance
- Factory Mutual Research Corp. group "1" fire rated per "Specification Test Standard for Cable Fire Propagation, Class 3972"†
- Passes IEEE-383 1974 70,000 BTU/hr vertical tray flame test and ICEA 70,000 BTU/hr vertical tray flame test (T-30-520)
- Single conductors pass UL VW-1 flame test
- Single conductors in accordance with performance requirements of ICEA S-95-658 and UL 44., Class XL
- Jacket exceeds the requirements of UL Class XL/90°C and ICEA Publication T-33-655, Type II
- UL approved for 90°C operation in both wet and dry locations
- Cable components are in compliance with the maximum leachable lead level required by the EPA in 40CFR, Part 261

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Without Overall Shield
(XLPO/LSZH-XLPO)
90°C, 600 Volt
NEC Type TC
UL Listed



Spec. RSS-3-089

16 AWG Solid

Product Code*	Number of Pairs	Conductor Type*	Insulation Thickness		Insulated Conductor Diameter (Inch)	Drain Wire Size/Stranding	Jacket Thickness (Mils)	Nominal Overall Diameter		Approximate Net Weight (Lbs/M')
			(Inch)	(mm)				(Inch)	(mm)	
I85-3044	2	JX	.020	.51	.09	18 AWG (16/s)	35	.42	10.67	85
I85-3048	3	JX	.020	.51	.09	18 AWG (16/s)	35	.45	11.43	110
I85-3052	4	JX	.020	.51	.09	18 AWG (16/s)	35	.50	12.70	140
I85-3056	5	JX	.020	.51	.09	18 AWG (16/s)	45	.57	14.48	185
I85-3060	7	JX	.020	.51	.09	18 AWG (16/s)	45	.62	15.75	245
I85-3064	9	JX	.020	.51	.09	18 AWG (16/s)	45	.72	18.29	310
I85-3068	12	JX	.020	.51	.09	18 AWG (16/s)	65	.86	21.84	430
I85-3072	15	JX	.020	.51	.09	18 AWG (16/s)	65	.95	24.13	525
I85-3076	19	JX	.020	.51	.09	18 AWG (16/s)	65	1.01	25.60	640
I85-3080	37	JX	.020	.51	.09	18 AWG (16/s)	65	1.35	34.29	1175

18 AWG Solid

I86-3044	2	JX	.020	.51	.08	20 AWG (10/s)	35	.39	9.91	65
I86-3048	3	JX	.020	.51	.08	20 AWG (10/s)	35	.41	10.41	85
I86-3052	4	JX	.020	.51	.08	20 AWG (10/s)	35	.45	11.43	105
I86-3056	5	JX	.020	.51	.08	20 AWG (10/s)	35	.49	12.45	125
I86-3060	7	JX	.020	.51	.08	20 AWG (10/s)	45	.56	14.22	180
I86-3064	9	JX	.020	.51	.08	20 AWG (10/s)	45	.66	16.76	225
I86-3068	12	JX	.020	.51	.08	20 AWG (10/s)	45	.74	18.80	290
I86-3072	15	JX	.020	.51	.08	20 AWG (10/s)	65	.86	21.84	390
I86-3076	19	JX	.020	.51	.08	20 AWG (10/s)	65	.91	23.11	470
I86-3080	37	JX	.020	.51	.08	20 AWG (10/s)	65	1.22	31.80	845

* **Product Code Sequence:** Codes for other alloy combinations can be obtained by applying the following numbering sequence:

Type	Product Code
EX	Add "1" to above "JX" code
KX	Add "2" to above "JX" code
TX	Add "3" to above "JX" code

Example: I85-3045 = 2 PAIR 16 AWG Type "EX"