

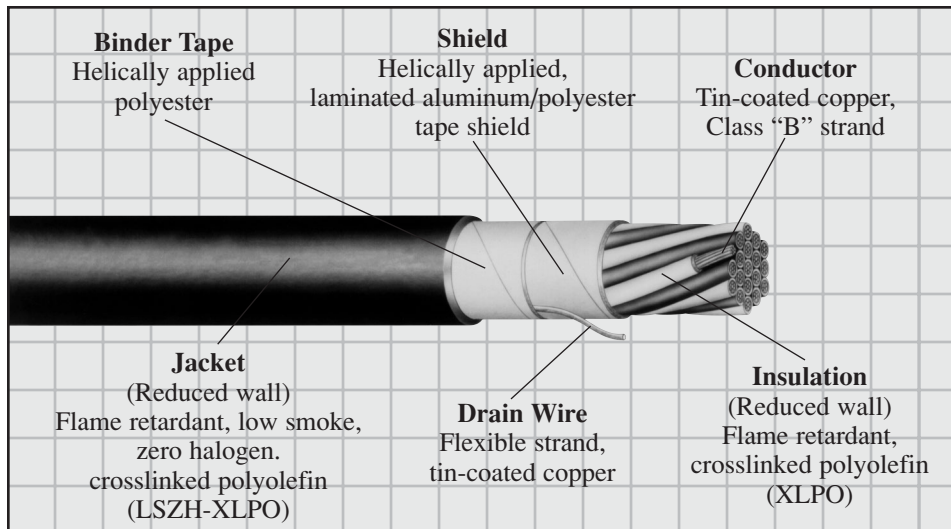
**Factory  
Mutual  
System**

## X-Link® TC

Instrumentation Cable  
Multi-Conductor Shielded  
(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, Type TC Instrumentation 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 wet and dry locations, indoors and outdoors, in metal trays, ducts, conduits, or in direct burial applications.

It is ideal for applications in substations, cogeneration, waste/energy and industrial facilities to perform a variety of signaling, data acquisition and monitoring functions. *Designed for use on circuits where shielding from external electrostatic interference is required.*

## 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)
- Tin-coated conductors for improved terminations and corrosion resistance
- 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

† 2/C #16 and larger

## Construction

### Conductor:

Tin-coated copper conductors, Class "B" strand (ASTM B-8 & B-33)

### Insulation:

20 mils of flame retardant crosslinked polyolefin meeting performance requirements of ICEA S-66-524 and UL 44 Class XL

### Circuit Identification:

Colored insulation per ICEA Method 1, Table K-2\*\*\*\*

### Fillers:

(Where required)

### Shield System:

Helically applied aluminum/polyester laminated tape shield in continuous contact with flexible strand, tin-coated copper drain wire

### Binder Tape:\*\*

Helically applied polyester

### Jacket:

Reduced wall, black, flame retardant, low smoke, zero halogen, crosslinked polyolefin jacket

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

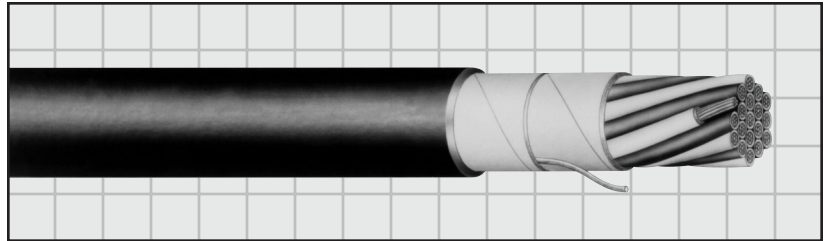
\*\* Not required on 2, 3, and 4 conductor configurations

\*\*\* Also available in K-1 color identification

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Spec. RSS-3-089

## 16 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness (Inch)	Insulation Thickness (mm)	Insulated Conductor Diameter (Inch)	Drain Wire Size/ Stranding	Jacket Thickness (Mils)	Nominal Overall Diameter (Inch)	Nominal Overall Diameter (mm)	Approximate Net Weight (Lbs/M')
I83-0021	2	.020	.51	.10	18 AWG (16/s)	35	.27	6.86	45
I83-0031	3	.020	.51	.10	18 AWG (16/s)	35	.29	7.37	60
I83-0041	4	.020	.51	.10	18 AWG (16/s)	35	.31	7.87	70
I83-0051	5	.020	.51	.10	18 AWG (16/s)	35	.37	9.40	95
I83-0071	7	.020	.51	.10	18 AWG (16/s)	35	.40	10.16	120
I83-0091	9	.020	.51	.10	18 AWG (16/s)	35	.46	11.68	150
I83-0121	12	.020	.51	.10	18 AWG (16/s)	35	.51	12.95	190
I83-0151	15	.020	.51	.10	18 AWG (16/s)	45	.59	14.99	240
I83-0191	19	.020	.51	.10	18 AWG (16/s)	45	.61	15.49	290
I83-0271	27	.020	.51	.10	18 AWG (16/s)	45	.73	18.54	395
I83-0371	37	.020	.51	.10	18 AWG (16/s)	45	.81	20.57	520

## 18 AWG, 7 Strand

I84-0021	2	.020	.51	.09	20 AWG (10/s)	35	.25	6.35	35
I84-0031	3	.020	.51	.09	20 AWG (10/s)	35	.26	6.60	45
I84-0041	4	.020	.51	.09	20 AWG (10/s)	35	.29	7.37	55
I84-0051	5	.020	.51	.09	20 AWG (10/s)	35	.33	8.38	70
I84-0071	7	.020	.51	.09	20 AWG (10/s)	35	.36	9.14	90
I84-0091	9	.020	.51	.09	20 AWG (10/s)	35	.41	10.41	110
I84-0121	12	.020	.51	.09	20 AWG (10/s)	35	.46	11.68	140
I84-0151	15	.020	.51	.09	20 AWG (10/s)	35	.51	12.95	165
I84-0191	19	.020	.51	.09	20 AWG (10/s)	45	.55	13.97	210
I84-0271	27	.020	.51	.09	20 AWG (10/s)	45	.65	16.51	285
I84-0371	37	.020	.51	.09	20 AWG (10/s)	45	.72	18.29	375

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