



**Product:** [U03122](#)

TC-ER XLPE/LSZH, 3 C #12 Str BC, XLPE Ins E2, Blk LSZH Jkt, 600V TC-ER 90C Dry/Wet SUN RES

## Product Description

UL Type TC (1277) XLPE/LSZH, 3 Conductor 12AWG (7x20) Bare Copper, XLPE Insulation E2 Color Code, Black LSZH Outer Jacket, 600V TC-ER 90C Dry/Wet SUN RES

## Technical Specifications

### Product Overview

Suitable Applications:	harsh environment digital and serial two-way communication, oil and gas extraction and refining sites, petrochemical, Profibus process automation or Foundation FieldBus process automation, extreme temperature environments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc.
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### Physical Characteristics (Overall)

#### Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	12	7x20	BC - Bare Copper	3

Conductor Count:	3
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#### Insulation

Material	Nominal Diameter	Nominal Wall Thickness
XLP, XLPO, XLPE (Thermoset)	0.150 in	0.031 in

#### Color Chart

Number	Color
1	Black
2	Red
3	Blue

#### Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.457 in	0.067 in

### Electrical Characteristics

#### Conductor DCR

<b>Nominal Conductor DCR</b>
1.65 Ohm/1000ft

#### Current

<b>Max. Recommended Current [A]</b>
30 Amps per Conductor at 30°C

#### Voltage

UL Description	UL Voltage Rating	Voltage Rating [V]
TC	600 V RMS (Type TC)	600 V RMS (Type TC)

### Temperature Range

UL Temp Rating:	90°C Dry, 90°C Wet
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Operating Temperature Range:	-30°C To +90°C
Wet Temp Range:	-30°C To +90 °C

## Mechanical Characteristics

Bulk Cable Weight:	135 lbs/1000ft
Max. Pull Tension:	154 lbs
Min. Bend Radius/Minor Axis:	1.83 in

## Standards

NEC/(UL) Compliance:	TC-ER, XHHW-2
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## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

## Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

## Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
IEEE Flammability:	1202
UL voltage rating:	600 V RMS (Type TC)

## Related Part Numbers

### Variants

Item #	Put-Up Type
U03122 01010000	Reel
U03122 01015000	Reel

## History

Update and Revision:	Revision Number: 0.51 Revision Date: 01-10-2024
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