



Product: [U03084C](#)

TC-ER XLPE/LSZH, 3+G C #8 Str BC, XLPE Ins M4, #10 Str BC Grnd, Blk LSZH Jkt, 600V TC-ER 90C Dry/Wet SUN RES

Product Description

UL Type TC-ER (1277) XLPE/LSZH, 3+G Conductor 8 AWG (7x16) Bare Copper, XLPE Insulation M4 Color Code, 10 (7x18) Bare Copper Ground Wire, 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)	8	7x16	BC - Bare Copper	3
Ground	10	7x18	BC - Bare Copper	1

Conductor Count:	3
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Insulation

Material	Nominal Diameter	Nominal Wall Thickness
XLPE, XLPO, XLPE (Thermoset)	0.272 in	0.0465 in
No Insulation		

Color Chart

Number	Color
Conductors 1 - 3	ICEA S-73-732 Table M4: Black and Numbered

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.635 in	0.063 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
.64 Ohm/1000ft

Current

Max. Recommended Current [A]
55 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:	308 lbs/1000ft
Max. Pull Tension:	449 lbs
Min. Bend Radius/Minor Axis:	2.54 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
U03084C 0102500	Reel

History

Update and Revision:	Revision Number: 0.52 Revision Date: 01-10-2024
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