



**Product:** [A03102Q](#)

TC VN/PVC, 3 C #10 Str BC, PVC-NYL Ins E2, Blk PVC Jkt, 600V TC-ER 90C Dry/Wet SUN RES DIR BUR

## Product Description

UL Type TC (1277) PVC-Nylon/PVC, 3 Conductor 10AWG (7x18) Bare Copper, PVC-NYL Insulation E2 Color Code, Black PVC Outer Jacket, 600V TC-ER 90C Dry/Wet SUN RES DIR BUR

## 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	Nominal Diameter	No. of Conductors
Conductor(s)	10	7x18	BC - Bare Copper	0.110 in	3

Conductor Count:	3
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#### Insulation

Material	Nominal Diameter
PVC/Nylon - Polyvinyl Chloride + Nylon	0.164 in

#### Color Chart

Number	Color
1	Black
2	Red
3	Blue

#### Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.450 in	0.047 in

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR
1.04 Ohm/1000ft

#### Current

Max. Recommended Current [A]
40 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, 75°C Wet
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Operating Temperature Range: -25°C To +90°C

## Mechanical Characteristics

UV Resistance:	Yes
Min Bend Radius (Overall):	4.5 in
Min. Bend Radius/Minor Axis:	1.80 in

## Standards

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

EU Directive 2000/53/EC (ELV):	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 - Burial:	Yes
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

## Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 Vertical Tray Flame Test
UL voltage rating:	600 V RMS (Type TC)

## History

Update and Revision:	Revision Number: 0.49 Revision Date: 01-10-2024
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