



**Product:** [3104A](#)

TC VN/PVC, 3 C #12 Str BC, PVC-NYL Ins E1, OS, Bik PVC Jkt, 600V TC-ER 150V NPLF 90C Dry 75C Wet SUN RES DIR BUR

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## Product Description

UL Type TC (1277) PVC-Nylon/PVC, 3 Conductor 12AWG (7x20) Bare Copper, PVC-NYL Insulation E1 Color Code, Overall Beldfoil® Shield, Black PVC Outer Jacket, 600V TC-ER 150V NPLF 90C Dry 75C Wet SUN RES DIR BUR

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

Element	AWG	Stranding	Material	No. of Triads
Conductor(s)	12	7x20	BC - Bare Copper	1

Conductor Count: 3

#### Insulation

Material	Nominal Diameter
PVC/Nylon - Polyvinyl Chloride + Nylon	0.13 in

#### Color Chart

Number	Color
1	Red
2	White
3	Black

#### Color Chart 2

Number	Color
1	Black & White & Red

#### Outer Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	TC - Tinned Copper	14

#### Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness	Ripcord
PVC - Polyvinyl Chloride	0.384 in	0.047 in	Yes

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR
1.5 Ohm/1000ft

#### Capacitance

Nom. Capacitance Conductor to Conductor
64 pF/ft

#### Current

Max. Recommended Current [A]

30 Amps per Conductor at 25°C

#### Voltage

UL Description	UL Voltage Rating	Voltage Rating [V]
TC	600 V RMS (Type TC)	600 V RMS (Type TC)
NPLF	150 V RMS (NPLF)	

#### Temperature Range

UL Temp Rating:	75°C Dry, 90°C Wet
Operating Temp Range:	-30°C To +90°C

#### Mechanical Characteristics

Max. Pull Tension:	315 lbs
Min. Bend Radius/Minor Axis:	4 in

#### Standards

NEC/(UL) Compliance:	NPLF, TC-ER, THHN, THWN
Other Specification:	ICEA S-73-532, S-61-402

#### 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 RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
MII Order #39 (China RoHS):	Yes

#### Suitability

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

#### Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
ICEA Flammability:	T-29-520
IEEE Flammability:	1202
UL voltage rating:	600 V RMS (Type TC)

#### Plenum/Non-Plenum

Plenum (Y/N):	No
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#### Part Number

#### Variants

Item #	Put-Up Type	UPC
3104A 0102500	Reel	612825334538
3104A 0105000	Reel	612825334545
3104A 0105000	Reel	612825334545

#### Product Notes

Notes:	Alternate color coding available upon request.
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#### History

Update and Revision:	Revision Number: 0.270 Revision Date: 09-24-2021
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