



**Product:** [3103A](#)

Inst, 1 Pr #12 Str BC, PVC-NYL Ins E1, OS, Blk PVC Jkt, 600V TC 150V NPLF THHN OR THWN

[Request Sample](#)

## Product Description

UL Instrumentation, 1 Pair 12AWG (7x20) Bare Copper, PVC-NYL Insulation E1 Color Code, Overall Beldfoil® Shield, Black PVC Outer Jacket, 600V TC 150V NPLF THHN OR THWN 90C Dry 75C Wet SUN RES DIR BUR

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	No. of Pairs
12	7x20	BC - Bare Copper	1

Conductor Count:	2
Total Number of Pairs:	1

#### Insulation

Material	Nominal Diameter
PVC/Nylon - Polyvinyl Chloride + Nylon	0.130 in

#### Color Chart

Number	Color
1	Black & White

#### 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	0.364 in	0.047 in	Yes

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
1.65 Ohm/1000ft	1.56 Ohm/1000ft

#### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
56 pF/ft	106 pF/ft

#### Current

Max. Recommended Current [A]
31 Amps per Conductor at 25°C

#### Voltage

UL Voltage Rating
600 V RMS

150 V RMS (NPLF)

## Temperature Range

UL Temp Rating:	75°C Dry, 90°C Wet
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## Mechanical Characteristics

Bulk Cable Weight:	105 lbs/1000ft
Max. Pull Tension:	253 lbs
Min. Bend Radius/Minor Axis:	3.8 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)
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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## Product Notes

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

Update and Revision:	Revision Number: 0.260 Revision Date: 09-24-2021
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