



**Product:** [1097A](#)

Inst, 4 Tri #16 Str BC, PVC-NYL Ins E1, IS/OS, Blk PVC Jkt, 600V TC-ER  
150V NPLF 90C Dry/Wet

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## Product Description

UL Instrumentation, 4 Triad 16AWG (7x24) Bare Copper, PVC-NYL Insulation E1 Color Code, Individual & Overall Beldfoil® Shield, Black PVC Outer Jacket, 600V TC-ER 150V NPLF 90C Dry/Wet SUN RES DIR BUR

## Technical Specifications

### Product Overview

Suitable Applications:	Industrial Control, Raceways Cable trays and ducts, Digital Control, Instruments (4-20ma, 0-10v, ...), low voltage digital control (24v, ...), RTD, control circuits, distributed control system (DCS), programmable logic controller (PLC), Solenoids, Valves, actuators, positioners
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### Construction Details

#### Conductor

Element	Number of Element	AWG	Stranding	Material
Triad(s)	4	16	7x24	BC - Bare Copper

#### Insulation

Element	Material	Thickness	Nom. Insulation Diameter	Color Code
Triad(s)	PVC/Nylon - Polyvinyl Chloride + Nylon	0.017 in (0.43 mm)	0.101 in (2.57 mm)	Black, White, Red and Numbered

#### Inner Shield Material

Element	Shield Type	Material	Coverage	Drainwire Type	Notes
Triad(s)	Tape	Bi-Laminate (Alum+Poly)	100%	18 AWG (7x26) TC	each triad

#### Outer Shield Material

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	16 AWG (7x24) TC

#### Outer Jacket Material

Material	Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.064 in (1.6 mm)	0.646 in	Yes

Cable Diameter (Nominal):	0.646 in (16.4 mm)
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### Electrical Characteristics

#### Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR
Triad(s)	3.67 Ohm/1000ft (12.0 Ohm/km)	4.99 Ohm/1000ft (16.4 Ohm/km)

Nom. Outer Shield DCR:	3.07 Ohm/1000ft
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#### Voltage

UL Voltage Rating
600 V (TC-ER), 150 V (NPLF)

### Mechanical Characteristics

#### Temperature

UL Rating	Operating
90°C Dry, 90°C Wet	-30C to 90C Dry, 75C wet

#### Bend Radius

Stationary Min.	Installation Min.
7.8 in (200 mm)	7.8 in (200 mm)

Max. Pull Tension:	554 lbs (251 kg)
Bulk Cable Weight:	245 lbs/1000ft

#### Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Burial
Flammability / Fire Resistance:	UL1685 (FT4 Loading), FT4, 1202
NEC / UL Compliance:	Article 336, Article 760, NPLF, TC-ER
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	ICEA S-73-532, S-61-402

#### History

Update and Revision:	Revision Number: 0.393 Revision Date: 06-08-2021
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