



**Product:** [1090A](#)

Inst, 50 Pr #16 Str BC, PVC-NYL Ins E1, OS, Blk PVC Jkt, 600V TC-ER 150V NPLF TFN

[Request Sample](#)

## Product Description

UL Instrumentation, 50 Pair 16AWG (7x24) Bare Copper, PVC-NYL Insulation E1 Color Code, Overall Beldfoil® Shield, Black PVC Outer Jacket, 600V TC-ER 150V NPLF TFN 90C Dry 75C 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, ...), encoders, 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	Size	Stranding	Material
Pair(s)	50	16 AWG	7x24	BC - Bare Copper

#### Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PVC/Nylon - Polyvinyl Chloride + Nylon	0.022 in (0.56 mm)	0.101 in (2.57 mm)	Black, White and Numbered

#### Outer Shield

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

#### Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.083 in (2.1 mm)	1.547 in (39.29 mm)	Yes

Overall Cable Diameter (Nominal):	1.547 in (39.29 mm)
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### Electrical Characteristics

#### Electricals

Element	Nom. Conductor DCR
Pair(s)	3.67 Ohm/1000ft (12.0 Ohm/km)

#### Voltage

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

### Mechanical Characteristics

#### Temperature

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

#### Bend Radius

Stationary Min.	Installation Min.

18.6 in (472 mm) 18.6 in (472 mm)

Max. Pull Tension:	3606 lbs (1636 kg)
Bulk Cable Weight:	1380 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Burial
Flammability / Reaction to Fire:	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)

## History

Update and Revision:	Revision Number: 0.232 Revision Date: 04-08-2022
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