



**Product:** [1049A](#)

Inst, 4 Pr #18 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 Pair 18AWG (7x26) 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, ...), 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)	4	18 AWG	7x26	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)	0.088 in (2.2 mm)	ICEA Chart E1

##### Inner Shield

Element	Shield Type	Material	Coverage	Drainwire Type	Notes
Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%	20 AWG (7x28) TC	each pair, extra polyester tape for isolation

##### Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	18 AWG (7x26) TC

##### Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.047 in (1.2 mm)	0.493 in (12.5 mm)	Yes

Overall Cable Diameter (Nominal):	0.493 in (12.5 mm)
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#### Electrical Characteristics

##### Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Max. Current
Pair(s)	6.66 Ohm/1000ft	8.48 Ohm/1000ft (27.8 Ohm/km)	10 Amps per conductor @ 30°C

##### Voltage

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

#### Mechanical Characteristics

##### Temperature

UL Temperature	Operating

90°C Dry, 90°C Wet -30°C to 90°C Dry/Wet

#### Bend Radius

Stationary Min.	Installation Min.
5.9 in (150 mm)	5.9 in (150 mm)

Max. Pull Tension:	214 lbs (97.1 kg)
Bulk Cable Weight:	122 lbs/1000ft

#### Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Burial
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, FT4, IEEE 1202 FT4
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 (WC57), S-61-402

#### History

Update and Revision:	Revision Number: 0.561 Revision Date: 04-14-2023
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#### Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC
1049A 0107500	Black	Reel	7,500 ft	612825105374

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