



Product: [1048A](#) 

Inst, 2 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, 2 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	No. of Elements	Size	Stranding	Material
Pair(s)	2	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)	0.379 in (9.63 mm)	Yes

Overall Cable Diameter (Nominal): 0.379 in (9.63 mm)

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)	11 Amps per conductor @ 30°C

Nom Outer Shield DCR@Cond DCR1-cnvt: 4.91 Ohm/1000ft (16.1 Ohm/km)

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.
4.5 in (110 mm)	4.5 in (110 mm)

Max. Pull Tension:	125 lbs (56.7 kg)
Bulk Cable Weight:	74 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)

History

Update and Revision:	Revision Number: 0.621 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
1048A 0107500	Black	Reel	7,500 ft	612825105343	C Z

Footnote:	C - CRATE REEL PUT-UP., Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.
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