



Product: [3090A](#) 

Inst, 1 Pr #16 Str BC, PVC-NYL Ins E1, OS, Blk PVC Jkt, 600V TC 150V NPLF 90C Dry/Wet

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Product Description

UL Instrumentation, 1 Pair 16AWG (7x24) Bare Copper, PVC-NYL Insulation E1 Color Code, Overall Beldfoil® Shield, Black PVC Outer Jacket, 600V TC 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)	1	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

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)	0.300 in (7.62 mm)	Yes

Overall Cable Diameter (Nominal): 0.300 in (7.62 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Inductance	Max. Current
Pair(s)	4.45 Ohm/1000ft	50 pF/ft (160 pF/m)	87 pF/ft (290 pF/m)	0.091 µH/ft (0.30 µH/m)	6.2 Amps per conductor at 25°C

Nom Outer Shield DCR: 5.47 Ohm/1000ft (17.9 Ohm/km)

Voltage

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

Mechanical Characteristics

Temperature

UL Temperature	Operating
90°C Dry, 90°C Wet	Wet: -30°C to +90°C, Dry: -25°C to +90°C

Bend Radius

Stationary Min.	Installation Min.
3.0 in (76 mm)	3.0 in (76 mm)

Max. Pull Tension:	105 lbs (47.6 kg)
Bulk Cable Weight:	50 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Burial
Flammability / Reaction to Fire:	UL 1685 UL Loading, IEEE 1202, FT4
NEC / UL Compliance:	Article 336, Article 760, NPLF, TC
European Directive Compliance:	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: 0.610 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
3090A 0102500	Black	Reel	2,500 ft	612825141204	
3090A 0105000	Black	Reel	5,000 ft	612825141211	C Z
3090A 01010000	Black	Reel	10,000 ft	612825141198	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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