



Product: [1047A](#)

Inst, 50 Pr #16 Str BC, PVC-NYL Ins E1, IS/OS, Blk PVC Jkt, 600V TC-ER
150V NPLF TFN 90C Dry / 75C Wet

[Request Sample](#)

Product Description

UL Instrumentation, 50 Pair 16AWG (7x24) Bare Copper, PVC-NYL Insulation E1 Color Code, Individual & 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	AWG	Stranding	Material
Pair(s)	50	16	7x24	BC - Bare Copper

Insulation

Element	Material	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

Inner Shield Material

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

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	0.116 in (2.95 mm)	1.773 in	Yes

Cable Diameter (Nominal):	1.773 in (45.03 mm)
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)
Pair(s)	3.67 Ohm/1000ft (12.0 Ohm/km)	50 pF/ft (160 pF/m)	87 pF/ft (290 pF/m)

Nom. Outer Shield DCR:	2.84 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, 75°C Wet	-30C to 90C Dry, 75C wet

Bend Radius

Stationary Min.	Installation Min.
21.3 in (541 mm)	21.3 in (541 mm)

Max. Pull Tension:	4726 lbs (2144 kg)
Bulk Cable Weight:	1739.3 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: 0.242 Revision Date: 06-08-2021
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