



**Product:** [3069A](#)

Inst, 12 Tri #16+22 Str BC, PVC Ins E1, IS/OS, Bk PVC Jkt, 300V PLTC ITC CMG

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### Product Description

UL Instrumentation, 12 Triad 16+22AWG (7x24+7x30) Bare Copper, PVC Insulation E1 Color Code, Individual & Overall Beldfoil® Shield, Black PVC Outer Jacket, PLTC ITC CMG AWM 2464 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, ...), RTD, 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
Triad(s)	12	16 AWG	7x24	BC - Bare Copper
Conductor(s)	1	22 AWG	7x30	BC - Bare Copper

##### Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Triad(s)	PVC - Polyvinyl Chloride	0.017 in (0.43 mm)	0.091 in (2.3 mm)	Black and White and Red Numbered 1, [delete], [Delete]
Conductor(s)	PVC - Polyvinyl Chloride	0.019 in (0.48 mm)	0.067 in (1.7 mm)	Orange

##### Inner Shield

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

##### 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	0.074 in (1.9 mm)	0.976 in	Yes

Overall Cable Diameter (Nominal):	0.976 in
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#### Electrical Characteristics

##### Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Max. Current
Triad(s)	4.2 Ohm/1000ft	5.4 Ohm/1000ft (18 Ohm/km)	7 Amps per Conductor at 25°C
Conductor(s)	17.2 Ohm/1000ft (56.4 Ohm/km)		5 Amps per Conductor at 25°C

##### Voltage

<b>UL Voltage Rating</b>
300 V

#### Mechanical Characteristics

## Temperature

UL Temperature	Operating
UL: 105°C, AWM 2464: 80°C	-20°C to +105°C

## Bend Radius

Stationary Min.	Installation Min.
9.76 in (248 mm)	9.76 in

Max. Pull Tension:	1598 lbs (724.8 kg)
Bulk Cable Weight:	608 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Burial
Flammability / Reaction to Fire:	UL1685 FT4 Loading, FT4, T-29-520
NEC / UL Compliance:	Article 725, Article 727, Article 800
AWM Compliance:	AWM 2464
CEC / C(UL) Compliance:	CMG
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)

## Product Notes

Notes:	Alternate color coding available upon request.
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## History

Update and Revision:	Revision Number: 0.284 Revision Date: 01-11-2024
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