



Product: [1083A](#)

Inst, 4 Tri #20+22 Str BC, PVC Ins E1, IS/OS, Blk PVC Jkt, 300V PLTC-ER ITC-ER CMG

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Product Description

UL Instrumentation, 4 Triad 20+22AWG (7x28) Bare Copper, PVC Insulation E1 Color Code, Individual & Overall Beldfoil® Shield, Black PVC Outer Jacket, PLTC-ER ITC-ER CMG AWM 2464 SUN RES

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	Number of Element	Size	Stranding	Material
Triad(s)	4	20 AWG	7x28	BC - Bare Copper
Comm Wire(s)	1	22 AWG	7x30	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Triad(s)	PVC - Polyvinyl Chloride	0.018 in (0.46 mm)	0.071 in (1.8 mm)	ICEA Chart E1
Comm Wire(s)	PVC - Polyvinyl Chloride	0.019 in (0.48 mm)	0.066 in (1.7 mm)	Orange

Inner Shield

Element	Shield Type	Material	Coverage	Drainwire Type	Notes
Triad(s)	Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC	each triad
Comm Wire(s)	No Shield				

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	20 AWG (7x28) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.053 in (1.3 mm)	0.482 in (12.2 mm)	Yes

Overall Cable Diameter (Nominal):	0.482 in (12.2 mm)
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Max. Current
Triad(s)	9.5 Ohm/1000ft	11.53 Ohm/1000ft (37.83 Ohm/km)	30 pF/ft (98 pF/m)	55 pF/ft (180 pF/m)	5.6 Amps per conductor @ 30°C
Comm Wire(s)	17.2 Ohm/1000ft (56.4 Ohm/km)				9.6 Amps per conductor @ 30°C

Voltage

UL Voltage Rating
300 V (PLTC-ER, CMG, AWM 2464), 150 V (ITC-ER)

Mechanical Characteristics

Temperature

UL Temperature	Operating
105°C	-30°C to +105°C

Bend Radius

Stationary Min.	Installation Min.
5.7 in (140 mm)	5.7 in (140 mm)

Max. Pull Tension:	182 lbs (82.6 kg)
Bulk Cable Weight:	126 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, FT4, T-29-520, IEEE 1202 FT4
NEC / UL Compliance:	Article 725, Article 727, Article 800, CMG, PLTC-ER, ITC-ER
AWM Compliance:	AWM 2464
CEC / C(UL) Compliance:	CMG
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: 0.514 Revision Date: 11-09-2022
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
1083A 01010000	Black	Reel	10,000 ft	612825106111

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