



REPRESENTATIVE IMAGE

**Product:** [1033A](#)

Inst, 1 Pr #20 Str BC, PVC Ins E1, OS, Blk PVC Jkt, 300V PLTC-ER ITC-ER CMG

[Request Sample](#)

## Product Description

UL Instrumentation, 1 Pair 20AWG (7x28) Bare Copper, PVC Insulation E1 Color Code, 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, ...), 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	Size	Stranding	Material
Pair(s)	1	20 AWG	7x28	BC - Bare Copper

#### Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PVC - Polyvinyl Chloride	0.018 in (0.46 mm)	0.071 in (1.8 mm)	ICEA Chart E1

#### Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC

#### Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.037 in (0.94 mm)	0.220 in (5.59 mm)	Yes

Overall Cable Diameter (Nominal):	0.220 in (5.59 mm)
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### Electrical Characteristics

#### Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Nom. Inductance Cond-Grnd	Max. Current
Pair(s)	10.9 Ohm/1000ft	30 pF/ft (98 pF/m)	55 pF/ft (180 pF/m)	.20 µH/ft	8 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.

2.6 in (66 mm)	2.6 in (66 mm)
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Max. Pull Tension:	34 lbs (15 kg)
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Bulk Cable Weight:	25 lbs/1000ft
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## Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance
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Flammability / Reaction to Fire:	UL 1685 FT4 Loading, FT4, IEEE 1202 FT4
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NEC / UL Compliance:	Article 725, Article 727, Article 800, CMG, PLTC-ER, ITC-ER
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AWM Compliance:	AWM 2464
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CEC / C(UL) Compliance:	CMG
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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)
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APAC Compliance:	China RoHS II (GB/T 26572-2011)
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## History

Update and Revision:	Revision Number: 0.504 Revision Date: 06-29-2022
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## Part Numbers

### Variants

Item #	Color	Putup Type	Length	UPC
1033A 0101000	Black	Reel	1,000 ft	612825105039
1033A 01010000	Black	Reel	10,000 ft	612825105046

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