



Product: [1059A](#)

Inst, 16 Pr #20+22 Str BC, PVC Ins E1, OS, Blk PVC Jkt, 300V PLTC-ER ITC-ER CMG

[Request Sample](#)

Product Description

UL Instrumentation, 16 Pair 20+22AWG (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 |
|------------------------|---|

Construction Details

Conductor

| Element | Number of Element | Size | Stranding | Material |
|------------------------|-------------------|--------|-----------|------------------|
| Pair(s) | 16 | 20 AWG | 7x28 | BC - Bare Copper |
| 'Stranding@Conductor1' | 1 | 22 AWG | 7x30 | BC - Bare Copper |

Insulation

| Element | Material | Nom. Thickness | Color Code |
|------------------------|--------------------------|--------------------|---------------------------|
| Pair(s) | PVC - Polyvinyl Chloride | 0.018 in (0.46 mm) | Black, White and Numbered |
| 'Stranding@Conductor1' | PVC - Polyvinyl Chloride | 0.019 in (0.48 mm) | Orange |

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 | 0.063 in (1.6 mm) | 0.684 in (17.4 mm) | Yes |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.684 in (17.4 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Shield | Max. Current |
|------------------------|-------------------------------|-------------------------------|---------------------------------|-----------------------------|
| Pair(s) | 9.5 Ohm/1000ft (31 Ohm/km) | 30 pF/ft (98 pF/m) | 55 pF/ft (180 pF/m) | 3 Amps per conductor @ 25°C |
| 'Stranding@Conductor1' | 14.7 Ohm/1000ft (48.2 Ohm/km) | | | |

Voltage

| UL Voltage Rating |
|---|
| 300 V (CMG, PLTC-ER, UL 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. |
|-----------------|-------------------|
| 6.8 in (170 mm) | 6.8 in (170 mm) |

| | |
|--------------------|------------------|
| Max. Pull Tension: | 232 lbs (105 kg) |
| Bulk Cable Weight: | 471 lbs/1000ft |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance |
| Flammability / Reaction to Fire: | UL1685 (FT4 Loading), FT4, T-29-520, 1202 |
| 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

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| Update and Revision: | Revision Number: 0.384 Revision Date: 04-08-2022 |
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