



**Product:** <u>1058A</u> ☑

Inst, 12 Pr #20+22 Str BC, PVC Ins E1, OS, Blk PVC Jkt, 300V PLTC ITC CMG

# **Product Description**

UL Instrumentation, 12 Pair 20+22AWG (7x28) Bare Copper, PVC Insulation E1 Color Code, Overall Beldfoil® Shield, Black PVC Outer Jacket, PLTC ITC 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)      | 12                | 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    |
|--------------|--------------------------|--------------------|--------------------------|---------------|
| Pair(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        |

## Outer Shield

| Shield Type | Shield Type Material    |      | 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) | 0.599 in (15.2 mm) | Yes     |
| Overall Cable Diameter (Nominal): | 0.599 in (15.2 n  | nm)                |         |

# **Electrical Characteristics**

## Electricals

| Element      | Nom. Conductor DCR            | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Shield | Max. Current                  |
|--------------|-------------------------------|-------------------------------|---------------------------------|-------------------------------|
| Pair(s)      | 10.9 Ohm/1000ft               | 30 pF/ft (98 pF/m)            | 55 pF/ft (180 pF/m)             | 4.8 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, CMG, AWM 2464), 150 V (ITC)

## **Mechanical Characteristics**

## Temperature

| <b>UL Temperature</b> | Operating       |
|-----------------------|-----------------|
| 105°C                 | -30°C to +105°C |

#### Bend Radius

| 7.1 in (180 mm) 7.1 in (1 | 180 mm)          |
|---------------------------|------------------|
| Max. Pull Tension:        | 324 lbs (147 kg) |
| Bulk Cable Weight:        | 183 lbs/1000ft   |

## **Standards and Compliance**

Stationary Min. Installation Min.

| 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, ITC, PLTC   |
| AWM Compliance:                   | AWM 2464  |
| CEC / C(UL) Compliance:           | CMG   |
| European Directive<br>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: 0.549 Revision Date: 04-14-2023 |
|----------------------|--|

## **Part Numbers**

#### Variants

| Item #        | Color | Putup Type | Length   | UPC          |
|---------------|-------|------------|----------|--------------|
| 1058A 0107500 | Black | Reel       | 7,500 ft | 612825105589 |

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