



**Product:** <u>183079A</u> ☑

Profibus, 1 Pr #22 Sol BC, PE Ins, OS+TC Brd, PVC jkt, CCA, PVC Jkt, PLTC CMG Profibus DP

# Request Sample

# **Product Description**

Profibus, 1 Pair 22AWG (Solid) Bare Copper, PE Insulation, Overall Beldfoil®+Tinned Copper Braid(65%) Shield, PVC Inner Jacket, Continuously Corrugated Aluminum Armor, PVC Outer Jacket, PLTC CMG SUN RES Profibus DP

## **Technical Specifications**

## **Product Overview**

Suitable Applications: exposure to rodent, crush, or cut through force, harsh environment, outdoors, data transmission applications such as Profibus DP or PA, Instrumentation and computer cable, etc. exposure to temperature extremes, humidity/moisture, dust, and oil.

## **Construction Details**

#### Conductor

| Element | No. of Elements | Size   | Stranding | Material         |
|---------|-----------------|--------|-----------|------------------|
| Pair(s) | 1               | 22 AWG | Solid     | BC - Bare Copper |

## Insulation

| Element | Material                 | Nom. Thickness     | Nom. Insulation Diameter | Color Code  | Notes                         |
|---------|--------------------------|--------------------|--------------------------|-------------|-------------------------------|
| Pair(s) | PE - Polyethylene (Foam) | 0.035 in (0.89 mm) | 0.099 in (2.5 mm)        | Red & Green | Flame Retardant, Foam w/ skin |

# Outer Shield

| Shield Type | Material                | Coverage |
|-------------|-------------------------|----------|
| Таре        | Bi-Laminate (Alum+Poly) | 100%     |
| Braid       | Tinned Copper (TC)      | 65%      |

### Inner Jacket

| Material                 | Nom. Thickness    | Nom. Diameter      |
|--------------------------|-------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.043 in (1.1 mm) | 0.315 in (8.00 mm) |

### Armor

| Armor Type & Material                         |
|---|
| CCAA - Continuously Corrugated Aluminum Armor |

### Outer Jacket

| Material                          | Nom. Thickness    | Nom. Diameter      |
|-----------------------------------|-------------------|--------------------|
| PVC - Polyvinyl Chloride          | 0.055 in (1.4 mm) | 0.665 in (16.9 mm) |
| Overall Cable Diameter (Nominal): | 0.665 in (16.9    | mm)                |

## **Electrical Characteristics**

## Electricals

| Element  | Nom. Conducto                                   | or DCR  | Nom. Characteristic Impedence | Nom. Velocity of Prop. | Max. Current           |
|----------|---|---------|-------------------------------|------------------------|------------------------|
| Pair(s)  | 16 Ohm/1000ft (52                               | Ohm/km) | 150 Ohm                       | 78%                    | 2.3 Amps per Conductor |
| Nom. Out | a. Outer Shield DCR: 3.9 Ohm/1000ft (13 Ohm/km) |         |                               |                        |                        |

# High Frequency (Nominal/Typical)

Element Frequency [MHz] Nom. Insertion Loss (Attenuation)

| Pair(s) | 0.2 | 0.27 dB/100ft |
|---------|-----|---------------|
|         | 4   | 0.67 dB/100ft |
|         | 16  | 1.37 dB/100ft |

## High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) |
|-----------------|-----------------------------------|
| 0.2             | 1.1 dB/100m                       |
| 4               | 2.65 dB/100m                      |
| 16              | 5.4 dB/100m                       |

### Voltage

UL Voltage Rating
300 V (CMG, PLTC)

# **Mechanical Characteristics**

## Temperature

| UL Temperature | Operating      |
|----------------|----------------|
| 60°C           | -30°C to +60°C |

## Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 2.5 in (64 mm)  | 2.5 in            |

| Max. Pull Tension: | 50 lbs (23 kg)             |
|--------------------|----------------------------|
| Bulk Cable Weight: | 170 lbs/1000ft (250 kg/km) |

## **Standards and Compliance**

| Environmental Suitability:        | Indoor, Outdoor, Sunlight Resistance  |
|-----------------------------------|---|
| Flammability / Reaction to Fire:  | UL1685 FT4 Loading, 1202, IEC 60332-1-2   |
| CPR Compliance:                   | CPR Euroclass: Eca  |
| NEC / UL Compliance:              | Article 725, Article 800, CMG, PLTC   |
| 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) |
| UK Regulation Compliance:         | UKCA Mark   |
| APAC Compliance:                  | China RoHS II (GB/T 26572-2011)   |

## **History**

| Update and Revision: | Revision Number: 0.257 Revision Date: 05-31-2024 |
|----------------------|--|

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