



**Product:** <u>9880</u> ☑

Thicknet 10BASE5, #12 BC, FPO, Duobond IV, PVC Jkt, CM

# **Product Description**

IEEE 802.3 Ethernet Thicknet 10BASE5, DEC p/n 17-00451-00, 12 AWG solid .086" bare copper conductor, foam polyethylene insulation, Duobond IV® quad shield (100% coverage), PVC jacket.

# **Technical Specifications**

### **Product Overview**

| Suitable Applications: Thick Ethernet |
|---------------------------------------|
|---------------------------------------|

### **Construction Details**

#### Conductor

| Element  | No. of Elements | Size   | Stranding | Nom. Diameter | Material         |
|----------|-----------------|--------|-----------|---------------|------------------|
| Coax(es) | 1               | 12 AWG | Solid     | 0.086 in      | BC - Bare Copper |

#### Insulation

| Element  | Material                 | Nom. Insulation Diameter | Color Code |
|----------|--------------------------|--------------------------|------------|
| Coax(es) | PE - Polyethylene (Foam) | 0.243 in (6.17 mm)       | White      |

## Inner Shield

| Element  | Shield Type | Material                      | Coverage |
|----------|-------------|-------------------------------|----------|
| Coax(es) | Таре        | Tri-Laminate (Alum+Poly+Alum) | 100%     |
| Coax(es) | Braid       | Tinned Copper (TC)            | 95%      |

## Outer Shield

| Layer | Outer Shield Type | Material                      | Material Trade Name | Coverage |
|-------|-------------------|-------------------------------|---------------------|----------|
| 1     | Tape              | Tri-Laminate (Alum+Poly+Alum) | Duofoil®            | 100%     |
| 2     | Braid             | Tinned Copper (TC)            |                     | 94%      |
| 3     | Таре              | Tri-Laminate (Alum+Poly+Alum) | Duofoil®            | 100%     |
| 4     | Braid             | Tinned Copper (TC)            |                     | 90%      |

#### Outer Jacket

| Material                 | Nom. Diameter      |
|--------------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.405 in (10.3 mm) |

# **Electrical Characteristics**

# Attenuation

| Frequency | Max. Attenuation |
|-----------|------------------|
| 1 MHz     | 0.19 dB/100ft    |
| 5 MHz     | 0.37 dB/100ft    |
| 10 MHz    | 0.52 dB/100ft    |
| 50 MHz    | 1.2 dB/100ft     |
| 100 MHz   | 1.7 dB/100ft     |
| 200 MHz   | 2.55 dB/100ft    |
| 400 MHz   | 3.9 dB/100ft     |
| 7000 MHz  | 5.5 dB/100ft     |

| 900 MHz  | 6.5 dB/100ft  |
|----------|---------------|
| 1000 MHz | 6.9 dB/100ft  |
| 1500 MHz | 8.5 dB/100ft  |
| 2000 MHz | 10.1 dB/100ft |
| 2500 MHz | 11.5 dB/100ft |
| 3000 MHz | 13 dB/100ft   |

#### Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR         | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------|-------------------------------|---------------------------------|-------------------------------|------------------------|
| 1.42 Ohm/1000ft    | 1.52 Ohm/1000ft (4.99 Ohm/km) | 26 pF/ft (85 pF/m)              | 50 Ohm                        | 78%                    |

### Voltage

# **UL Voltage Rating** 300 V RMS, 30 V RMS

Electrical Characteristics Notes:

UL AWM 1478: 30 V RMS

# **Mechanical Characteristics**

### Temperature

| <b>UL Temperature</b> | Operating      |
|-----------------------|----------------|
| 60°C                  | -40°C To +60°C |

#### **Bend Radius**

| Stationary Min. Installation Min.   |  |
|-------------------------------------|--|
| 4.05 in (103 mm) 4.05 in (103 mm)   |  |
| Max. Pull Tension: 255 lbs (116 kg) |  |
| Bulk Cable Weight: 122 lbs/1000ft   |  |

### **Standards and Compliance**

| Environmental Suitability:           | Indoor, Indoor  |
|--------------------------------------|---|
| Flammability /<br>Reaction to Fire:  | UL1685 UL Loading, IEC 60332-1-2  |
| CPR Compliance:                      | CPR Euroclass: Eca; CPR UKCA Class: Eca   |
| NEC / UL<br>Compliance:              | Article 725, Article 800, CL2, CM   |
| AWM Compliance:                      | AWM 1478  |
| CEC / C(UL)<br>Compliance:           | СМ  |
| IEEE Compliance:                     | IEEE 802.3 10Base5  |
| European<br>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)   |
| Other Standard Compliance(s):        | DEC Part No. 17-00451-00  |
| Plenum Number:                       | 89880   |

## **Product Notes**

Ringband stripes every 2.5 meters to aid users in tap placement.//(1)# Elements@Conductor1:-In Stibo it was Blank and now changed to 1. (2)Size@Conductor1:-In Stibo it was 12 now changed to 12AWG (3)Color@Color Chart1 01:- In stibo it was Blank now Changed to White (4)Material@OuterShield1 1 - In stibo it is Tri-Laminate (Alum+Poly+Alum) But in BPCS (EAA+ Alum+ Poly+Alum) (5)Material@OuterShield1 3 - In stibo it is Tri-Laminate (Alum+Poly+Alum) But in BPCS (Diamond Pattern EAA+ Alum+ Poly+Alum + Mineral oil) (6)Cable Diameter (Nominal)- In Stibo it was Blank Now Changed to 0.405 in. Notes:

# **History**

| Update and Revision: | Revision Number: 0.478 Revision Date: 09-07-2025 |
|----------------------|--|
|----------------------|--|

## **Part Numbers**

#### Variants

| Item #      | Color  | Putup Type | Length | UPC          | Footnote |
|-------------|--------|------------|--------|--------------|----------|
| 9880 004500 | Yellow | Reel       | 500 ft | 612825259961 | С        |

| 9880 0041000 | Yellow | Reel | 1,000 ft | 612825259947 | С |
|--------------|--------|------|----------|--------------|---|
| 9880 0041640 | Yellow | Reel | 1,640 ft | 612825259954 | С |

Footnote: C - CRATE REEL PUT-UP.

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