



Part Number: 3072F

DataTray®, (1 pr) 18 AWG (7x26) TC, FRPO/PVC, Foil+TC Braid Shld, CMG, MSHA, TC/PLTC/ITC, 78Ω

Product Description

One 18 AWG pair stranded (7x26) tinned copper conductors, flame-retardant polyolefin insulation, overall Beldfoil® (100% coverage) plus a tinned copper braid shield (55% coverage), UV-resistant PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Pairs |
|-----|-----------|--------------------|------------------|--------------|
| 18 | 7x26 | TC - Tinned Copper | 0.046 in | 1 |

| | |
|------------------------|--------|
| Conductor Count: | 2 |
| Total Number of Pairs: | 1 |
| Conductor Size: | 18 AWG |

Insulation

| Material | Nominal Diameter | Nominal Wall Thickness |
|-----------------------------------|------------------|------------------------|
| FRPO - Flame Retardant Polyolefin | 0.096 in | 0.025 in |

Color Chart

| Number | Color |
|--------|---------|
| 1 | Natural |
| 2 | Blue |

Outer Shield Material

| Type | Layer | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|-------|-------|--------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | 1 | Aluminum/Polyester | Beldfoil® | 100 % | TC - Tinned Copper | 20 | 7x28 mm |
| Braid | 2 | TC - Tinned Copper | | 55 % | | | |

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.324 in | 0.053 in |

Construction and Dimensions

Stranding

| Lay Length | Diameter |
|------------|----------|
| 1.75 in | 0.192 mm |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 6.9 Ohm/1000ft | 3.2 Ohm/1000ft |

Capacitance

| Nom. Mutual Capacitance |
|-------------------------|
| 19.5 pF/ft |

| | |
|------------|-----------------|
| Shielding: | Foil + Braid(s) |
|------------|-----------------|

Inductance

Nominal Inductance

0.12 μ H/ft

Impedance

Nominal Characteristic Impedance

78 Ohm

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 0.52 dB/100ft |
| 10 MHz | 1.98 dB/100ft |
| 50 MHz | 3.78 dB/100ft |
| 100 MHz | 5.35 dB/100ft |
| 200 MHz | 7.57 dB/100ft |
| 400 MHz | 10.7 dB/100ft |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.58 ns/ft | 64.5 % |

High Freq

| Frequency [MHz] |
|-----------------|
| 1 MHz |
| 10 MHz |
| 50 MHz |
| 100 MHz |
| 200 MHz |
| 400 MHz |

Voltage

| UL Voltage Rating |
|---------------------------------|
| 600 V RMS (NEC Type TC) |
| 300 V RMS (NEC Type PLTC & CMG) |
| 300 V RMS (NEC Type CMG) |

Electrical Characteristics Notes: Nutual Capacitance: 19.5 pF/ft

Temperature Range

| | |
|-----------------------|----------------|
| UL Temp Rating: | 75°C Dry |
| Operating Temp Range: | -40°C To +75°C |

Mechanical Characteristics

| | |
|----------------------------------|---------------|
| Bulk Cable Weight: | 48 lbs/1000ft |
| Max Recommended Pulling Tension: | 85 lbs |
| Min Bend Radius/Minor Axis: | 3.25 in |

Standards

| | |
|--------------------------|--------------------|
| NEC/(UL) Specification: | CMG, ITC, PLTC, TC |
| CEC/C(UL) Specification: | CMG |
| PMSHA Specification: | SC-182/7 |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-10-13 |

| | |
|-----------------------------------|-----|
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------------------|-----|
| Suitability - Sunlight Resistance: | Yes |
|------------------------------------|-----|

Flammability, LSOH, Toxicity Testing

| | |
|---------------------|-------------------------|
| C(UL) Flammability: | FT4 |
| UL Flammability: | UL1685 UL Loading |
| IEEE Flammability: | 1202 |
| UL voltage rating: | 600 V RMS (NEC Type TC) |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item # | Color | Footnote |
|----------------|-------------|----------|
| 3072F C551000 | Blue, Cairo | C |
| 3072F C5510000 | Blue, Cairo | C N |
| 3072F C55500 | Blue, Cairo | C N |
| 3072F C555000 | Blue, Cairo | C |

| | |
|-----------|---|
| Footnote: | C - CRATE REEL PUT-UP. |
| Footnote: | N - FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN. |

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