



Part Number: 2105A

FOUNDATION Fieldbus, (16 pr) 18 AWG (7x26) TC, XLP/FR-PVC, Foil Shld, 300V, CMG, PLTC-ER

Product Description

Sixteen 18 AWG pairs stranded (7x26) tinned copper conductors, cross-linked polyolefin insulation, overall Beldfoil® shield (100% coverage), flame retardant PVC jacket.

Product Specifications

Technical Specifications

Construction and Dimensions

Conductor:

| AWG | Stranding | Material | No. of Pairs |
|------------------------------------|-----------|--------------------|--------------|
| 18 | 7x26 | TC - Tinned Copper | 16 |
| Total Number of Conductors: | | | 32 |

Insulation:

| Material |
|-------------------------------|
| XLP - Cross-linked Polyolefin |

Color Chart 1:

| Number | Color |
|--------|---------------------------|
| 1 | Blue & Orange Numbered 1 |
| 2 | Blue & Orange Numbered 2 |
| 3 | Blue & Orange Numbered 3 |
| 4 | Blue & Orange Numbered 4 |
| 5 | Blue & Orange Numbered 5 |
| 6 | Blue & Orange Numbered 6 |
| 7 | Blue & Orange Numbered 7 |
| 8 | Blue & Orange Numbered 8 |
| 9 | Blue & Orange Numbered 9 |
| 10 | Blue & Orange Numbered 10 |
| 11 | Blue & Orange Numbered 11 |
| 12 | Blue & Orange Numbered 12 |
| 13 | Blue & Orange Numbered 13 |
| 14 | Blue & Orange Numbered 14 |
| 15 | Blue & Orange Numbered 15 |
| 16 | Blue & Orange Numbered 16 |

Stranding:

| Lay Length |
|------------|
| 0.091 mm |

Innershield:

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

Outershield 1:

| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|------|------------------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | Aluminum Foil-Polyester Tape | Beldfoil® | 100 % | TC - Tinned Copper | 18 | 7x26 mm |

Outerjacket 1:

| Material | Nominal Diameter | Ripcord |
|---|------------------|---------|
| FR PVC - Flame Retardant Polyvinyl Chloride | 1.126 in | Yes |

Electrical Characteristics

Conductor DCR:

| Nominal Conductor DCR |
|-----------------------|
| 5.86 Ohm/1000ft |

Capacitance:

| Max. Capacitance Unbalance | Nom. Capacitance Conductor to Shield |
|------------------------------------|---|
| 1.2 pF/ft | 22 pF/ft |
| Other Electrical Characteristic 1: | Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft |
| Other Electrical Characteristic 2: | 31.25 KBits/sec |

High Frequency (Nominal/Typical):

| Nom. Insertion Loss |
|---------------------|
| 0.08 db/100ft |

Delay:

| Nominal Velocity of Propagation (VP) [%] |
|--|
| 64 % |

High Freq:

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Max./Min. Input Impedance (unFitted) |
|-----------------|-----------------------------------|--------------------------------------|
| | 0.091 db/100ft | 100 Ohm |
| 0.03125 MHz | | |
| 0.039 MHz | | |
| 0.039 MHz | | |

Current:

| Element | Max. Recommended Current [A] |
|---------------|------------------------------|
| Per Conductor | 5.4 Amps |

Inductance:

| Nominal Inductance |
|--------------------|
| 0.22 μ H/ft |

Voltage:

| Description | UL Voltage Rating | Voltage Rating [V] |
|-----------------|-------------------|--------------------|
| CSA CIC type TC | 300 V RMS | 300 V RMS |

Use

| | |
|------------------------------------|---------|
| Suitability - Oil Resistance: | Yes |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | Yes |
| Suitability - Sunlight Resistance: | Yes |
| Max Recommended Pulling Tension: | 940 lbs |

Safety

| | |
|-----------------------|-------------------------|
| CSA Flammability: | FT4 |
| ISO/IEC Flammability: | 60332-3-24 (Category C) |
| UL Flammability: | UL1685 FT4 Loading |

Temperature Range

| | |
|---------------------------|--|
| Installation Temp Rating: | -25°C |
| Operating Temp Range: | -25°C Cold Impact -40°C To +90°C -55°C Cold Bend |
| UL Temp Rating: | 90°C Wet/Dry |

Mechanical Characteristics

| | |
|-----------------------------|---------|
| Min Bend Radius/Minor Axis: | 11.5 in |
|-----------------------------|---------|

Part Number

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

Standards

| | |
|-----------------------------------|----------------------------------|
| CA Prop 65 (CJ for Wire & Cable): | CA Prop 65 (CJ for Wire & Cable) |
| CSA AWM Specification: | CSA Specification |
| MII Order #39 (China RoHS): | MII Order #39 (China RoHS) |
| NEC/(UL) Specification: | NEC/(UL) Specification |
| Other Specification: | Other Specification |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | EU CE Mark |

History

Product Variants

| Part Number | Color | Put-Up Type | Length |
|---------------|-------------|-------------|---------|
| 2105A 0031000 | ORANGE | Reel | 1000 ft |
| 2105A 0035000 | ORANGE | Reel | 5000 ft |
| 2105A 0061000 | BLUE, LIGHT | Reel | 1000 ft |
| 2105A 0065000 | BLUE, LIGHT | Reel | 5000 ft |

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