



Part Number: 2112A

FOUNDATION Fieldbus, (8 pr) 16 AWG (7x24) TC, XLP/FR-PVC, Foil Shld, 300V, CMG, PLTC-ER

Product Description

Eight 16 AWG pair stranded (7x24) tinned copper conductors, cross-linked polyolefin, overall Beldfoil® shield (100% coverage), flame retardant PVC jacket.

Product Specifications

Technical Specifications

Construction and Dimensions

Conductor:

| AWG | Stranding | Material | No. of Pairs |
|------------------------------------|-----------|--------------------|--------------|
| 16 | 7X24 | TC - Tinned Copper | 8 |
| Total Number of Conductors: | | | 16 |

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 |

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 % | 18 | 7x26 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 | 16 | 7x24 mm |

Outerjacket 1:

| Material | Nominal Diameter | Ripcord |
|---|------------------|---------|
| FR PVC - Flame Retardant Polyvinyl Chloride | 0.982 in | Yes |

Electrical Characteristics

Conductor DCR:

| Nominal Conductor DCR |
|-----------------------|
| 4.2 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

0.065 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 | 10.1 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: | 786 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: | 10 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 |
|---------------|-------------|-------------|---------|
| 2112A 0031000 | ORANGE | Reel | 1000 ft |
| 2112A 0035000 | ORANGE | Reel | 5000 ft |
| 2112A 0061000 | BLUE, LIGHT | Reel | 1000 ft |
| 2112A 0065000 | BLUE, LIGHT | Reel | 5000 ft |

© 2016 Belden, Inc.

All Rights Reserved

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

