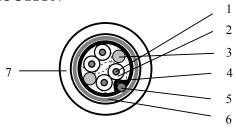
Belden <mark>CDT</mark>
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## **APPLICATION**

Instrumentation and computer cable for EIA RS-485 data transmission applications.

### **CONSTRUCTION**



1. Conductor AWG24 (7xAWG32) tinned Cu

2. Insulation

Material Polyethylene Diameter over insulation 1.73  $\pm$  0.05 mm

Colour of insulation Pair #1: White/blue and blue/white

Pair #2: White/orange and

orange/white

3. Filler (2x)

Material Polypropylene
Diameter 2.87 mm
Colour White

4. Foil (Z-fold®)

Material Aluminium / Polyester
Thickness 9 / 23 μm

5. **Drainwire** AWG20 (7xAWG28) tinned Cu

6. Braiding

Material 0.122 mm tinned Cu Coverage 90%

7. Sheath

Material FRNC (UV stabilised)
Colour Chrome (like RAL 7037)

Thickness of sheath  $0.89 \pm 0.05 \text{ mm}$ Diameter over sheath  $8.65 \pm 0.10 \text{ mm}$ 

## REQUIREMENTS AND TEST METHODS

### **Electrical:**

Nominal resistance conductor	$78.7~\Omega/km$
Nominal resistance shield	$7.2 \Omega/\text{km}$
Nominal capacitance conductor to conductor	42.0 pF/m
Nominal capacitance conductor to shield + other cond.	75.5 pF/m
Nominal impedance @ 1 MHz	$120 \Omega$
Nominal velocity of propagation	66 %
Nominal delay	5.2 ns/m
Nominal attenuation @ 1 MHz	1.97 dB/100m

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Testvoltage conductor-conductor	2500 VDC, 3 seconds
Testvoltage conductor-screen	2500 VDC, 3 seconds
Voltage rating	300 V RMS (CM application)
	30 V RMS (AWM application

Maximum continues current per conductor @ 25 °C 2.1 A

# Mechanical and physical:

Flame resistance IEC 332-3C Oil resistance ASTMD741 Radiation resistance IEC544 (CERN) Application specification BS 7655 section 6.1 table 1, LTS 3 Temperature range installing -15 to +80 °C Temperature range operating (moving installation) -15 to +80 °C Temperature range operating (fixed installation) -45 to +80 °C Temperature range storage -45 to +80 °C Minimum bending radius 10 x cable diameter Maximum pulling tension 395 N

## **MARKING**

Colour code 2114: chrome sheath with text 'BELDEN V 9842NH 2PR 24AWG SHIELDED LSNH IEC 332-3C'

#### **PACKAGING**

On non-returnable reels with a nominal length of 305m (-0, +10%) or on non-returnable reels with a nominal length of 500m (-0, +10%) or on non-returnable reels with a nominal length of 1000m (-0, +10%).

Each reel is labelled with the following data:

Belden Logo. Belden code number. Item description. Length on the reel. Date of manufacture. CE-marking.



Belden CDT believes this product to be in compliance with the environmental regulations EU RoHS (Directive 2002/95/EC, 27 January 2003); this is valid for all material produced after the RoHS compliant date for this product.