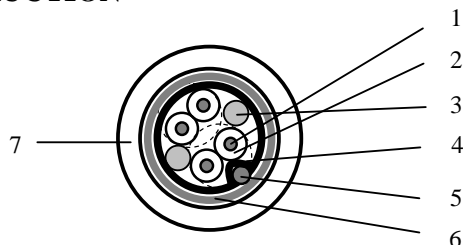
	<b>TECHNICAL DATA SHEET</b>	code	<b>9842NH</b>
		version	<b>5</b>
		date	<b>2005-12-20</b>
	<b>9842NH</b>	page	<b>1/2</b>

## APPLICATION

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

## CONSTRUCTION




<b>1. Conductor</b>	AWG24 (7xAWG32) tinned Cu
<b>2. Insulation</b>	
Material	Polyethylene
Diameter over insulation	1.73 ± 0.05 mm
Colour of insulation	Pair #1: White/blue and blue/white Pair #2: White/orange and orange/white
<b>3. Filler (2x)</b>	
Material	Polypropylene
Diameter	2.87 mm
Colour	White
<b>4. Foil (Z-fold®)</b>	
Material	Aluminium / Polyester
Thickness	9 / 23 µm
<b>5. Drainwire</b>	AWG20 (7xAWG28) tinned Cu
<b>6. Braiding</b>	
Material	0.122 mm tinned Cu
Coverage	90%
<b>7. Sheath</b>	
Material	FRNC (UV stabilised)
Colour	Chrome (like RAL 7037)
Thickness of sheath	0.89 ± 0.05 mm
Diameter over sheath	8.65 ± 0.10 mm

## REQUIREMENTS AND TEST METHODS

### Electrical:

Nominal resistance conductor	78.7 Ω/km
Nominal resistance shield	7.2 Ω/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 Ω
Nominal velocity of propagation	66 %
Nominal delay	5.2 ns/m
Nominal attenuation @ 1 MHz	1.97 dB/100m

	<b>TECHNICAL DATA SHEET</b>	code	<b>9842NH</b>
		version	<b>5</b>
		date	<b>2005-12-20</b>
	<b>9842NH</b>	page	<b>2/2</b>

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 60332-3C	
Oil resistance	ASTMD741	
Radiation resistance	IEC544 (CERN)	
Application specification	BS 7655 section 6.1 table 1, LTS 3	
Halogen content according to IEC754-1	zero	
Corrosivity of fire gasses according to IEC754-2	Conductivity	$\leq 100 \mu\text{S/cm}$
	pH value	$\geq 3.5$
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.

	<b>TECHNICAL DATA SHEET</b>	code	<b>9842NH</b>
		version	<b>5</b>
		date	<b>2005-12-20</b>
	<b>9842NH</b>	page	<b>3/2</b>



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.