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 ± 0.05 mm
	Colour of insulation	Pair #1: White/blue and blue/white Pair #2: White/orange and Orange/white Pair #3: White/Green and Green/white Pair #4: White/Brown and Brown/white
3.	**Foil (Z-fold®)**	
	Material	Aluminium / Polyester
	Thickness	9 / 23 µm
4.	**Drainwire**	AWG24 (7xAWG32) tinned Cu
5.	**Braiding**	
	Material	0.122 mm tinned Cu
	Coverage	90%
6.	**Sheath**	
	Material	FRNC (UV stabilised)
	Colour	Chrome (like RAL 7037)
	Nom. thickness of sheath	0.89 mm
	Diameter over sheath	9.90 ± 0.25 mm

REQUIREMENTS AND TEST METHODS

Electrical:

Nominal resistance conductor	78.7 Ω/km
Nominal resistance shield	6.9 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
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	≤ 100 µS/cm
pH value	≥ 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	500 N

MARKING

‘BELDEN V 9844NH 4PR 24AWG SHIELDED LSNH IEC 332-3C’

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.