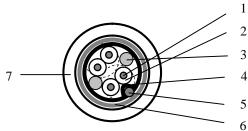


TECHNICAL DATA SHEET	code	9829NH
	version	5
	date	2007-02-15
9829NH	page	1/2

APPLICATION

Instrumentation and computer cable for EIA RS-422 data transmission applications.

CONSTRUCTION



1. Conductor AWG24 (7xAWG32) tinned Cu

2. Insulation

Material Polyethylene Diameter over insulation 1.37 \pm 0.05 mm

Colour of insulation

Pair 1: White/blue, blue/white

Pair 2: White/orange, orange/white

3. Filler (2x)

Material Polypropylene
Diameter 2.20 mm
Colour White

4. Foil (Beldfoil®)

Material Aluminium / Polyester Thickness 9 / 23 μm

5. Drainwire AWG24 (7xAWG32) tinned Cu

6. Braiding

Material 0.122 mm tinned Cu Coverage 65%

7. Sheath

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

Nominal thickness 0.89 mm Nominal diameter 7.10 mm

BE		EN		
SENDING ALL THE RIGHT SIGNALS				

TECHNICAL DATA SHEET	code	9829NH
	version	5
	date	2007-02-15
9829NH	page	2/2

REQUIREMENTS AND TEST METHODS

Electrical:

Nominal resistance conductor $78.7 \Omega/\text{km}$ Nominal resistance shield without drainwire $14.3 \Omega/\text{km}$ Nominal capacitance conductor to conductor 50.9 pF/m Nominal capacitance conductor to shield + other cond. 90.2 pF/m Nominal impedance @ 1 MHz 100Ω Nominal velocity of propagation 66 % Nominal delay 5.2 ns/m

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 ASTMD471 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 ≥ 3.5

Temperature range installing $-15 \text{ to } +80 \,^{\circ}\text{C}$ Temperature range operating (moving installation) -15 to +80 °C

Temperature range operating (fixed installation) -45 to +80 °C Temperature range storage $-45 \text{ to } +80 \,^{\circ}\text{C}$ Minimum bending radius 10 x cable diameter

Maximum pulling tension 258 N

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 declares 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.