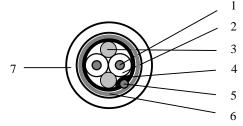
BELDERN SENDING ALL THE RIGHT SIGNALS	TECHNICAL DATA SHEET	code	9841NH
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APPLICATION

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

CONSTRUCTION



- 1. Conductor
- 2. Insulation Material Diameter over insulation Colour of insulation
- **3.** Filler (2x) Material Diameter Colour
- 4. Foil (Beldfoil®) Material Thickness
- 5. Drainwire
- 6. Braiding Material Coverage
- 7. Sheath Material Colour Nominal thickness Nominal diameter

AWG24 (7xAWG32) tinned Cu

Polyethylene $1.73 \pm 0.05 \text{ mm}$ White/blue and blue/white

Polypropylene 1.90 mm White

Aluminium / Polyester 9 / 23 µm

AWG24 (7xAWG32) tinned Cu

0.122 mm tinned Cu 90%

FRNC (UV stabilised) Chrome (like RAL 7037) 0.89 mm 5.90 mm



REQUIREMENTS AND TEST METHODS

Electrical:		
Nominal resistance conductor	78.7 Ω/km	
Nominal resistance shield	11.0 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	$\leq 100 \ \mu\text{S/cm}$	
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	328 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.