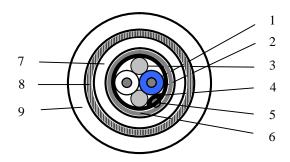


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APPLICATION

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

Thickness of sheath

Diameter over sheath

8. Armouring

Material

Optical coverage

9. Sheath

Material

Colour

Thickness of sheath

Diameter over sheath

AWG24 (7xAWG32) tinned Cu

Polyethylene

 $1.73 \pm 0.05 \text{ mm}$

White/blue and blue/white

Polypropylene

1.90 mm

White

Aluminium / Polyester

 $9/23 \mu m$

AWG20 (7xAWG28) tinned Cu

0.122 mm tinned Cu

90%

FRNC

Chrome (like RAL 7037)

0.89 mm

 $5.90 \pm 0.10 \text{ mm}$

Single steel wire 0.90 mm

>95 %

FRNC

Black

 $1.30\pm0.15~mm$

 $10.30 \pm 0.50 \text{ mm}$



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REQUIREMENTS AND TEST METHODS

Electrical:

Nominal resistance conductor $78.7 \Omega/\text{km}$ $11.0 \Omega/km$ Nominal resistance shield Nominal capacitance conductor to conductor 42.0 pF/m Nominal capacitance conductor to shield + other cond. 75.5 pF/m Nominal impedance @ 1 MHz 120Ω 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 60332-3-24
Oil resistance ASTMD741
Radiation resistance IEC544 (CERN)

Application specification BS 7655 section 6.1 table 1, LTS 3

Halogen content according to IEC60754-1 zero

Corrosivity of fire gasses according to IEC60754-2

Conductivity $\leq 100 \,\mu\text{S/cm}$

pH value ≥ 3.5

Temperature range installing -15 to +80 $^{\circ}$ C Temperature range operating (moving installation) -15 to +80 $^{\circ}$ C Temperature range operating (fixed installation) -45 to +80 $^{\circ}$ C Temperature range storage -45 to +80 $^{\circ}$ C

Minimum bending radius 15 x cable diameter

PACKAGING

On non-returnable reels.

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.