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### **APPLICATION**

Coaxial cables used for Radio-frequency designed according the International Standard IEC 1196.

### CONSTRUCTION

1 2 3 4 5

1 Inner conductor 7x0.75 mm stranded silver plated copper

2 Dielectric Solid PE

3 Braid layer 1 Silver plated copper
 4 Braid layer 2 Silver plated copper

5 Sheath PVC according the European Standard HD 624.

# REQUIREMENTS AND TEST METHODS

Test methods in accordance with International Standard IEC 1196.

## **Mechanical characteristics**

1. Inner conductor

Construction: 7x0.75 mm

Diameter:  $2.25 \text{ mm} \pm 0.03 \text{ mm}$ 

2. Dielectric

Diameter:  $7.25 \text{ mm} \pm 0.2 \text{ mm}$ 

3. Braid layer 1

Diameter screen:  $8.0 \text{ mm} \pm 0.25 \text{ mm}$ 

Coverage braid:  $68\% \pm 4\%$ 

4. Braid layer 2

Diameter screen:  $8.7 \text{ mm} \pm 0.25 \text{ mm}$ 

Coverage braid:  $90\% \pm 4\%$ 

5. Sheath:

Diameter:  $10.8 \text{ mm} \pm 0.2 \text{ mm}$ Tensile strength:  $\geq 12.5 \text{ N/mm}^2$ Elongation at break:  $\geq 150 \%$ 

Cable:

Crush resistance of cable: < 1% (load of 700N)

Storage/operating temperature:  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ 

Minimum installation temperature: -5 °C Minimum static bend radius: 110 mm



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## **Electrical characteristics**

Mean characteristic impedance: $50 \pm 2 \Omega$ DC loop resistance: $\leq 9.1 \Omega/\text{km}$ DC resistance inner conductor: $\leq 6.0 \Omega/\text{km}$ DC resistance outer conductor: $\leq 3.1 \Omega/\text{km}$ 

Capacitance:  $100 \text{ pF/m} \pm 3 \text{ pF/m}$ 

Velocity ratio:  $0.66 \pm 0.02$ Insulation resistance:  $> 10^4$  MΩ.km

Voltage test of dielectric: 3 kVdc Return loss at 100-1000 MHz:  $\geq$  23 dB Power rating at 100 MHz: 760 W 1000 MHz: 175 W

at Nominal

Attenuation at Nominal
50 MHz: 4.3 dB/100m
230 MHz: 9.9 dB/100m
470 MHz: 14.9 dB/100m
860 MHz: 21.3 dB/100m
1000 MHz: 23.3 dB/100m
Maximum attenuation is 10% higher.

# **REVISIONS**

#	Description	Date	Initials
1	Removed SE demand above 1000MHz	2010-02-22	PBo



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.