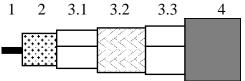


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# APPLICATION

Low loss HDTV/SDI Digital coax used in analog and digital video circuits and high quality applications. The outer conductor is designed for high screening attenuation and low transfer impedance. The cable is UV-resistant and suitable for indoor and outdoor use.

## CONSTRUCTION



- 1 Inner conductor Solid soft annealed copper
- 2 Dielectric Gas injected PE
- 3.1 Foil AL-PET-AL bonded to dielectric
- 3.2 Braid Annealed tinned copper
- 3.3 Foil AL-PET (L-folded) bonded to sheath
- 4 Sheath LSNH/FRNC

## **REQUIREMENTS AND TEST METHODS**

### Test methods in accordance with European standard EN 50117-1.

### **Mechanical characteristics**

1. Inner conductor.	
Diameter:	$1.02 \text{ mm} \pm 0.03 \text{ mm}$
2. Dielectric:	
Diameter:	$4.57 \text{ mm} \pm 0.15 \text{ mm}$
3. Outer conductor:	
Nominal diameter screen:	5.6 mm
Foil overlap (both):	$\geq 2 \text{ mm}$
Coverage braid:	80 % ± 5 %
4. Sheath:	
Diameter:	$6.96 \text{ mm} \pm 0.2 \text{ mm}$
Tensile strength:	$\geq$ 9.0 N/mm <sup>2</sup>
Elongation at break:	$\geq$ 125 %
Corrosivity	To meet EN 50290-2-27
5. Cable:	
Storage/operating temperature:	-30°C to +70°C
Minimum installation temperature:	-5 °C
Resistance to flame propagation:	To meet IEC 60332-3-24
Maximum tensile strength of cable:	300 N
Minimum static bend radius:	70 mm

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<b>Electrical char</b>	racteristics		
Mean characteristic impedance:		$75\pm3~\Omega$	
Nominal DC re	sistance inner conductor:	21 Ω/km	
Nominal DC re	sistance outer conductor:	11 Ω/km	
Capacitance:		53 pF/m $\pm$ 2	pF/m
Velocity ratio:		$0.82 \pm 0.02$	-
Nominal delay:		4.07 ns/m	
Insulation resist	tance:	$> 10^4 \text{ M}\Omega.\text{km}$	1
Voltage test of	dielectric:	2 kVdc	
Return loss at	5-1600 MHz:	$\geq$ 23 dB	
	1600-4500 MHz:	$\geq 21 \text{ dB}$	
Screening atten	uation at		
	30-1000 MHz:	$\geq$ 95 dB	
	1000-2000 MHz:	$\geq$ 85 dB	
	2000-3000 MHz:	$\geq$ 75 dB	
	3000-4500 MHz:	$\geq$ 65 dB	
Transfer imped	ance	$\leq$ 2.5 mΩ/m	
Attenuation at	Nominal	Attenuation at	Nominal
1 MHz:			17.5 dB/100m
	1.5  dB/100 m		17.9 dB/100m
	2.4 dB/100m		21.0 dB/100m

71.5 MHz:

135 MHz:

270 MHz:

360 MHz:

540 MHz:

0.8  dB/100m	/20 MHZ:	1/.5 dB/100m
1.5 dB/100m	750 MHz:	17.9 dB/100m
2.4 dB/100m	1000 MHz:	21.0 dB/100m
5.6 dB/100m	1500 MHz:	26.0 dB/100m
7.4 dB/100m	2250 MHz:	32.0 dB/100m
10.4 dB/100m	3000 MHz:	38.0 dB/100m
12.1 dB/100m	4500 MHz:	48.0 dB/100m
15.0 dB/100m		



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.