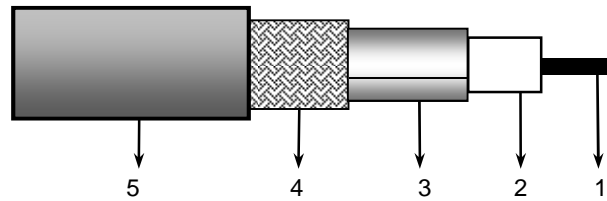


70081NH

**Low Loss Serial Digital Video coax
RG59/U bonded Al-foil Cu FRNC HDTV
Duobond II 80%TC Braid**



Applications

- Low loss HDTV/SDI Digital coax used in analog and digital video circuits and high quality applications.
- The cable is UV-resistant and suitable for indoor and outdoor use.
- Use of 1080p/50 applications

General Standards

- SDTV/HDTV serial digital standard compliant
- European standard EN 50117-1
- European standard EN 50290-2-20

Construction & Dimensions

1. Inner conductor	
Material	Solid bare copper
Dimension	0.81 mm ± 0.03 mm
2. Dielectric	
Material	Gas injected PE
Diameter	3.68 mm ± 0.15 mm
3. Foil	
Material	AL-PET-AL bonded to dielectric
Foil overlap:	≥ 2 mm
4. Braid	
Material	Tinned copper
Coverage	80 % ± 5 %
Nominal diameter screen	4.4 mm
5. Jacket	
Material	LSNH/FRNC
Diameter	5.92 mm ± 0.2 mm

Mechanical characteristics

Parameter	Specification	Unit
Tensile strength of sheath	≥ 9.0	N/mm ²
Elongation at break of sheath	≥ 125	%
Maximum tensile strength of cable	200	N
Minimum static bend radius	60	mm

Electrical characteristics

Parameter	Specification	Unit
Mean characteristic impedance	75 ± 3	Ω
Nominal DC resistance inner conductor	32	Ω/km
Nominal DC resistance outer conductor	12	Ω/km
Capacitance	53 ± 2	pF/m
Velocity of propagation	0.83	
Nominal delay:	4.0	Ns/m
Insulation resistance	≥ 10 ⁴	MΩ.km
Dielectric strength	2	kVdc
Return loss at		
	5 – 1600 MHz	≥ 23
	1600 – 4500 MHz	≥ 21

Attenuation at:	Nominal	Unit
1 MHz:	1.0	dB/100m
3.6 MHz:	2.0	dB/100m
10 MHz:	3.0	dB/100m
71.5 MHz:	6.9	dB/100m
135 MHz:	8.9	dB/100m
270 MHz:	12.5	dB/100m
360 MHz:	14.4	dB/100m
540 MHz:	18.1	dB/100m

Attenuation at:	Nominal	Unit
720 MHz:	21.0	dB/100m
750 MHz:	21.3	dB/100m
1000 MHz:	24.9	dB/100m
1500 MHz:	30.5	dB/100m
2250 MHz:	38.0	dB/100m
3000 MHz:	44.0	dB/100m
4500 MHz:	53.8	dB/100m

Maximum attenuation is 10 % higher.

Environmental and overall characteristics

Parameter	Specification	Unit
Storage/operating temperature	-30 to +70	°C
Minimum installation temperature	-5	°C
Smoke density acc. to IEC 61034-1/2 & EN50268-1/2; transmittance	> 60	%
Amount of halogen acid gas acc. to IEC 60754-1/2 & EN50267-1/2; pH	> 4.3	
Amount of halogen acid gas acc. to IEC 60754-1/2 & EN50267-1/2;	< 10	μS/mm
Resistance to flame propagation according IEC 60332-1	Pass	



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.