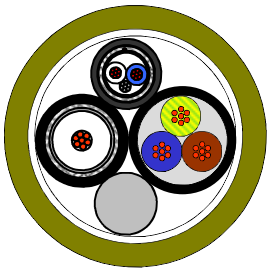
VA113

Studio Connecting Cable



Application

Studio connecting cables are primary used in closed circuit TV systems and for compact installations in studios and broadcasting vans. They are not suitable for continuously moved applications.

Standards

Flame resistance

Audio cable AC10 SS 26/7 1P: VDE 0472 part 804 class B and IEC 332-1

Construction

Element 1: Coaxial cable 0.6L/2.8 AF – 75 Ω (Art.-Nr.: CT2739600)	
Inner conductor	stranded copper wires, bare, 7 x 0.20 mm, diameter 0.6 mm
Insulation	foam-PE, diameter 2.8 mm
Outer conductor	Al-PET-Al-foil and copper braid, tinned, diameter 3.4 mm
Sheath	DMC FLEX PVC, diameter 4.5 mm matt black, RAL 9005
Element 2: Power cable 3 x 1.0 mm²	
Inner conductor	stranded copper wires, bare, 32 x 0.20 mm, diameter 1.3 mm
Insulation	PE, wall thickness 0.40 mm, diameter 2.1 mm
Identification	1 x blue, 1x brown, 1 x yellow-green
Stranding	3 x core, diameter 4,5 mm
Sheath	PVC, wall thickness 0.54 mm, diameter 5.9 mm matt black, RAL 9005
Element 3: Audio cable AC10 SS 26/7 1P (Art.-Nr.: CT2751401)	
Inner conductor	stranded copper wires, bare, 7 x 0.16 mm, diameter 0.48 mm (AWG26/7) (0.14 mm2)
Insulation	Foam-Skin-PE, diameter 1.2 mm
Pair stranding	2 cores twisted to the pair, diameter 2.4 mm
Pair identification	a – core: white, b – core: blue
Pair screen	1 x Al-PET foil, Al inside + stranded copper drain wires, tinned, in interstice diameter 2.5 mm
Insulation	PET-foil
Overall screen	1 x copper braid, tinned + 1 x copper drain wire under copper braid
Sheath	DMC FLEX PVC, diameter 4.2 mm
Cable lay up	
Stranding	(0+2) 1 x Element 1 + 1 x Element 2 + 1 x Element 3 + 1 x filler in the two interstices diameter 10.4 mm
Wrapping	1 x Polyester web, diameter 10.5 mm

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Sheath	DMC FLEX PVC, diameter 13.5 mm olive
Printing	**DRAKA** VAN 113 + batch no. + meter marking

Mechanical properties

Audio cable AC10 SS 26/7 1P

Minimum bending radius	without load	4 x D (D= outer diameter)
	with load	8 x D (D= outer diameter)
Temperature range	during operation	- 30° C to + 70° C

Electrical properties

at 20°C

Coaxial cable 0.6L/2.8 AF – 75 Ω

Characteristic impedance		75 Ω ± 1.5 Ω
Screening factor		> 100 dB
Velocity ratio		78 %
DC resistance	Inner conductor	82 Ω/km
	Outer conductor	17 Ω/km
Mutual capacitance		56 nF/km

Power cable 3 x 1.0 mm²

DC resistance		< 19.5 Ω/km
Insulation resistance	core/environment	> 10^2 MΩ*km
Operating voltage	AC U_{rms}	230 V
	DC	300 V

Audio cable AC10 SS 26/7 1P

Loop resistance		≤ 288 Ω/km
Insulation resistance	500 V	≥ 2000 MΩ*km
Mutual capacitance	800 Hz	nom. 45 nF/km
Capacitance unbalance	pair/ground	≤ 1200 pF/km
Velocity ratio		78 %
Test voltage	(50 Hz. 1 min) core/core and core/screen	700 V_{rms}
Characteristic impedance	6 MHz	110 Ω ± 10 %
Transfer impedance	to 10 MHz	≤ 10 mΩ/m
	to 100 MHz	≤ 10 mΩ/m

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Electrical data at 20°C

Coaxial cable 0.8/3.7 AF – 75 Ω

Attenuation (dB/100m)		Return loss (dB)	
Frequency (MHz)		**Frequency (MHz)**	
1	1.3	50 – 300	> 22
3	2.0	300 – 800	> 18
5	2.6		
10	3.7		
30	6.2		
100	11.0		
200	15.7		
300	19.6		
500	25.7		
800	33.0		

Audio cable AC10 SS 26/7 1P

Frequency (MHz)	Attenuation (dB/100m)	Near end crosstalk (dB/300m)
0.015	0.55	
1.0	3.0	
4.0	5.3	
10.0	8.1	
20.0	11.5	

Technical data

Product code	Type	Weight kg/km	Standard delivery length m	Drum size *OWD	Copper content	Tensile force N	Minimum bending radius N mm	Storage
1002321 CT2963200	VAN 113 DMC FLEX PVC olive	185	1000	1000/500/560	52.5	225	120	inside

*OWD (oneway drum)

[PRODUCT CODE TABLE]