



DATA SHEET	2170002
RG 178 B/U	valid from : 12.06.2008

Application

Coaxial cable for radio- and computer systems as well as the entire field of commercial radio-frequency technology and electronics for low range transmissions, and with the small cable diameter, for application in narrow spaces. Cable design and electrical properties of RG 178 B/U to **MIL-C 17 F**. Designation according to MIL-C 17 F : M 17/93 – RG178.

The cable is intended for limited flexible use and for static laying. PTFE material is used to meet requirements concerning low and high ambient temperatures resp. chemical stress.

Design

Inner conductor	stranded, silvered, copper-clad steel wires, (30AWG), 0.057 mm ² , 7 x 0.102 mm, 0.30 ± 0.025 mmØ
Insulation	PTFE, , 0.84 ± 0.051 mmØ
Outer conductor	silvered copper braid (38AWG), coverage nom. 96 %
Sheath	FEP, transparent brown, outer diameter 1.81 ± 0.13 mm Ø

Marking on the sheath:

No marking required.

Electrical properties at 20°C

DC resistance inner conductor		max.Ω/km	802	
Insulation resistance		min. GΩxkm	10	
Capacitance at	1 kHz	nom. nF/km	93	
Nominal velocity of propagation		%	69	
Impedance		Ω	50 ± 2	
Attenuation at				Acc. to MIL 17/93G
	1 MHz	dB/100m	nom. 8	
	5 MHz	dB/100m	nom. 15	
	10 MHz	dB/100m	nom. 20	
	20 MHz	dB/100m	nom. 26	
	50 MHz	dB/100m	nom. 32	max. 38,05
	100 MHz	dB/100m	nom. 43	max.52,49
	200 MHz	dB/100m	nom. 62	max.75,46
	400 MHz	dB/100m	nom. 92	max.108.26
	800 MHz	dB/100m	nom. 134	max.154.2
	1 GHz	dB/100m	nom. 153	max.170.6
	2 GHz	dB/100m		max.249.34
	3 GHz	dB/100m		max.308.4
HF voltage, peak value (not for power purposes)		max. kV	1.0	
Working voltage (nominal voltage)	50 Hz	U _{eff} kV	1.5	
Test voltage		U _{eff} kV	2	

Mechanical and thermal properties

Weight		approx. kg/km	10
Minimum bending radius	fixed installation	mm	10
	repeated bendings	mm	19
Permissible temperature range	fixed installation	°C	- 90 up to + 200
Fire load		kWh/m	0.01

RoHS directive

This cable confirms to RoHS directive (2002/95/EG)

elaborated by: TE-K: A. Khan / H. Pfeffer	Document: DB2170002EN	page 1 of 1
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