2170006



RG 214 /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. The low attenuation of this 50 Ohms coaxial cable allows high range transmissions. With the outer conductor consisting of two braids the cable is recommended for applications with particularly stringent screening requirements. Cable design and electrical properties of RG 214 /U according to **MIL-C 17 F**. Designation according to MIL-C 17 F : M17/75-RG 214. The cable is intended for limited flexible use and for static laying in dry and damp interiors and outdoor.

## Design

Inner conductor	stranded silvered copper wires, 3.17 mm $^2$ , 7x 0.76, approx. 2.3 mm $arnothing$
Insulation	PE (polyethylene), 7.3 mm $\varnothing$
Outer conductor	silvered copper braid, coverage nom. 95 %
	silvered copper braid, coverage nom. 98 %
Sheath	PVC, black, UV resistant, flame retardant, outer diameter 10,8 $\pm$ 0.18 mm $\varnothing$

## Electrical properties at 20 °C

DC resistance inner conductor			max.Ω/km	5.8
Insulation resistance			min. GΩxkm	5
Capacitance at	1	kHz	nom. nF/km	101
Nominal velocity of propagation			%	66
Impedance			Ω	50 ± 2
Attenuation at	1	MHz	nom. dB/100m	0.6
	5	MHz	nom. dB/100m	1.4
	10	MHz	nom. dB/100m	2,0
	20	MHz	nom. dB/100m	3.2
	50	MHz	nom. dB/100m	4.5
	100	MHz	nom. dB/100m	7.0
	200	MHz	nom. dB/100m	10.2
	400	MHz	nom. dB/100m	15.0
	600	MHz	nom. dB/100m	18.3
	800	MHz	nom. dB/100m	23
	1	GHz	nom. dB/100m	27
	2	GHz	nom. dB/100m	40
HF voltage, peak value (not for power purposes)		max.kV	5.0	
Working voltage (nominal voltage)	50	) Hz	U <sub>eff</sub> kV	5.0
Test voltage			U <sub>eff</sub> kV	10

## Mechanical and thermal properties

Weight		approx. kg/km	207
Minimum bending radius	fixed installation	mm	75
	repeated bendings	mm	165
Permissible temperature range	fixed installation	C	- 40 bis + 80
	moved	C	- 10 bis + 80
Fire load		kWh/m	1.01
Flame propagation	flame retardant to IEC 60 332-1-2		
RoHS directive	This cable confirms to RoHS directive (2002/95/EG)		

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