



MRC 300 AFB, 02Y(St)C2Y, 1.78/4.83AFB

Coaxials basing upon EN 50117-1 and IEC 61196-1



Application

The radio-frequency cables described in this chapter are used in transmitter and receiver installations in radio communications as well as in the entire field of commercial radio-frequency technology and electronics.

Standards

EN 50117-1, IEC 61196-1

Flame resistance

Construction

Inner conductor	copper wire, bare, diameter 1.78 mm ± 0.01 mm
Insulation	Foam-PE, diameter 4.83 mm ± 0.05 mm
Outer conductor	Al-PET - foil bonded to the dielectric + copper braid, tinned, 93% optical coverage
Sheath	PE, diameter 7.6 mm ± 0.2 mm
Colour	black RAL 9005
Printing	DRAKA COMTEQ MRC 300 AFB

Mechanical properties

Minimum bending radius	without load	5 x D (D= outer diameter)
	with load	10 x D (D= outer diameter)
Temperature range	during operation	- 40° C to + 85° C
	during installation	- 15° C to + 55° C
Corrosivity		acc. to IEC 60754-1/2

Electrical properties

at 20°C

DC resistance	Inner conductor	7.0 Ω/km
	Outer conductor	8.6 Ω/km
Mutual capacitance		79 pF/m
Velocity ratio		85 %
Characteristic impedance	at 200 MHz	50 Ω ± 2 Ω
Transfer impedance	at 10 MHz	≤ 5 mΩ/m
Screening factor	at 100-1000 MHz	90 dB
Operating voltage		1.0 kV _{rms}
Test voltage	Inner/Outer conductor	2.0 kV _{rms}
Insulation resistance		≥ 10 GΩ*km



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Electrical data

at 20°C

Frequency (MHz)	Attenuation (dB/100m)	Max. power rating (Watts) (ambient temperature 40°C and max. inner conductor temperature 100°C)	Return loss (dB) several peaks are allowed	
			Frequency	
	nominal	maximum		
30	3.5	2100	50-450	≥ 26
150	7.8	920	450-1000	≥ 23
220	9.5	760	1000-2500	≥ 15
450	13.7	520		
900	19.7	360		
1800	28.4	250		
2500	33.9	210		
5200	51.3	137		
5800	54.2	130		

Technical data

Product code	Designation	Type	Brand name	Outer diameter	Weight	Standard delivery length m	Drum size	Gross weight kg	Copper content	Tensile force
				mm	kg/km		*PWD			N
CK2653000	02Y(St) C2Y	1.78/4.83 AFB PE black	MRC 300 AFB	7.6	65	1000	600/200/ 380	70	37	230

*PWD (plywood drum)