Coaxials basing upon
EN 50117-1 and IEC 61196-1
MRC 300 AFB
02Y(St)C2Y 1.78/4.83AFB

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.

Construction

		MRC 300 AFB
		02Y(St)C2Y
		1.78/4.83AFB
Inner conductor		copper wire, bare
	Ø mm	1.78 ± 0.01
Insulation		Foam-PE
	Ø mm	4.83 ± 0.05
Outer conductor		Al-PET - foil bonded to the dielectric + copper braid, tinned, 93% optical coverage
Sheath		PE
	Ø mm	7.6 ± 0.2
	Colour	black RAL 9005
	Marking	DRAKA COMTEQ MRC 300 AFB

Technical data

Product code	Desig -nation	Type	Brand name	Outer dia -meter mm	Weight approx. kg/km	Standard -delivery -length m	Drum size *PWD	Gross weight kg	Cop -per con -tent	Tensile force 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)

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Electrical properties

		MRC 300 AFB 02Y(St)C2Y 1.78/4.83AFB
DC resistance		
Inner conductor Outer conductor	Ω/km	7.0 8.6
Mutual capacitance	pF/m	79
Velocity ratio	%	85
Characteristic impedance at		
200 MHz	Ω	50 ± 2
Attenuation at / Power Rating (ambient temp. + 40°C and inner conductor temp. max. + 100°C)		
30 MHz 150 MHz 220 MHz 450 MHz 900 MHz 1800 MHz 2500 MHz 5200 MHz 5800 MHz	dB/100m Watts	3.5/2100 7.8/920 9.5/760 13.7/520 19.7/360 28.4/250 33.9/210 51.3/137 54.2/130
Transfer impedance at		
10 MHz	mΩ/m	≤ 5
Return loss at		
50-450 MHz 450-1000 MHz 1000-2500 MHz	dB	≥ 26 ≥ 23 ≥ 15
Screening factor at		
100-1000 MHz	dB	90
Insulation resistance	GΩxkm	≥ 10
Test voltage		
Inner-/outer conductor	kV_{rms}	2.0
Operating voltage	kV_{rms}	1.0

Mechanical properties

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