



MRC 400 AFB, 02Y(St)C2Y, 2.74/7.24AFB

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, 61196-1

Flame resistance

Construction

Inner conductor	copper wire, bare, diameter 2.74 mm \pm 0.01 mm
Insulation	Foam-PE, diameter 7.24 mm \pm 0.05 mm
Outer conductor	Al-PET- foil bonded to the dielectric + copper braid, tinned, 93% optical coverage
Sheath	PE, diameter 10.3 mm \pm 0.2 mm
Colour	black, RAL 9005
Printing	DRAKA MRC 400 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	4.6 Ω /km
	Outer conductor	5.4 Ω /km
Mutual capacitance		79 pF/m
Velocity ratio		85 %
Characteristic impedance	at 200 MHz	50 Ω \pm 2 Ω
Transfer impedance	at 10 MHz	\leq 5 m Ω /m
Screening factor	at 100-1000 MHz	90 dB
Operating voltage		1.2 kV _{rms}
Test voltage	Inner/Outer conductor	3.0 kV _{rms}
Insulation resistance		\geq 10 G Ω *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	2.2	3330	50-450	≥ 26
150	5.0	1470	450-1000	≥ 23
220	6.1	1200	1000-2500	≥ 15
450	8.9	830		
900	12.8	580		
1800	18.6	400		
2500	22.3	330		
5200	33.6	222		
5800	35.5	210		

Technical data

Product code	Designation	Type	Brand name	Outer diameter mm	Weight kg/km	Standard delivery length m	Drum size *PWD	Gross weight kg	Copper content	Tensile force N
1002691 CK2654000	02Y(St) C2Y	2.74/7.24 AFB PE black	MRC 400 AFB	10.3	136.4	1000	760/470/ 500	152	103	515

*PWD (plywood drum)