



## MRC 240 AFB, 02Y(St)C2Y, 1.42/3.81AFB

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 1.42 mm ± 0.01 mm
Insulation	Foam-PE, diameter 3.81 mm ± 0.05 mm
Outer conductor	Al-PET - foil bonded to the dielectric + copper braid, tinned, 93% optical coverage
Sheath	PE, diameter 6.1 mm ± 0.2 mm
Colour	black, RAL 9005
Printing	DRAKA COMTEQ MRC 240 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	10.5 Ω/km
	Outer conductor	12.8 Ω/km
Mutual capacitance		79.5 pF/m
Velocity ratio		84 %
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 <sub>rms</sub>
Test voltage	inside/Outer conductor	2.0 kV <sub>rms</sub>
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	4.4	1140	50-450	≥ 26
150	9.9	660	450-1000	≥ 23
220	12.0	540	1000-2500	≥ 15
450	17.3	380		
900	24.8	260		
1800	35.6	180		
2500	42.4	150		
5200	63.3	105		
5800	66.8	100		

### 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
1002689 CK2652400	02Y(St) C2Y	1.42/3.81 AFB PE black	MRC 240 AFB	6.1	47	1000	500/200/ 360	51	30	155

\*PWD (plywood drum)