

# 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 ± 0.01 mm
Insulation	Foam-PE, diameter 7.24 mm ± 0.05 mm
Outer conductor	Al-PET- foil bonded to the dielectric + copper braid, tinned, 93% optical coverage
Sheath	PE, diameter 10.3 mm ± 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	3.0 Ω/km
	Outer conductor	5.4 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		1.2 kV <sub>rms</sub>
Test voltage	Inner/Outer conductor	3.0 kV <sub>rms</sub>

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Insulation resistance		$\geq 10 \text{ G}\Omega \cdot \text{km}$
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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	
	nominal	maximum	Frequency	
30	2.2	3330	50-450	$\geq 26$
150	5.0	1470	450-1000	$\geq 23$
220	6.1	1200	1000-2500	$\geq 15$
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 CK265400 0	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)

### Product Code Table

Product Description	Product Code	PG Reference Code	PG Part Number
MRC 400 AFB		--	<b>60011266</b>
MRC 400 AFB 500DW	1002691-00500DW	60011266	<b>60013739</b>
MRC 400 AFB 1000DW	1002691-01000DW	--	<b>60013740</b>

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