



Material

Inner conductor	Copper clad aluminum
Insulation	Physically foamed PE
Outer conductor	Helical corrugated copper
Jacket	Black PE
Marking	MCC-120020 RF50 1/4"S xxM Lot nº Fca

Dimensions

Inner conductor (\varnothing mm)	1,90
Insulation (\varnothing mm)	4,70
Outer conductor (\varnothing mm)	6,40
Jacket (\varnothing mm)	7,40
Flexibility	Superflexible
Weight (Kg/Km)	63

Mechanical properties

Minimum bend radius, single bend (mm)	25
Minimum bend radius, multiple bends (mm)	30
Number of bends, minimum	15
Number of bends, typical	30
Tensile strength (Kg)	68
Recommended maximum clamp spacing (m)	1
Flat plate crush strength (Kg/mm)	1,6

Electrical properties

Nominal impedance (Ω)	50 \pm 1
Nominal capacitance (pF/m)	79
Nominal inductance (μ H/m)	0,20
Velocity of propagation (%)	82
DC insulation dielectric strength (kV)	1,6
Jacket spark test voltage (1 min,50Hz,rms) (kV)	8
Insulation resistance ($M\Omega \cdot km$)	> 100.000
DC resistance, inner conductor (Ω/km)	10,16
DC resistance, outer conductor (Ω/km)	7,16
Peak power (KW)	6,4
Cut-off frequency (MHz)	18.000
Screening attenuation (VSWR/dB)	> 120
PIM (dBc)	\geq - 160
Return loss (690-960 MHz) (VSWR/dB)	1,12 / 24,94
Return loss (1.700-2.200 MHz) (VSWR/dB)	1,15 / 23,13
Return loss (2.300-2.700 MHz) (VSWR/dB)	1,15 / 23,13
Return loss (3.400-3.800 MHz) (VSWR/dB)	1,15 / 23,13

Attenuation

Frequency (MHz)	Attenuation		Power (20°C, KW)
	(20°C,dB/100m)	(20°C,dB/100ft)	
100	5,89	1,80	1,23
450	12,80	3,90	0,57
690	16,07	4,90	0,48
800	17,40	5,30	0,42
900	18,53	5,65	0,40
960	19,12	5,83	0,38
1000	19,60	5,97	0,37
1700	26,08	7,95	0,29
1800	26,90	8,20	0,27
2000	28,50	8,69	0,26
2200	29,98	9,14	0,24
2300	30,72	9,36	0,24
2400	31,44	9,58	0,23
2500	32,15	9,80	0,22
2600	32,86	10,02	0,22
2700	33,56	10,23	0,21
3000	35,60	10,85	0,20
3400	38,16	11,63	0,19
3600	39,41	12,01	0,19
3800	40,63	12,38	0,18

Attenuation values may have a tolerance of +5%

Standards

Installation temperature (°C)	- 55 + 85
Operating temperature (°C)	- 40 + 60
Storage temperature (°C)	- 55 + 85
IEC 60754-1 (Amount of halogen acid gas)	Compliant
IEC 60754-2 (Degree of acidity of gases)	Compliant
EN50575 (CPR Cable EuroClass)	Fca
IEC 61196.1-2005 (Design and test methods)	Compliant
2011/65/EU (RoHs) 0	Compliant
UV Resistance	Compliant



Material

Inner conductor	Copper clad aluminum
Insulation	Physically foamed PE
Outer conductor	Helical corrugated copper
Jacket	Black PE
Marking	MCC-120114 RF50Z 1/4"S xxM Lot nº Eca

Dimensions

Inner conductor (Ø mm)	1,90
Insulation (Ø mm)	4,70
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Flexibility	Superflexible
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Nominal inductance (μH/m)	0,20
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Jacket spark test voltage (1 min,50Hz,rms) (kV)	8
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Peak power (KW)	6,4
Cut-off frequency (MHz)	18.000
Screening attenuation (VSWR/dB)	> 120
PIM (dBc)	≥ - 160
Return loss (690-960 MHz) (VSWR/dB)	1,12 / 24,94
Return loss (1.700-2.200 MHz) (VSWR/dB)	1,15 / 23,13
Return loss (2.300-2.700 MHz) (VSWR/dB)	1,15 / 23,13
Return loss (3.400-3.800 MHz) (VSWR/dB)	1,15 / 23,13

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Attenuation values may have a tolerance of +5%

Standards

Installation temperature (°C)	- 30 + 85
Operating temperature (°C)	- 25 + 60
Storage temperature (°C)	- 30 + 85
IEC 60332-1 (Tets flame on single cable)	Compliant
IEC 60332-3.C (Fire test on bundled cables)	Compliant
IEC 61034 (Smoke emission test)	Compliant
IEC 60754-1 (Amount of halogen acid gas)	Compliant
IEC 60754-2 (Degree of acidity of gases)	Compliant
EN50575 (CPR Cable EuroClass)	Eca
IEC 61196.1-2005 (Design and test methods)	Compliant
2011/65/EU (RoHs) 0	Compliant
UV Resistance	Compliant