



According standards: C 90131 - France Télécom: C 12.21 H - Edition 2 - 06/98

Cable type	Standard:	716CRC8
Size: A2+	Aerial:	F 716CRC8
	Units	Nominal

Construction

INNER CONDUCTOR			
Material and construction	-	copper wire	
Diameter	mm	3.9	
DIELECTRIC			
Material	-	gas-injected cellular PE	
Diameter	mm	16.0	
OUTER CONDUCTOR			
Material and construction	-	smooth copper tape	
OUTER SHEATH			
Material	-	black HD-PE	
Thickness	mm	2.0	> 1.6
Overall diameter	mm	20.5	< 20.9

Cable with messenger

MESSENGER			
Material	-	galvanized steel	
Construction	.. X mm	19 x 0.8	
Height of web	mm	3.5	
Wide of web	mm	1.8	
Diameter over messenger	mm	7.8	

Mechanical characteristics

Minimum bending radius	1 x	cm	14
	10 x	cm	25
Maximum pulling strength (without messenger)		daN	230
Weight		kg/km	304

Cable with messenger

Minimum breaking strength of messenger	daN	12250
Weight	kg/km	464

Electrical characteristics

Characteristic impedance	Ω	75	+/- 2
Capacity	pF/m	50	
Relative propagation velocity (velocity ratio)	%	88	
DC-resistance of inner conductor at 20°C	Ω/km	1.45	< 1.5
DC-resistance of outer conductor at 20°C	Ω/km	2.1	< 2.2
Current rating (50 - 60) Hz	A	36	
Dielectric voltage strength	kV	4	
Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$		
	a =	-	0.155
	b =	-	0.00056
	5 MHz	dB/100m	0.4 < 0.4
	10 MHz	dB/100m	0.5 < 0.5
	30 MHz	dB/100m	0.9 < 0.9
	50 MHz	dB/100m	1.1 < 1.2
	100 MHz	dB/100m	1.6 < 1.7
	200 MHz	dB/100m	2.3 < 2.4
	300 MHz	dB/100m	2.9 < 3.0
	400 MHz	dB/100m	3.3 < 3.5
	470 MHz	dB/100m	3.6 < 3.8
	600 MHz	dB/100m	4.1 < 4.3
	800 MHz	dB/100m	4.8 < 5.1
	860 MHz	dB/100m	5.0 < 5.3
	1000 MHz	dB/100m	5.5 < 5.7
Return loss (3 peak values up to 4 dB lower are permissible)			
	30 - 310 MHz	dB (VSWR)	28 > 24
	310 - 460 MHz	dB (VSWR)	26 > 22
	460 - 585 MHz	dB (VSWR)	25 > 21
	585 - 862 MHz	dB (VSWR)	24 > 20

