



Cable type	Standard:	707CRT2(V)
Size: 1.63/7.2	Aerial:	A 707CRT2

	Units	Nominal
Construction		
INNER CONDUCTOR		
Material and construction	-	copper wire
Diameter	<i>mm</i>	1.63
DIELECTRIC		
Material	-	gas-injected cellular PE
Diameter	<i>mm</i>	7.2
OUTER CONDUCTOR		
Material and construction	-	copper tape & braid
Diameter over tape	<i>mm</i>	7.4
OUTER SHEATH		
Material	-	PE (PVC)
Thickness	<i>mm</i>	1.0
Overall diameter	<i>mm</i>	10.0 < 10.2

Cable with messenger		
MESSENGER		
Material	-	AMS
Construction	<i>.. X mm</i>	1 x 3.15
Diameter over messenger	<i>mm</i>	5.5
OVERALL DIMENSIONS	<i>mm</i>	17/10

Mechanical characteristics			
Minimum bending radius			
	1 x	<i>cm</i>	5
	10 x	<i>cm</i>	10
Maximum pulling strength (without messenger)		<i>daN</i>	15
Weight (PE / PVC jacket)		<i>kg/km</i>	87 (100)

Cable with messenger		
Minimum breaking strength of messenger	<i>daN</i>	250
Modulus of elasticity	<i>N/mm²</i>	62000
Thermal coefficient of linear expansion	<i>1/°C</i>	23 x 10⁻⁶
Weight	<i>kg/km</i>	125

Electrical characteristics				
Characteristic impedance		Ω	75	+/- 3
Capacity		<i>pF/m</i>	54	
Relative propagation velocity (velocity ratio)		%	82	
DC-resistance of inner conductor at 20°C		<i>Ω/km</i>	8.2	
DC-resistance of outer conductor at 20°C		<i>Ω/km</i>	6.8	
Current rating (50 - 60) Hz		A	9	
Dielectric voltage strength		<i>kV</i>	1.5	
Longitudinal attenuation at 20°C			$\alpha(f[\text{MHz}]) = a \cdot \sqrt{f[\text{MHz}]} + b \cdot f[\text{MHz}]$	
	a =	-	0.37	
	b =	-	0.0016	
	5 MHz	<i>dB/100m</i>	0.84	< 0.88
	10 MHz	<i>dB/100m</i>	1.19	< 1.25
	30 MHz	<i>dB/100m</i>	2.07	< 2.18
	50 MHz	<i>dB/100m</i>	2.70	< 2.83
	100 MHz	<i>dB/100m</i>	3.86	< 4.05
	200 MHz	<i>dB/100m</i>	5.55	< 5.83
	300 MHz	<i>dB/100m</i>	6.89	< 7.23
	400 MHz	<i>dB/100m</i>	8.04	< 8.44
	470 MHz	<i>dB/100m</i>	8.77	< 9.21
	600 MHz	<i>dB/100m</i>	10.02	< 10.52
	800 MHz	<i>dB/100m</i>	11.75	< 12.33
	860 MHz	<i>dB/100m</i>	12.23	< 12.84
	1000 MHz	<i>dB/100m</i>	13.30	< 13.97
	1750 MHz	<i>dB/100m</i>	18.28	< 19.19
	2150 MHz	<i>dB/100m</i>	20.60	< 21.63
	2400 MHz	<i>dB/100m</i>	21.97	< 23.06
Return loss (3 peak values up to 4 dB lower are permissible)				
	30 - 470 MHz	<i>dB</i>	> 23	
	470 - 862 MHz	<i>dB</i>	> 20	
Screening attenuation (30 - 1000 MHz)		<i>dB</i>	> 90	
Transfer impedance (5 - 30 MHz)		<i>mΩ/m</i>	< 5	
EN-50117 Screening Class		-	Class A	

