



Cable type	Standard:	705CRT2
Size: 1.00/4.65	Aerial:	A 705CRT2

	Units	Nominal
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Construction

INNER CONDUCTOR

Material and construction	-	copper wire
Diameter	<i>mm</i>	1.00

DIELECTRIC

Material	-	gas-injected cellular PE
Diameter	<i>mm</i>	4.65

OUTER CONDUCTOR

Material and construction	-	copper tape & copper braid
Diameter over tape	<i>mm</i>	4.80

OUTER SHEATH

Material	-	polyethylene
Thickness	<i>mm</i>	0.8
Overall diameter	<i>mm</i>	7.0 < 7.2

Cable with messenger

MESSENGER

Material	-	AMS
Construction	<i>.. X mm</i>	1 x 2
Diameter over messenger	<i>mm</i>	3.5
OVERALL DIMENSIONS	<i>mm</i>	12/7

Mechanical characteristics

Minimum bending radius			
	1 x	<i>cm</i>	2.0
	10 x	<i>cm</i>	4.0
Maximum pulling strength (without messenger)		<i>daN</i>	10
Weight		<i>kg/km</i>	48

Cable with messenger

Minimum breaking strength of messenger	<i>daN</i>	100
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>	66

Electrical characteristics

Characteristic impedance	Ω	75	<i>+/- 3</i>
Capacity	<i>pF/m</i>	54	
Relative propagation velocity (velocity ratio)	<i>%</i>	82	
DC-resistance of inner conductor at 20°C	<i>Ω/km</i>	21.9	
DC-resistance of outer conductor at 20°C	<i>Ω/km</i>	8.9	
Current rating (50 - 60) Hz	<i>A</i>	5	
Dielectric voltage strength	<i>kV</i>	1.0	
Longitudinal attenuation at 20°C		$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$	
	a =	-	0.598
	b =	-	0.0015
	5 MHz	<i>dB/100m</i>	1.34 < 1.41
	10 MHz	<i>dB/100m</i>	1.91 < 2.00
	30 MHz	<i>dB/100m</i>	3.32 < 3.49
	50 MHz	<i>dB/100m</i>	4.30 < 4.52
	100 MHz	<i>dB/100m</i>	6.13 < 6.44
	200 MHz	<i>dB/100m</i>	8.76 < 9.19
	300 MHz	<i>dB/100m</i>	10.81 < 11.35
	400 MHz	<i>dB/100m</i>	12.56 < 13.19
	470 MHz	<i>dB/100m</i>	13.67 < 14.35
	600 MHz	<i>dB/100m</i>	15.55 < 16.33
	800 MHz	<i>dB/100m</i>	18.11 < 19.02
	860 MHz	<i>dB/100m</i>	18.83 < 19.77
	1000 MHz	<i>dB/100m</i>	20.41 < 21.43
	1750 MHz	<i>dB/100m</i>	27.64 < 29.02
	2150 MHz	<i>dB/100m</i>	30.95 < 32.50
	2400 MHz	<i>dB/100m</i>	32.90 < 34.54

Return loss (3 peak values up to 4 dB lower are permissible)

10 - 470 MHz	<i>dB</i>	> 20
470 - 862 MHz	<i>dB</i>	> 18
862 - 1200 MHz	<i>dB</i>	> 16

Screening attenuation (30 - 1000 MHz)

	<i>dB</i>	> 95
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Transfer impedance (5 - 30 MHz)

	<i>mΩ/m</i>	< 2.5
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EN-50117 Screening Class

	-	Class A+
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