



Cable type	Standard:	705CRT5(V)
Size: 1.02/4.65	Aerial:	A 705CRT5

	Units	Nominal
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Construction

INNER CONDUCTOR

Material and construction	-	copper wire
Diameter	<i>mm</i>	1.02

DIELECTRIC

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

OUTER CONDUCTOR

Material and construction	-	aluminium tape & braid
Diameter over tape	<i>mm</i>	4.8

OUTER SHEATH

Material	-	PE (PVC)
Thickness	<i>mm</i>	0.8
Overall diameter	<i>mm</i>	7.0 < 7.4

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>	3.5
	10 x	<i>cm</i>	7
Maximum pulling strength (without messenger)		<i>daN</i>	10
Weight (PE / PVC jacket)		<i>kg/km</i>	36 (44)

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>	52

Electrical characteristics

Characteristic impedance	Ω	75 +/- 3
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>	20.6
DC-resistance of outer conductor at 20°C	<i>Ω/km</i>	23.3
Current rating (50 - 60) Hz	<i>A</i>	5
Dielectric voltage strength	<i>kV</i>	1
Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$	

a =	-	0.595	
b =	-	0.0015	
5 MHz	<i>dB/100m</i>	1.79	< 1.97
10 MHz	<i>dB/100m</i>	2.35	< 2.58
30 MHz	<i>dB/100m</i>	3.75	< 4.13
50 MHz	<i>dB/100m</i>	4.73	< 5.21
100 MHz	<i>dB/100m</i>	6.55	< 7.21
200 MHz	<i>dB/100m</i>	9.16	< 10.08
300 MHz	<i>dB/100m</i>	11.21	< 12.33
400 MHz	<i>dB/100m</i>	12.95	< 14.25
470 MHz	<i>dB/100m</i>	14.05	< 15.46
600 MHz	<i>dB/100m</i>	15.92	< 17.52
800 MHz	<i>dB/100m</i>	18.48	< 20.33
860 MHz	<i>dB/100m</i>	19.19	< 21.11
1000 MHz	<i>dB/100m</i>	20.77	< 22.84
1750 MHz	<i>dB/100m</i>	27.97	< 30.76
2150 MHz	<i>dB/100m</i>	31.26	< 34.39
2400 MHz	<i>dB/100m</i>	33.20	< 36.52

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

5 - 470 MHz	<i>dB</i>	> 20
470 - 862 MHz	<i>dB</i>	> 18

Screening attenuation (30 - 1000 MHz)

	<i>dB</i>	> 70
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Transfer impedance (5 - 30 MHz)

	<i>mΩ/m</i>	< 20
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EN-50117 Screening Class

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