

Cable type	standard	7(CW)05CRT2(V)
Size: 1.02/4.55	aerial	A 7(CW)05CRT2(V)
	Units	Nominal

Construction

INNER CONDUCTOR		
Material and construction	-	copper (clad steel) wire
Diameter	<i>mm</i>	1.02
DIELECTRIC		
Material	-	gas-injected cellular PE
Diameter	<i>mm</i>	4.55
OUTER CONDUCTOR		
Material and construction	-	copper 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 (20)
Weight		<i>kg/km</i>	47 (48)

Cable with messenger

Minimum breaking strength of messenger	<i>daN</i>	100
Modulus of elasticity	<i>daN/mm²</i>	62000
Thermal coefficient of linear expansion	<i>1/°C</i>	23 x 10⁻⁶
Weight	<i>kg/km</i>	65

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 (51.6)	
DC-resistance of outer conductor at 20°C	<i>Ω/km</i>	8.7	
Current rating (50 - 60) Hz	<i>A</i>	5.0 (0.5)	
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 =	-	0.598
	b =	-	0.0015
	5 MHz	<i>dB/100m</i>	< 1.41
	10 MHz	<i>dB/100m</i>	< 2.00
	30 MHz	<i>dB/100m</i>	< 3.49
	50 MHz	<i>dB/100m</i>	< 4.52
	100 MHz	<i>dB/100m</i>	< 6.44
	200 MHz	<i>dB/100m</i>	< 9.19
	300 MHz	<i>dB/100m</i>	< 11.35
	400 MHz	<i>dB/100m</i>	< 13.19
	470 MHz	<i>dB/100m</i>	< 14.35
	600 MHz	<i>dB/100m</i>	< 16.33
	800 MHz	<i>dB/100m</i>	< 19.02
	860 MHz	<i>dB/100m</i>	< 19.77
	1000 MHz	<i>dB/100m</i>	< 21.43
	1750 MHz	<i>dB/100m</i>	< 29.02
	2150 MHz	<i>dB/100m</i>	< 32.50
	2400 MHz	<i>dB/100m</i>	< 34.54
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>	> 90
Transfer impedance (5 - 30 MHz)		<i>m Ω/m</i>	< 5
EN 50117 screening class		-	Class A