



Cable type	Standard:	7CW05CRT2(V)
Size: 1.02/4.65	Aerial:	A 7CW05CRT2

	Units	Nominal
Construction		
INNER CONDUCTOR		
Material and construction	-	copper clad steel wire
Diameter	mm	1.02
DIELECTRIC		
Material	-	gas-injected cellular PE
Diameter	mm	4.65
OUTER CONDUCTOR		
Material and construction	-	copper tape & braid
Diameter over tape	mm	4.8
OUTER SHEATH		
Material		PE (PVC)
Thickness	mm	0.8
Overall diameter	mm	7.0 < 7.4

Cable with messenger		
MESSENGER		
Material	-	AMS
Construction	.. X mm	1 x 2
Diameter over messenger	mm	3.5
OVERALL DIMENSIONS	mm	12/7

Mechanical characteristics			
Minimum bending radius			
	1 x	cm	3.5
	10 x	cm	7
Maximum pulling strength (without messenger)		daN	20
Weight (PE / PVC jacket)		kg/km	47 (56)

Cable with messenger		
Minimum breaking strength of messenger	daN	100
Modulus of elasticity	N/mm ²	62000
Thermal coefficient of linear expansion	1/°C	23 x 10⁻⁶
Weight	kg/km	66

Electrical characteristics				
Characteristic impedance	Ω		75	+/- 3
Capacity	pF/m		54	
Relative propagation velocity (velocity ratio)	%		82	
DC-resistance of inner conductor at 20°C	Ω/km		51.6	
DC-resistance of outer conductor at 20°C	Ω/km		8.7	
Current rating (50 - 60) Hz	A		0.5	
Dielectric voltage strength	kV		1	
Longitudinal attenuation at 20°C		$\alpha(f[\text{MHz}]) = a \cdot \sqrt{f[\text{MHz}]} + b \cdot f[\text{MHz}]$		
	a =	-	0.598	
	b =	-	0.0015	
	5 MHz	dB/100m	1.34	< 1.41
	10 MHz	dB/100m	1.91	< 2.00
	30 MHz	dB/100m	3.32	< 3.49
	50 MHz	dB/100m	4.30	< 4.52
	100 MHz	dB/100m	6.13	< 6.44
	200 MHz	dB/100m	8.76	< 9.19
	300 MHz	dB/100m	10.81	< 11.35
	400 MHz	dB/100m	12.56	< 13.19
	470 MHz	dB/100m	13.67	< 14.35
	600 MHz	dB/100m	15.55	< 16.33
	800 MHz	dB/100m	18.11	< 19.02
	860 MHz	dB/100m	18.83	< 19.77
	1000 MHz	dB/100m	20.41	< 21.43
	1750 MHz	dB/100m	27.64	< 29.02
	2150 MHz	dB/100m	30.95	< 32.50
	2400 MHz	dB/100m	32.90	< 34.54
Return loss (3 peak values up to 4 dB lower are permissible)				
	5 - 470 MHz	dB	> 20	
	470 - 862 MHz	dB	> 18	
Screening attenuation (30 - 1000 MHz)		dB	> 90	
Transfer impedance (5 - 30 MHz)		mΩ/m	< 5	
EN-50117 Screening Class		-	Class A	

