KABELWERK EUPEN AG
CABLERIE D'EUPEN S.A.
KABELFABRIEK EUPEN N.V.

Cable type	**standard aerial**	***707CRT2(V)***
Size: 1.63/7.2		***A 707CRT2(V)***
	Units	**Nominal**
Construction		
INNER CONDUCTOR		
Material and construction	-	**copper wire**
Diameter	*mm*	**1.63**
DIELECTRIC		
Material	-	**gas-injected cellular PE**
Diameter	*mm*	**7.2**
OUTER CONDUCTOR		
Material and construction	-	**copper tape & braid**
Diameter over tape	*mm*	**7.4**
OUTER SHEATH		
Material		**PE (PVC)**
Thickness	*mm*	**1.0**
Overall diameter	*mm*	**10.0** < 10.4
Cable with messenger		
MESSENGER		
Material	-	**AMS**
Construction	.. *X mm*	**1 x 3.15**
Diameter over messenger	*mm*	**5.5**
OVERALL DIMENSIONS	*mm*	**17/10**

Mechanical characteristics			
Minimum bending radius			
	1 x	*cm*	**5**
	10 x	*cm*	**10**
Maximum pulling strength (without messenger)		*daN*	**15**
Weight		*kg/km*	**87**
Cable with messenger			
Minimum breaking strength of messenger		*daN*	**250**
Modulus of elasticity		daN/mm^2	**62000**
Thermal coefficient of linear expansion		*1/°C*	**23 x 10^{-6}**
Weight		*kg/km*	**125**

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*	**8.2**	
DC-resistance of outer conductor at 20°C		*Ω/km*	**6.8**	
Current rating (50 - 60) Hz		*A*	**9**	
Dielectric voltage strength		*kV*	**2**	
Longitudinal attenuation at 20°C			$\alpha(f_{[MHz]}) = a.\sqrt{f}_{[MHz]} + b.f_{[MHz]}$	
	a =	-	0.37	
	b =	-	0.0016	
	5 MHz	*dB/100m*	**0.84**	< 0.88
	10 MHz	*dB/100m*	**1.19**	< 1.25
	30 MHz	*dB/100m*	**2.07**	< 2.18
	50 MHz	*dB/100m*	**2.70**	< 2.83
	100 MHz	*dB/100m*	**3.86**	< 4.05
	200 MHz	*dB/100m*	**5.55**	< 5.83
	300 MHz	*dB/100m*	**6.89**	< 7.23
	400 MHz	*dB/100m*	**8.04**	< 8.44
	470 MHz	*dB/100m*	**8.77**	< 9.21
	600 MHz	*dB/100m*	**10.02**	< 10.52
	800 MHz	*dB/100m*	**11.75**	< 12.33
	860 MHz	*dB/100m*	**12.23**	< 12.84
	1000 MHz	*dB/100m*	**13.30**	< 13.97
	1750 MHz	*dB/100m*	**18.28**	< 19.19
	2150 MHz	*dB/100m*	**20.60**	< 21.63
	2400 MHz	*dB/100m*	**21.97**	< 23.06
Return loss (3 peak values up to 4 dB lower are permissible)				
	30 - 470 MHz	*dB*	**> 23**	
	470 - 862 MHz	*dB*	**> 20**	
Screening attenuation (30 - 1000 MHz)		*dB*	**> 90**	
Transfer impedance (5 - 30 MHz)		*m Ω/m*	**< 5**	
EN 50117 screening class		-	**Class A**	