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

Cable type	**standard aerial**	***705CRT5(V)***	
Size: 1.02/4.55		***A 705CRT5(V)***	
	Units	**Nominal**	
Construction			
INNER CONDUCTOR			
Material and construction	-	**copper wire**	
Diameter	*mm*	**1.02**	
DIELECTRIC			
Material	-	**gas-injected cellular PE**	
Diameter	*mm*	**4.55**	
OUTER CONDUCTOR			
Material and construction	-	**aluminium 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*	**10**	
Weight	*kg/km*	**36**	
Cable with messenger			
Minimum breaking strength of messenger	*daN*	**100**	
Modulus of elasticity	*daN/mm²*	**62000**	
Thermal coefficient of linear expansion	*1/°C*	**23 x 10^{-6}**	
Weight	*kg/km*	**52**	
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*	**20.6**	
DC-resistance of outer conductor at 20°C	*Ω/km*	**23.3**	
Current rating (50 - 60) Hz	*A*	**5**	
Dielectric voltage strength	*kV*	**1**	
Longitudinal attenuation at 20°C		$\alpha(f_{[MHz]}) = a.\sqrt{f}_{[MHz]} + b.f_{[MHz]}$	
a =	-		
b =	-		
5 MHz	*dB/100m*	**1.79**	< 1.97
10 MHz	*dB/100m*	**2.35**	< 2.58
30 MHz	*dB/100m*	**3.75**	< 4.13
50 MHz	*dB/100m*	**4.73**	< 5.21
100 MHz	*dB/100m*	**6.55**	< 7.21
200 MHz	*dB/100m*	**9.16**	< 10.08
300 MHz	*dB/100m*	**11.21**	< 12.33
400 MHz	*dB/100m*	**12.95**	< 14.25
470 MHz	*dB/100m*	**14.05**	< 15.46
600 MHz	*dB/100m*	**15.92**	< 17.52
800 MHz	*dB/100m*	**18.48**	< 20.33
860 MHz	*dB/100m*	**19.19**	< 21.11
1000 MHz	*dB/100m*	**20.77**	< 22.84
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*	**> 70**	
Transfer impedance (5 - 30 MHz)	*mΩ/m*	**< 20**	
EN 50117 screening class	-	**-**	