DATA SHEET
Eupen 75 Ω CATV cables

Kabelwerk EUPEN AG
cable

7088 - Rev. 4 - 03.12.14

Cable type	Standard:	7088	
Size: 2.0/8.3	Aerial:	A 7088	
	Units	Nominal	

Construction

INNER CONDUCTOR			
Material and construction	-	**copper wire**	
Diameter	*mm*	**2.02**	
DIELECTRIC			
Material	-	**gas-injected cellular PE**	
Diameter	*mm*	**8.6**	
OUTER CONDUCTOR			
Material and construction	-	**corrugated copper tube**	
Diameter over outer conductor	*mm*	**9.3**	
OUTER SHEATH			
Material		**black polyethylene**	
Thickness	*mm*	**1.0**	
Overall diameter	*mm*	**11.3**	< 11.7

Cable with messenger

MESSENGER			
Material	-	**AMS**	
Construction	.. X *mm*	**7 x 1.52**	
Diameter over messenger	*mm*	**7**	
OVERALL DIMENSIONS	*mm*	**20.8/11.3**	

Mechanical characteristics

Minimum bending radius			
1 x	*cm*	**8**	
10 x	*cm*	**15**	
Maximum pulling strength (without messenger)	*daN*	**50**	
Weight	*kg/km*	**145**	

Cable with messenger

Minimum breaking strength of messenger	*daN*	**400**	
Modulus of elasticity	N/mm^2	**62000**	
Thermal coefficient of linear expansion	*1/°C*	**23 x 10^{-6}**	
Weight	*kg/km*	**205**	

Electrical characteristics

Characteristic impedance	*Ω*	**75**	+/- 2
Capacity	*pF/m*	**50**	
Relative propagation velocity (velocity ratio)	*%*	**88**	
DC-resistance of inner conductor at 20°C	*Ω/km*	**5.3**	
DC-resistance of outer conductor at 20°C	*Ω/km*	**2.6**	
Current rating (50 - 60) Hz	*A*	**11**	
Dielectric voltage strength	*kV*	**2**	
Longitudinal attenuation at 20°C		$\alpha(f_{[MHz]}) = a.\sqrt{f}_{[MHz]} + b.f_{[MHz]}$	
a =	-	0.296	
b =	-	0.00085	
5 MHz	*dB/100m*	**0.67**	< 0.70
10 MHz	*dB/100m*	**0.94**	< 0.99
30 MHz	*dB/100m*	**1.65**	< 1.73
50 MHz	*dB/100m*	**2.14**	< 2.24
100 MHz	*dB/100m*	**3.05**	< 3.20
200 MHz	*dB/100m*	**4.36**	< 4.57
300 MHz	*dB/100m*	**5.38**	< 5.65
400 MHz	*dB/100m*	**6.26**	< 6.57
470 MHz	*dB/100m*	**6.82**	< 7.16
600 MHz	*dB/100m*	**7.76**	< 8.15
800 MHz	*dB/100m*	**9.05**	< 9.50
860 MHz	*dB/100m*	**9.41**	< 9.88
1000 MHz	*dB/100m*	**10.21**	< 10.72
1200 MHz	*dB/100m*	**11.27**	< 11.84
Return loss (3 peak values up to 4 dB lower are permissible)			
5 - 470 MHz	*dB*	**> 23**	
470 - 862 MHz	*dB*	**> 20**	
862 - 1200 MHz	*dB*	**> 18**	
Screening attenuation (30 - 1000 MHz)	*dB*	**>> 120**	

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