



Cable type	underground:	7092 X
Size: 1/2" Hiflex	aerial:	

	Units	Nominal
Construction		
INNER CONDUCTOR		
Material and construction	-	copper wire
Diameter	mm	2.13
DIELECTRIC		
Material	-	gas-injected cellular PE
Diameter	mm	9.0
OUTER CONDUCTOR		
Material and construction	-	corrugated copper tube
Diameter over outer conductor	mm	12.2
OUTER SHEATH		
Material	-	black polyethylene
Thickness	mm	.65
Overall diameter	mm	13.5 < 13.7

Cable with messenger		
MESSANGER		
Material	-	-
Construction	.. X mm	-
Diameter over messenger	mm	-
OVERALL DIMENSIONS	mm	-

Mechanical characteristics			
Minimum bending radius			
	1 x	cm	4
	10 x	cm	4
Maximum pulling strength (without messenger)		daN	65
Weight		kg/km	190

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

Electrical characteristics				
Characteristic impedance	Ω	75	+/- 2	
Capacity	pF/m	54		
Relative propagation velocity (velocity ratio)	%	81		
DC-resistance of inner conductor at 20°C	Ω/km	4.8		
DC-resistance of outer conductor at 20°C	Ω/km	3.0		
Current rating (50 - 60) Hz	A	12		
Dielectric voltage strength	kV	2		
Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$			
	a =	-	0.3012	
	b =	-	0.00108	
	5 MHz	dB/100m	0.68	< 0.71
	10 MHz	dB/100m	0.96	< 1.01
	30 MHz	dB/100m	1.68	< 1.77
	50 MHz	dB/100m	2.18	< 2.29
	100 MHz	dB/100m	3.12	< 3.28
	200 MHz	dB/100m	4.48	< 4.70
	300 MHz	dB/100m	5.54	< 5.82
	400 MHz	dB/100m	6.46	< 6.78
	470 MHz	dB/100m	7.04	< 7.39
	600 MHz	dB/100m	8.03	< 8.43
	800 MHz	dB/100m	9.38	< 9.85
	860 MHz	dB/100m	9.76	< 10.25
	1000 MHz	dB/100m	10.60	< 11.14

Return loss (3 peak values up to 4 dB lower are permissible)			
	5 - 470 MHz	dB	> 23
	470 - 862 MHz	dB	> 20

Screening attenuation (30 - 1000 MHz)	dB	>> 120
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