



Cable type	Standard:	7092 X
Size: 1/2" Hiflex	Aerial:	

Construction

	Units	Nominal
INNER CONDUCTOR		
Material and construction	-	copper wire
Diameter	mm	2.14
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	0.7
Overall diameter	mm	13.6 < 13.8

Cable with messenger

MESSENGER		
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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