



Cable type	underground:	7162
Size: 5/8" - HD	aerial:	A 7162
	Units	Nominal

Construction

INNER CONDUCTOR			
Material and construction	-	copper wire	
Diameter	mm	3.45	
DIELECTRIC			
Material	-	gas-injected cellular PE	
Diameter	mm	16.0	
OUTER CONDUCTOR			
Material and construction	-	corrugated copper tube	
Diameter over outer conductor	mm	17.2	
OUTER SHEATH			
Material	-	black polyethylene	
Thickness	mm	1.3	
Overall diameter	mm	19.8	< 20.1

Cable with messenger

MESSENGER			
Material	-	AMS	
Construction	.. X mm	7 x 2	
Diameter over messenger	mm	8.5	
OVERALL DIMENSIONS	mm	30.8/19.8	

Mechanical characteristics

Minimum bending radius			
	1 x	cm	10
	10 x	cm	20
Maximum pulling strength (without messenger)		daN	115
Weight		kg/km	355

Cable with messenger

Minimum breaking strength of messenger	daN	700
Modulus of elasticity	N/mm ²	62000
Thermal coefficient of linear expansion	1/°C	23 x 10 ⁻⁶
Weight	kg/km	455

Electrical characteristics

Characteristic impedance	Ω	75	+/- 2
Capacity	pF/m	54	
Relative propagation velocity (velocity ratio)	%	82	
DC-resistance of inner conductor at 20°C	Ω/km	1.8	
DC-resistance of outer conductor at 20°C	Ω/km	1.45	
Current rating (50 - 60) Hz	A	23	
Dielectric voltage strength	kV	4	
Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$		
	a =	-	0.169
	b =	-	0.001
	5 MHz	dB/100m	0.38 < 0.40
	10 MHz	dB/100m	0.54 < 0.57
	30 MHz	dB/100m	0.96 < 1.00
	50 MHz	dB/100m	1.25 < 1.31
	100 MHz	dB/100m	1.79 < 1.88
	200 MHz	dB/100m	2.59 < 2.72
	300 MHz	dB/100m	3.23 < 3.39
	400 MHz	dB/100m	3.78 < 3.97
	470 MHz	dB/100m	4.13 < 4.34
	600 MHz	dB/100m	4.74 < 4.98
	800 MHz	dB/100m	5.58 < 5.86
	860 MHz	dB/100m	5.82 < 6.11
	1000 MHz	dB/100m	6.34 < 6.66

Return loss (3 peak values up to 4 dB lower are permissible)

	5 - 470 MHz	dB	> 26
	470 - 862 MHz	dB	> 22

Screening attenuation (30 - 1000 MHz)

		dB	>> 120
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