



Cable type	Standard:	7128
Size: 1/2" - LD	Aerial:	A 7128
	Units	Nominal

Construction

INNER CONDUCTOR			
Material and construction	-	copper wire	
Diameter	mm	3.06	
DIELECTRIC			
Material	-	gas-injected cellular PE	
Diameter	mm	12.4	
OUTER CONDUCTOR			
Material and construction	-	corrugated copper tube	
Diameter over outer conductor	mm	13.7	
OUTER SHEATH			
Material	-	black polyethylene	
Thickness	mm	1.1	
Overall diameter	mm	16.0	< 16.3

Cable with messenger

MESSENGER			
Material	-	AMS	
Construction	.. X mm	7 x 1.7	
Diameter over messenger	mm	7.5	
OVERALL DIMENSIONS			
	mm	26/16	

Mechanical characteristics

Minimum bending radius			
	1 x	cm	12
	10 x	cm	20
Maximum pulling strength (without messenger)		daN	85
Weight		kg/km	245

Cable with messenger

Minimum breaking strength of messenger	daN	500
Modulus of elasticity	N/mm ²	62000
Thermal coefficient of linear expansion	1/°C	23 x 10 ⁻⁶
Weight	kg/km	305

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	2.3	
DC-resistance of outer conductor at 20°C	Ω/km	1.95	
Current rating (50 - 60) Hz	A	20	
Dielectric voltage strength	kV	3	
Longitudinal attenuation at 20°C		$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$	
	a =	-	0.197
	b =	-	0.0007
	5 MHz	dB/100m	0.44 < 0.47
	10 MHz	dB/100m	0.63 < 0.66
	30 MHz	dB/100m	1.10 < 1.16
	50 MHz	dB/100m	1.43 < 1.50
	100 MHz	dB/100m	2.04 < 2.14
	200 MHz	dB/100m	2.93 < 3.07
	300 MHz	dB/100m	3.62 < 3.80
	400 MHz	dB/100m	4.22 < 4.43
	470 MHz	dB/100m	4.60 < 4.83
	600 MHz	dB/100m	5.25 < 5.51
	800 MHz	dB/100m	6.13 < 6.44
	860 MHz	dB/100m	6.38 < 6.70
	1000 MHz	dB/100m	6.93 < 7.28
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

