



Cable type	Standard:	7168
Size: 5/8" - LD	Aerial:	A 7168
	Units	Nominal

Construction

INNER CONDUCTOR			
Material and construction	-	copper wire	
Diameter	mm	3.9	
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

MESSANGER			
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	15
	10 x	cm	25
Maximum pulling strength (without messenger)		daN	130
Weight		kg/km	345

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	435

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	1.42	
DC-resistance of outer conductor at 20°C	Ω/km	1.49	
Current rating (50 - 60) Hz	A	26	
Dielectric voltage strength	kV	4	

Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$		
a =	-	0.153	
b =	-	0.00065	
5 MHz	dB/100m	0.35	< 0.36
10 MHz	dB/100m	0.49	< 0.51
30 MHz	dB/100m	0.86	< 0.90
50 MHz	dB/100m	1.11	< 1.17
100 MHz	dB/100m	1.60	< 1.67
200 MHz	dB/100m	2.29	< 2.41
300 MHz	dB/100m	2.85	< 2.99
400 MHz	dB/100m	3.32	< 3.49
470 MHz	dB/100m	3.62	< 3.80
600 MHz	dB/100m	4.14	< 4.34
800 MHz	dB/100m	4.85	< 5.09
860 MHz	dB/100m	5.05	< 5.30
1000 MHz	dB/100m	5.49	< 5.76
1200 MHz	dB/100m	6.08	< 6.38

Return loss (3 peak values up to 4 dB lower are permissible)			
5 - 470 MHz	dB	> 26	
470 - 862 MHz	dB	> 22	
862 - 1200 MHz	dB	> 20	

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