



Cable type	underground:	7118
Size: 2.65/11.0	aerial:	A 7118
	Units	Nominal

Construction

INNER CONDUCTOR			
Material and construction	-	copper wire	
Diameter	mm	2.65	
DIELECTRIC			
Material	-	gas-injected cellular PE	
Diameter	mm	11.2	
OUTER CONDUCTOR			
Material and construction	-	corrugated copper tube	
Diameter over outer conductor	mm	12.0	
OUTER SHEATH			
Material	-	black polyethylene	
Thickness	mm	1.1	
Overall diameter	mm	14.3	< 14.6

Cable with messenger

MESSENGER			
Material	-	AMS	
Construction	.. X mm	7 x 1.7	
Diameter over messenger	mm	7.5	
OVERALL DIMENSIONS	mm	24.3/14.3	

Mechanical characteristics

Minimum bending radius			
	1 x	cm	10
	10 x	cm	18
Maximum pulling strength (without messenger)		daN	75
Weight		kg/km	210

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	280

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	3.05	
DC-resistance of outer conductor at 20°C	Ω/km	2.05	
Current rating (50 - 60) Hz	A	16	
Dielectric voltage strength	kV	3	
Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$		
	a =	-	0.228
	b =	-	0.0007
	5 MHz	dB/100m	0.51 < 0.54
	10 MHz	dB/100m	0.73 < 0.76
	30 MHz	dB/100m	1.27 < 1.33
	50 MHz	dB/100m	1.65 < 1.73
	100 MHz	dB/100m	2.35 < 2.47
	200 MHz	dB/100m	3.36 < 3.53
	300 MHz	dB/100m	4.16 < 4.37
	400 MHz	dB/100m	4.84 < 5.08
	470 MHz	dB/100m	5.27 < 5.54
	600 MHz	dB/100m	6.00 < 6.31
	800 MHz	dB/100m	7.01 < 7.36
	860 MHz	dB/100m	7.29 < 7.65
	1000 MHz	dB/100m	7.91 < 8.31
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

