



<b>Cable type</b>	<b>Standard:</b>	<b>7118</b>
<b>Size: 2.65/11.0</b>	<b>Aerial:</b>	<b>A 7118</b>
	<b>Units</b>	<b>Nominal</b>

### Construction

<b>INNER CONDUCTOR</b>			
Material and construction	-	<b>copper wire</b>	
Diameter	mm	<b>2.65</b>	
<b>DIELECTRIC</b>			
Material	-	<b>gas-injected cellular PE</b>	
Diameter	mm	<b>11.3</b>	
<b>OUTER CONDUCTOR</b>			
Material and construction	-	<b>corrugated copper tube</b>	
Diameter over outer conductor	mm	<b>12.0</b>	
<b>OUTER SHEATH</b>			
Material	-	<b>black polyethylene</b>	
Thickness	mm	<b>1.1</b>	
Overall diameter	mm	<b>14.3</b>	<b>&lt; 14.6</b>

### Cable with messenger

<b>MESSANGER</b>			
Material	-	<b>AMS</b>	
Construction	.. X mm	<b>7 x 1.7</b>	
Diameter over messenger	mm	<b>7.5</b>	
<b>OVERALL DIMENSIONS</b>	mm	<b>24.3/14.3</b>	

### Mechanical characteristics

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

### Cable with messenger

Minimum breaking strength of messenger	daN	<b>500</b>
Modulus of elasticity	N/mm <sup>2</sup>	<b>62000</b>
Thermal coefficient of linear expansion	1/°C	<b>23 x 10<sup>-6</sup></b>
Weight	kg/km	<b>280</b>

### Electrical characteristics

Characteristic impedance	Ω	<b>75</b>	<b>+/- 2</b>
Capacity	pF/m	<b>50</b>	
Relative propagation velocity (velocity ratio)	%	<b>88</b>	
DC-resistance of inner conductor at 20°C	Ω/km	<b>3.05</b>	
DC-resistance of outer conductor at 20°C	Ω/km	<b>2.05</b>	
Current rating (50 - 60) Hz	A	<b>16</b>	
Dielectric voltage strength	kV	<b>3</b>	

<b>Longitudinal attenuation at 20°C</b>			
$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$			
a =	-	0.228	
b =	-	0.0007	
5 MHz	dB/100m	<b>0.51</b>	<b>&lt; 0.54</b>
10 MHz	dB/100m	<b>0.73</b>	<b>&lt; 0.76</b>
30 MHz	dB/100m	<b>1.27</b>	<b>&lt; 1.33</b>
50 MHz	dB/100m	<b>1.65</b>	<b>&lt; 1.73</b>
100 MHz	dB/100m	<b>2.35</b>	<b>&lt; 2.47</b>
200 MHz	dB/100m	<b>3.36</b>	<b>&lt; 3.53</b>
300 MHz	dB/100m	<b>4.16</b>	<b>&lt; 4.37</b>
400 MHz	dB/100m	<b>4.84</b>	<b>&lt; 5.08</b>
470 MHz	dB/100m	<b>5.27</b>	<b>&lt; 5.54</b>
600 MHz	dB/100m	<b>6.00</b>	<b>&lt; 6.31</b>
800 MHz	dB/100m	<b>7.01</b>	<b>&lt; 7.36</b>
860 MHz	dB/100m	<b>7.29</b>	<b>&lt; 7.65</b>
1000 MHz	dB/100m	<b>7.91</b>	<b>&lt; 8.31</b>
1200 MHz	dB/100m	<b>8.74</b>	<b>&lt; 9.18</b>

<b>Return loss (3 peak values up to 4 dB lower are permissible)</b>			
5 - 470 MHz	dB	<b>&gt; 23</b>	
470 - 862 MHz	dB	<b>&gt; 20</b>	
862 - 1200 MHz	dB	<b>&gt; 18</b>	

<b>Screening attenuation (30 - 1000 MHz)</b>	<b>dB</b>	<b>&gt;&gt; 120</b>
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