



Cable type: **7118-HLFCRC** flame-retardant **C<sub>ca</sub>**  
Size: **2.65/11.0**

Cable with UV resistant, halogen free, low smoke, flame retardant jacket according to IEC 60754, IEC 60332-1, IEC 60332-3 cat. C, IEC 61034 and EN 50399 C<sub>ca</sub>-S1,d2,a1.  
Compliant to EN 50575.

	Units	Nominal
<b>Construction</b>		
<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>flame retardant polyolefin</b>
Thickness	mm	<b>1.1</b>
Overall diameter	mm	<b>14.3</b> < 14.6

<b>Mechanical characteristics</b>			
Minimum bending radius			
	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>227</b>
Recommended temperature range			<b>-70 to +85 °C</b> <b>-40 to +60 °C</b> <b>-55 to +85 °C</b>

<b>Electrical characteristics</b>				
Characteristic impedance		Ω	<b>75</b>	+/- 2
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>2.5</b>	
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	<b>0.51</b>	< 0.54
	10 MHz	dB/100m	<b>0.73</b>	< 0.76
	30 MHz	dB/100m	<b>1.27</b>	< 1.33
	50 MHz	dB/100m	<b>1.65</b>	< 1.73
	100 MHz	dB/100m	<b>2.35</b>	< 2.47
	200 MHz	dB/100m	<b>3.36</b>	< 3.53
	300 MHz	dB/100m	<b>4.16</b>	< 4.37
	400 MHz	dB/100m	<b>4.84</b>	< 5.08
	470 MHz	dB/100m	<b>5.27</b>	< 5.54
	600 MHz	dB/100m	<b>6.00</b>	< 6.31
	800 MHz	dB/100m	<b>7.01</b>	< 7.36
	860 MHz	dB/100m	<b>7.29</b>	< 7.65
	1000 MHz	dB/100m	<b>7.91</b>	< 8.31
	1200 MHz	dB/100m	<b>8.74</b>	< 9.18
Return loss (3 peak values up to 4 dB lower are permissible)				
	5 - 470 MHz	dB	<b>&gt; 23</b>	
	470 - 862 MHz	dB	<b>&gt; 20</b>	
	862 - 1200 MHz	dB	<b>&gt; 18</b>	
Screening attenuation (30 - 1000 MHz)		dB	<b>&gt;&gt; 120</b>	