



<b>Cable type</b>	<b>Standard:</b>	<b>7CW05CRT2</b>
<b>Size: 1.00/4.55</b>	<b>Aerial:</b>	<b>A 7CW05CRT2</b>
	<b>Units</b>	<b>Nominal</b>

**Construction**

<b>INNER CONDUCTOR</b>		
Material and construction	-	<b>copper clad steel wire</b>
Diameter	mm	<b>1.00</b>
<b>DIELECTRIC</b>		
Material	-	<b>gas-injected cellular PE</b>
Diameter	mm	<b>4.55</b>
<b>OUTER CONDUCTOR</b>		
Material and construction	-	<b>copper tape &amp; copper braid</b>
Diameter over tape	mm	<b>4.80</b>
<b>OUTER SHEATH</b>		
Material	-	<b>PE</b>
Thickness	mm	<b>0.8</b>
Overall diameter	mm	<b>7.0 &lt; 7.2</b>

**Cable with messenger**

<b>MESSANGER</b>		
Material	-	<b>AMS</b>
Construction	.. X mm	<b>1 x 2</b>
Diameter over messenger	mm	<b>3.5</b>
<b>OVERALL DIMENSIONS</b>	mm	<b>12/7</b>

**Mechanical characteristics**

Minimum bending radius			
	1 x	cm	<b>3.5</b>
	10 x	cm	<b>7.0</b>
Maximum pulling strength (without messenger)		daN	<b>20</b>
Weight		kg/km	<b>47</b>

**Cable with messenger**

Minimum breaking strength of messenger	daN	<b>100</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>66</b>

**Electrical characteristics**

Characteristic impedance	Ω	<b>75</b>	+/- 3
Capacity	pF/m	<b>54</b>	
Relative propagation velocity (velocity ratio)	%	<b>82</b>	
DC-resistance of inner conductor at 20°C	Ω/km	<b>51.6</b>	
DC-resistance of outer conductor at 20°C	Ω/km	<b>8.7</b>	
Current rating (50 - 60) Hz	A	<b>0.5</b>	
Dielectric voltage strength	kV	<b>1.0</b>	
Longitudinal attenuation at 20°C		$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$	
	a =	-	0.598
	b =	-	0.0015
	5 MHz	dB/100m	<b>1.34</b> < 1.41
	10 MHz	dB/100m	<b>1.91</b> < 2.00
	30 MHz	dB/100m	<b>3.32</b> < 3.49
	50 MHz	dB/100m	<b>4.30</b> < 4.52
	100 MHz	dB/100m	<b>6.13</b> < 6.44
	200 MHz	dB/100m	<b>8.76</b> < 9.19
	300 MHz	dB/100m	<b>10.81</b> < 11.35
	400 MHz	dB/100m	<b>12.56</b> < 13.19
	470 MHz	dB/100m	<b>13.67</b> < 14.35
	600 MHz	dB/100m	<b>15.55</b> < 16.33
	800 MHz	dB/100m	<b>18.11</b> < 19.02
	860 MHz	dB/100m	<b>18.83</b> < 19.77
	1000 MHz	dB/100m	<b>20.41</b> < 21.43
	1750 MHz	dB/100m	<b>27.64</b> < 29.02
	2150 MHz	dB/100m	<b>30.95</b> < 32.50
	2400 MHz	dB/100m	<b>32.90</b> < 34.54

Return loss (3 peak values up to 4 dB lower are permissible)		
10 - 470 MHz	dB	<b>&gt; 20</b>
470 - 862 MHz	dB	<b>&gt; 18</b>
862 - 1200 MHz	dB	<b>&gt; 16</b>

Screening attenuation (30 - 1000 MHz)	dB	<b>&gt; 90</b>
Transfer impedance (5 - 30 MHz)	mΩ/m	<b>&lt; 5</b>
EN-50117 Screening Class	-	<b>Class A</b>