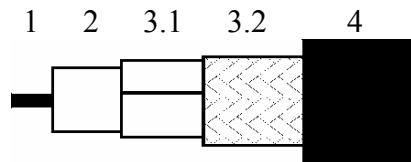


	<b>TECHNICAL DATA SHEET</b>	Code	<b>CTF100</b>
		version	<b>1</b>
		date	<b>2008-04-09</b>
	<b>COAX CTF100</b>	page	<b>1/2</b>

## APPLICATION

Coaxial cables used in cabled distribution networks designed according the European Standard EN 50117-2-1 and En 50117-2-4 operating at frequencies between 5 MHz and 3000 MHz.

## CONSTRUCTION



1	Inner conductor	Solid soft annealed copper
2	Dielectric	Gas injected LDPE
3.1	Foil	Copper-polyester foil
3.2	Braid	Annealed copper
4	Sheath	PVC according the European Standard HD 624.

## REQUIREMENTS AND TEST METHODS

**Test methods in accordance with European standard EN 50117-1.**

### Mechanical characteristics

1. Inner conductor:	
Diameter:	0.96 mm ± 0.02 mm
2. Dielectric:	
Diameter:	4.7 mm ± 0.15 mm
Adhesion:	7.5 – 75 N at 25 mm
3. Outer conductor:	
Diameter screen:	5.35 mm ± 0.15 mm
Coverage braid:	55 % ± 5 %
4. Sheath:	
Diameter:	6.65 mm ± 0.2 mm
Tensile strength:	≥ 12.5 N/mm <sup>2</sup>
Elongation at break:	≥ 150 %
5. Cable:	
Storage/operation temperature:	-40°C to +70°C
Minimum installation temperature:	-5 °C
Minimum static bend radius:	35 mm

	<b>TECHNICAL DATA SHEET</b>	Code	<b>CTF100</b>
		version	<b>1</b>
		date	<b>2008-04-09</b>
	<b>COAX CTF100</b>	page	<b>2/2</b>

### Electrical characteristics

Mean characteristic impedance:	$75 \pm 3 \Omega$
Regularity of impedance:	>40dB or <1%
DC loop resistance:	$\leq 41 \text{ Ohm/km}$
DC resistance inner conductor:	$\leq 26 \text{ Ohm/km}$
DC resistance outer conductor:	$\leq 15 \text{ Ohm/km}$
Capacitance:	$55.0 \text{ pF/m} \pm 2.0 \text{ pF/m}$
Velocity ratio:	$0.82 \pm 0.02$
Insulation resistance:	$> 10^4 \text{ MOhm.km}$
Voltage test of dielectric:	2 kVdc
Screening efficiency after flexing	
30-1000 MHz:	$\geq 75 \text{ dB}$
1000 – 2000 MHz:	$\geq 65 \text{ dB}$
2000 – 3000 MHz:	$\geq 55 \text{ dB}$
Return loss at	
5-30 MHz:	$\geq 20 \text{ dB}^*$
30-470 MHz:	$\geq 20 \text{ dB}^*$
470-1000 MHz:	$\geq 18 \text{ dB}^*$
1000-2000 MHz:	$\geq 16 \text{ dB}^*$
2000-3000 MHz:	$\geq 15 \text{ dB}^*$

\*Max. 3 peak values 4 dB lower than specified.

Attenuation at	Maximal	Attenuation at	Maximal
5 MHz:	1.6 dB/100m	860 MHz:	19.5 dB/100m
50 MHz:	4.6 dB/100m	1000 MHz:	21.5 dB/100m
100 MHz:	6.5 dB/100m	1750 MHz:	29.0 dB/100m
200 MHz:	9.5 dB/100m	2150 MHz:	32.5 dB/100m
460 MHz:	15.0 dB/100m	2400 MHz:	34.4 dB/100m
800 MHz:	18.8 dB/100m	3000 MHz:	38.4 dB/100m

### REVISIONS

#	Description	Date	Initials