

ören HD163 (1.6/7.2) Class A+ EN50117

HD 163 75 Ohm Coaxial Cable

Application

These cables are used for indoor distributions of CATV networks and connections of SMATV systems where low attenuations and high screening performance is required.

Construction Details

Inner Conductor	: ø 1.63 mm Bare copper
Insulation	: ø 7.20 mm Gas injected foam PE
1st Shield	: Aluminum foil, bonded to the insulation
2nd Shield	: Tinned copper wire braiding (55% Coverage)
3rd Shield	: Aluminum foil, bonded to the outer sheath
Outer Sheath*	: ø 10.0 mm PVC, PE or HFFR

Mechanical Properties

Cable Weight	102 kg/km
Min. Bending Radius	100 mm
Max. Tensile Strength	225 N
Standard Packing	300 m / 500 m / 1000 m

Standards

Flame Behaviour

Flame retardant according to IEC 60332-1

Screening Performance

Class A+ according to EN 50117-2-1 and EN 50117-2-4

Matching Cabelcon Connectors		
Interface	Product Name	Product Code
F Male	FM-RG11-CX3 7.5	99909510
F Male	FM-RG11-CX3 QM 10.5	99909538
3.5/12 Male	3.5/12M-RG11-CX3 7.5	99909520
3.5/12 Female	3.5/12F-RG11-CX3 7.5	99939530
5/8 Male	5/8MU-RG11-CX3 7.5	99909525
BNC Male	BNCM-11-CX3 7.5	99909536

* PVC Sheath : HD 163 (1.6/7.20) • PE Sheath : HD 163 PE (1.6/7.20) • HFFR Sheath : HD 163 HF (1.6/7.20)

HD 163 75 Ohm Coaxial Cable

Electrical Properties

Impedance

$75 \pm 2 \Omega$

Capacitance

$53 \pm 2 \text{ pF/m}$

Velocity of Propagation

84%

Inner Conductor DCR @ 20°C

8.50 Ohm/km

Outer Conductor DCR @ 20°C

9.70 Ohm/km

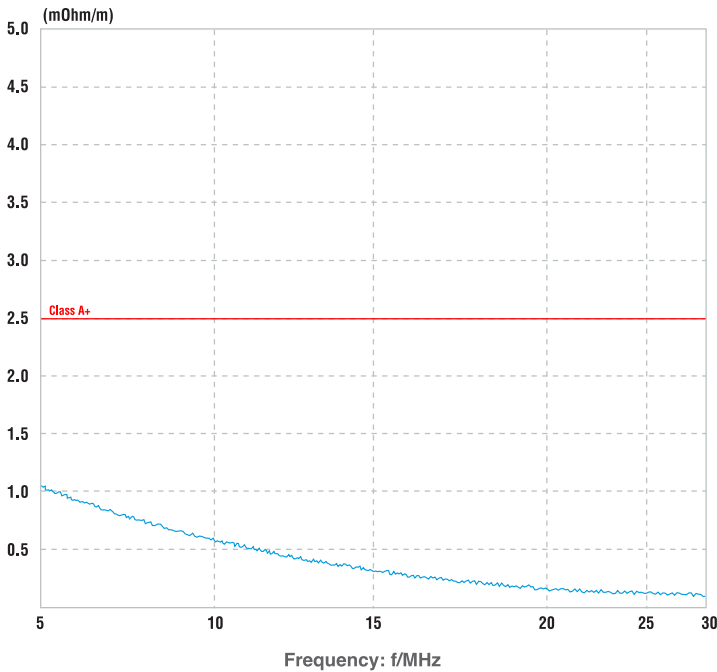
Attenuations @ 20°C

5 MHz	1.20 dB/100m
50 MHz	2.90 dB/100m
100 MHz	4.20 dB/100m
230 MHz	6.30 dB/100m
470 MHz	9.00 dB/100m
860 MHz	12.60 dB/100m
1000 MHz	13.70 dB/100m
1500 MHz	17.10 dB/100m
1750 MHz	18.60 dB/100m
2150 MHz	20.70 dB/100m
2400 MHz	22.10 dB/100m

Return Loss

5 - 30 MHz	> 26 dB
30 - 470 MHz	> 23 dB
470 - 1000 MHz	> 20 dB
1000 - 3000 MHz	> 18 dB

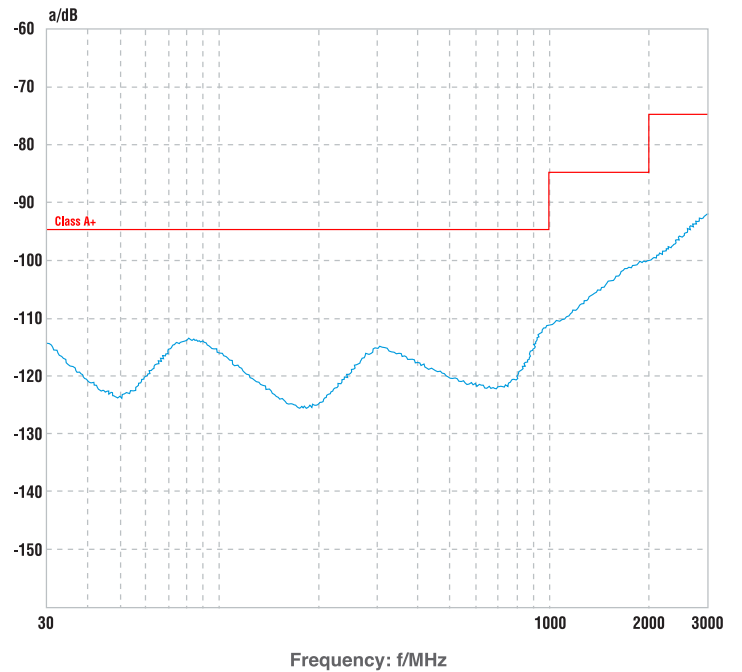
Transfer Impedance Graph



Transfer Impedance

5-30MHz < 1.5 mOhm/m

Screening Attenuation Graph



Screening Efficiency

30 - 1000MHz > 100 dB
1000 - 2000MHz > 90 dB
2000 - 3000MHz > 85 dB

Distributor: