

# Broadcast Coaxial Cables

## 4 X CAL 59

### Construction

Inner conductor	Plain copper	0.8 mm
Dielectric	Foam PE	$\Phi 3.65 \pm 0.10$ mm
Outer conductor (shield 1)	Aluminium + polyester + Aluminium tape	
Shield coverage		100%
Outer conductor (shield 2)	Tinned copper	96 x 0.15 mm
Shield coverage		88%
Individual sheath	PVC(yellow green red blue)	$\Phi 5.90 \pm 0.10$ mm
Overall sheath	Black PVC	$\Phi 16.90 \pm 0.40$ mm
Reinforcement	PVC	5 x $\Phi 2.40 \pm 0.10$ mm

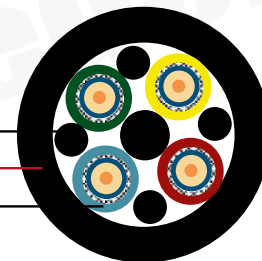
### Electrical & Mechanical Characteristics

Impedance	75 $\pm$ 5 Ohm
Nominal capacitance	56 pF/m
Velocity of propagation	80%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	35 Ohm/Km
Outer conductor resistance	12.5 Ohm/Km
Operating temperature range	-25 °C - +80 °C
Copper weight	87.2 Kg/Km
Cable weight (approx.)	340.1 Kg/Km
Screening effectiveness	>90 dB

PVC reinforcement

PVC sheath

CAL 59



### Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
50	6.0	1.83
200	11.6	3.54
470	18.2	5.55
860	25.5	7.77
1000	27.9	8.51
1350	32.6	9.94
1500	34.9	10.64
1750	37.6	11.46
2150	42.3	12.90
2400	45.4	13.84

### Return Loss

30-470 MHz	>32dB
470-860 MHz	>30dB
860-2400 MHz	>26dB