



### CONSTRUCTION AND DIMENSIONS

	materials	dimensions mm	tolerance
Inner conductor: solid soft annealed copper wire	Cu	1.40	± 0.02
Dielectric: Physical foam	PEE gas	3.80	± 0.05
Outer conductor:	Al/Pet/Al	12-15-12	
	Foil: Aluminium/Polyester/Aluminium coverage	100%	
Braid: tinned copper wires	CuSn	visual coverage diameter	80% 4.40
Sheath	N.C. PVC or PE or Duraflam	6.10	± 0.10

### ELECTRICAL CHARACTERISTICS

Impedance	50±2	Ohm
Capacitance	83±2	pF/m
Velocity ratio	81%	
Screening efficiency	> 90	dB
Resistance at 20 °C	inner conductor	11.2 Ohm/km
	outer conductor	12.4 Ohm/km

### ATTENUATION AND MAX POWER

MHz	dB/100m	kW
30	4.2	1.41
50	5.4	1.09
150	9.2	0.62
220	11.1	0.51
450	16.1	0.35
900	23.2	0.24
1500	30.5	0.19
1800	33.7	0.17
2000	35.7	0.16
2500	40.3	0.14
3500	48.6	0.12
5800	64.5	0.09

### MECHANICAL SPECIFICATIONS

Performance property	Units
Bend radius installation	mm 30/60
Weight	kg/km 53.7

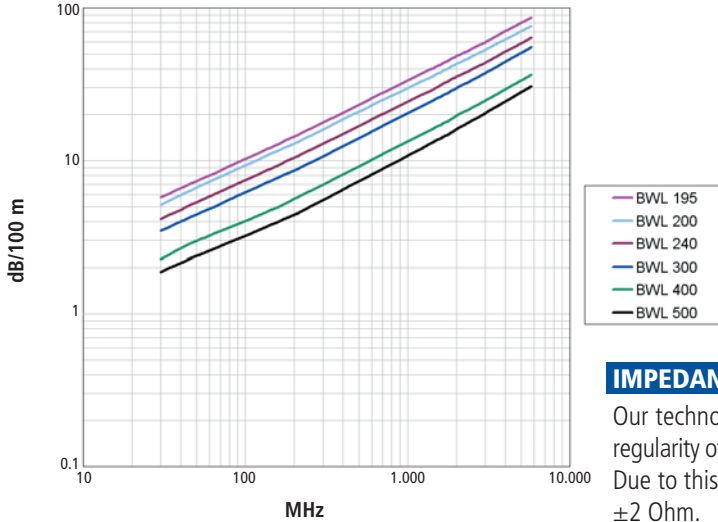
### ENVIRONMENTAL SPECIFICATIONS

Performance property	°C
Minimum Installation temperature	-5 °C
Operating temperature range PE	-40/+80°C
Operating temperature range PVC	-30/+75°C

## POWER RATING AND ATTENUATION CHART

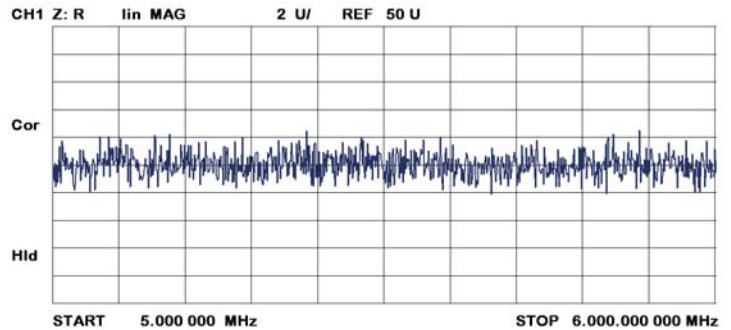
Freq. MHz	MAX POWER (T <sub>a</sub> =40° C; T <sub>cond</sub> =100° C)															
	BWL 195		BWL 200		BWL 240		BWL 240 flex		BWL 300		BWL 400		BWL 400CuPet		BWL 500	
	kW	dB/100m	kW	dB/100m	kW	dB/100m	kW	dB/100m	kW	dB/100m	kW	dB/100m	kW	dB/100m	kW	dB/100m
30	0.88	5.8	0.92	5.2	1.41	4.2	1.41	4.9	2.04	3.5	3.36	2.3	3.36	2.1	4.73	1.9
50	0.68	7.4	0.71	6.7	1.09	5.4	1.09	6.3	1.57	4.5	2.59	3.0	2.59	2.7	3.64	2.4
150	0.39	12.6	0.41	11.4	0.62	9.2	0.62	10.9	0.89	7.6	1.47	4.9	1.47	4.7	2.06	3.9
220	0.32	15.3	0.34	13.8	0.51	11.1	0.51	13.3	0.73	9.2	1.20	6.0	1.20	5.8	1.68	4.7
450	0.22	22.2	0.23	20.0	0.35	16.1	0.35	19.2	0.50	13.4	0.82	8.7	0.82	8.4	1.14	7.0
900	0.16	31.9	0.16	28.5	0.24	23.2	0.24	27.6	0.35	19.4	0.57	12.7	0.57	12.3	0.78	10.2
1500	0.12	41.8	0.13	37.3	0.19	30.5	0.19	36.2	0.26	25.7	0.43	16.8	0.43	16.3	0.59	13.7
1800	0.11	46.0	0.12	41.1	0.17	33.7	0.17	40.0	0.24	28.4	0.39	18.6	0.39	18.1	0.53	15.2
2000	0.10	48.7	0.11	43.4	0.16	35.7	0.16	42.3	0.22	30.2	0.36	19.8	0.36	19.2	0.50	16.2
2500	0.09	55.0	0.10	48.9	0.14	40.3	0.14	47.8	0.20	34.2	0.32	22.5	0.32	21.8	0.44	18.5
3500	0.07	66.1	0.08	58.7	0.12	48.6	0.12	57.4	0.16	41.5	0.26	27.3	0.26	26.5	0.35	22.7
5800	0.05	87.5	0.06	77.3	0.09	64.5	0.09	76.1	0.12	55.8	0.20	36.9	0.20	35.9	0.26	31.1

### Attenuation Chart



### IMPEDANCE

Our technology has been developed in the broadcasting sector where the regularity of impedance in a digital video coaxial cable is extremely important. Due to this we grant on all our production a regularity of impedance of  $50 \pm 2$  Ohm.



### SCREENING

Bonding the foil to the dielectric provides outstanding return loss values throughout the entire range (Bit error reduction in digital applications) facilitating the connectorization (Time consuming) and better screening immunity compared to a non bonded cable.

### SRL Return Loss

In gaining the high return loss levels needed the manufacturing process used by BETACAVI gives the best possible results as shown by the graph.

