

# CLASS A/A+ DIGITAL DROP COAXIALS

## CAVEL code

### CONSTRUCTION DATA

		CW41S	DG70 DG70C	DG80 DG80C	DG100	DG113
Inner conductor	material	FeCu	Cu	Cu	Cu	Cu
	dia. mm	0,41	0,70	0,80	1,00	1,13
Dielectric	material	PEG	PEG	PEG	PEG	PEG
	dia. mm	1,90	2,90	3,50	4,30	4,80
Screen:	material	Al2S	Al2	Al2	Al2	Al2
	Film foil laminate	100	100	100	100	100
Foil coverage	material	CuSn	CuSn	CuSn	CuSn	CuSn
	%	70	73	65	77	72
Braid	material	CuSn	CuSn	CuSn	CuSn	CuSn
	%	70	73	65	77	72
Braid coverage	dia. mm	2,50	3,40	4,00	4,80	5,30
	material	PVC	PVC	PVC	PVC	PVC
Outer sheath	material	PVC	PVC	PVC	PVC	PVC
	colour		■ ■ ■ ■	■ ■ ■ ■		
dia. mm	3,60	4,30	5,00	6,00	6,60	

### PHYSICAL DATA

Copper weight	kg/km	4,3	10,2	11,4	17,6	19,2
Cable weight	kg/km	14,9	20,9	25,9	37,5	43,0
Min. bending radius:	single bendings	mm	15/30	20/40	25/50	30/60
	repeated bendings	mm	15/30	20/40	25/50	30/60
Max. cable pulling strength	N	120	80	90	120	150

### ELECTRICAL DATA

Impedance	Ohm	75 ± 3	75 ± 3	75 ± 3	75 ± 3	75 ± 3
Capacitance	pF/m	55 ± 3	52 ± 2	52 ± 2	52 ± 2	52 ± 2
Velocity ratio	%	82	85	85	85	85
Attenuation (at 20°C)						
at	5 MHz	dB/100m	3,8	2,5	2,1	1,8
at	10 MHz	dB/100m	5,4	3,5	3,0	2,5
at	30 MHz	dB/100m	8,2	5,2	4,4	3,6
at	50 MHz	dB/100m	10,6	6,7	5,7	4,6
at	200 MHz	dB/100m	20,9	13,0	11,0	9,0
at	300 MHz	dB/100m	25,6	15,9	13,5	10,7
at	470 MHz	dB/100m	32,5	20,2	17,2	14,0
at	862 MHz	dB/100m	44,3	27,8	23,6	19,2
at	1000 MHz	dB/100m	47,8	29,9	25,5	20,7
at	1750 MHz	dB/100m	64,2	40,3	34,3	27,9
at	2150 MHz	dB/100m	71,6	45,0	38,0	31,1
at	2400 MHz	dB/100m	74,3	47,9	40,2	32,9
at	3000 MHz	dB/100m	85,8	53,7	44,0	37,3
Structural Return Loss (SRL)						
at	5 - 470 MHz	dB	> 29	> 30	> 30	> 30
at	470 - 1000 MHz	dB	> 27	> 28	> 28	> 28
at	1000 - 2000 MHz	dB	> 22	> 26	> 26	> 26
at	2000 - 3000 MHz	dB	> 18	> 22	> 22	> 22
Screening Attenuation (SA)						
at	5 - 30 MHz	class	A	A	A	A +
at	30 - 1000 MHz	mΩ/m	0,5	0,25	0,35	0,15
at	1000 - 2000 MHz	dB	> 90	> 85	> 80	> 90
at	2000 - 3000 MHz	dB	> 80	> 70	> 70	> 80
DC resistance inner/outer cond.	Ohm/km	310,0 / 30,0	45,5 / 19,6	35,0 / 18,6	22,5 / 13,7	18,0 / 13,9
Loop resistance	Ohm/km	340,0	65,1	53,6	36,2	31,9
Max. current (I <sub>eff</sub> )	A	n.a.	3,0	4,0	6,0	8,0
Sheath spark testing	kV	2,5	2,5	2,5	3,0	3,0

### Specification conformity

EN 50117	part 2-4	part 2-4	part 2-4	part 2-4	part 2-4	
Standard packing (further details at page 25)						
Unit length	m	100	200	150	100	100 250
Unit packing content	m	500	1.200	900	600	600 500
Packing mode	mod.	3	8C	8B	8A	8A 10
Fits CABLEBOX	item	-	DS100	DS100	DS100	DS100 DS250

### Tools & connectors (further details at pages 26 - 29)

Stripper	item	CS41	CS70	CS00	CS00	CS00
F twist-on connector	item	-	FA70	FA501	FA602	FA703
F crimp connector	item	F41	F70	F501	F602	F703
F compression connector	item	-	-	FC501SL	-	FC703SL
BNC compression connector	item	-	-	BNCC501SL	-	BNCC703SL
F connector	item	-	-	-	-	-
IEC connector	item	-	-	-	-	-
N connector	item	-	-	-	-	-
5/8" connector	item	-	-	-	-	-
3,5/12" connector	item	-	-	-	-	-