

Class A++ Broadband Coaxials SA > 105 dB

CAVEL code		TS61L	RP913B	TS703J	TS11J	TS22/99J	TS27/115J
CONSTRUCTION DATA							
Inner Conductor	dia. mm	1,00	1,13	1,13	1,63	2,20	2,70
	material	Cu	Cu	Cu	Cu	Cu	Cu
Dielectric	material	PEG	PEG	PEG	PEG	PEG	PEG
	dia. mm	4,80	4,80	4,80	7,20	9,90	11,50
Screen							
1. Film Foil Laminate	material	APAS	AP	APAS	APAS	APAS	APAS
2. Braid	material	CuSn	CuSn	CuSn	CuSn	CuSn	CuSn
Braid Optical Coverage	%	45	71	45	63	64	64
	dia. mm	5,32	5,35	5,37	7,85	10,72	12,32
3. Overlapped Film Foil	material	AP	-	-	-	-	-
Shorting Fold Film Foil (J)	material	-	-	APJ	APJ	APJ	APJ
Outer Sheath	dia. mm	6,60	6,60	6,90	10,30	13,10	15,30
	material	PVC	PVC	PVC	PE	PE	PE
PHYSICAL DATA							
Copper Content	kg/km	12,6	19,1	14,6	34,9	61	83,3
Cable Weigth	kg/km	39,4	44,4	44,0	86,8	133	180,2
Min. Bending Radius:							
single/repeated bends	mm	35/70	35/70	35/70	100	150	200
Max. Tensile Strength	N	120	150	150	300	600	800
ELECTRICAL DATA							
Impedance	Ohm	75±3	75±3	75±3	75±2	75±2	75±2
Capacitance	pF/m	54±2	52±2	52±2	52±2	52±2	52±2
Velocity ratio	%	82	85	85	85	85	85
Attenuation (at 20°C)							
at 5 MHz	dB/100m	2,0	1,4	1,6	1,1	0,8	0,8
at 10 MHz	dB/100m	2,3	1,9	2,3	1,5	1,1	1,0
at 30 MHz	dB/100m	3,5	3,0	3,2	2,2	1,5	1,3
at 50 MHz	dB/100m	4,6	4,0	4,1	2,8	2,0	1,7
at 200 MHz	dB/100m	8,6	8,1	8,0	5,6	4,0	3,5
at 300 MHz	dB/100m	10,8	9,9	9,8	6,9	4,9	4,3
at 470 MHz	dB/100m	13,6	12,6	12,5	8,8	6,4	5,5
at 862 MHz	dB/100m	18,8	17,3	17,2	11,9	9,1	7,7
at 1000 MHz	dB/100m	20,4	18,7	18,6	12,8	9,8	8,4
at 1750 MHz	dB/100m	27,8	25,7	25,2	17,9	13,8	11,5
at 2150 MHz	dB/100m	31,1	28,8	28,1	19,8	15,5	12,8
at 2400 MHz	dB/100m	32,4	30,6	29,7	21,0	16,5	13,6
at 3000 MHz	dB/100m	37,3	34,1	33,7	24,5	18,9	15,4
Structural Return Loss (SRL)							
at 5 - 470 MHz	dB	> 30	> 30	> 30	> 30	> 30	> 25
at 470 - 1000 MHz	dB	> 28	> 28	> 28	> 28	> 28	> 24
at 1000 - 2000 MHz	dB	> 26	> 26	> 26	> 23	> 23	> 23
at 2000 - 3000 MHz	dB	> 22	> 22	> 22	> 20	> 20	> 22
Screening Attenuation (SA)							
at 5 - 30 MHz (TI)	mΩ/m	< 0,9	< 0,9	< 0,9	< 0,9	< 0,9	< 0,9
at 30 - 1000 MHz	dB	> 105	> 112	> 105	> 105	> 115	> 115
at 1000 - 2000 MHz	dB	> 95	> 104	> 90	> 90	> 100	> 110
at 2000 - 3000 MHz	dB	> 85	> 91	> 80	> 80	> 85	> 100
DC Resistance: inner/outer	Ohm/km	22,5 / 14	18 / 10,7	18 / 14	8,5 / 7,5	5 / 4,5	3,4 / 3,5
Loop Resistance	Ohm/km	36,5	28,7	32	16	9,5	6,9
Sheath Insulation Voltage	kV	3	3	3	8	8	8
Max. Current (I _{eff})	A	6	8	8	16	21	25
Specification Conformity							
	EN50117	2-4	2-4	2-4	2-3	2-3	2-3
Standard Packing							
Put-up	mode	coil	coil	reel	drum	drum	drum
Unit Length	m	100	100	100	500	500	500
Unit Packing Content	m	600	600	500	500	500	500
Packing Pattern (look at page 25)	mod.	S100M	S100M	R100M	PD500	WD500	WD500
Fits CABLEBOX	item	DS100	DS100	DS100	-	-	-

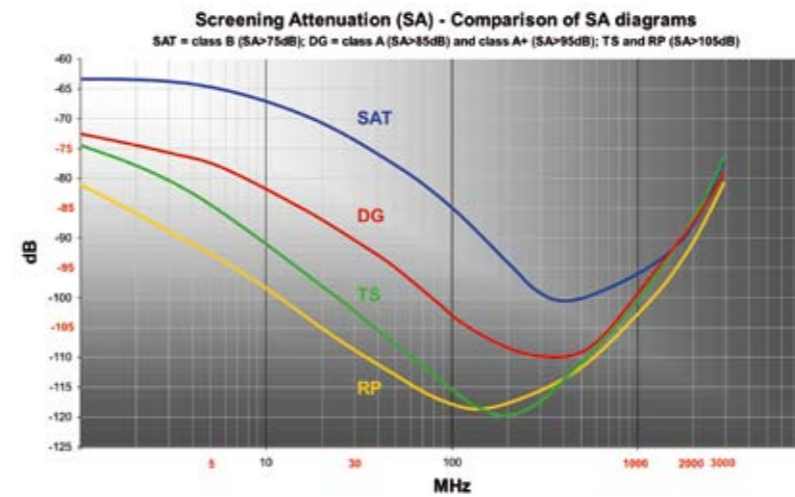
Tools & Connectors (look at pages 26-29)

CLASS A++ COAXIALS FOR TRIPLE PLAY DIGITAL NETWORKS

The market demand for products offering high screening performance for use in digital broadband communication systems is growing day by day. This is due on the one hand to the increasing number of transmission systems and, on the other hand, to the demand for digital TV programming such as PPV and VOD. Furthermore many operators now offer digital services for internet and digital telephony. Altogether these comprise the so-called Triple Play digital network. This applies to distribution and reception systems in different fields, including terrestrial, satellite and

cable broadband TV networks. All such systems require coaxial cables with more efficient screening features, especially in the so-called Return Path frequency range, typically 5 - 85 MHz.

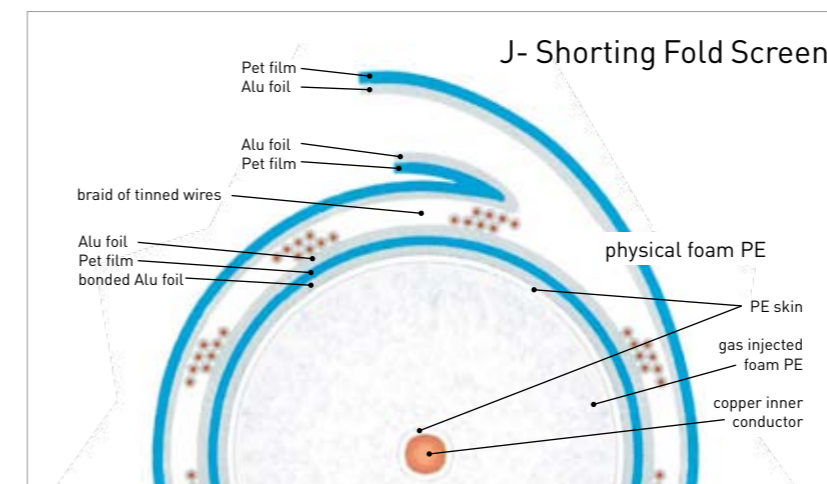
We have introduced two series of cables which both offer the highest screening efficiency, Class A++, according to EN50117 specifications. The RP Series includes Double Shielded coaxials performing the highest possible screening efficiency along Return Path frequencies. This is due to the use of a thicker Al foil film over the dielectric.



The TS Series includes coaxials provided with the special J-Shorting-Fold Screen. This is an innovative Triple Shielded screen that affords excellent screening attenuation (SA) along the full frequency bandwidth range 30-3000 MHz. It consists of:

1. An Al/Pet/Al foil film bonded to the dielectric (APAS);
2. One conventional braid of CuSn wires;

3. Another Al/Pet foil film (AP) over the braid, which is folded back over itself on the overlapping section. The combination of these screening components guarantees the stability of the SA values, which are close to those provided by a real metal tube while keeping the cable's flexibility within acceptable limits for easy handling during installation.



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