

# **Product Bulletin**

**PB 280** 

### Commercial AV Digital Coax Cables

Belden Commercial AV Digital Coax cables offer superior image quality with low Return Loss. They are ideal for a wide range of SDI, HD and video display applications.



Belden Offers SDI/HD Coaxial Cables With Design Features That Make Using Compression Connectors Faster, Easier and More Secure With the proliferation of plasma and LCD screens, there is growing market demand for high resolution video in a host of applications, including:

- AV presentations and whiteboards for meetings and classroom training
- Projector presentation systems
- Teleconferencing
- Closed-circuit surveillance and security systems
- Video for home theaters
- Video pick-up in sports bars, casinos, racinos and other commercial venues
- High Resolution Surveillance Video
- SDI, video, and Broadband HDTV
- Broadband Internet Delivery

Concurrently, AV and security system integrators are increasingly selecting compression connectors, which can be problematic when used with traditional foil design coaxial cables. The foil can bunch up when inserted into compression connectors or, if the foil is left in place, foil "stringers" can result which can short to the cable's center conductor.

#### **The Belden Solution**

Belden has designed its Commercial AV Digital Coax cables especially for use with compression connectors. The cable design features a foil shield that is securely bonded to the core, thus making installation easier and eliminating the risk of foil stringers and shorting.

#### Available in Six Designs, Ten Colors

The new Belden Commercial AV Digital Coax cable line includes six products: 1371R and 1371P (Mini RG-59 Type), 1370R and 1370P (RG-59/U Type), and 1369P and 1369P (RG-6U Type).

All cables are sweep tested to 3GHz, and all guarantee -15dB Return Loss (RL) performance. The cable design includes a tinned copper braid shield (85 percent coverage) and bonded Duofoil® shield (100 percent coverage) for effective shielding in higher frequency applications. The cables are available in ten colors: Black, White, Red, Green, Blue, Yellow, Orange, Violet, Brown, and Gray.

# Gas-injected High-density Foam Dielectric

The new coax design uses very high velocity dielectrics so the plenum and non-plenum versions are close in size, allowing selection of a single type of compression connector for both.

Belden's best-in-class, high-density foaming technology ensures reliable signal integrity and better video images while also providing superior crush-resistance, concentricity and conductor adhesion for more stable performance.

# **BELDEN**



## **Belden Commercial AV Digital Coax Cables**

Description	Part	UL NEC/	Standard Weight/1000 ft		Conductor (stranding)	Nominal Core OD		Shielding	Nominal OD		Nom.	Nom. Vel.	Nominal Capacitance		Nominal Attenuation			Recommended
	No.	C(UL) CEC Type	Lbs.	kg	Diameter Nom. DCR	Inch	mm	Materials Nom. DCR	Inch	mm	lmp. (Ω)	of [	pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100 m	Pro-SNS BNC Connector

Mini RG-59/U Type • 23 AWG Solid 0.23" BC Conductor • Duofoil® Bonded to the Core (100% Coverage) + TC Braid Shield (85% Coverage)

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Gas-inject	ed Foam	HDPE In:	sulatio	n • Fl	RPVC Ja	cket (Bla	ack, Wł	nite, Red, Gr	een, Bl	ue, Y	ellow, Ora	ange, '	Violet,	Brown,	and Gra	ay)		
SDI/HDTV Digital Video 75°C	1371R	NEC: CMR CEC: CMR	36	16	23 AWG	0.102	2.59	Duofoil (solid) .023" BC 20.1Ω/M' 65.9Ω/km	0.160	4.06	75 + 85% TC Braid 4.6Ω/M' 15.1Ω/km	82	16.3	53.5	1 3.6 5 71.5 135 270 360 540 720 1000 1500 2250 3000	0.4 0.8 0.9 3.1 3.8 5.4 6.2 7.7 9.5 10.5 13 16 18.5	0.1 0.2 0.3 0.9 1.2 1.6 1.9 2.3 2.9 3.2 4.0 4.9 5.6	FS15BNC
Gas-inject	ed Foam	<b>FEP Insu</b>	lation	• Flan	narrest®	Jacket	(Black,	White, Red	, Green	, Blue	e, Yellow,	Orang	ge, Vio	let, Bro	wn, and	Gray)		
SDI/HDTV Digital Video 75°C	1371P	NEC: CMP CEC: CMP	16	7	23 AWG	0.102	2.59	Duofoil (solid) .023" BC 20.1Ω/M' 65.9Ω/km	0.160	4.06	75 +85% TC Braid 4.6Ω/M' 15.1Ω/M'	80	16.6	54.5	1 3.6 71.5 135 270 360 540 720 1000 1500 2250 3000	0.38 0.76 3.1 4.1 5.8 6.9 8.7 10.3 12.4 15.7 19.9 23.8	0.1 0.2 0.9 1.2 1.8 2.1 2.7 3.1 3.8 4.8 6.1 7.3	FS15BNC

RG-59/U Type • 20 AWG Solid .032" BC Conductor • Duofoil® Bonded to the Core (100% Coverage) + TC Braid Shield (85% Coverage)

KG-59/U IY	Je • 20 /	AWG 50	iiu .032	BC COI	iductor •	Duololi	Donue	d to the C	016 (100	170 UC	verage)	+ 10	Di alu	Silleiu (	65% C	overage	=)	
Gas-injecte	d Foam	HDPE I	nsulati	on • FF	RPVC Ja	cket (Bla	ack, Wh	nite, Red, C	areen, Bl	lue, Ye	ellow, Or	ange,	Violet,	Brown,	and Gr	ay)		
SDI/HDTV Digital Video 75°C	1370R	NEC: CMR CEC: CMR	23	10.5	20 AWG	0.136	3.45	Duofoil (solid) .032" BC 10.1Ω/M' 33.1Ω/km	0.202	5.13	75 + 85% TC Braid 4.1Ω/M' 13.5Ω/km	84	16.6	54.5	1 3.6 5 71.5 135 270 360 540 720 1000 1500 2250 3000	0.3 0.6 0.6 2.1 2.7 3.8 4.4 5.5 6.4 7.6 9.3 11.6 13.4	0.1 0.2 0.2 0.2 0.6 0.8 1.2 1.3 2.0 2.3 2.8 3.5 4.1	FSNS59BNCPL
Gas-injecte	d Foam	FEP In:	sulatio	ı • Flan	narrest®	Jacket	t (Black	, White, Re	ed, Greei	n, Blu	e, Yellow	, Ora	nge, Vi	olet, Bro	own, and	d Gray)		

Gas-injecte	d Foam	FEP Insu	lation	• Flar	narrest <sup>®</sup>	Jacket	(Black,	White, Red	I, Green	ı, Blue	e, Yellow,	Orange	, Violet	Brown,	and Gray	)	
SDI/HDTV Digital Video	1370P	NEC: CMP	27	12	20 AWG	0.133	3.38	Duofoil (solid)	0.192	4.88	75 +85%	84 1	6.1 5	2.8	1 0.3 3.6 0.6	0.1 0.2	FSNS59BNCPL
75°C		CEC: CMP						.032" BC			TC Braid 4.1Ω/M'			71	5 0.7	0.2 0.2	
- Gauss		CIVIP						10.1Ω/M'			4.1Ω/M' 13.5Ω/M'			13	35 3.2 70 4.6	0.7 1.0	
								33.1Ω/km						36	5.3	1.4	
<u>Junio</u>	<del></del>														20 7.3	1.6 2.2	
														100 150	00 12.8	2.9 3.9	
														225 300		5.3 6.7	

RG-6/U Type • 18 AWG Solid .040" BC Conductor • Duofoil® Bonded to the Core (100% Coverage) + TC Braid Shield (85% Coverage)

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Gas-injecte	d Foam	HDPE	Insulati	on •	FRPVC	Jacket (B	lack, W	hite, Red,	Green,	Blue, Y	'ellow, Or	ange,	Violet,	Brown,	and Gr	ay)		
SDI/HDTV Digital Video 75°C	1369R	NEC: CMR CEC: CMR	29	13	18 AV	VG 0.170	4.32	Duofoil (solid) .040" BC 6.4Ω/M'	0.23	5.97	75 + 85% TC Braid 3.6Ω/M' 11.8Ω/km	83	16.6	54.5	1 3.6 5 71.5 135	0.2 0.4 0.5 1.7 2.2	0.1 0.1 0.2 0.5 0.7	FSNS6BNCPL
								20.9Ω/kn	1						270 360 540 720 1000 1500 2250	3.2 3.7 4.6 5.4 6.4 8.0 10.0	1.0 1.1 1.4 1.6 2.0 2.4 3.1	
															3000	11.8	3.6	

Gas-injecte	d Foam	FEP In	sulation	• Fla	amarrest	Jacket	(Black,	White, Red,	Green,	Blue,	Yellow,	Orange	, Violet	, Brown	and	Gray)		
SDI/HDTV Digital Video	1369P	NEC: CMP	34	15	18 AWG	0.168	4.27	Duofoil (solid)	0.231	5.87	75 + 85%	83	16.3	53.5	1 3.6	0.2 0.5	0.1 0.1	FSNS6BNCPL
75°C		CEC: CMP						.040" BC			TC Braid 3.6Ω/M'				71.5	0.6 1.8 2.4	0.2 0.5 0.7	
								$6.4\Omega/\text{M}'$ $20.9\Omega/\text{km}$			11.8Ω/km				135 270 360	2.4 3.4 4.0	1.0 1.2	
															540 720	5.2 6.1	1.6	
															1000	7.3 9.2	2.2	
															2250	11.6	3.5	

BC = Bare Copper • FEP = Fluorinated Ethylene Propylene • FHDPE = Foam High-density Polyethylene • FRPVC = Fire Resistant PVC • HDPE = High-density Polyethylene • TC = Tinned Copper