

# Standard Analog Video Cable

## 75 Ohm Miniature Coax



Belden standard video cables are typically used in non-critical video applications such as video equipment rack wiring, closed circuit TV (CCTV), master antenna TV(MATV) and color or monochrome video monitor hook-ups. Applications such as these do not require Precision Video coaxes which have extremely tight electrical tolerances. (See Precision Video cables, pages 19.49 through 19.58.)

Standard video coaxes are available in both solid and stranded designs. Stranded designs are recommended for flexing applications such as interconnection of CCTV cameras with pan and tilt capabilities, or remote camera hook-ups where the cable is constantly being spooled and despoiled from a reel. Belden's Brilliance high-flex part no. 8241F is ideal for these types of applications.

Video coax cables have a characteristic impedance of 75 ohms. This value was not chosen arbitrarily. Physics shows that optimum attenuation characteristics occur at 77 ohms. Materials and design lead to the selection of 75 ohms as the optimum compromise for low power applications.

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Insulation Diameter		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m
<b>30 AWG Stranded (7x38) .012" Tinned Copper Conductor • Tinned Copper Braid Shield (89% Coverage)</b>																			
<b>Foam HDPE Insulation • Black PVC Jacket</b>																			
UL AWM Style 1375 (30V 60°C)	<b>9221</b>	—	100	30.5	1.5	1.0	30 AWG (7x38) .012"	.058	1.47	TC Braid 89% Shield Coverage	.097	2.46	75	78%	17.3	56.8	1	.7	2.3
			U-500	U-152.4	4.0	1.8	TC			11.7Ω/M'							4	1.3	4.3
			500	152.4	4.0	1.8	100.0Ω/M'			38.4Ω/km							5	1.6	5.2
																	10	2.2	7.2
																	50	5.1	16.7
																	100	7.3	23.9
																	200	10.5	34.4
																	400	15.5	50.9
																	1000	26.6	87.3

<b>27 AWG Stranded (7x35) .017" Bare Copper-covered Steel Conductor • Tinned Copper Braid Shield (93% Coverage)</b>																			
<b>Polyethylene Insulation • Black PVC Jacket</b>																			
UL AWM Style 1354 (30V 60°C) (1700V non-UL)	<b>8218</b>	—	U-500	U-152.4	8.5	3.9	27 AWG (7x35) .017"	.100	2.54	TC Braid 93% Shield Coverage	.150	3.81	75	66%	20.5	67.3	1	1.2	3.9
			500	152.4	8.0	3.6	BCCS			5.7Ω/M'							10	2.4	7.9
			U-1000	U-304.8	16.0	7.3	120.0Ω/M'			18.7Ω/km							50	4.2	13.8
			1000	304.8	14.0	6.4	393.7Ω/km										100	5.7	18.7
																	200	8.3	27.2
																	400	12.1	39.7
																	700	16.5	54.1
																	900	19.0	62.3
																	1000	20.0	65.6

<b>Miniature • 25 AWG Solid .018" Tinned Copper Conductors • Duobond® (100% Coverage) + TC Braid Shield (95% Coverage)</b>																				
<b>Gas-injected Foam HDPE Insulation • Black PVC Jacket</b>																				
	<b>1281R</b>	NEC: CMR	1	1000	304.8	8.0	3.6	25 AWG (solid) .018" TC	.074	1.88	Duobond (100%) + TC Braid	.114	2.90	75	80%	17.0	55.8	1	.5	1.7
		CEC: CMG						34.0Ω/M'			5.4Ω/M'							5	1.2	3.8
								111.6Ω/km			17.7Ω/km							50	3.7	12.1
																		100	4.9	16.1
																		200	6.7	22.0
																		400	9.5	31.2
																		700	13.4	44.0
																		900	15.0	49.2
																		1000	15.8	51.8
																		3000	31.2	102.4

<b>Plenum • FPFA Insulation • Black Flamarrest® Jacket</b>																				
	<b>1282P</b>	NEC: CMP	1	1000	304.8	10.0	4.5	25 AWG (solid) .018" TC	.074	1.88	Duobond (100%) + TC Braid	.114	2.90	75	81%	17.0	55.8	1	.4	1.3
		CEC: CMP FT6						31.8Ω/M'			5.8Ω/M'							5	.9	3.0
								104.3Ω/km			19.0Ω/km							50	3.7	12.1
																		100	5.0	16.4
																		200	7.0	23.0
																		400	10.0	32.8
																		700	14.5	47.6
																		900	17.0	55.8
																		1000	17.5	57.4
																		3000	37.0	121.4

BCCS = Bare Copper-covered Steel • DCR = DC Resistance • FPFA = Foam Perfluoroalkoxy • HDPE = High-density Polyethylene • TC = Tinned Copper