Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

6788AV Composite - Audio and Video Composite Cable

Picture Not Available

Description:

6 Coax - 25 AWG solid tinned copper conductors, FPFA insulation, Duobond® shield plus an interlocked serve shield, Flamarrest® jacket. 2 pairs - 22 AWG stranded (7x30) tinned copper conductors, Flamarrest® insul., Beldfoil® shield, drain wire, Flamarrest® jacket.

Usage (Overall)

Suitable Applications: Projection Video, Projectors, Classroom, Room-to-Room AV, RGB, VGA, SVGA, XGA, SXGA, USGA, HDTVm LCD, Plasma, Component Video, Video Mult., Composite Audio Video, Hybrid Component, Animation, Special Effects, RGB62TS, RGB6C/22-2P-PLN, High Resolution, HR + STP

Coax

Physical Characteristics

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
6	25	Solid	TC - Tinned Copper	0.018

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FPFA - Foam Perflouoroalkoxy	0.074

Inner Shield

Inner Shield Material:

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	% Coverage (%)
1	Duobond®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Interlocked Serve	TC - Tinned Copper	95

Inner Jacket

Inner Jacket Material:

Inner Jacket Trade Name	Inner Jacket Material	Nom. Dia. (in.)
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride	0.114

Inner Jacket Color Code Chart:

Number	Color
1	Red
2	Green
3	Blue
4	Yellow
5	Black
6	White

Mechanical Characteristics

Min. Bend Radius (Install): 1.100 in.

Electrical Characteristics

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/ft)
0.087

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
17.000

Nominal Velocity of Propagation:

VP (%)
80.000

Nominal Delay:

Delay (ns/ft)
1.240

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
34.000

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
5.400

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	850.000	20.000

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.520
5.000	1.170
50.000	3.700
100.000	4.900
200.000	6.700
400.000	9.500
750.000	13.400
900.000	15.000
1000.000	15.800
3000.000	31.200

Max. Operating Voltage - UL: 300 V RMS

Twisted Pair

Physical Characteristics

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
2	22	7x30	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Twisted Pair Color Code Chart:

Number	Color
1	Black and Red
2	Black and Red

Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG	Stranding	Conductor Material
24	Stranded	TC - Tinned Copper

Inner Jacket

Inner Jacket Material:

Inner Jacket Trade Name	Inner Jacket Material	Nom. Dia. (in.)
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride	0.134

Inner Jacket Color Code Chart:

Number	Color
1	Brown
2	Orange

Mechanical Characteristics

Min. Bend Radius (Install): 1.500 in.

Electrical Characteristics

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
46.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
16.100

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
11.500

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Current
2.8 Amps per conductor @ 25°C

Physical Characteristics (Overall)

Conductor

Overall Cabling

Overall Cabling Color Code Chart:

Number	Color
1	Red
2	Green
3	Blue
4	Yellow
5	Black
6	White
7	Brown
8	Orange

Overall Nominal Diameter: 0.426 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	0°C To +75°C
Separation Temperature Range:	0°C To +75°C
Bulk Cable Weight:	82 lbs/1000 ft.
Max. Recommended Pulling Tension:	185 lbs.
Min. Bend Radius (Install)/Minor Axis:	4.500 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMG
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	02/13/2007
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flame Test

UL Flame Test:	NFPA 262 Plenum Flame Test (UL910)(FT6)
CSA Flame Test:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	5788AV

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
6788AV 0001000	1,000 FT	99.000 LB	NONE	C	BONDED FILLER COMPOSITE
6788AV 000250	250 FT	32.750 LB	NONE	C	BONDED FILLER COMPOSITE
6788AV 0091000	1,000 FT	107.000 LB	WHITE	C	BONDED FILLER COMPOSITE
6788AV 009250	250 FT	26.750 LB	WHITE	C	BONDED FILLER COMPOSITE

Notes:
C = CRATE REEL PUT-UP.

BELDEN
SENDING ALL THE RIGHT SIGNALS

New Product Bulletin

NP 272

Belden® Banana Peel® Projector Cables

Belden Projector Cables in a Banana Peel composite cable format, offer optimum flexibility and faster, easier installation break-outs for room-to-room Riser and Plenum Audio/Video applications.

Easy to Install, New Belden Banana Peel Projector Cables Support High Performance in Room-to-Room A/V Applications

As the demand for sophisticated multimedia systems continues to grow, so too does the need for easier-to-install composite Audio/Video Projector cables. Installers are frequently called upon to run inter-room cabling to support high-performance A/V communications systems in schools, universities, municipal buildings, houses of worship and commercial office spaces.

To meet market demand, Belden introduces its Banana Peel® Projector Cables, an innovative design combining both audio and video cable components within a single composite cable. Designed for use in modern, high-tech buildings, Banana Peel Projector Cables are extremely flexible and easy to handle, enabling installers to save time and labor by running multiple A/V cables simultaneously from room-to-room, where similarly equipped wall plates are desired in each room.

Within the composite Projector Cables, the video components include six Belden RG-59 type 75 Ohm Precision Video Mini Coax Cables (Product No. 1281R-Riser and 1282P-Plenum) for analog and digital video. Audio components include two Belden 22 AWG Shielded Twisted Pair Audio Cables featuring aluminum foil-bonded jackets for easy access to the positive, negative and shield drain wires.

Banana Peel Construction Means Faster Installation

Unlike conventional projector cables with overall jackets which are difficult to handle and add to the cables' fuel load, the new Projector Cables feature Belden's exclusive Banana Peel construction. In this design, individual cables are affixed to a central spline and are simply peeled off as needed for termination, making installation much faster and easier.

The Banana Peel construction also enables easier break-out of cables when the full bundle of eight components needs to be divided to run two smaller bundles to separate wall plates. Belden's coax cables offer true 75 Ohm impedance, are sweep-tested, and come with Return Loss assurance. In addition, the elimination of the outer jacket reduces the cables' total fuel load, making the Belden Projector Cables more suitable for in-wall and plenum use.

BELDEN
SENDING ALL THE RIGHT SIGNALS

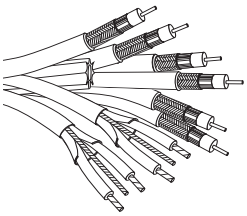
Banana Peel® Projector Cables

Inter-room Audio/Video Composites: 6 Mini Hi-res Coaxes + 2 Shielded Twisted Pairs
Riser- and Plenum-rated

(6) Mini RG-59 Type RGB Coax (1281R Type) + (2) 22 AWG Audio Cables (5500FE Type) • (6) 25 AWG Solid Coax with Duobond® + TC Serve (95% Coverage) • (2) Jacketed 22 AWG STP Audio Cables

Insulation: Gas-Injected Foam Polythylene (Coax) and PVC (Pairs)

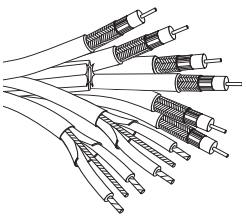
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Overall Nominal OD Inch	Overall Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Coax Nominal Attenuation MHz	Coax Nominal Attenuation dB/ 100 Ft.	Coax Nominal Attenuation dB/ 100m
UL 300V 75°C	**5788AV** new	NEC: CMR CEC: CMG FT4	250	152.4	108.5	49.3	(6) Coax: 25 AWG (solid) .018" BC 31.8Ω/M′ 104.3Ω/km	.074 Coax OD: .114	1.88 2.90	Duobond + TC Serve 95% Shield Coverage 5.4Ω/M′ 17.7Ω/km	.442	11.2	75	80%	17.0	55.8	1	.52	1.7
			1000	304.8	232.0	105.5											5	1.2	3.9
																	10	1.6	5.2
																	20	2.4	7.9
																	50	3.7	12.1
																	71	4.4	14.1
							(2) Pairs: 22 AWG (7x30) .030" TC 14.1Ω/M′ 46.2Ω/km	Pair OD: .135	Pair OD: 3.43	Each Pair: Beldfoil Shielded 100% Shield Coverage w/22 AWG 14.3Ω/M′ 46.9Ω/km			N/A	N/A	46.0	151.0	100	4.9	16.1
																	135	5.6	18.4
																	180	6.4	21.0
																	200	6.7	22.0
																	270	7.7	25.2
																	400	9.5	31.1
																	750	13.4	44.0
																	1000	15.8	51.8
																	2250	26.1	85.6
																	3000	31.2	102.3



(6) Mini RG-59 Type RGB Coax (1282P Type) + (2) 22 AWG Audio Cables (6500FE Type) • (6) 25 AWG Solid Coax with Duobond® + TC Serve Shield (95% Coverage) • (2) Jacketed 22 AWG STP Audio Cables

Insulation: Low Smoke Foam Fluoropolymer (Coax) and LS-PVC (Pairs)

UL 300V 75°C	**6788AV** new	NEC: CMP CEC: CMP FT6	250	152.4	108.5	49.3	(6) Coax: 25 AWG (solid) .018" BC 31.8Ω/M′ 104.3Ω/km	.074 Coax OD: .114	1.88 2.90	Duobond + TC Serve 95% Shield Coverage 5.4Ω/M′ 17.7Ω/km	.433	11.0	75	80%	17.0	55.8	1	.52	1.7
			1000	304.8	232.0	105.5											5	1.2	3.9
																	10	1.6	5.2
																	20	2.4	7.9
																	50	3.7	12.1
																	71	4.5	14.8
																	100	4.9	16.1
							(2) Pairs: 22 AWG (7x30) .030" TC 14.1Ω/M′ 46.2Ω/km	Pair OD: .135	Pair OD: 3.43	Each Pair: Beldfoil Shielded 100% Shield Coverage w/22 AWG 14.3Ω/M′ 46.9Ω/km			N/A	N/A	46.0	151.0	135	5.6	18.2
																	180	6.3	21.3
																	200	6.7	22.0
																	270	7.7	25.4
																	400	9.5	31.2
																	750	13.4	44.0
																	1000	15.8	51.8
																	2250	23.5	77.0
																	3000	31.2	102.4



BC = Bare Copper • DCR = DC Resistance • LS = Low Smoke • STP = Shielded Twisted Pairs • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1.800.BELDEN.1**. Request quotations of cables not listed.

Circuit Identification

009: White jackets (all components) with printed identification

000: Coax: Red, Green, Blue, Yellow, Black, White
Audio: Brown, Orange

Suitable Coax Connectors

BNC: 1B25A

RCA: 1R25A