



Description:

22 AWG stranded (7x30) TC conductors, FEP insulation, dual twisted pairs, overall Beldfoil® shield (100% coverage), 22 AWG stranded TC drain wire, Flammarrest® jacket in zip-cord construction.

Physical Characteristics (Overall)

Conductor

AWG:

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

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.007

Outer Shield

Outer Shield Material:

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

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire	Conductor Material
22	7x30		TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material	Nom. Wall Thickness (in.)
Flammarrest®	LS PVC - Low Smoke Polyvinyl Chloride	.017

Overall Cabling

Overall Nominal Diameter: 0.127 x 0.269 in.

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White

Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
1.750	6.860

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

UL Temperature Rating: 60°C

Bulk Cable Weight: 24.500 lbs/1000 ft.

Max. Recommended Pulling Tension: 54 lbs.

Min. Bend Radius (Install)/Minor Axis: 1.300 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
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):	04/01/2005
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
CSA Flame Test:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	9451D

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

42

Nom. Inductance:

Inductance (μ H/ft)

.15

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

35

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

67

Nominal Velocity of Propagation:

VP (%)

69

Nominal Delay:

Delay (ns/ft)

1.47

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

14.1

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

14.3

Max. Operating Voltage - UL:

Voltage

300 V RMS

Max. Recommended Current:

9451DP Multi-Conductor - Double-Pair Cable

Current

2.9 Amps per conductor @ 25°C

Notes (Overall)

Notes: The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9451DP 0091000	1,000 FT	26.000 LB	WHITE	C	2 FSPR #22 FEP PLENUM PVC

Notes:

C = CRATE REEL PUT-UP.

Line Level Analog Audio Cable

Single-Pair Cables



Belden analog audio cables are used for connecting line level audio equipment in either permanent or semi-permanent installations. They consist of one or two individually foil-shielded, twisted pairs. Once installed, they are not intended to be moved while in service. For cables that are in motion during use, refer to the Microphone and Musical Instrument Cable section in this catalog.

no. 8451 utilizes a paper tape separator to facilitate easy long length jacket stripping. Part no. 9451 comes with a bonded Beldfoil® shield so that the shield and jacket strip simultaneously. A special matte PVC jacket material is employed on part no. 1508A making it a highly flexible construction. Double pair cables are available in a round construction (part no. 8723) or in a ZIP cord style (part no. 1504A) for easy separation in two-channel or stereo hook-ups.

Belden's analog audio cable offering consists of a selection of designs to handle a variety of audio applications. Belden part

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

24 AWG Stranded (7x32) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 24 AWG Stranded TC Drain Wire

Polypropylene Insulation • PVC Jacket (Available in Brown, Red, Green, Lt. Blue, Purple, Gray, White or Black)

300V RMS 60°C	1883A	NEC: CMR CEC: CMG FT4	1	Black, Red	U-1000 1000 [▲]	U-304.8 304.8	11.0 11.0	5.0 5.0	.008 .20	.020 .51	.123 3.12	31 102	58 190				
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▲1000 ft. put-up available in Gray only.

Jacket and shield are bonded so both can be removed with automatic stripping equipment.

For cross-connect use with 1408R (et al.) Snake Cables, see page 19.18.

Polyolefin Insulation • Black Matte PVC Jacket

High-Flex 300V RMS 60°C	1508A	NEC: CM CEC: CM	1	Black, Red	500 1000	152.4 304.8	6.5 11.0	2.9 5.0	.008 .20	.024 .61	.131 3.33	31 102	58 190				
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Jacket and shield are bonded so both can be removed with automatic stripping equipment.

For cross-connect use with 1408R (et al.) Snake Cables, see page 19.18.

24 AWG Stranded (7x32) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage)^{††} • 24 AWG Stranded TC Drain Wire

Polyethylene Insulation • Chrome PVC Jacket

Low-Capacitance UL AWM Style 2092 (300V RMS 60°C)	8641	NEC: CM CEC: CM	1	Black, Clear	100 U-500 500 U-1000 1000 2000	30.5 U-152.4 152.4 U-304.8 304.8 609.6	2.3 7.5 3.4 7.0 3.2 14.0 6.4 14.0 6.4 28.0	1.0 3.4 3.2 6.4 6.4 12.7	.016 .41	.025 .64	.168 4.27	22 72	42 138				
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For Plenum versions of 8641, see 88641 or 82641.

Plenum • FEP Insulation • Red FEP Jacket

300V RMS 200°C, Non-conduit	88641	NEC: CMP CEC: CMP FT6	1	Black, Red	100 500 [†] 1000 [†]	30.5 152.4 304.8	2.4 6.0 9.0	1.1 2.7 4.1	.006 .15	.014 .36	.106 2.69	31 102	59 194				
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Plenum • FEP Insulation • Natural Flamarrest® Jacket

300V RMS 60°C, Non-conduit	82641	NEC: CMP CEC: CMP FT6	1	Black, Red	U-1000 ^{††} 1000 ^{††}	U-304.8 304.8	9.0 8.0	4.1 3.6	.006 .15	.014 .36	.106 2.69	31 102	59 194				
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FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

*Capacitance between conductors.

**Capacitance between one conductor and other conductors connected to shield.

[†]Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

^{††}Length may vary ±10% for UnReel.

Line Level Analog Audio Cable

Single- and Double-Pair Cables



19 • Brilliance® Broadcast

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

22 AWG Stranded (19x34) TC Conductors • Dual Twisted Pairs • Overall Beldfoil® Shield (100% Coverage) • 24 AWG Stranded TC Drain Wire

PVC Insulation • PVC Jacket in Zip-Cord Construction (Red & Green, Red & Black, Red & Purple or Red & Gray)

	1504A	NEC:	2	Black, Red	U-1000	U-304.8	32.0	14.5	.010	.25	.020	.51	.143	3.63	57	187	100	328		
		CM			2000 *	609.8	64.0	29.0												
		CEC: CM														.286	7.26			

*2000 ft. put-up available in Red & Gray or Red & Green only.
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

22 AWG Stranded (7x30) TC Conductors • Dual Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 22 AWG Stranded TC Drain Wire

Polyolefin Insulation • PVC Jacket in Zip-Cord Construction (Red & Green, Red & Gray, Red & Black or Red & Purple)

	9451D	NEC:	2	Black, Red	U-1000	U-304.8	29.0	13.2	.008	.20	.020	.51	.135	3.43	34	112	67	220		
		CMR			2000 *	620.8	62.0	28.1												
		CEC: CMG FT4														.270	6.86			

*2000 ft. put-up available in Red & Green only.
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

Plenum • FEP Insulation • White Flamarrest® Jacket in Zip-Cord Construction

	9451DP <small>new</small>	NEC:	2	Black & Red, Black & White	1000	304.8	24.0	10.9	.007	.18	.017	.43	.127	3.23	35	115	67	220			
		CMP																			
		CEC: CMP FT6														.269	6.83				

The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

20 AWG Stranded (7x28) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 20 AWG Stranded TC Drain Wire

PVC Insulation • Beige PVC Jacket

	9154	NEC:	1	Black, Red	U-500	U-152.4	11.5	5.2	.014	.36	.031	.79	.198	5.03	60	197	100	328			
		CMG			500	152.4	12.0	5.5													
		CEC:			U-1000	U-304.8	22.0	10.0													
		CMG FT4			1000	304.8	23.0	10.5													

9154 has 22 AWG stranded tinned copper drain wire.

Polyethylene Insulation • Chrome PVC Jacket

	8762	NEC:	1	Black, Clear	100	30.5	3.2	1.5	.016	.41	.028	.71	.204	5.18	27	89	49	161				
		CM			250	76.2	6.3	2.8														
		CEC:			U-500	U-152.4	12.0	5.5														
		CM			500	152.4	12.0	5.5														
					U-1000	U-304.8	23.0	10.5														
					1000	304.8	23.0	10.5														

	9464	NEC:	1	Black, Clear	U-500	U-152.4	17.0	7.7	.016	.41	.035	.89	.214	5.44	27	89	49	161		
		CM			U-1000	U-304.8	32.0	14.5												
		CEC: CM																		

The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is on the inside of foil shield.

20 AWG Stranded (7x28) Tinned Copper Conductors • Twisted Pair • Tinned Copper Spiral Wrapped Shield (89% Coverage)

PVC Insulation • Chrome PVC Jacket

	8759	NEC:	1	Black, Red	U-500	U-152.4	12.5	5.7	.016	.41	.025	.64	.199	5.05	47	154	79	259			
		CMG			U-1000	U-304.8	24.0	10.9													
		CEC:			1000	304.8	25.0	11.4													
		CMG FT4																			

FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

* Capacitance between conductors.

** Capacitance between one conductor and other conductors connected to shield.

