

9620 Multi-Conductor - Audio, Control and Instrumentation Cable



Description:

16 AWG stranded (19x29) tinned copper conductors, conductors cabled, PVC insulation, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
5	16	19x29	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PVC - Polyvinyl Chloride	.031

Insulation Resistance: 500 Megaohms/1000 ft.

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.042

Overall Cabling

Overall Cabling Lay Length & Direction:

Length (in.)	Twists (ft.)
4.5	2.6

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red
4	Green
5	Orange

Overall Nominal Diameter: 0.411 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +80°C

UL Temperature Rating: 80°C

Bulk Cable Weight: 95.100 lbs/1000 ft.

Max. Recommended Pulling Tension: 152 lbs.

Min. Bend Radius (Install)/Minor Axis: 4 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

9620 Multi-Conductor - Audio, Control and Instrumentation Cable

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):	10/1/2005
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:	VW-1
Other Flame Test:	VW-1, FT1

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
19.5

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.4

Max. Operating Voltage - UL:

Voltage
600 V RMS

Max. Recommended Current:

Current
5.5 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9620 060100	100 FT	11.000 LB	CHROME		5#16 PVC FRPVC
9620 0601000	1,000 FT	109.000 LB	CHROME	C	5#16 PVC FRPVC
9620 060500	500 FT	53.500 LB	CHROME	C	5#16 PVC FRPVC

Notes:

C = CRATE REEL PUT-UP.

Introduction

Belden® multi-conductor cables are manufactured in a wide variety of gage sizes, dimensions, insulation materials, shielding configurations, and jacketing materials including Plenum and High-Temperature versions. These cables meet the technical requirements of many different types of systems. In fact, Belden offers one of the broadest lines of UL Listed, NEC and CEC multi-conductor cables available from any single source.

Applications for multi-conductor cables include computers, communications, instrumentation, sound, control, audio, and data transmission. Each of these cables is designed to protect signal integrity under critical conditions by reducing hum, noise, and crosstalk.

To assist you in selecting the proper cable for your application, both the suggested working voltages and the maximum temperature ratings are indicated for each applicable product in this section.

Most of our multi-conductor cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a multi-conductor cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Multi-Conductor Cables Packaging

Belden's unique UnReel® cable dispenser is available for many of the multi-conductor products listed in this section. The letter "U" before the specified put-up length denotes UnReel packaging.

Selection Guide

Shielded Multi-Conductor Computer Cables for RS-232 Applications

Specifications		Cable Series*			
		9925	9608	9533	9939
Conductor Size: (AWG)	28				
	24	✓	✓	✓	
	22				✓
	20				
	18				
Page No.		4.18	4.17	4.11	4.19
Insulation:	S-R PVC		✓	✓	✓
	Polyethylene				
	Polypropylene				
	Datalene®†	✓			
Shield:	Overall Foil			✓	
	Drain Wire	✓		✓	
	Overall Foil/Braid	✓	✓		✓
	Braid Coverage	65%	65%		65%
Drain Wire Overall:		Yes	No	Yes	No
No. of Cond. Available:	1				
	2				
	3	✓	✓	✓	✓
	4	✓	✓	✓	✓
	5	✓	✓	✓	✓
	6	✓	✓	✓	✓
	7	✓	✓	✓	✓
	8	✓	✓	✓	✓
	9	✓	✓	✓	✓
	10	✓	✓	✓	✓
	11				
	12				
	13				
	15	✓	✓	✓	✓
	17				
	18				
	19				
	20			✓	
	25	✓	✓	✓	✓
	27				
30			✓		
31					
37	✓	✓		✓	
40			✓		
50		✓	✓	✓	
Capacitance ** (pF/ft.)		12.0	30.0	30.0	35.0

*All cables are UL-listed.

**Capacitance may vary on some cables.

† Foam high density polyethylene.

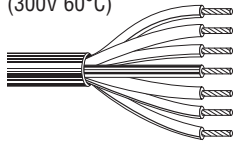
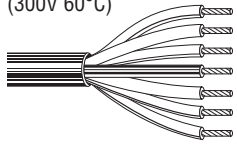
Unshielded

Audio, Control and Instrumentation Cables Plenum-Rated and Non-Plenum

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

18 AWG Stranded (19x30) Tinned Copper Conductors • Conductors Cabled *(continued)*

PVC Insulation • Chrome PVC Jacket


	8619	UL AWM Style 2598 (300V 60°C)	NEC: 19	See	100	30.5	20.3	9.2	.017	.43	.045	1.14	.490	12.45
		CMG	Chart 2R	500	152.4	101.0	45.9							
		CEC: CMG FT4	(Tech Info Section)	1000	304.8	198.0	90.0							
	9626		NEC: 25	See	100	30.5	29.1	13.2	.017	.43	.060	1.52	.612	15.54
			CMG	Chart 2R	500	152.4	139.5	63.3						
			CEC: CMG FT4	(Tech Info Section)	1000	304.8	277.0	125.8						

Plenum • FEP Insulation • Red FEP Jacket

	88489	300V RMS	NEC: 4	Black, White, Red, Green	500 [†]	152.4	14.5	6.6	.007	.18	.009	.23	.161	4.09
			CMP		1000 [†]	304.8	29.0	13.2						
			CEC: CMP FT6											

Suitable for Outdoor and Direct Burial applications.

Plenum • FEP Insulation • Natural Flamarrest® Jacket

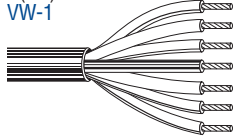
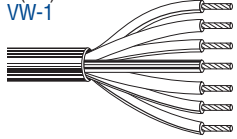
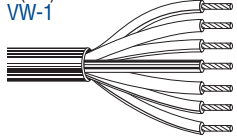
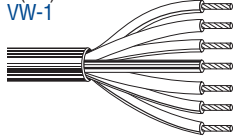
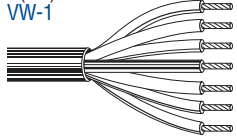
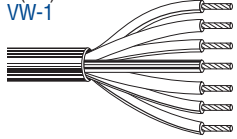
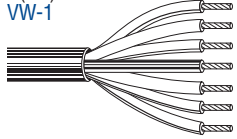
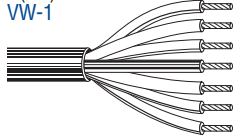
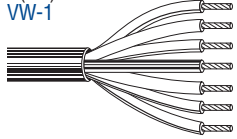
	82489	300V RMS	NEC: 4	Black, White, Red, Green	U-1000 [†]	U-304.8	31.0	14.1	.007	.18	.014	.36	.170	4.32
			CMP		1000 [†]	304.8	29.0	13.2						
			CEC: CMP FT6											

16 AWG Stranded (19x29) Tinned Copper Conductors • Conductors Cabled

PVC Insulation • Cabled Wire (No Jacket)

	9498	UL AWM Style 1007 (300V 80°C) VV-1	—	3	Orange, Black, Orange w/ Black Stripe	1000	304.8	42.0	19.1	.027	.69	—	—	.243	6.17

PVC Insulation • Chrome PVC Jacket

	8620	600V RMS 80°C C(UL) FT4 VV-1	—	4	See Chart 2 (Tech Info Section)	100	30.5	8.9	4.0	.031	.79	.042	1.07	.376	9.55
						500	152.4	44.0	20.0						
						1000	304.8	88.0	40.0						
	9620		—	5	See Chart 2 (Tech Info Section)	100	30.5	11.0	5.0	.031	.79	.042	1.07	.411	10.44
						500	152.4	53.5	24.3						
						1000	304.8	109.0	49.5						
	8621		—	7	See Chart 2R (Tech Info Section)	100	30.5	13.2	6.0	.031	.79	.045	1.14	.458	11.63
						500	152.4	73.5	33.4						
						1000	304.8	143.0	65.0						
	9721		—	8	See Chart 2R (Tech Info Section)	100	30.5	27.3	12.4	.031	.79	.045	1.14	.496	12.60
						500	152.4	136.5	62.0						
						1000	304.8	269.0	122.1						
	9621		—	9	See Chart 2R (Tech Info Section)	100	30.5	17.0	7.8	.031	.79	.045	1.14	.533	13.54
						500	152.4	94.0	42.7						
						1000	304.8	181.0	82.2						
	8622		—	12	See Chart 2R (Tech Info Section)	100	30.5	27.0	12.3	.031	.79	.060	1.52	.627	15.93
						500	152.4	126.5	57.4						
						1000	304.8	251.0	114.0						
	8623		—	15	See Chart 2R (Tech Info Section)	100	30.5	32.5	14.8	.031	.79	.060	1.52	.694	17.63
						500	152.4	155.5	70.6						
						1000	304.8	314.0	142.6						
	8624		—	19	See Chart 2R (Tech Info Section)	100	30.5	36.8	16.7	.031	.79	.065	1.65	.740	18.80
						500	152.4	178.5	81.0						
						1000	304.8	361.0	164.0						
	9622		—	25	See Chart 2R (Tech Info Section)	100	30.5	49.0	22.2	.031	.79	.065	1.65	.879	22.33
						500	152.4	236.0	107.1						
						1000	304.8	480.0	217.9						

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