

## 8629 Multi-Conductor - Audio, Control, Communication and Instrumentation Cable



### Description:

14 AWG stranded (19x27) tinned copper conductors, conductors cabled, PVC insulation, PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
12	14	19x27	TC - Tinned Copper	.071

#### Insulation

##### Insulation Material:

Insulation Material	Wall Thickness (in.)	Dia. (in.)
PVC - Polyvinyl Chloride	.045	.160

##### Insulation Resistance:

500 Mega Ohms / 1000 ft. @ 500 V DC

#### Outer Shield

##### Outer Shield Material:

Outer Shield Material
Unshielded

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.065

#### Overall Cabling

##### Overall Cabling Lay Length & Direction:

Length (in.)	Twists (ft.)
9.11	1.3

##### Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue
8	White/Black
9	Red/Black
10	Green/Black
11	Orange/Black
12	Blue/Black
13	Black/White

##### Overall Nominal Diameter:

0.824 in.

### Mechanical Characteristics (Overall)

##### Operating Temperature Range:

-20°C To +80°C

##### Bulk Cable Weight:

418.700 lbs/1000 ft.

## 8629 Multi-Conductor - Audio, Control, Communication and Instrumentation Cable

Max. Recommended Pulling Tension: 570 lbs.

Min. Bend Radius (Install)/Minor Axis: 8 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

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): 10/01/2005

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: UL1685 UL Loading, VW-1

CSA Flame Test: FT1

#### Plenum/Non-Plenum

Plenum (Y/N): No

### Electrical Characteristics (Overall)

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

18

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

2.8

#### Max. Operating Voltage - Non-UL:

Voltage

600 V RMS

#### Max. Recommended Current:

Current

6.5 Amps per conductor @ 25°C

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8629 060500	500 FT	224.000 LB	CHROME	C	12 #14 PVC PVC

#### 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
<b>Conductor Size:</b> (AWG)	28				
	24	✓	✓	✓	
	22				✓
	20				
	18				
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<b>Insulation:</b>	S-R PVC		✓	✓	✓
	Polyethylene				
	Polypropylene				
	Datalene®†	✓			
<b>Shield:</b>	Overall Foil			✓	
	Drain Wire	✓		✓	
	Overall Foil/Braid	✓	✓		✓
	Braid Coverage	65%	65%		65%
<b>Drain Wire Overall:</b>		Yes	No	Yes	No
<b>No. of Cond. Available:</b>	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		✓	✓	✓	
<b>Capacitance ** (pF/ft.)</b>		12.0	30.0	30.0	35.0

\*All cables are UL-listed.

\*\*Capacitance may vary on some cables.

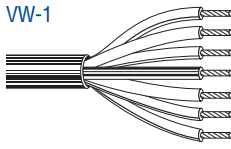
† Foam high density polyethylene.

# Unshielded

Audio, Control, Communication and Instrumentation Cables  
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

**14 AWG** Stranded (19x27) Tinned Copper Conductors • Conductors Cabled

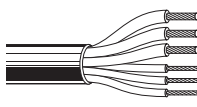
PVC Insulation • Chrome PVC Jacket														
	8627	—	4	See Chart 2 (Tech Info Section)	100	30.5	13.8	6.3	.045	1.14	.045	1.14	.490	12.45
					500	152.4	76.5	34.7						
					1000	304.8	149.0	67.6						
	9623	—	5	See Chart 2 (Tech Info Section)	100	30.5	18.1	8.3	.045	1.14	.060	1.52	.573	14.55
					500	152.4	99.5	45.1						
					1000	304.8	197.0	89.4						
	8628	—	7	See Chart 2 (Tech Info Section)	100	30.5	23.9	11.0	.045	1.14	.060	1.52	.623	15.82
					500	152.4	128.0	58.1						
					1000	304.8	255.0	115.8						
	8629	—	12	See Chart 2 (Tech Info Section)	100	30.5	44.6	20.2	.045	1.14	.065	1.65	.824	20.93
					500	152.4	222.0	100.8						
					1000	304.8	454.0	206.1						

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		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

**22 and 18 AWG** Stranded (7x30 and 16x30) Tinned Copper Conductors • Conductors Cabled

PVC Insulation • Chrome PVC Jacket																					
	8446	NEC: CMG FT4	6: 4 Unshld 22 (7x30) 2 Unshld 18 (16x30)	Red, Green, Brown, Blue Black, White	100	30.5	4.7	2.1	.010	.25	.032	.81	.236	5.99	30	98	54	177			
					U-500	U-152.4	21.5	9.8													
					500	152.4	21.5	9.8													
					U-1000	U-304.8	41.0	18.6	.019	.48											
					1000	304.8	43.0	19.5													

**20 and 16 AWG** Stranded (7x28 and 19x28) Tinned Copper Conductors • Conductors Cabled

PVC Insulation • Chrome PVC Jacket																						
	9686	NEC: CM	6: 3 Unshld 20 (7x28) 3 Unshld 16 (19x28)	Green, Blue, Purple Black, Red, Yellow	U-500	U-152.4	32.5	14.7	.012	.30	.032	.81	.295	7.49	20	66	36	118				
													.013	.33					30	98	54	177

\*Capacitance between conductors.  
\*\*Nominal capacitance conductor to conductor and shield.