Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



8627 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
4	14	19x27	TC - Tinned Copper

Insulation

Insulation Material:

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

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.045

Overall Cabling

Overall Cabling Lay Length & Direction:

Length (in.)	Twists (ft.)
5.80	2.0

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red
4	Green

Overall Nominal Diameter: 0.490 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +80°C
Bulk Cable Weight:	95 lbs/1000 ft.
Max. Recommended Pulling Tension:	190 lbs.
Min. Bend Radius (Install)/Minor Axis:	5 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	

Detailed Specifications & Technical Data





8627 Multi-Conductor - Audio, Control, Communication and Instrumentation Cable

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
7.5 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8627 060100	100 FT	13.800 LB	CHROME	С	4 #14 PVC FRPVC
8627 0601000	1,000 FT	149.000 LB	CHROME	С	4 #14 PVC FRPVC
8627 060500	500 FT	76.500 LB	CHROME	С	4 #14 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 crossfalk

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

		Cable Series*						
Specifica	ntions		9925	9608	9533	9939		
Conductor Si		28						
(AWG)		24	1	1	1			
		22			-	1		
		20						
		18						
	Pac	je No.	4.18	4.17	4.11	4.19		
Insulation:	S-R PVC	,		1	1	1		
	Polyethylene				-			
	Polypropylene	9						
	Datalene® †	-	1					
Shield:	Overall Foil		-		1			
	Drain Wire		1		1			
	Overall Foil/B	raid	1	1	-	1		
	Braid Coveraç		65%	65%		65%		
Drain Wire O		, -	Yes	No	Yes	No		
No. of Cond.	1		- 110					
		2						
		3	1	1	1	1		
		4	1	1	1	1		
		5	1	1	1	1		
		6	1	1	1	1		
		7	1	1	1	1		
		8	1	1	1	1		
		9	1	1	1	1		
		10	1	1	1	1		
		11	,	,	·	•		
		12						
		13						
		15	/	1	1	1		
		17				-		
		18						
		19						
		20			1			
		25	1	/	/	1		
		27	-		-	-		
		30			1			
	31			-				
		37	1	1		1		
			, ·	<u> </u>	1	,		
		40 50		1	1	1		
_	** (pF/ft.)	30	12.0	30.0	30.0	35.0		

^{*}All cables are UL-listed.



^{**}Capacitance may vary on some cables.

[†] Foam high density polyethylene.

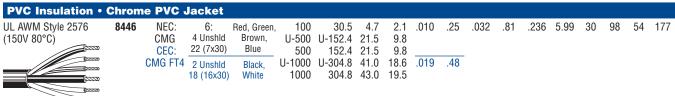
Unshielded

Audio, Control, Communication and Instrumentation Cables Non-Plenum

Description	Dart No.	Part No. UL NEC/ C(UL) CEC Type	No.	Color			L COLOR	Standard	Lengths		ndard Neight		ation kness		ket kness	Nomi	nal OD
Description	ran Nu.		Cond.	Code	Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm			
14 AWG Stranded (19x27) Ti	nned Cop	per Condu	ctors •	Conductor	s Cabled												
PVC Insulation • Chromo	e PVC Ja	acket															
600V RMS 80°C VW-1	8627	_	4	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.8 76.5 149.0	6.3 34.7 67.6	.045	1.14	.045	1.14	.490	12.45			
	9623	_	5	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	18.1 99.5 197.0	8.3 45.1 89.4	.045	1.14	.060	1.52	.573	14.55			
	8628	_	7	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	23.9 128.0 255.0	11.0 58.1 115.8	.045	1.14	.060	1.52	.623	15.82			
	8629	_	12	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	44.6 222.0 454.0	20.2 100.8 206.1	.045	1.14	.065	1.65	.824	20.93			

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



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

	`		,															
PVC Insulation • Chrome PVC Jacket																		
NEC Article 800 (90°C)	9686	NEC: CM	6: 3 Unshld 20 (7x28)	Green, Blue, Purple	U-500 _	U-152.4	32.5	14.7	.012	.30	.032	.81	.295	7.49	20	66	36	118
			3 Unshld 16 (19x28)	Black, Red, Yellow					.013	.33					30	98	54	177



^{*}Capacitance between conductors.
**Nominal capacitance conductor to conductor and shield.