



Description:

10 AWG stranded (19x23) bare copper conductors, conductors parallel, PVC insulation, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
2	10	19x23	BC - Bare Copper

Insulation

Insulation Material:

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

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.025

Overall Cabling

Overall Cabling Color Code Chart:

Number	Color
1	Brown
2	Red

Overall Nominal Diameter: 0.225 x 0.400 in.

Mechanical Characteristics (Overall)

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

UL Temperature Rating: 75°C

Bulk Cable Weight: 91.500 lbs/1000 ft.

Max. Recommended Pulling Tension: 235.600 lbs.

Min. Bend Radius (Install)/Minor Axis: 3.400 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 07/01/2005

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

8678 Multi-Conductor - Duplex Primary Wire

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

Flame Test

UL Flame Test: UL1685 UL Loading, VW-1

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Max. Operating Voltage - UL:

Voltage

300 V RMS

Max. Recommended Current:

Current

16 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8678 060500	500 FT	51.000 LB	CHROME	C	2#10 PVC PARALLEL

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				
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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.

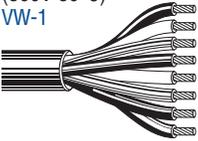
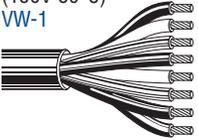
† Foam high density polyethylene.

Unshielded

Antenna Rotor Control Cables, Security/Audio Systems and Duplex Primary Wire

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

Antenna Rotor Cables Stranded Tinned Copper Conductors • Conductors Cabled

PVC Insulation • Chrome PVC Jacket															
UL AWM Style 2464 (300V 80°C) VW-1 	9405	NEC: CM	8	Black, White	2@16	500	152.4	47.0	21.3	.019	.48	.032	.81	.345	8.76
					(19x28)	1000	304.8	92.0	41.8			.018	.46		
				Brown, Red, Yellow, Blue, Orange, Green	6@18 (16x30)										
UL AWM Style 2576 (150V 80°C) VW-1 	8448	NEC: CMG CEC: CMG FT4	8	Black, White	2@18	U-500	U-152.4	25.0	11.4	.019	.48	.032	.81	.259	6.58
					(16x30)	500	152.4	25.5	11.6			.010	.25		
				Red, Green, Brown, Blue, Yellow, Orange	6@22 (7x30)	U-1000	U-304.8	49.0	22.2						
						1000	304.8	50.0	22.7						

Security/Audio/Power Limited Controls Cable Stranded Bare Copper Conductors • Conductors Parallel

PVC Insulation • Chrome PVC Jacket															
200V RMS 75°C VW-1 	8484	—	4	Black, Green, Red, White	20	U-500	U-152.4	12.5	5.7	—	—	—	—	.177	4.50
					(7x28)	500	152.4	12.5	5.7						
						U-1000	U-304.8	24.0	10.9						
						1000	304.8	25.0	11.4						

Duplex Primary Wire Stranded Bare Copper Conductors • Conductors Parallel

PVC Insulation • Chrome PVC Jacket															
300V RMS 75°C VW-1 	8677	—	2	Brown, Red	16	500	152.4	18.5	8.4	.024	.61	.022	.56	.149	3.78
					(19x29)										x
														.254	6.45
	8675	—	2	Brown, Red	14	500	152.4	23.5	10.7	.023	.58	.023	.58	.168	4.27
					(19x27)									x	x
														.290	7.37
	8673	—	2	Brown, Red	12	500	152.4	32.5	14.8	.026	.66	.022	.56	.186	4.72
					(19x25)									x	x
														.328	8.33
	8678	—	2	Brown, Red	10	500	152.4	51.0	23.1	.031	.79	.025	.64	.225	5.72
					(19x23)									x	x
														.400	10.16