Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9751 Multi-Conductor - Audio, Control and Instrumentation Cable





Description:

20 AWG stranded (7x28) tinned copper conductors, PVC insulation, twisted pairs, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

		Stranding	Conductor Material						
6	20	7x28	TC - Tinned Copper						

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PVC - Polyvinyl Chloride	.013

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.035

Overall Cabling

Overall Nominal Diameter: 0.366 in.

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +80°C
Non-UL Temperature Rating:	80°C (UL AWM Style 2464)
Bulk Cable Weight:	77.900 lbs/1000 ft.
Max. Recommended Pulling Tension:	168 lbs.
Min. Bend Radius (Install)/Minor Axis:	3.750 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG					
CEC/C(UL) Specification:	CMG					

Detailed Specifications & Technical Data





9751 Multi-Conductor - Audio, Control and Instrumentation Cable

AWM Specification:	UL Style 2464 (300 V 80°C)
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
ame Test	
C(UL) Flame Test:	FT4
enum/Non-Plenum	
Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft) 24.5

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 10.0

Max. Operating Voltage - UL:

Voltage 300 V RMS (UL AWM Style 2464)

Max. Recommended Current:

Current
2.6 Amps per conductor @ 20°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9751 060100	100 FT	9.000 LB	CHROME		6 #20 PR PVC PVC
9751 0601000	1,000 FT	89.000 LB	CHROME	С	6 #20 PR PVC PVC
9751 060500	500 FT	45.000 LB	CHROME	С	6 #20 PR PVC PVC

Notes:

C = CRATE REEL PUT-UP.

Introduction

Belden® paired cable products are manufactured in a variety of gage sizes, dimensions, insulation materials, shielding configurations, and jacketing materials including Plenum and High-Temperature versions to meet the technical requirements of many different types of systems.

Paired cables allow balanced signal transmission, which results in lower crosstalk through common mode rejection. Due to the improved noise immunity of twisted pairs, they generally permit higher data speeds than multi-conductor cables.

As an aid to proper cable selection, both the suggested working voltages and the maximum temperature ratings are indicated for each applicable paired cable selection.

Most of our paired 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 paired cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Paired Cables Packaging

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



Unshielded

Audio, Control and Instrumentation Cables

Description	Part	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
	No.				Ft.	m	Lbs.	kg	inch	mm	Inch	mm	inch	mm
AWG Stranded (7x28	,		ctors • T	wisted Pa	irs									
PVC Insulation • Ch														
00V RMS	8205	NEC: CMG CEC: CMG FT4	1	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	2.6 9.0 9.0 18.0 18.0	1.2 4.1 4.1 8.2 8.2	.013	.33	.025	.64	.180	4.57
L AWM Style 2464 100V 80°C)	9750	NEC: CMG CEC: CMG FT4	3	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	26.5 50.0	12.0 22.7	.013	.33	.035	.89	.299	7.59
	9751	NEC: CMG CEC: CMG FT4	6	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	9.1 45.0 89.0	4.1 20.5 40.5	.013	.33	.035	.89	.366	9.30
	9752	NEC: CMG CEC: CMG FT4	9	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.1 65.5 125.0	5.9 29.8 56.8	.013	.33	.035	.89	.429	10.9
	9755	NEC: CMG CEC: CMG FT4	15	See Chart 3 (Tech Info Section)	100 1000	30.5 304.8	17.9 194.0	8.1 88.2	.013	.33	.040	1.02	.545	13.84
9 AWG Solid Bare Cop	per Conduc	tors • Twisted	l Pair											
PVC Insulation • Ch														
00V RMS	8486	NEC: CM CEC: CM	1	Brown, Tan	U-500 U-1000 1000	U-152.4 U-304.8 304.8	9.5 18.0 19.0	4.3 8.2 8.6	.015	.38	.025	.64	.182	4.62
8 AWG Stranded (7x26) Tinned Co	pper Conduc	tors • T	wisted Pai	r									
PVC Insulation • Ch	rome PVC	Jacket												
000V RMS	8461	NEC: CMG CEC: CMG FT4	1	Black, White	100 U-500 500 U-1000	30.5 U-152.4 152.4 U-304.8	3.2 14.0 13.5 26.0	1.4 6.4 6.1 11.8	.022	.56	.028	.71	.234	5.94

