# **Detailed Specifications & Technical Data**



ENGLISH MEASUREMENT VERSION

9750 Multi-Conductor - Audio, Control and Instrumentation Cable



EU CE Mark:

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Description:	
	onductors, PVC insulation, twisted pairs, PVC jacket.
Physical Characteristics (Overall)	
Conductor AWG:	
# Pairs AWG Stranding Conductor Material	
3 20 7x28 TC - Tinned Copper	
Insulation Insulation Material:	
Insulation Material Wall Thickness (in.)	
PVC - Polyvinyl Chloride .013	
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:	0.299 in.
Pair	
Pair Color Code Chart:	
Number Color   1 Black & Red	
2 Black & White	
3 Black & Green	
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-20°C To +80°C
Non-UL Temperature Rating:	80°C (UL AWM Style 2464)
Bulk Cable Weight:	45.200 lbs/1000 ft.
Max. Recommended Pulling Tension:	84 lbs.
Min. Bend Radius (Install)/Minor Axis:	3 in.
Applicable Specifications and Agency	Compliance (Overall)
Applicable Standards & Environmental Pro	
NEC/(UL) Specification:	CMG
CEC/C(UL) Specification:	CMG
AWM Specification:	UL Style 2464 (300 V 80°C)

Yes

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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
Flame Test	
C(UL) Flame Test:	FT4
Plenum/Non-Plenum	
Plenum (Y/N):	No

Ele	ectrical Characteristics (Overall)
No	om. Capacitance Conductor to Conductor:
	Capacitance (pF/ft)
	24.5
No	om. Conductor DC Resistance:
	DCR @ 20°C (Ohm/1000 ft)
[	10.0
Ма	ax. 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
9750 0601000	1,000 FT	50.000 LB	CHROME	С	3 #20 PR PVC PVC
9750 060500	500 FT	26.500 LB	CHROME	С	3 #20 PR PVC PVC

Notes: C = CRATE REEL PUT-UP.

# Introduction

Belden<sup>®</sup> 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<sup>®</sup> 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.

# BELDEN

# 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
20 AWG Stranded (7x28)	Finned Co	opper Conduc	tors • 7	Twisted Pa	irs									
<b>PVC Insulation • Chro</b>	me PVC	Jacket												
300V 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
UL AWM Style 2464 (300V 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	10.90
	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

## 19 AWG Solid Bare Copper Conductors • Twisted Pair

PVC Insulation • Chrome PVC Jacket														
300V 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

## 18 AWG Stranded (7x26) Tinned Copper Conductors • Twisted Pair

PVC Insulation • Chrome PVC Jacket														
300V RMS	8461	NEC: CMG CEC:	1	Black, White	100 U-500 500	30.5 U-152.4 152.4	3.2 14.0 13.5	1.4 6.4 6.1	.022	.56	.028	.71	.234	5.94
(dense)		CMG FT4			U-1000	U-304.8	26.0	11.8						
					1000	304.8	27.0	12.2						

