# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



8444 Multi-Conductor - Audio, Control and Instrumentation Cable





## **Description:**

22 AWG stranded (7x30) tinned copper conductors, conductors cabled, PVC insulation, PVC Jacket.

## **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Conductors	AWG	Stranding	Conductor Material
4	22	7x30	TC - Tinned Copper

#### Insulation

#### **Insulation Material:**

Insulation Material	Wall Thickness (in.)
PVC - Polyvinyl Chloride	.010

#### **Outer Shield**

#### **Outer Shield Material:**

Outer Shield Material
Unshielded

#### **Outer Jacket**

#### **Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.032

#### **Overall Cabling**

### Overall Cabling Lay Length & Direction:



#### **Overall Cabling Color Code Chart:**

Color
Black
White
Red
Green

Overall Nominal Diameter: 0.185 in.

## **Mechanical Characteristics (Overall)**

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Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2576)
Bulk Cable Weight:	20.600 lbs/1000 ft.
Max. Recommended Pulling Tension:	35 lbs.
Min. Bend Radius (Install)/Minor Axis:	1.800 in.

## **Applicable Specifications and Agency Compliance (Overall)**

#### **Applicable Standards & Environmental Programs**

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

# **Detailed Specifications & Technical Data**





## 8444 Multi-Conductor - Audio, Control and Instrumentation Cable

UL Style 2576 (150 V 80°C)
FT4
Yes
Yes
Yes
04/01/2005
Yes
Yes
Yes
Yes
No
88444, 82444
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## **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/ft) .17

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
34

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 15.6

Max. Operating Voltage - UL:

Voltage 300 V RMS (CMG) 150 V RMS (UL AWM Style 2576)

Max. Recommended Current:

Current
2.4 Amps per conductor @ 25°C

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8444 060U1000	1,000 FT	22.000 LB	CHROME		4 #22 PVC PVC
8444 060U500	500 FT	11.500 LB	CHROME		4 #22 PVC PVC
8444 060100	100 FT	2.800 LB	CHROME		4 #22 PVC PVC
8444 0601000	1,000 FT	23.000 LB	CHROME	С	4 #22 PVC PVC
8444 060500	500 FT	11.000 LB	CHROME		4 #22 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 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			
lo. of Cond. Available:		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			
		40	, ·	<u> </u>	1	,			
		50		1	1	1			
_	** (pF/ft.)	30	12.0	30.0	30.0	35.0			

<sup>\*</sup>All cables are UL-listed.



<sup>\*\*</sup>Capacitance may vary on some cables.

<sup>†</sup> Foam high density polyethylene.

# **Unshielded**

Audio, Control and Instrumentation Cables Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC	No. of	Color	Standard	Lengths	Stan Unit V	dard Veight		ation (ness	Jac Thick	ket iness	Nomir	al OD
บะระเป็นเกแ	Fait No.	Type	Cond.	Code	Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
22 AWG Solid Bare Copper	Conductor	s • Conduc	tors C	abled										
<b>Polyethylene Insulation</b>	• Rose (	Gray PVC	Jack	cet										
UL AWM Style 2092 (300V 60°C)	8795	NEC: CM CEC: CM	2	Red, Green	U-500 U-1000 1000	U-152.4 U-304.8 304.8	10.0 19.0 17.0	4.5 8.6 7.8	.018	.46	.022	.56	.168	4.27
UL AWM Style 2093 (300V 60°C)	8794	NEC: CM	3	Green, Red, Yellow	U-1000 1000	U-304.8 304.8	22.0 21.0	10.0 9.6	.018	.46	.022	.56	.178	4.52
UL AWM Style 2094 (300V 60°C)	9794	NEC: MP, CM	4	Green, Red, Yellow, Black	U-500 U-1000 1000	U-152.4 U-304.8 304.8	14.0 26.0 25.0	6.4 11.8 11.4	.018	.46	.025	.64	.200	5.08
UL AWM Style 2094 (300V 60°C)	1242A	NEC: CM CEC: CM	4	Green, Red, Yellow, Black	U-1000	U-304.8	16.0	7.2	.018	.46	.025	.64	.154	3.91

22 AWG Stranded (7x30) Tinned Copper Conductors • Conductors Cabled

	-,	-												
PVC Insulation • Ch	rome PVC	Jacket												
*Twisted pair	8442*	NEC: CMG CEC: CMG FT4	2	Black, Red	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8 3048.0	2.4 8.0 7.5 15.0 15.0 150.0	1.1 3.7 3.4 6.8 6.8 68.2	.015		.025 Jenum vei 8442 or 8		.170 f 8442,	4.32
UL AWM Style 2576 (150V 80°C)	8443	NEC: CMG CEC: CMG FT4	3	Black, Red, Green	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	2.7 9.5 9.5 18.0 18.0	1.2 4.3 4.3 8.2 8.2	.010	.25	.032	.81	.172	4.37
	8444	CMG FT4  NEC: 4 See 100 CMG Chart 1 U-500 U-1 CEC: (Tech Info 500 1 1000 3  NEC: 5 See 100 CMG Chart 1 U-500 U-1 000 3  NEC: 5 See 100 CMG Chart 1 U-500 U-1 CEC: (Tech Info 500 U-1 000 3  NEC: 7 See U-500 U-1 CMG Chart 1 U-500 U-1 CMG FT4 Section) U-1000 U-3 CMG FT4 Section) U-1000 U-3 CMG CMG Chart 1 U-500 U-1 CMG CMG Chart 1 U-500 U-1 CMG CMG Chart 1 U-500 U-1	30.5 U-152.4 152.4 U-304.8 304.8	3.1 11.5 11.5 22.0 23.0	1.4 5.2 5.2 10.0 10.5	.010		.032 lenum vei 8444 or 8		.185 f 8444,	4.70			
	8445	CMG CEC:	5	Chart 1 (Tech Info	U-500 500 U-1000	30.5 U-152.4 152.4 U-304.8 304.8	3.5 13.5 13.5 25.0 26.0	1.6 6.1 6.1 11.4 11.8	.010	.25	.032	.81	.194	4.93
	9430		7			U-152.4 152.4 U-304.8 304.8	17.0 17.0 32.0 34.0	7.7 7.7 14.5 15.9	.010	.25	.032	.81	.214	5.44
	9421	NEC: CMG CEC: CMG FT4	8	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.2 19.0 18.5 36.0 38.0	1.9 8.7 8.4 16.3 17.2	.010	.25	.032	.81	.229	5.82
	9423	NEC: CMG CEC: CMG FT4	9	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.7 21.0 21.5 41.0 43.0	2.1 9.6 9.8 18.6 19.5	.010	.25	.032	.81	.244	6.20
	8456	NEC: CMG CEC: CMG FT4	10	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.0 22.5 23.0 44.0 46.0	2.3 10.2 10.5 20.0 20.9	.010	.25	.032	.81	.264	6.71

 $^{\dagger}$ Final put-up may vary -10% to +20%. May contain two pieces, minimum length of any one piece is 1500 ft.

