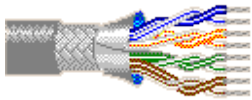


## 8342 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232 Applications



### Description:

24 AWG stranded (7x32) tinned copper conductors, semi-rigid PVC insulation, multi-paired cable with overall Beldfoil® (100% coverage) + TC braid shield (65% coverage), PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material
1	12	24	7x32	TC - Tinned Copper

#### Insulation

Insulation Material:

Insulation Material
S-R PVC - Semi-Rigid Polyvinyl Chloride

#### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	65

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cabling

Overall Nominal Diameter: 0.405 in.

#### Pair

Pair Color Code Chart:

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/White
3	White/Green & Green/White
4	White/Brown & Brown/White
5	White/Gray & Gray/White
6	Red/Blue & Blue/Red
7	Red/Orange & Orange/Red
8	Red/Green & Green/Red
9	Red/Brown & Brown/Red
10	Red/Gray & Gray/Red
11	Black/Blue & Blue/Black
12	Black/Orange & Orange/Black
Single Conductor	Gray

Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
1.000	12.000

### Mechanical Characteristics (Overall)

## 8342 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232 Applications

Operating Temperature Range:	-30°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2464)
Bulk Cable Weight:	93.900 lbs/1000 ft.
Min. Bend Radius (Install)/Minor Axis:	4 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG
CEC/C(UL) Specification:	CMG
AWM Specification:	UL Style 2464 (300 V 80°C)
CSA Specification:	AWM I A
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):	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

C(UL) Flame Test:	FT4
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#### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)
75

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
30

#### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
50

#### Nominal Velocity of Propagation:

VP (%)
60

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
24

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
3.6

#### Max. Operating Voltage - UL:

Voltage
300 V RMS (UL AWM Style 2464)

#### Max. Recommended Current:

Current
1.1 Amps per conductor @ 25°C

## 8342 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232 Applications

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8342 060100	100 FT	11.000 LB	CHROME		12 PR,1#24 PVCRL SHLD PVC
8342 0601000	1,000 FT	109.000 LB	CHROME	C	12 PR,1#24 PVCRL SHLD PVC
8342 060500	500 FT	55.000 LB	CHROME	C	12 PR,1#24 PVCRL SHLD 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.

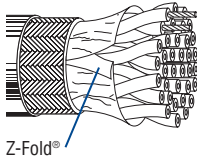
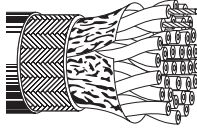
Most of our paired cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a paired cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

### 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.

# Overall Foil/Braid Shield

## Low-Capacitance Computer Cables for EIA RS-232 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
<b>24 AWG Stranded (7x32) TC Conductors • Twisted Pairs • Overall Beldfoil® (100% Coverage) + TC Braid Shield (65% Coverage)</b>																		
<b>Semi-rigid PVC Insulation • Chrome PVC Jacket</b>																		
UL AWM Style 2464 (300V 80°C) CSA AWM I A	8332	NEC:	2	See	100	30.5	4.1	1.9	24.0Ω/M'	5.4Ω/M'	.250	6.35	75	60%	30	98	50	164
		CMG		Chart 5	500	152.4	16.5	7.5	78.7Ω/km	17.7Ω/km								
		CEC:		(Tech Info Section)	1000	304.8	37.0	16.8										
		CMG FT4																
 Z-Fold®	8333	NEC:	3	See	100	30.5	4.8	2.2	24.0Ω/M'	6.6Ω/M'	.265	6.73	75	60%	30	98	50	164
		CMG		Chart 5	500	152.4	20.5	9.3	78.7Ω/km	21.7Ω/km								
		CEC:		(Tech Info Section)	1000	304.8	44.0	20.1										
		CMG FT4																
	8334	NEC:	4	See	100	30.5	5.3	2.4	24.0Ω/M'	4.5Ω/M'	.288	7.32	75	60%	30	98	50	164
		CMG		Chart 5	500	152.4	22.5	10.2	78.7Ω/km	14.8Ω/km								
		CEC:		(Tech Info Section)	1000	304.8	49.0	22.3										
		CMG FT4																
	8335	NEC:	5	See	100	30.5	6.0	2.7	24.0Ω/M'	4.6Ω/M'	.295	7.49	75	60%	30	98	50	164
		CMG		Chart 5	500	152.4	29.5	13.4	78.7Ω/km	15.1Ω/km								
		CEC:		(Tech Info Section)	1000	304.8	57.0	25.9										
		CMG FT4																
	8336	NEC:	6	See	100	30.5	6.5	3.0	24.0Ω/M'	4.7Ω/M'	.310	7.87	75	60%	30	98	50	164
		CMG		Chart 5	500	152.4	31.5	14.3	78.7Ω/km	15.4Ω/km								
		CEC:		(Tech Info Section)	1000	304.8	62.0	28.2										
		CMG FT4																
	8337	NEC:	7	See	100	30.5	6.8	3.1	24.0Ω/M'	4.7Ω/M'	.321	8.15	75	60%	30	98	50	164
		CMG		Chart 5	500	152.4	33.0	14.9	78.7Ω/km	15.4Ω/km								
		CEC:		(Tech Info Section)	1000	304.8	65.0	29.5										
		CMG FT4																
	8340	NEC:	10	See	100	30.5	9.1	4.1	24.0Ω/M'	3.5Ω/M'	.385	9.78	75	60%	30	98	50	164
		CMG		Chart 5	500	152.4	43.5	19.7	78.7Ω/km	11.5Ω/km								
		CEC:		(Tech Info Section)	1000	304.8	90.0	40.9										
		CMG FT4																
	8342	NEC:	12.5	See	100	30.5	11.0	5.0	24.0Ω/M'	3.6Ω/M'	.405	10.29	75	60%	30	98	50	164
		CMG		(12 pairs + 1 single) Chart 5	500	152.4	55.0	25.0	78.7Ω/km	11.8Ω/km								
		CEC:		(Tech Info Section)	1000	304.8	109.0	49.5										
		CMG FT4																
	8345	NEC:	15	See	500	152.4	61.5	28.0	24.0Ω/M'	3.2Ω/M'	.445	11.30	75	60%	30	98	50	164
		CMG		Chart 5	1000	304.8	123.0	55.9	78.7Ω/km	10.5Ω/km								
		CEC:		(Tech Info Section)														
		CMG FT4																
UL AWM Style 2464 (300V 80°C)	8348	NEC:	18	See	100	30.5	14.2	6.4	24.0Ω/M'	2.7Ω/M'	.480	12.19	75	60%	30	98	50	164
		CMG		Chart 5	500	152.4	78.5	35.8	78.7Ω/km	8.9Ω/km								
		CEC:		(Tech Info Section)	1000	304.8	152.0	69.3										
		CMG FT4																
	8355	NEC:	25	See	500	152.4	96.5	43.9	24.0Ω/M'	2.5Ω/M'	.550	13.97	75	60%	30	98	50	164
		CMG		Chart 5	1000	304.8	195.0	88.6	78.7Ω/km	8.2Ω/km								
		CEC:		(Tech Info Section)														
		CMG FT4																

DCR = DC Resistance • TC = Tinned Copper

\*Capacitance between conductors.

\*\*Capacitance between one conductor and other conductors connected to shield.