

## 9504 Multi-Conductor - Computer Cable for EIA RS-232 Applications



### Description:

24 AWG stranded (7x32) TC conductors, semi-rigid PVC insulation, twisted pairs, overall Beldfoil shield (100% coverage), 24 AWG stranded TC drain Wire, PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	7x32	TC - Tinned Copper

#### Insulation

##### Insulation Material:

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

#### Outer Shield

##### Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

##### Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire	Conductor Material
24	7x32		TC - Tinned Copper

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cabling

Overall Nominal Diameter: 0.265 in.

#### Pair

##### Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue

### Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2464)
Bulk Cable Weight:	33.300 lbs/1000 ft.
Max. Recommended Pulling Tension:	44 lbs.
Min. Bend Radius (Install)/Minor Axis:	2.750 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

## 9504 Multi-Conductor - Computer Cable for EIA RS-232 Applications

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):	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

UL Flame Test:	UL1685 FT4 Loading
C(UL) Flame Test:	FT4

### Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	89504, 82504

## 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)

17

### Max. Operating Voltage - UL:

Voltage

300 V RMS (UL AWM Style 2464)

### Max. Recommended Current:

Current

1.5 Amps per conductor @ 25°C

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9504 060U1000	1,000 FT	34.000 LB	CHROME		4 PR #24 PVC FS PVC
9504 060U500	500 FT	17.500 LB	CHROME		4 PR #24 PVC FS PVC

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9504 060100	100 FT	4.000 LB	CHROME		4 PR #24 PVC FS PVC
9504 0601000	1,000 FT	36.000 LB	CHROME	C	4 PR #24 PVC FS PVC
9504 060500	500 FT	18.000 LB	CHROME		4 PR #24 PVC FS PVC

**Notes:**

C = CRATE REEL PUT-UP.


# Overall Beldfoil® Shield

High-Temperature Control and Instrumentation Cables and 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		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

**20 AWG Stranded (7x28) TC Conductors • Pairs Cabled Together • Overall Beldfoil® Shield (100% Coverage) • Drain Wire**

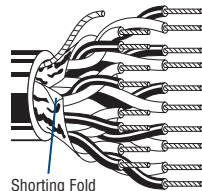
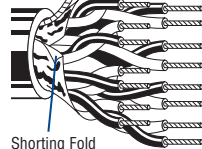


**Tefzel® Insulation • Clear Tefzel Jacket**

<b>High-Temperature</b> 300V RMS, 150°C VW-1	<b>85164</b>	4	See Chart 3 (Tech Info Section)	100	30.5	6.6	3.0	.015	.38	.025	.64	.344	8.74	23	75	40	131			
				500†	152.4	37.0	16.8													
				1000†	304.8	71.0	32.3													
	<b>85168</b>	8	See Chart 3 (Tech Info Section)	100	30.5	11.5	5.2	.015	.38	.025	.64	.439	11.15	23	75	40	131			
				500†	152.4	62.0	28.2													
				1000†	304.8	126.0	57.3													

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

**24 AWG Stranded (7x32) TC Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG Stranded TC Drain Wire**

**Semi-rigid PVC Insulation • Chrome PVC Jacket**

<b>UL AWM Style 2464</b> (300V 80°C) CSA AWM I A	<b>9501</b>	NEC: 1 CMG CEC: CMG FT4	See Chart 3 (Tech Info Section)	100	30.5	2.1	1.0	24.0Ω/M'	18.0Ω/M'	.156	3.96	75	60%	40	131	74	243		
				U-500	U-152.4	7.5	3.4	78.7Ω/km	59.1Ω/km										
				500	152.4	7.0	3.2												
				U-1000	U-304.8	14.0	6.4												
				1000	304.8	14.0	6.4												
	<b>9502††</b>	NEC: 2 CMG CEC: CMG FT4 P-MSHA-SC-7K-182037	See Chart 3 (Tech Info Section)	100	30.5	3.7	1.7	24.0Ω/M'	17.0Ω/M'	.222	5.64	75	60%	30	98	50	164		
				U-500	U-152.4	15.0	6.8	78.7Ω/km	55.8Ω/km										
				500	152.4	14.5	6.6												
				U-1000	U-304.8	28.0	12.7												
				1000	304.8	30.0	13.6												
				10000	3048.0	290.0	131.8												
	<b>9503</b>	NEC: 3 CMG CEC: CMG FT4	See Chart 3 (Tech Info Section)	100	30.5	3.4	1.5	24.0Ω/M'	17.0Ω/M'	.232	5.89	75	60%	30	98	50	164		
				U-500	U-152.4	15.0	6.8	78.7Ω/km	55.8Ω/km										
				500	152.4	14.5	6.6												
				U-1000	U-304.8	28.0	12.7												
				1000	304.8	30.0	13.6												
	<b>9504</b>	NEC: 4 CMG CEC: CMG FT4	See Chart 3 (Tech Info Section)	100	30.5	4.0	1.8	24.0Ω/M'	17.0Ω/M'	.265	6.73	75	60%	30	98	50	164		
				U-500	U-152.4	18.0	8.2	78.7Ω/km	55.8Ω/km										
				500	152.4	16.5	7.5												
				U-1000	U-304.8	35.0	15.9												
				1000	304.8	36.0	16.3												
	<b>9505</b>	NEC: 5 CMG CEC: CMG FT4	See Chart 3 (Tech Info Section)	100	30.5	4.7	2.1	24.0Ω/M'	17.0Ω/M'	.289	7.34	75	60%	30	98	50	164		
				U-500	U-152.4	21.5	9.8	78.7Ω/km	55.8Ω/km										
				500	152.4	23.0	10.4												
				U-1000	U-304.8	41.0	18.6												
				1000	304.8	43.0	19.5												

DCR = DC Resistance • TC = Tinned Copper

\* Capacitance between conductors.

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

† Spools are one piece, but length may vary ±10% from length shown.

†† Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration certification. Request quotations of RG/U cables not listed.

Tefzel is a DuPont trademark.