

### Description:

24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, twisted pairs, individually Beldfoil® shielded (100% coverage), 24 AWG stranded tinned copper drain wire, PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
2	24	7x32	TC - Tinned Copper	.024

#### Insulation

##### Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Datalene®	FPE - Foam Polyethylene	.061

#### Inner Shield

##### Inner Shield Material:

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

##### Inner Shield Drain Wire AWG:

AWG
24

Inner Shield Drain Wire Stranding: 7x32

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cabling

Overall Nominal Diameter: 0.266 in.

#### Pair

##### Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White

##### Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
1.100	10.900

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +80°C

UL Temperature Rating: 60°C (UL AWM Style 2493)

Bulk Cable Weight: 34.500 lbs/1000 ft.

Max. Recommended Pulling Tension: 22 lbs.

## 9729 Multi-Conductor - Shielded Twisted Pair Cable

Min. Bend Radius (Install)/Minor Axis: 3.250 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2493 (300 V 60°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):	01/01/2004
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 UL Loading

#### Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	89729, 82729

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)  
100

#### Nom. Inductance:

Inductance (µH/ft)  
0.23

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)  
12.5

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

Capacitance (pF/ft)  
23.2

#### Nominal Velocity of Propagation:

VP (%)  
76

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)  
24

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 15 Ohm/1000 ft

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
.384	0.74
.7056	0.87
.768	0.88
1.024	0.94
1.4112	1.01
1.536	1.03

## 9729 Multi-Conductor - Shielded Twisted Pair Cable

2.048	1.13
2.8224	1.29
3.072	1.35
4.096	1.57
5.6448	1.78
6.144	1.84
8.192	2.13
11.2896	2.45
12.288	2.57
24.576	3.57

### Max. Operating Voltage - UL:

Voltage
300 V RMS (UL AWM Style 2493)

### Max. Recommended Current:

Current
1 Amp per conductor @ 25°C

### Notes (Overall)

**Notes:** Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9729 060100	100 FT	4.300 LB	CHROME		2 FS PR #24 FHDPE PVC
9729 0601000	1,000 FT	39.000 LB	CHROME	C	2 FS PR #24 FHDPE PVC
9729 06010000	10,000 FT	390.000 LB	CHROME	C Y	2 FS PR #24 FHDPE PVC
9729 060500	500 FT	20.500 LB	CHROME	C	2 FS PR #24 FHDPE PVC

#### Notes:

C = CRATE REEL PUT-UP.

Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

**AES/EBU Digital Audio Cable**Multi-Pair Snake Cables  
Individually Shielded Pairs**Individually Shielded Pairs**

NEC: CM (CEC: CM)

**Product Description**

**24 AWG** stranded (7x32) tinned copper conductors. Datalene® insulation. Twisted pairs individually Beldfoil® shielded (100% Coverage). Overall Chrome PVC jacket and 24 AWG stranded tinned copper drain wire.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

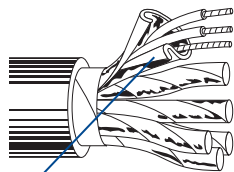
**Color Code:** See Chart 3 (in Technical Information Section)

**Specifications**

<b>Nominal OD — Conductor</b>	.024" (.60mm)
<b>Nominal OD — Insulation</b>	.061" (1.55mm)
<b>Approvals</b>	
NEC	CM
CEC	CM
<b>UL Ratings</b>	UL AWM Style 2493
<b>Voltage Rating</b>	300V
<b>Temperature Rating</b>	60°C
Non UL Temperature Rating	80°C
<b>Nominal DCR</b>	
Conductor	24.0Ω/M' (78.7Ω/km)
Shield	15.0Ω/M' (49.2Ω/km)
<b>Nominal Impedance</b>	100Ω
<b>Nominal Velocity of Propagation</b>	76%
<b>Nominal Capacitance</b>	
Between Conductors	12.5 pF/Ft. (41.0 pF/m)
Between Conductor/Shield*	23.2 pF/Ft. (76.1 pF/m)

DCR = DC Resistance

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



Z-Fold®

Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm

**Individually Shielded Pairs** NEC: CM (CEC: CM)

24 AWG							
9729	2	100	30.5	4.3	2.0	.266	6.76
		500	152.4	20.5	9.3		
		1000	304.8	39.0	17.7		
		10000 <sup>†</sup>	3048.0	390.0	176.9		

For Plenum version of 9729, see 89729 or 82729.

9730	3	100	30.5	5.1	2.3	.334	8.48
		500	152.4	24.5	11.1		
		1000	304.8	46.0	20.9		
		10000 <sup>††</sup>	3048.0	520.0	236.4		

For Plenum version of 9730, see 89730.

9728	4	100	30.5	6.0	2.7	.363	9.22
		500	152.4	29.0	13.2		
		1000	304.8	51.0	23.1		

For Plenum version of 9728, see 89728.

9731	6	100	30.5	7.4	3.4	.421	10.69
		500	152.4	42.0	19.1		
		1000	304.8	83.0	37.7		

For Plenum version of 9731, see 89731.

9732	9	100	30.5	9.9	4.5	.488	12.40
		500	152.4	57.0	25.8		
		1000	304.8	106.0	48.1		

For Plenum version of 9732, see 89732.

9733	11	500	152.4	75.0	34.1	.575	14.61
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9734	12	500	152.4	79.5	36.1	.575	14.61
		1000	304.8	154.0	70.0		

For Plenum version of 9734, see 89734.

9735	15	500	152.4	95.0	43.2	.639	16.23
		1000	304.8	185.0	84.1		

9736	17	500	152.4	103.5	47.0	.671	17.04
		1000	304.8	210.0	95.5		

9737	19	1000	304.8	231.0	105.0	.671	17.04
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9738	27	1000	304.8	334.0	151.8	.797	20.24
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<sup>†</sup> Total length may vary -10 to +5% from length shown and may contain 2 pieces. Minimum length of any one piece will be 1500 ft.

<sup>††</sup> Total length may vary -10 to +20% from length shown and may contain 2 pieces. Minimum length of any one piece will be 1500 ft.