

## 9729 Multi-Conductor - Shielded Twisted Pair Cable



For more Information  
please call

1-800-Belden1



### General 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. (mm)
2	24	7x32	TC - Tinned Copper	0.6096

Total Number of Conductors: 4

#### Insulation

##### Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.483

#### 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	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.219

#### Overall Cable

Overall Nominal Diameter: 6.756 mm

#### Pair

##### Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White

##### Pair Lay Length & Direction:

Lay Length (mm)	Twists (twist/m)	Direction
44.450	22.639	Left Hand

### Mechanical Characteristics (Overall)

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

UL Temperature Rating: 80C (UL AWM Style 2919)

Bulk Cable Weight: 52.087 Kg/Km

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Max. Recommended Pulling Tension:	97.860 N
Min. Bend Radius/Minor Axis:	69.850 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
NEC Articles:	800
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2919 (30 V 80°C)
EU Directive 2011/65/EU (ROHS II):	Yes
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
CSA Flame Test:	FT1

#### Suitability

Suitability - Indoor:	Yes
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#### Plenum/Non-Plenum

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

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)

100

#### Nom. Inductance:

Inductance (µH/m)

0.75463

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

41.0125

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

Capacitance (pF/m)

76.1192

#### Nominal Velocity of Propagation:

VP (%)

76

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

78.744

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 49.215 Ohm/km

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
.384	2.42794
.7056	2.85447
.768	2.88728
1.024	3.08414
1.4112	3.31381
1.536	3.37943
2.048	3.70753
2.8224	4.23249
3.072	4.42935
4.096	5.15117
5.6448	5.84018
6.144	6.03704
8.192	6.98853
11.2896	8.03845
12.288	8.43217
24.576	11.7132

**Max. Operating Voltage - UL:**

Voltage
300 V RMS

**Max. Recommended Current:**

Description	Current
10C temperature rise	1 Amp per conductor @ 25°C ambient

### 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	38.000 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
9729 0605000	5,000 FT	185.000 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'.

Revision Number: 3    Revision Date: 02-07-2017

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