Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

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. (in.)
2	24	7x32	TC - Tinned Copper	.024

Total Number of Conductors:	4

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (in.)
Datalene®	FPE - Foam Polyethylene	0.019

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 (in.)
PVC - Polyvinyl Chloride	0.048

Overall Cable

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 (twist/ft)	Direction
1.750	6.900	Left Hand

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	60°C (UL AWM Style 2493)
Bulk Cable Weight:	35 lbs/1000 ft.
Max. Recommended Pulling Tension:	22 lbs.
Min. Bend Radius/Minor Axis:	2.750 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
NEC Articles:	800
CEC/C(UL) Specification:	CM

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AWM Specification:	UL Style 2493 (300 V 60°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

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
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:

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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'.

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