

# 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.

ζ <b>σ</b> <i>μ</i>	
Physical Characteristics (Overall)	
Conductor AWG:	
# Pairs AWG Stranding Conductor Material Dia	. (mm)
2 24 7x32 TC - Tinned Copper 0.6	
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 Mat	
Beldfoil® (Z-Fold®) Tape Aluminum Foil-Po	
Inner Shield Drain Wire AWG:	A set of the set of th
AWG 24	
24	
Inner Shield Drain Wire Stranding:	7x32
Inner Shield Drain Wire Conductor Material	I: TC - Tinned Copper
Outer Jacket	
Outer Jacket Material:	
Outer Jacket Material Nom. Wall Thickness (m	1m)
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:	60°C (UL AWM Style 2493)
Bulk Cable Weight:	52.087 Kg/Km

# **Detailed Specifications & Technical Data**



## METRIC MEASUREMENT VERSION

## 9729 Multi-Conductor - Shielded Twisted Pair Cable

Max. Recommended Pulling Tension:	97.860 N				
Min. Bend Radius/Minor Axis:	69.850 mm				
oplicable Specifications and Agency C	ompliance (Overall)				
pplicable Standards & Environmental Prog	grams				
NEC/(UL) Specification:	СМ				
NEC Articles:	800				
CEC/C(UL) Specification:	СМ				
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				
lame Test					
UL Flame Test:	UL1685 UL Loading				
CSA Flame Test:	FT1				
uitability					
Suitability - Indoor:	Yes				
lenum/Non-Plenum					
Plenum (Y/N):	No				
Plenum Number:	89729, 82729				

### 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 49.2 Deg. C:

49.215 Ohm/km

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#### METRIC MEASUREMENT VERSION

### 9729 Multi-Conductor - Shielded Twisted Pair Cable

No	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	30 MT	1.950 KG	CHROME		2 FS PR #24 FHDPE PVC
9729 0601000	305 MT	17.237 KG	CHROME	С	2 FS PR #24 FHDPE PVC
9729 06010000	3,048 MT	176.902 KG	CHROME	CY	2 FS PR #24 FHDPE PVC
9729 060500	152 MT	9.299 KG	CHROME	С	2 FS PR #24 FHDPE PVC
9729 0605000	1,524 MT	83.915 KG	CHROME	С	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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