# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



# 8105 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422



For more Information please call

1-800-Belden1



# **Description:**

24 AWG stranded (7x32) TC conductors, Datalene® insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (65% coverage), 24 AWG stranded TC drain wire, PVC jacket.

# **Physical Characteristics (Overall)**

# Conductor

#### AWG:

# Pairs AWC		Stranding	Conductor Materia	
5	24	7x32	TC - Tinned Copper	

#### Insulation

# Insulation Material:

Insulation Trade Name		Insulation Material		
	Datalene®	FPE - Foam Polyethylene		

# **Outer Shield**

# **Outer Shield Material:**

Layer	# Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape w/Shorting Fold	100
2		Braid	TC - Tinned Copper	65

# **Outer Shield Drain Wire AWG:**

AWG	Stranding	<b>Drain Wire Conductor Material</b>
24	7x32	TC - Tinned Copper

#### **Outer Jacket**

# **Outer Jacket Material:**

# Outer Jacket Material PVC - Polyvinyl Chloride

#### **Overall Cabling**

Overall Nominal Diameter: 7.696 mm

# Pair

# Pair Color Code Chart:

Number	Color		
1	White/Blue & Blue/White		
2	White/Orange & Orange/White		
3	White/Green & Green/White		
4	White/Brown & Brown/White		
5	White/Gray & Gray/White		

Mechanical Characteristics (Overall)					
	Operating Temperature Range:	-30°C To +80°C			
	UL Temperature Rating:	80°C (UL AWM Style 2919)			
	Bulk Cable Weight:	78.131 Kg/Km			
	Max. Recommended Pulling Tension:	269.116 N			
	Min. Bend Radius (Install)/Minor Axis:	76.200 mm			

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Applicable Specifications and Agency Compliance (Overall)					
Applicable Standards & Environmental Programs					
NEC/(UL) Specification:	CM				
CEC/C(UL) Specification:	СМ				
AWM Specification:	UL Style 2919 (30 V 80°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:	88105				
Floatwicel Characteristics (Overall)					

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 72.182

**Nominal Velocity of Propagation:** 



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 78.744

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 13.7802

Max. Operating Voltage - UL:

Voltage 30 V RMS (UL AWM Style 2919) 300 V RMS

Max. Recommended Current:

Current
1.5 Amps 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.

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# **Related Documents:**

No related documents are available for this product

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8105 060100	30 MT	2.359 KG	CHROME		5 PR #24 FHDPE SH PVC
8105 0601000	305 MT	21.319 KG	CHROME	С	5 PR #24 FHDPE SH PVC
8105 060500	152 MT	11.340 KG	CHROME	С	5 PR #24 FHDPE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 06-30-2008

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