# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



### 7838A Multi-Conductor - T1/DS1 Central Office Interconnect/Cross Connect Cable



For more Information please call

1-800-Belden1



#### **General Description:**

22 AWG solid tinned copper conductors, twisted pairs, Datalene® insulation, individually shielded with 100% Beldfoil® shield, 24 AWG solid tinned copper drain wire each pair, PVC jacket.

#### **Physical Characteristics (Overall)** Conductor AWG: # Pairs AWG Stranding Conductor Material Dia. (in.) 22 Solid TC - Tinned Copper | .0254 **Total Number of Conductors:** 4 Insulation Insulation Material: Insulation Trade Name Insulation Material Datalene® PO w/Foam PO - Polyolefin w/Foam Polyolefin Inner Shield Inner Shield Material: Inner Shield Trade Name Type Inner Shield Material Coverage (%) Tape | Aluminum Foil-Polyester Tape | 100 Inner Shield Drain Wire AWG: AWG 24 Solid Inner Shield Drain Wire Stranding: Inner Shield Drain Wire Conductor Material: TC - Tinned Copper **Outer Jacket** Outer Jacket Material: **Outer Jacket Material** PVC - Polyvinyl Chloride **Overall Cable Overall Nominal Diameter:** 0.202 x 0.360 in Pair Pair Color Code Chart: Number Color Blue & White/Blue Orange & White/Orange **Mechanical Characteristics (Overall)** -20°C To +75°C **Operating Temperature Range:** Bulk Cable Weight: 33 lbs/1000 ft. Max. Recommended Pulling Tension: 31 lbs Min. Bend Radius/Minor Axis: **Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs** NEC/(UL) Specification: СМ CEC/C(UL) Specification: CM EU Directive 2011/65/EU (ROHS II): Yes EU Directive 2000/53/EC (ELV): Yes EU Directive 2002/95/EC (RoHS): Yes 01/01/2004 EU RoHS Compliance Date (mm/dd/yyyy):

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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	

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Description Impedance (Ohm) @ 1 MHz 100.000

Nom. Inductance:

Inductance (µH/ft) 0.24

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

Nominal Velocity of Propagation:

**VP** (%) 72

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 16.7

Nom. Attenuation:

Attenuation (dB/1000 ft.) 4.3 @ 772 KHz

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current 3.5 Amps per conductor @ 25°C

Differential Impedance @ 1 MHz:

105

## Notes (Overall)

Notes: Single conductors are dual insulated. The outer layer of insulation must be stripped off before attaching modular connectors. Use a stripping tool such as Cooper Tools Xcelite model 103-S, or equivalent with a mechanical stop to avoid nicking the inner insulation. RJ-45 Compatible.

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

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7838A 0601000	1,000 FT	37.000 LB	CHROME	С	2 FS PR #22 PP/FPE PVC PARA
7838A 0602000	2,000 FT	74.000 LB	CHROME	С	2 FS PR #22 PP/FPE PVC PARA
7838A 0605000	5,000 FT	180.000 LB	CHROME	С	2 FS PR #22 PP/FPE PVC PARA

Notes:

C = CRATE REEL PUT-UP.

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