**ENGLISH MEASUREMENT VERSION** 



7922A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cables



For more Information please call

1-800-Belden1



## **Description:**

**22 AWG** Bonded-Pairs solid bare copper conductors, polyolefin insulation, industrial grade sunlight- and Oil-resistant PVC jacket, rip cord. Sequential marking at two foot intervals.

### **Usage (Overall)**

**Suitable Applications:** 

Industrial Ethernet Cable, Harsh Environments, 350MHz Enhanced Category 5e, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, CMX - Outdoor, PLTC Listed, Approved for Cable Tray Use in Class 1, Division 2, Hazardous Areas and Non-hazardous Areas, Cable Trays, Raceways, Conduit and Supported by Messenger Wires, Approved for Outdoor Usage

## **Physical Characteristics (Overall)**

### Conductor

AWG:

# Pairs AWG		Stranding	<b>Conductor Material</b>	Dia. (in.)
4	22	Solid	BC - Bare Copper	.026

### Insulation

#### **Insulation Material:**

Insulation Material	Wall Thickness (in.)	Dia. (in.)
PO - Polyolefin	.011	.048

### **Outer Shield**

Outer Shield Material:

Outer Shield Material Unshielded

### **Outer Jacket**

**Outer Jacket Material:** 

Outer Jacket Material	Nom. Wall Thickness (in.)
Industrial Grade PVC - Polyvinyl Chloride	.043

Outer Jacket Ripcord:

Yes

## **Overall Cabling**

Overall Nominal Diameter: 0.301 in.

Pair

### **Pair Color Code Chart:**

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

### **Mechanical Characteristics (Overall)**

Installation Temperature Range:	-10°C To +75°C
Operating Temperature Range:	-25°C To +75°C
Bulk Cable Weight:	42 lbs/1000 ft.

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Max. Recommended Pulling Tension:	40 lbs.
Min. Bend Radius (Install)/Minor Axis:	0.300 in.

# Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs

pplicable Standards & Environmental Programs					
PLTC, CMR, CMX-Outdoor					
NEC 725					
CMR					
UL Style 444 (300 V 75°C)					
11801 Category 5					
Yes					
Yes					
01/01/2004					
Yes					

ANSI/TIA/EIA 568B.2 Category 5e

NEMA WC-63.1 Category 5e

Other Specification: Flame Test

**Telecommunications Standards:** 

**UL Flame Test:** UL1666 Vertical Riser

C(UL) Flame Test: FT4

**Suitability** 

Suitability - Indoor: Yes

Suitability - Outdoor: Yes
Sunlight Resistance: Yes

Oil Resistance: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

### **Electrical Characteristics (Overall)**

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m): 66

Nominal Velocity of Propagation:

**VP (%)** 70

Maximum Delay:

**Delay (ns/100 m)** 510

Max. Delay Skew:

Delay Skew (ns/100 m) 25

**Maximum Conductor DC Resistance:** 

**DCR @ 20°C (Ohm/100 m)** 9

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Max. Operating Voltage - UL:

Voltage 300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

# **Electrical Characteristics-Premise (Overall)**

### Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.0	65.3	65.3	63.3	63.3	20.0
4	4.0	56.3	56.3	52.3	52.3	23.0
8	5.7	51.8	51.8	46.1	46.1	24.5
10	6.4	50.3	50.3	43.9	43.9	25.0
16	8.1	47.3	47.3	39.1	39.1	25.0
20	9.2	45.8	45.8	35.2	35.2	25.0
25	10.3	44.3	44.3	34.1	34.1	24.3
31.25	11.6	42.9	42.9	31.3	31.3	23.6
62.5	16.8	38.4	38.4	21.6	21.6	21.5
100	21.7	35.3	35.3	17.1	17.1	20.1
155	27.7	32.5	32.5	4.7	4.7	19.0
200	32.0	30.8	30.8	3.0	3.0	19.0
250	36.4	29.3	29.3	>0	>0	18.0
300	40.5	28.2	28.2	>0	>0	18.0
310	41.3	27.9	27.9			18.0
350	44.3	27.2	27.2			17.0

### **Premise Cable Electrical Table 2:**

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 12	105 ± 10	63.8	60.8
4	100 ± 12	100 ± 10	51.7	48.7
8	100 ± 12	100 ± 10	45.7	42.7
10	100 ± 12	100 ± 10	43.8	40.8
16	100 ± 12	100 ± 10	39.7	36.7
20	100 ± 12	100 ± 10	37.7	34.7
25	100 ± 15	100 ± 10	35.8	32.8
31.25	100 ± 15	100 ± 10	33.9	30.9
62.5	100 ± 15	100 ± 10	27.8	24.8
100	100 ± 15	100 ± 10	23.8	20.8
155	100 ± 18	100 ± 10	19.9	16.9
200	100 ± 20	100 ± 10	17.7	14.7
250	100 ± 20	100 ± 10	15.8	12.8
300	100 ± 20	100 ± 10	14.2	11.2
310	100 ± 20	100 ± 10	13.9	10.9
350	100 ± 22	100 ± 10	12.9	9.9

# **Notes (Overall)**

Notes: US Patent #'s 5, 606, 151; 5, 734, 126. Operating temperatures are subject to length de-rating

Notes (Cont'd.): Cable passes -25C Cold Bend per UL 1581

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7922A 0101000	1,000 FT	46.000 LB	BLACK	С	4 PR #22 PP PVC
7922A 0102000	2,000 FT	92.000 LB	BLACK	С	4 PR #22 PP PVC

Notes

C = CRATE REEL PUT-UP.

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### 7922A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cables

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