

METRIC MEASUREMENT VERSION

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



For more Information please call

1-800-Belden1



## **General 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 Conductor Material Dia. (mm) 0.6604 Solid BC - Bare Copper 22 4 8 **Total Number of Conductors:** Insulation **Insulation Material:** Insulation Material Wall Thickness (mm) Dia. (mm) PO - Polyolefin 0.2794 1.2192 **Outer Shield Outer Shield Material: Outer Shield Material** Unshielded **Outer Jacket Outer Jacket Material: Outer Jacket Material** Nom. Wall Thickness (mm) Industrial Grade PVC - Polyvinyl Chloride 1.0922 **Outer Jacket Ripcord:** Yes **Overall Cable Overall Nominal Diameter:** 7.645 mm Pair Pair Color Code Chart: Number Color White/Blue & Blue 1 White/Orange & Orange 2 3 White/Green & Green 4 White/Brown & Brown **Mechanical Characteristics (Overall)**

Storage Temperature Range:	-25°C To +75°C
Installation Temperature Range:	-10°C To +75°C

# **Detailed Specifications & Technical Data**



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Operating Temperature Range:	-25°C To +75°C			
Bulk Cable Weight:	62.504 Kg/Km			
Max. Recommended Pulling Tension:	177.928 N			
Min. Bend Radius/Minor Axis:	7.620 mm			
pplicable Specifications and Agency Con	npliance (Overall)			
Applicable Standards & Environmental Progra				
NEC/(UL) Specification:	CMR, CMX-Outdoor, PLTC			
CEC/C(UL) Specification:	CMR			
EU Directive 2011/65/EU (ROHS II):	Yes			
Other Standards:	ISO/IEC 11801 ed 2.1 (2008) Class D			
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			
Telecommunications Standards:	Category 5e - TIA 568.C.2			
Other Specification:	NEMA WC-63.1 Category 5e			
Flame Test				
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			
lectrical Characteristics (Overall)				
Nom. Capacitance Conductor to Shield: Capacitance (pF/m) 49.215				
Maximum Capacitance Unbalance (pF/100 m):	66			
Nominal Velocity of Propagation:				
<b>VP (%)</b> 70				
Maximum Delay:				
<b>Delay (ns/100 m)</b> 510				
Max. Delay Skew: Delay Skew (ns/100 m) 25 Maximum Conductor DC Resistance:				



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DCR @ 20°C (Ohm/100 m)

9

Max. Operating Voltage - UL:

Voltage

300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

3

## **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	305 MT	20.865 KG	BLACK	С	4 PR #22 PP PVC
7922A 0102000	610 MT	41.731 KG	BLACK	С	4 PR #22 PP PVC
7922A 0105000	1,524 MT	106.595 KG	BLACK	С	4 PR #22 PP PVC

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Notes: C = CRATE REEL PUT-UP.

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