

# **BELDEN**Cable

# 7919A Paired - Category 5e DataTuff® Twisted Pair Cable





Metric Version
For more information please call
1-800-Belden1

See Put-ups and Colors

Color Code Chart : Termination Instructions for Shielded UTP.pdf

#### **Description:**

24 AWG solid bare copper conductors, twisted pairs, polyolefin insulation, overall Beldfoil shield (100% coverage), 24 AWG stranded TC drain wire, industrial grade sunlight- and oil-resistant PVC jacket, rip cord. Sequential marking at two foot intervals

#### SUITABLE APPLICATIONS:

Suitable Applications	Industrial Ethernet Cable, Harsh Environments, 100MHz Category 5e, Gigabit
	Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL
	Component or Composite Video, AES/EBU Digital Video, RS-422, CMX -
	Outdoor, RJ-45 Compatible, Noisy Environments

#### PHYSICAL CHARACTERISTICS:

#### **CONDUCTOR:**

Number of Pairs	4
Total Number of Conductors	8
AWG	24
Stranding	Solid
Conductor Material	BC - Bare Copper

#### **INSULATION:**

Insulation Material	PO - Polyolefin
Nom. Insulation Wall Thickness	0.254 mm

#### Pair Color Code Chart:

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

#### **OUTER SHIELD:**

Outer Shield Material Trade Name	Beldfoil®
Outer Shield Type	Tape
Outer Shield Material	Aluminum Foil-Polyester Tape
Outer Shield %Coverage	100 %

## **Detailed Specifications &** Technical Data





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OUTER SHIELD DRAIN WIRE:	
Outer Shield Drain Wire AWG	24
Outer Shield Drain Wire Stranding	7x32
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper
OUTER JACKET:	

Outer Jacket Material	Industrial Grade PVC - Polyvinyl Chloride
Outer Jacket Ripcord	No

#### **OVERALL NOMINAL DIAMETER:**

6.731 mm Overall Nominal Diameter

#### **MECHANICAL CHARACTERISTICS:**

Operating Temperature Range	-40°C To +75°C
Installation Temperature Range	-25°C To +75°C
Bulk Cable Weight	44.646 Kg/Km
Max. Recommended Pulling Tension	111.205 N
Min. Bend Radius (Install)	25.4 mm

#### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### **APPLICABLE STANDARDS:**

NEC/(UL) Specification	CMR, CMX-Outdoor, UL444
CEC/C(UL) Specification	CMR
IEC Specification	11801 Category 5
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
TIA/EIA Specification	568-B.2 Category 5e
Other Specification	NEMA WC-63.1 Category 5e, UL verified to Category 5e

#### FLAME TEST:

UL Flame Test	UL1666 Riser
CSA Flame Test	FT4

#### **SUITABILITY:**

Suitability - Outdoor	Yes	
Sunlight Resistance	Yes	
Oil Resistance	Yes	

#### PLENUM/NON-PLENUM:

Plenum (Y/N)

#### **ELECTRICAL CHARACTERISTICS:**

Nom. Mutual Capacitance @ 1 KHz 49.215 pF/m



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Maximum Capacitance Unbalance (pF/100 m)	330 pF/100 m
Nominal Velocity of Propagation	70 %
Maximum Delay (ns/100 m)	538 @ 100MHz ns/100 m
Maximum Delay Skew (ns/100m)	45 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C	9.38 Ohms/100 m
Maximum DCR Unbalance @ 20 Deg. C	3 %
Max. Operating Voltage - UL	300 V RMS

#### **ELECTRICAL CHARACTERISTICS - PREMISE:**

Premise Cable Electricals Table 1:

Frequency (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min. Return Loss (dB)	Min. Structural Return Loss (dB)
1	2	65.3	62.3	63.0	60.0	20	23
4	4.1	56.3	53.3	51.0	49.0	23	23.0
8	5.8	51.8	48.8	46.0	43.0	24.5	24.5
10	6.5	50.3	47.3	43.0	41.0	25	25.0
16	8.2	47.3	44.3	39.0	36.0	25	25.0
20	9.3	45.8	42.8	36.5	33.5	25	25.0
25	10.4	44.3	41.3	33.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	31.0	28.0	23.6	23.6
62.5	17	38.4	35.4	22.0	19.0	21.5	21.5
100	22	35.3	32.3	14.0	11.0	20.1	20.1

#### Premise Cable Electricals Table 2:

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	$100 \pm 15$	$100 \pm 15$	63.8	60.8
4	$100 \pm 15$	$100 \pm 15$	51.7	48.7
8	$100 \pm 15$	$100 \pm 15$	45.7	42.7
10	$100 \pm 15$	$100 \pm 15$	43.8	40.8
16	$100 \pm 15$	$100 \pm 15$	39.7	36.7
20	$100 \pm 15$	$100 \pm 15$	37.7	34.7
25	$100 \pm 15$	$100 \pm 15$	35.8	32.8
31.25	$100 \pm 15$	$100 \pm 15$	33.9	30.9
62.5	$100 \pm 15$	$100 \pm 15$	27.8	24.8
100	$100 \pm 15$	$100 \pm 15$	23.8	20.8

#### NOTES:

Notes	Operating temperatures are subject to length de-rating. Cable passes -40°C Cold
	Rend per III. 1581

#### **PUT-UPS AND COLORS:**

Item Des	scription Pu	ıt-Up (M)	Ship Weight (kgs.)	Jacket Color	Notes
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### Detailed Specifications & Technical Data



## **BELDEN**Cable<sup>\*\*</sup>

### 7919A Paired - Category 5e DataTuff® Twisted Pair Cable

7919A 0061000	4 PR #24 PP FS PVC	304.8	15.89	BLUE, LIGHT	С
7919A 0101000	4 PR #24 PP FS PVC	304.8	15.89	BLACK	С
7919A 0102000	4 PR #24 PP FS PVC	609.6	30.872	BLACK	С

C = CRATE REEL PUT-UP.

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