Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

7930A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable

For more Information please call

1-800-Belden1

Description:

24 AWG stranded (7x32) bare copper conductors, twisted pairs, polyolefin insulation, industrial grade sunlight- and oil-resistant PVC jacket. Sequential marking at two foot intervals.

Usage (Overall)

Suitable Applications:	Industrial Ethernet, Harsh Environments, Flexible Applications, 200MHz Category 5e, Industrial Patch Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, CMX - Outdoor, RJ-45 Compatible

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	7x32	BC - Bare Copper

Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

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	.030

Overall Cable

Overall Nominal Diameter:	0.240 in.

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

Installation Temperature Range:	-10°C To +75°C
Operating Temperature Range:	-25°C To +75°C
Bulk Cable Weight:	26 lbs/1000 ft.
Max. Recommended Pulling Tension:	25 lbs.
Min. Bend Radius (Install)/Minor Axis:	0.960 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR, CMX-Outdoor, UL444
CEC/C(UL) Specification:	CMR
Other Standards:	11801 Category 5e Patch
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:	568-B.2 Category 5e Patch
Other Specification:	NEMA WC-63.1 Category 5e Patch, ICEA 661 Category 5 Patch, UL verified to Category 5e

Flame Test

UL Flame Test:	UL1666 Riser
CSA 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. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m):	330

Nominal Velocity of Propagation:

VP (%)
69

Maximum Delay:

Delay (ns/100 m)
510 @ 100MHz

Typical Delay Skew:

Delay Skew (ns/ft)
12

Max. Delay Skew:

Delay Skew (ns/100 m)
45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9.38

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)	Min. SRL (dB)
1	2.5	65.3	62.3	62.8	59.8	20.0	23.0
4	4.9	56.3	53.3	51.4	48.4	23.0	23.0
8	6.9	51.8	48.8	44.9	41.9	24.5	24.5
10	7.8	50.3	47.3	42.5	39.5	25.0	25.0
16	9.9	47.3	44.3	37.4	34.4	25.0	25.0
20	11.1	45.8	42.8	34.7	31.7	25.0	25.0
25	12.5	44.3	41.3	21.8	28.8	24.3	24.3
31.25	14.1	42.9	39.9	28.8	25.8	23.6	23.6
62.5	20.4	38.4	35.4	18.0	15.0	21.5	21.5
100	26.4	35.3	32.3	8.9	5.9	20.1	20.1
155	33.7	32.5	29.5			15.8	
200	38.9	30.8	27.8			15.0	

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8
155	100 ± 25	100 ± 15	19.9	16.9
200	100 ± 25	100 ± 15	17.7	14.7

Notes (Overall)

Notes: Operating temperatures are subject to length de-rating. Cable passes -25C Cold Bend per UL 1581.

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7930A 0101000	1,000 FT	29.000 LB	BLACK	C	4 PR #24 PP PVC
7930A 0102000	2,000 FT	56.000 LB	BLACK	C	4 PR #24 PP PVC

Notes:
C = CRATE REEL PUT-UP.

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