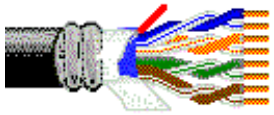
121700A Paired - Category 5e DataTuff® Twisted Pair Cable



For more information please call

1-800-Belden1

See Put-ups and Colors

Related Documents : No. 8 for DataTwist Cables (Modified Western Electric).pdf

Description:

24 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, PVC inner jacket, rip cord, polyester wrap, aluminum interlocked armor, industrial grade outer PVC jacket. Sequential marking at one meter intervals.

SUITABLE APPLICATIONS:

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, RJ-45 Compatible, Flexible Applications, Armored for Extra Protection

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	24
Stranding	Solid
Conductor Diameter	.020 in.
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material	PO - Polyolefin
Nom. Insulation Wall Thickness	.009 in.
Insulation Diameter	.035 in.

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

INNER JACKET:

Inner Jacket Material	PVC - Polyvinyl Chloride
Inner Jacket Diameter	.200 in.
Inner Jacket Ripcord	Yes

OVERALL CABLING:

121700A Paired - Category 5e DataTuff® Twisted Pair Cable

Overall Cabling Separator Material	Polyester
OUTER SHIELD:	
Outer Shield Material	Unshielded
OUTER JACKET:	
Outer Jacket Material	Industrial Grade PVC - Polyvinyl Chloride
Outer Jacket Nominal Wall Thickness	.045 in.
ARMORING/OUTER JACKET:	
ARMORING :	
Armor Type	Interlocked
Armor Material	Aluminum
Diameter over Armor	.440 in.
OUTER JACKET OVER ARMOR :	
Outer Jacket over Armor (y/n)	Yes
Outer Jacket Material Over Armor	PVC - Polyvinyl Chloride
OVERALL NOMINAL DIAMETER:	
Overall Nominal Diameter	0.530 in.
MECHANICAL CHARACTERISTICS:	
Operating Temperature Range	-40°C To +75°C
Installation Temperature Range	-25°C To +75°C
Bulk Cable Weight	29 lbs/1000 ft.
Max. Recommended Pulling Tension	40 lbs.
Min. Bend Radius (Install)	6.5 in.
APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:	
APPLICABLE STANDARDS:	
NEC/(UL) Specification	CM, UL444
CEC/C(UL) Specification	CMG, HL
IEC Specification	11801 Category 5
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/01/2005
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	UL1685 FT4 Loading
CSA Flame Test	FT4
SUITABILITY:	
Sunlight Resistance	Yes

121700A Paired - Category 5e DataTuff® Twisted Pair Cable

Oil Resistance	Yes

PLENUM/NON-PLENUM:

Plenum (Y/N)	N

ELECTRICAL CHARACTERISTICS:

Nom. Mutual Capacitance @ 1 KHz	15 pF/ft
Maximum Capacitance Unbalance (pF/100 m)	66 pF/100 m
Nominal Velocity of Propagation	70 %
Maximum Delay (ns/100 m)	510 ns/100 m
Maximum Delay Skew (ns/100m)	25 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C	9 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	2.0	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 Electricals Table 2 :

121700A Paired - Category 5e DataTuff® Twisted Pair Cable

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	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:

Notes	US Patent #'s 5, 606, 151; 5, 734, 126 Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
121700A 0081000	4 PR 24 ARM PVC CABLE	1000	159	GRAY	C Z
121700A 0101000	4 PR 24 ARM PVC CABLE	1000	159	BLACK	C Z
121700A 0103000	4 PR 24 ARM PVC CABLE	3000	459	BLACK	C Z

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

Revision Number: 8 Revision Date: 07-12-2006

121700A Paired - Category 5e DataTuff® Twisted Pair Cable

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NEW PRODUCT

BULLETIN

NP 197

Peak network efficiency and reliability are achieved with Belden's DataTuff Industrial Ethernet cables. Bonded-Pair versions also offer the unique advantage of Installable Performance™.

DataTuff® Category 6 and 5e Ethernet Cables Are Made for Tough Industrial Environments

The reliability of your Industrial Ethernet network depends on the cable infrastructure: Data transmission errors can lead to interruptions in critical control functions resulting in lost production time and even safety issues. To help ensure optimum factory floor performance, Belden has consistently built both quality and reliability into each cable it manufactures. From the introduction and dominant call-out of Belden's Blue Hose® cables, to our present line of DataTuff Category 6 and 5e copper cables and TrayOptic® fiber optic Industrial Ethernet cables, Belden has always supplied the cable you need, when you need it.

And because we have been at the forefront of the industrial marketplace for decades and understand the rigors of the industrial environment, we also have the unique ability to provide top performing cables — regardless of the work environment. So, even if your cabling system is exposed to the following conditions you can turn to Belden for the right solution:

- Oil and sunlight
- Temperature variations
- Abrasion and crushing
- Presence of EMI/RFI (electromagnetic interference or radio frequency interference)

Only DataTuff Cables with Belden's Patented Bonded-Pair Technology Offer The Benefit of Installable Performance

Many versions of DataTuff cables feature Belden's patented Bonded-Pair technology. This construction feature affixes the conductors of the cable pairs along their longitudinal axes to ensure that no performance-robbing gaps can develop between the conductor pairs. Since no gaps can occur and the conductor-to-conductor spacing is always uniform, the cable offers excellent and consistently reliable electrical performance — even after the cable has been subjected to the bending, pulling and twisting that is inherent in the installation process. Belden calls this unique after-installation performance capability Installable Performance.

TrayOptic Cables Feature Laser Certified Fiber (LCF™) and Water-Blocking Capability

When the installation demands the combination of sophisticated fiber optic technology and rugged durability, turn to Belden's line of TrayOptic indoor/outdoor fiber optic cables — now upgraded to include a water-blocking agent. All TrayOptic products also utilize Laser Certified Fiber to handle Gigabit Ethernet light sources and any expanded bandwidth requirements. For information on Belden's full line of BelOptix® fiber optic cables, including TrayOptic cables, contact Belden at 1-800-BELDEN-4 or visit www.belden.com.

Quality You Can Trust

All Belden products are manufactured to the industry's highest standards of quality, utilizing the most advanced equipment, systems, controls and processes. In fact, Belden has long been a pioneer in production processes, such as statistical process control (SPC), that have become industry standards. And Belden was the first major designer and manufacturer of cable products to achieve ISO 9000 registration for the majority of its domestic and overseas facilities.

Belden Quality Means Uptime and Superior Safety Performance

Today's critical industrial networking applications can't afford data transmission errors that can cause downtime, delays, and even safety concerns. Belden quality gives you the performance and reliability you need on a day-by-day basis.

INDUSTRIALTUFF™

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Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nom. Insulated Conductor OD Inch	Nom. Insulated Conductor OD mm	Nominal OD Inch	Nominal OD mm	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
Enhanced Cat 5e • 24 AWG Bonded-Pairs Solid BC • Rip Cord • See Color Code Chart																		
Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Sunlight- and Oil-resistant Black PVC Jacket																		
	7923A new	NEC: CMR, CMX- Outdoor CEC: CMR FT4	4	1000 2000	304.8 609.6	28.0 54.0	12.7 24.5	.038 x .075	.97 x 1.91	.230	5.94	1 4 8 10 16 25 31.25 62.5 100 155 200 250 350	2.0 4.0 5.7 6.4 8.1 10.3 11.6 16.8 21.7 27.7 32.0 36.4 44.3	65.3 56.3 51.8 50.3 47.3 44.3 42.9 38.4 35.3 32.5 30.8 29.3 27.2	63.3 52.3 46.1 43.9 39.1 34.1 31.3 21.6 17.1 4.7 3.0 — —	60.8 48.7 42.7 40.8 36.7 32.8 30.9 24.8 20.8 16.9 14.7 12.8 9.9	100±12 100±12 100±12 100±12 100±12 100±15 100±15 100±15 100±15 100±18 100±18 100±20 100±22	20.0 23.0 24.5 25.0 25.0 24.3 23.6 21.5 20.1 19.0 19.0 18.0 17.0
Rip Cord																		
RJ-45 Compatible • -25°C Cold Bend • U.S. Patents 5,606,151 and 5,734,126 Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e																		
Cat 5e • 24 AWG Bonded-Pairs Solid BC • Overall Beldfoil® Shield • 24 AWG Stranded TC Drain Wire • See Color Code Chart																		
Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Sunlight- and Oil-resistant Black PVC Jacket																		
Shielded	**7929A** new	NEC: CMR, CMX- Outdoor CEC: CMR FT4	4	1000 2000	304.8 609.6	36.0 70.0	16.3 31.8	.045 x .088	1.14 x 2.24	.265	6.73	1 4 10 16 31.25 62.5 100 200	2.0 4.1 6.5 8.2 11.7 17.0 22.0 32.4	62.3 53.3 47.3 44.3 39.9 35.4 32.3 27.8	60.3 49.2 41.8 36.0 28.2 18.4 10.3 1.0	60.8 48.7 40.8 36.7 30.9 24.8 20.8 14.7	100±15 100±15 100±15 100±15 100±15 100±15 100±15 100±25	20.0 23.0 25.0 25.0 23.6 21.5 20.1 15.0
RJ-45 Compatible • -25°C Cold Bend • U.S. Patents 5,606,151 and 5,734,126 Shield is bonded to jacket inner wall for electrical stability. • Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e																		
Cat 5e • 24 AWG Bonded-Pairs Solid BC • Overall Beldfoil + 70% TC Braid • 24 AWG Solid Spiral Drain Wire • See Color Code Chart																		
Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Sunlight- and Oil-resistant Black PVC Jacket																		
Heavy-shielded	**7921A** new	NEC: CMR, CMX- Outdoor CEC: CMR FT4	4	1000 2000	304.8 609.6	55.0 108.0	24.9 49.0	.047 x .091	1.19 x 2.31	.330	8.38	1 4 10 16 31.25 62.5 100	2.0 4.1 6.5 8.2 11.7 17.0 22.0	62.3 53.3 47.3 44.3 39.9 35.4 32.3	60.3 49.2 41.8 36.0 28.2 18.4 10.3	60.8 48.7 40.8 36.7 30.9 24.8 20.8	100±15 100±15 100±15 100±15 100±15 100±15 100±15	20.0 23.0 25.0 25.0 23.6 21.5 20.1
-25°C Cold Bend • U.S. Patents 5,606,151 and 5,734,126 • Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e																		
Enhanced Cat 5e • 24 AWG Bonded-Pairs Solid BC • Rip Cord • See Color Code Chart																		
Non-Plenum • Polyolefin Insulation • PVC Inner Jacket • .035″ Industrial Grade Black or Gray PVC Outer Jacket																		
Upjacketed	**11700A**	NEC: CMR CEC: CMR FT4	4	1000 3000	304.8 914.4	39.0 117.0	17.7 53.2	.038 x .075	.97 x 1.91	.285 Nominal Core OD: .200	7.24 5.08	(Same as 7923A above)						
Rip Cord																		
RJ-45 Compatible • -25°C Cold Bend • U.S. Patents 5,606,151 and 5,734,126 • Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e • Outer jacket is sunlight- and oil-resistant.																		
Enhanced Cat 5e • 24 AWG Bonded-Pairs Solid BC • Mylar® Wrap • Rip Cord • See Color Code Chart																		
Non-Plenum • Polyolefin Insulation • PVC Inner Jacket • .045″ Industrial Grade Black or Gray PVC Outer Jacket																		
Interlocked AL Armor	**121700A**	NEC: CMG CEC: HL CMG FT4	4	1000 3000	304.8 914.4	155.0 465.0	70.5 211.4	.038 x .075	.97 x 1.91	.530 Nominal Core OD: .200	13.46 5.08	(Same as 7923A above)						
Rip Cord																		
RJ-45 Compatible • -25°C Cold Bend • U.S. Patents 5,606,151 and 5,734,126 • Jacket sequentially marked at 1 meter intervals. • Verified to TIA/EIA-568-B.2, Category 5e • Outer jacket is sunlight- and oil-resistant.																		
Enhanced Cat 5e • 24 AWG Bonded-Pairs Stranded TC (7x32) • See Color Code Chart																		
Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Sunlight- and Oil-resistant Black PVC Jacket																		
Stranded Flexible	**7924A** new	NEC: CMR, CMX- Outdoor CEC: CMR FT4	4	1000 2000	304.8 609.6	30.0 58.0	13.6 26.3	.039 x .077	.99 x 1.96	.242	6.15	1 4 8 10 16 25 31.25 62.5 100 155 200 250 350	2.4 4.8 6.8 7.7 9.7 12.4 13.9 20.2 26.0 33.2 38.4 43.7 53.2	65.3 56.3 51.8 50.3 47.3 44.3 42.9 38.4 35.3 32.5 30.8 29.3 27.2	62.9 51.5 45.0 42.6 37.5 31.9 29.0 18.3 9.2 — — — —	60.8 48.7 42.7 40.8 36.7 32.8 30.9 24.8 20.8 16.9 14.7 12.8 9.9	100±12 100±12 100±12 100±12 100±12 100±15 100±15 100±15 100±15 100±18 100±18 100±20 100±22	20.0 23.0 24.5 25.0 25.0 24.3 23.6 21.5 20.1 19.0 19.0 18.0 17.0
RJ-45 Compatible • -25°C Cold Bend • U.S. Patents 5,606,151; 5,734,126 and 5,763,823 Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e																		

ACR = Attenuation Crosstalk Ratio • AL = Aluminum • BC = Bare Copper • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • TC = Tinned Copper

Mylar is a DuPont trademark.

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nom. Insulated Conductor OD Inch	Nom. Insulated Conductor OD mm	Nominal OD Inch	Nominal OD mm	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
Enhanced Cat 5e • 24 AWG Bonded-Pairs Solid BC • See Color Code Chart																		
FEP Insulation • Sunlight-, Oil- and Gas-resistant Black FEP Jacket																		
High & Low Temp Oil Res I & II Gas Res	**7928A** new	NEC: Limited Combustible FHC 25/50 CMP CEC: CMP FT6	4	1000	304.8	24.0	10.9	.036 x .071	.91 x 1.80	.187	4.75	1	2.0	65.3	63.3	60.8	100±12	20.0
												4	4.0	56.3	52.3	48.7	100±12	23.0
												8	5.7	51.8	46.1	42.7	100±12	24.5
												10	6.4	50.3	43.9	40.8	100±12	25.0
												16	8.1	47.3	39.1	36.7	100±12	25.0
												25	10.3	44.3	34.1	32.8	100±15	24.3
												31.25	11.6	42.9	31.3	30.9	100±15	23.6
												62.5	16.8	38.4	21.6	24.8	100±15	21.5
												100	21.7	35.3	17.1	20.8	100±15	20.1
												155	27.7	32.5	4.7	16.9	100±18	19.0
												200	32.0	30.8	3.0	14.7	100±18	19.0
												250	36.4	29.3	—	12.8	100±20	18.0
												350	44.3	27.2	—	9.9	100±22	17.0

RJ-45 Compatible • -70°C • U.S. Patents 5,606,151 and 5,734,126
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

Cat 5e • 24 AWG Solid BC • Twisted Pairs • Rip Cord • See Color Code Chart

Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Sunlight- and Oil-resistant Black PVC Jacket

	7918A new	NEC: CMR, CMX-Outdoor CEC: CMR FT4	4	1000 2000	304.8 609.6	28.0 54.0	12.7 24.5	.037	.94	.230	5.84	1	2.0	62.3	60.3	60.8	100±15	20.0
												4	4.1	53.3	49.2	48.7	100±15	23.0
												10	6.5	47.3	41.8	40.8	100±15	25.0
												16	8.2	44.3	36.0	36.7	100±15	25.0
												31.25	11.7	39.9	28.2	30.9	100±15	23.6
												62.5	17.0	35.4	18.4	24.8	100±15	21.5
												100	22.0	32.3	10.3	20.8	100±15	20.1
												200	32.4	27.8	1.0	14.7	100±25	15.0

Rip Cord

RJ-45 Compatible • -25°C Cold Bend • Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

Cat 5e • 24 AWG Solid BC • Twisted Pairs • Overall Beldfoil® Shield • 24 AWG Stranded TC Drain Wire • See Color Code Chart

Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Sunlight- and Oil-resistant Black PVC Jacket

Shielded	**7919A** new	NEC: CMR, CMX-Outdoor CEC: CMR FT4	4	1000 2000	304.8 609.6	36.0 70.0	16.3 31.8	.042	1.07	.265	6.73	(Same as 7918A above)

RJ-45 Compatible • -25°C Cold Bend • Shield is bonded to jacket inner wall for electrical stability. • Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

Enhanced Cat 6 • 23 AWG Bonded-Pairs Solid BC • Patented E-Spline Center Member • Rip Cord • See Color Code Chart

Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Sunlight- and Oil-resistant Black PVC Jacket

	7927A new	NEC: CMR CEC: CMR FT4	4	1000 2000	304.8 609.6	44.0 88.0	20.0 39.9	.042	1.07	.251 x .339	6.38 x 8.61	1	1.9	80.3	78.5	70.8	100±12	20.0
												10	5.7	65.3	59.6	50.8	100±12	25.0
												31.25	10.2	57.9	47.7	40.9	100±15	25.0
												62.5	14.7	53.4	38.7	34.9	100±15	25.0
												100	18.9	50.3	31.4	30.8	100±15	25.0
												155	23.9	47.5	23.5	27.0	100±15	22.8
												200	27.5	45.8	18.3	24.8	100±15	21.7
												250	31.2	44.3	13.2	22.8	100±20	20.5
												350	37.7	40.2	4.5	19.9	100±22	19.8
												400	40.6	39.3	0.6	18.8	100±22	19.5
												500	46.2	37.8	>0*	16.8	100±22	18.4
												550	48.8	37.2	—	16.0	100±22	18.0
												600	51.4	36.6	—	15.2	100±22	17.6

Rip Cord

RJ-45 Compatible • -25°C Cold Bend • U.S. Patents 5,606,151; 5,734,126; 5,789,711 and 6,297,454-B1
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2-1, Category 6
*PSUM ACR >0 is guaranteed to 460 MHZ.

Cat 6 • 23 AWG Bonded-Pairs Solid BC • See Color Code Chart

FEP Insulation • Sunlight-, Oil- and Gas-resistant Black FEP Jacket

High & Low Temp Oil Res I & II Gas Res	**7931A** new	NEC: Limited Combustible FHC 25/50 CMP CEC: CMP FT6	4	1000	304.8	35.0	15.9	.038	.97	.214	5.44	1	2.0	72.3	70.3	64.8	100±15	20.0
												10	6.0	57.3	51.3	44.8	100±15	25.0
												20	8.5	52.8	44.3	38.7	100±15	25.0
												31.25	10.7	49.9	39.2	34.9	100±15	23.6
												62.5	15.4	45.4	30.0	28.8	100±15	21.5
												100	19.8	42.3	22.5	24.8	100±15	20.1
												200	29.0	37.8	8.8	18.7	100±22	18.0
												250	32.8	36.3	3.5	16.8	100±32	17.3

RJ-45 Compatible • -70°C Cold Bend • U.S. Patents 5,606,151 and 5,734,126
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2-1, Category 6

ACR = Attenuation Crosstalk Ratio • AL = Aluminum • BC = Bare Copper • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • TC = Tinned Copper

Color Codes

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

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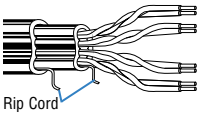
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Nom. Insulated Conductor OD		Nominal OD		Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm							
Enhanced Cat 6 • 23 AWG Bonded-Pairs Solid BC • Rip Cord • See Color Code Chart																		
Non-Plenum • Polyolefin Insulation • PVC Inner Jacket • .035″ Industrial Grade Black or Gray PVC Outer Jacket																		
Upjacketed	**11872A**	NEC: CM CEC: CM FT1	4	1000	304.8	66.0	30.0	.041 x .080	1.04 x 2.03	.475 x .265	12.07 x 6.73	1	1.9	72.3	70	64.8	100±12	20.0
												4	3.7	63.3	59	52.7	100±12	23.0
												10	5.9	57.3	51	44.8	100±12	25.0
												16	7.5	54.3	46	40.7	100±12	25.0
												31.25	10.6	49.9	39	34.9	100±15	23.6
												62.5	15.4	45.4	30	28.8	100±15	21.5
												100	19.8	42.3	25	24.8	100±15	21.0
												155	25.1	39.5	14	20.9	100±15	21.0
										Nominal Core OD:		200	29.0	37.9	10	18.7	100±15	21.0
										.365 x .165	9.27 x 4.19	310	31.7	34.9	—	14.9	100±20	18.0
												350	39.8	34.2	—	13.9	100±22	17.0
												400*	43.0	33.3	—	12.7	100±25	14.0
												500*	49.0	31.8	—	10.8	100±25	14.0

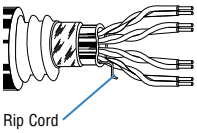


RJ-45 Compatible • -25°C Cold Bend • U.S. Patents 5,606,151, 5,734,126 and 5,821,467
Jacket sequentially marked at 2 ft. intervals. • Verified to TIA/EIA-568-B.2-1, Category 6
*Value provided for information only.

Enhanced Cat 6 • 23 AWG Bonded-Pairs Solid BC • Mylar® Wrap • Rip Cord • See Color Code Chart

Non-Plenum • Polyolefin Insulation • PVC Inner Jacket • .055″ Industrial Grade Black or Gray PVC Outer Jacket

Interlocked AL Armor	**121872A**	NEC: CMG CEC: HL CMG FT4	4	1000	304.8	293.0	133..2	.041 x .080	1.04 x 2.03	.684	17.37	(Same as 11872A above)
										Nominal Core OD:		
										.365 x .165	9.27 x 4.19	



RJ-45 Compatible • -40°C • U.S. Patents 5,606,151, 5,734,126 and 5,821,467 • Jacket sequentially marked at 1 meter intervals. • Verified to TIA/EIA-568-B.2-1, Category 6

ACR = Attenuation Crosstalk Ratio • AL = Aluminum • BC = Bare Copper • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • TC = Tinned Copper

DataTuff® Industrial Ethernet Cable Selection Guide

Part No.	Category	Shielding		Conductor		Installation	Environmental Issues				Industrial Grade Jacket		
		Unshielded	Shielded*	Solid	Stranded** Flexibility	Installation Stress Resistance†	Oil Resistance	UV Sunlight Resistance	Gasoline Resistance	HI/LO Temp	Heavy	Upjacket	Armored
7923A	Cat 5e	●		●		●	●	●			●		
7929A	Cat 5e		●	●		●	●	●			●		
7921A	Cat 5e		●	●		●	●	●			●		
11700A	Cat 5e	●		●		●	●	●				●	
121700A	Cat 5e	●		●		●	●	●					●
7924A	Cat 5e	●			●	●	●	●			●		
7928A	Cat 5e	●		●		●	●	●	●	●	●		
7918A	Cat 5e	●		●			●	●			●		
7919A	Cat 5e		●	●			●	●			●		
7927A	Cat 6	●		●		●	●	●			●		
7931A	Cat 6	●		●		●	●	●	●	●	●		
11872A	Cat 6	●		●		●						●	
121872A	Cat 6	●		●		●		●					●

* Shielded products are recommended for high-noise environments.
** Stranded products are recommended where more flexibility is needed.
† Products with Bonded-Pair technology provide Installable Performance™ advantages — refer to Belden Bonded-Pair Cable Bulletin #BP02.

This chart is meant to help the user select the right cable. Refer to cable specifications for details. See www.belden.com for fiber optic cable recommendations and technical data sheets.

Color Codes:

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

For More Information: **www.belden.com/ienp197.pdf**

Belden Electronics Division Technical Support **1-800-BELDEN-1** or **1-800-BELDEN-3**

Mylar is a DuPont trademark.