

Industrial Data Solutions® – Industrial Ethernet Cables

Category 5e DataTuff® Twisted Pair Cables
Heavy Duty Sunlight- and Oil-Resistant Jackets



De-scription	Part No.	UL NEC/ C(UL)/CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Freq. MHz	Max. Atten. dB/100m	Min. PSUM			Input Imp. (Ω)	Min. RL dB
			ft.	m	lbs.	kg		inch	mm		inch	mm			NEXT dB	ACR dB/100m	ELFEXT dB/100m		

Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm Bare Copper • Rip Cord

Polyethylene Insulation • Industrial Grade Sunlight- and Oil-Resistant FRNC/LSNH Jacket (Black and Grey)																					
<p>Rip Cord</p>	BEB1212 IEC	60332-1	1000	305	20.1	9.1	0.51 mm	0.037	0.95	Bonded-Pair	0.217	5.50	1	2.0	62.3	60.3	60.8	100 ± 15	20.0		
			1640	500	33.1	15.0									24 AWG	Unshielded	4	4.1	53.3	49.2	48.7
	10	6.3	47.3	41.0	40.8	100 ± 15	25.0	16	8.0	44.3	36.2	36.7	100 ± 15	25.0	25	10.1	41.3	31.2	32.8	100 ± 15	25.0
	62.5	16.5	35.4	18.9	24.8	100 ± 15	21.5	100	21.3	32.3	11.0	20.8	100 ± 15	20.1							

4-Pair
EtherNet/IP Compliant
Color Code: see chart below
Burning Energy: 400 kJ/m
RJ-45 Compatible, -25°C Cold Bend
Verified to ISO/IEC 11801 (2nd Edition), EN-50173-1, TIA/EIA-568-B.2, Category 5e
U.S. Patents 5,606,151 and 5,734,126
Jacket sequentially marked at 1 m intervals.

Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm Bare Copper • Overall Beldfoil® Shield + 40% TC Braid • 26 AWG TC Drain Wire

Polyethylene Insulation • Industrial Grade Sunlight- and Oil-Resistant FRNC/LSNH Jacket (Black, Grey and Blue)																			
	Heavy Shielded	BEB3212 IEC	60332-1	1000	305	30.9	14.0	0.51 mm	0.041	1.05	Bonded-Pair	0.262	6.65	see above					
				1640	500	50.7	23.0							24 AWG	Overall Beldfoil®	+ Overall	40% TC Braid	+ Drain Wire	(26 AWG TC)

4-Pair
EtherNet/IP Compliant
Color Code: see chart below
Burning Energy: 575 kJ/m
RJ-45 Compatible, -25°C Cold Bend
Verified to ISO/IEC 11801 (2nd Edition), EN-50173-1, Category 5e
U.S. Patents 5,606,151 and 5,734,126
Jacket sequentially marked at 1 m intervals.

Enhanced Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm Bare Copper • Overall Beldfoil® Shield • 24 AWG Tinned Copper Drain Wire

Polyolefin Insulation • Industrial Grade Sunlight- and Oil-Resistant Black PVC Jacket (Black and Blue)																					
	Shielded	7929A	NEC: 1000 CMR 2000 CMX-Outdoor CEC: CMR FT4	1000	305	37.0	16.8	0.51 mm	0.045	1.14	Bonded-Pair	0.265	6.73	1	2.0	62.3	60.3	60.8	100 ± 15	20.0	
				2000	610	72.1	32.7							24 AWG	Overall Beldfoil®	+ Drain Wire	(24 AWG TC)	4	4.1	53.3	49.2
	10	6.5	47.3	40.8	40.8	100 ± 15	25.0	16	8.2	44.3	36.1	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							

4-Pair
Color Code: see chart below
RJ-45 Compatible, -25°C Cold Bend
610 m put-up available in Black only.
Third party verified to TIA/EIA-568-B.2, Category 5e
U.S. Patents 5,606,151 and 5,734,126
Shield is bonded to jacket inner wall for electrical stability. Jacket sequentially marked at 0.6 m intervals.

Enhanced Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm BC • Overall Beldfoil® Shield + 70% TC Braid • 24 AWG Spiral Drain Wire

Polyolefin Insulation • Industrial Grade Sunlight- and Oil-Resistant Black PVC Jacket (Black, Red, Blue and Teal)																					
	Heavy Shielded	7921A	NEC: 1000 CMR 2000 CMX-Outdoor CEC: CMR FT4	1000	305	54.9	24.9	0.51 mm	0.047	1.19	Bonded-Pair	0.330	8.38	1	2.0	62.3	60.3	60.8	100 ± 15	20.0	
				2000	610	106.0	48.1							24 AWG	Overall Beldfoil®	+ Overall	70% TC Braid	+ Drain Wire	(24 AWG TC)	4	4.1
	10	6.5	47.3	40.8	40.8	100 ± 15	26.0	16	8.2	44.3	36.1	36.7	100 ± 15	26.0	31.25	11.7	39.9	28.2	30.9	100 ± 15	25.0
	62.5	17.0	35.4	18.4	24.8	100 ± 15	23.5	100	22.0	32.3	10.3	20.8	100 ± 15	22.5							

4-Pair
Color Code: see chart below
-25°C Cold Bend
610 m put-up available in Black only.
Third party verified to TIA/EIA-568-B.2, Category 5e
U.S. Patents 5,606,151 and 5,734,126
Jacket sequentially marked at 0.6 m intervals.

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

Color Code

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



For more information, contact Belden Technical Support +31-77-3875-414 • www.belden-emea.com

Industrial Data Solutions® - Industrial Ethernet Cables

Category 5e DataTuff® Twisted Pair Cables
Heavy Duty Sunlight- and Oil-Resistant Jackets



De- scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Freq. MHz	Max. Atten. dB/100m	Min. PSUM			Input Imp. (Ω)	Min. RL dB
			ft.	m	lbs.	kg		inch	mm		inch	mm			NEXT dB	ACR dB/100m	ELFEXT dB/100m		

Enhanced Cat 5e • 24 AWG • Solid 0.5 mm Bare Copper • Rip Cord

Polyolefin Insulation • Industrial Grade Sunlight- and Oil-Resistant PVC Jacket (Black and Blue)

<p>Rip Cord</p>	7918A	NEC:	1000	305	28.0	12.7	0.51 mm	0.037	0.94	Non- Bonded-Pair Unshielded	0.230	5.84	1	2.0	62.3	60.3	60.8	100 ± 15	20.0		
		CMR	2000	610	52.0	23.6	24 AWG								4	4.1	53.3	49.2	48.7	100 ± 15	23.0
		CMX-Outdoor					Solid BC								10	6.5	47.3	40.8	40.8	100 ± 15	25.0
		CEC:													16	8.2	44.3	36.1	36.7	100 ± 15	25.0
		CMR FT4													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							

4-Pair Cable passes -40°C Cold Bend per UL1581 Installation Temperature: -25°C to +75°C Operating Temperature: -40°C to +75°C* 610 m put-up available in Black only. RJ-45 Compatible Third party verified to TIA/EIA-568-B.2, Category 5e Jacket sequentially marked at 0.6 m intervals. Color Code: see chart below

Enhanced Cat 5e • 24 AWG • Solid 0.5 mm Bare Copper • Overall Beldfoil® Shield • 24 AWG Tinned Copper Drain Wire

Polyolefin Insulation • Industrial Grade Sunlight- and Oil-Resistant Black PVC Jacket

<p>Shielded</p>	7919A	NEC:	1000	305	35.1	15.9	0.51 mm	0.042	1.07	Non- Bonded-Pair Overall Beldfoil® + Drain Wire (24 AWG TC)	0.265	6.73	1	2.0	62.3	60.3	60.8	100 ± 15	20.0		
		CMR	2000	610	68.1	30.9	24 AWG								4	4.1	53.3	49.2	48.7	100 ± 15	23.0
		CMX-Outdoor					Solid BC								10	6.5	47.3	40.8	40.8	100 ± 15	25.0
		CEC:													16	8.2	44.3	36.1	36.7	100 ± 15	25.0
		CMR FT4													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

4-Pair Cable passes -40°C Cold Bend per UL1581 Installation Temperature: -25°C to +75°C Operating Temperature: -40°C to +75°C* 610 m put-up available in Black only. RJ-45 Compatible Third party verified to TIA/EIA-568-B.2, Category 5e • P-07-KA060004-MSHA** Shield is bonded to jacket inner wall for electrical stability. Jacket sequentially marked at 0.6 m intervals. Color Code: see chart below

Enhanced Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm Bare Copper • Overall Beldfoil® Shield • 24 AWG Tinned Copper Drain Wire

Polyolefin Insulation • Industrial Grade Sunlight- and Oil-Resistant PVC Jacket (Black, Red and Teal)

<p>Shielded</p>	7933A	NEC:	1000	305	32.0	14.5	0.51 mm	0.038	0.97	Bonded-Pair Overall Beldfoil® + Drain Wire (24 AWG TC)	0.227	5.77	1	2.0	62.3	60.3	60.8	100 ± 15	20.0		
		CMR FT4	2000	610	64.8	29.4	24 AWG								4	4.1	53.3	49.2	48.7	100 ± 15	23.6
		CEC:					Solid BC								10	6.5	47.3	40.8	40.8	100 ± 15	26.0
		CMR FT4													16	8.2	44.3	36.1	36.7	100 ± 15	26.0
															31.25	11.7	39.9	28.2	30.9	100 ± 15	25.0
															62.5	17.0	35.4	18.4	24.8	100 ± 15	23.5
															100	22.0	32.3	10.3	20.8	100 ± 15	22.5
								200	32.4	27.8	1.0	14.7	100 ± 25	15.0							

2-Pair Cable passes -40°C Cold Bend per UL1581 Installation Temperature: -25°C to +75°C Operating Temperature: -40°C to +75°C* 610 m put-up available in Black only. M-12 or RJ-45 Compatible Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126 Shield is bonded to jacket inner wall for electrical stability. Jacket sequentially marked at 0.6 m intervals. Color Code: see chart below

EtherNet/IP Compliant

Enhanced Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm Bare Copper

Plenum • FEP Insulation • Sunlight-, Oil- and Gas-Resistant Black FEP Jacket

<p>Compliant High & Low Temp Oil Res I & II Gas Res</p>	7928A	NEC:	1000	305	24.0	10.9	0.51 mm	0.036	0.91	Bonded-Pair Unshielded	0.187	4.57	1	2.0	65.3	63.3	60.8	100 ± 12	20.0		
		Limited					24 AWG								4	4.0	56.3	52.3	48.7	100 ± 12	23.6
		Combustible					Solid BC								10	6.4	50.3	43.9	40.8	100 ± 12	26.0
		FHC 25/50													16	8.1	47.3	39.1	36.7	100 ± 12	26.0
		CMP													31.25	11.6	42.9	31.3	30.9	100 ± 15	25.0
		CEC:													62.5	16.8	38.4	21.6	24.8	100 ± 15	23.5
		CMP FT6													100	21.7	35.3	17.1	20.8	100 ± 15	22.5
								350	44.3	27.2	-	9.9	100 ± 22	17.0							

4-Pair Cable passes -70°C Cold Bend per UL1581 Installation Temperature: -55°C to +150°C Operating Temperature: -70°C to +150°C* RJ-45 Compatible • Jacket sequentially marked at 0.6 m intervals. Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126 Color Code: see chart below

EtherNet/IP Compliant

TC = Tinned Copper • BC = Bare Copper • ACR = Attenuation Crosstalk Ratio • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • DCR = DC resistance • * Subject to length de-rating. • ** Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration Certification.

Color Code

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

Industrial Data Solutions® – Industrial Ethernet Cables

Category 5e DataTuff® Twisted Pair Cables
Heavy Duty Sunlight- and Oil-Resistant Jackets



De-scription	Part No.	UL NEC / C(UL)/CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Freq. MHz	Max. Atten. dB/100m	Min. PSUM			Input Imp. (Ω)	Min. RL dB
			ft.	m	lbs.	kg		inch	mm		inch	mm			NEXT dB	ACR dB/100m	ELFEXT dB/100m		

Enhanced Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm Bare Copper • Twisted Pairs • Rip Cord

Polyolefin Insulation • Industrial Grade Sunlight- and Oil-Resistant PVC Jacket (Black, Red or Teal)

<p>Rip Cord</p> <p>4-Pair</p>	7923A	NEC:	1000	305	28.0	12.7	0.51 mm	0.038	0.97	Bonded-Pair	0.230	5.84	1	2.0	65.3	68.3	60.8	100 ± 12	20.0	
		CMR	2000	610	54.0	24.5	24 AWG			Unshielded				4	4.0	56.3	52.3	48.7	100 ± 12	23.6
		CMX-Outdoor					Solid BC							8	5.7	51.8	46.1	42.7	100 ± 12	25.4
		CEC:												10	6.4	50.3	43.9	40.8	100 ± 12	26.0
		CMR FT4												16	8.1	47.3	39.1	36.7	100 ± 12	26.0
														25	10.3	44.3	34.1	32.1	100 ± 15	25.5
														31.25	11.6	42.9	31.3	30.9	100 ± 15	25.0
														62.5	16.8	38.4	21.6	24.8	100 ± 15	23.5
														100	21.7	35.3	17.1	20.8	100 ± 15	22.5
														155	27.7	32.5	4.7	16.9	100 ± 18	19.0
												200	32.0	30.8	3.0	14.7	100 ± 20	19.0		
												250	36.4	29.3	-	12.8	100 ± 20	18.0		
												350	44.3	27.2	-	9.9	100 ± 22	17.0		

Cable passes -40°C Cold Bend per UL1581
Installation Temperature: -25°C to +75°C
Operating Temperature: -40°C to +75°C*
610 m put-up available in Black only.

RJ-45 Compatible
Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126
P-07-KA060003-MSHA**
Jacket sequentially marked at 0.6 m intervals.

EtherNet/IP Compliant

Enhanced Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm Bare Copper • Rip Cord

Polyolefin Insulation • PVC Inner Jacket • Industrial Grade PVC Outer Jacket (Black, Grey, Red, Teal or Blue)

<p>Rip Cord</p> <p>4-Pair</p>	Upjacketed 11700A	NEC:	1000	305	39.0	17.7	0.51 mm	0.038	0.97	Bonded-Pair	0.285	7.24							see above	
		CMR	3000	914	117.3	53.2	24 AWG			Unshielded										
		CMX-Outdoor					Solid BC													
		CEC:																		
		CMR FT4																		

Cable passes -40°C Cold Bend per UL1581
Installation Temperature: -25°C to +75°C
Operating Temperature: -40°C to +75°C*
914 m put-up available in Black only.

RJ-45 Compatible
Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126
P-07-KA060005-MSHA**
Outer jacket is sunlight- and oil-resistant. Jacket sequentially marked at 0.6 m intervals.

EtherNet/IP Compliant

Enhanced Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm Bare Copper • Polyester Wrap • Rip Cord

Polyolefin Insulation • PVC Inner Jacket • Interlocked AL Armor • Industrial Grade PVC Outer Jacket (Black or Grey)

<p>Rip Cord</p> <p>4-Pair CMG</p>	Interlocked AL Armor 121700A	NEC:	1000	305	158.7	72.0	0.51 mm	0.038	0.97	Bonded-Pair	0.530	13.46							see above	
		CM	3000	914	464.3	210.6	24 AWG			Unshielded										
		CEC:					Solid BC													
		HL																		
		CMG FT4																		

Cable passes -40°C Cold Bend per UL1581
Installation Temperature: -25°C to +75°C
Operating Temperature: -40°C to +75°C*
914 m put-up available in Black only.

RJ-45 Compatible
Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126
Verified to TIA/EIA-568-B.2, Category 5e
Outer jacket is sunlight- and oil-resistant. Jacket sequentially marked at 1 m intervals.

TC = Tinned Copper • BC = Bare Copper • ACR = Attenuation Crosstalk Ratio • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • DCR = DC resistance
* Subject to length de-rating. • ** Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration Certification.

Color Code

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