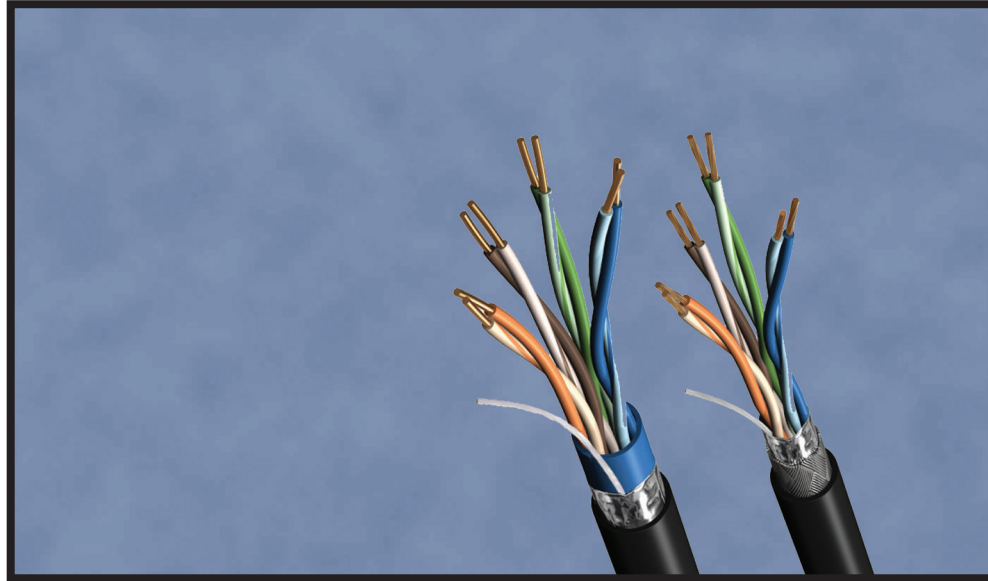


PB 341

Belden DataTuff® Industrial Ethernet Cables Support CC-Link IE Field Networks

Belden has received CC-Link IE Field Network Certification for listed DataTuff Industrial Ethernet cables, by CC-Link Partner Association.



Belden Announces Certified DataTuff Industrial Ethernet Cables for CC-Link IE Field Network

Belden has been certified for installation on CC-Link IE Field Networks with the listed DataTuff industrial Ethernet shielded cables. The listed cables have passed the rigorous certification testing by the CC-Link Partner Assoc. and are recommended products for network installation. The cables are designed for Mission Critical applications in harsh environments, utilizing Bonded-Pair technology for superior electrical performance. Shielding provides excellent immunity from electromagnetic interference (EMI) and radio frequency interference (RFI).

About CC-Link IE Field Network

CC-Link IE Field Network is the first open-technology gigabit Industrial Ethernet network extended down to the field device level. It combines the best of existing technologies and applies them in a highly reliable architecture that provides exceptional data bandwidth and transaction rates. CC-Link IE Field provides seamless control data transmission between automation controllers such as PLCs and computers and field devices such as digital and analog I/O, pneumatic valve manifolds, RFID readers, VFDs, motion controllers and other factory assets.

DataTuff Certified Industrial Ethernet Cables for CC-Link IE Field Network

Belden has received CC-Link IE Field Network Certification on the following DataTuff Industrial Ethernet cables.

- 7953A Category 6, Foil Shield, Solid Conductors
- 7929A Category 5e, Foil Shield, Solid Conductors
- 7921A Category 5e, Foil + Braid Shield, Solid Conductors
- 7939A Category 5e, Foil shield, Stranded Conductors

The certificates are posted on our web site at www.belden.com.



7921A Certificate



7929A Certificate



7939A Certificate



7953A Certificate

Category 6 & 5e DataTuff® Twisted Pair Cables, 4-Pair

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		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							

Cat 6 • 23 AWG Solid BC • Internal Tape Separator • Overall Beldfoil Shield • Rip Cord • See Color Code Chart: Page 8

Non-Plenum • Polyolefin Insulation • FRPO Inner Jacket • .030" Industrial Grade Sunlight- and Oil-resistant Black PVC Outer Jacket

Shielded	7953A	NEC: CMR CEC: CMR FT4	4	Standard Lengths		Standard Unit Wt.		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							
				1000	304.8	32.0	14.5	.340	8.64	1	2.0	72.3	70.3	64.8	100±15	20.0
				2000	609.6	64.0	29.0			4	3.8	63.3	59.5	52.7	100±16	23.0
										8	5.3	58.8	53.4	46.7	100±17	24.5
										10	6.0	57.3	51.3	44.8	100±18	25.0
										16	7.6	54.3	46.7	40.7	100±19	25.0
										20	8.5	52.8	44.3	38.7	100±20	25.0
										25	9.5	51.3	41.8	36.8	100±21	24.3
										31.5	10.7	49.9	39.2	34.9	100±22	23.6
										62.5	15.4	45.4	30.0	28.8	100±23	21.5
										100	19.8	42.3	22.5	24.8	100±24	20.1
										155	25.2	39.5	14.3	20.9	100±25	18.8
										200	29.0	37.8	8.8	18.7	100±26	18.0
										250	32.8	36.3	3.5	16.8	100±27	17.3

Installation Temperature: -25°C to +75°C; Operating Temperature: -40°C to +75°C*
 RJ-45 Compatible†† • Cable passes -40°C Cold Bend per UL1581 • 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

Enhanced 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 or Blue PVC Jacket

MSHA Approved	7929A	NEC: CMR, CMX- Outdoor CEC: CMR FT4	4	Standard Lengths		Standard Unit Wt.		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							
				1000	304.8	37.0	16.8	.265	6.73	1	2.0	62.3	60.3	60.8	100±15	20.0
				2000†	609.6	72.0	32.7			4	4.1	53.3	49.2	48.7	100±15	23.0
										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
										200	32.4	27.8	1.0	14.7	100±15	15.0

†2000 ft. put-up available in Black only.
 Installation Temperature: -25°C to +75°C; Operating Temperature: -40°C to +75°C* • P-07-KA060003-MSHA**
 RJ-45 Compatible† • Cable passes -40°C Cold Bend per UL1581 • 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

Enhanced 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, Red & Teal or Blue PVC Jacket

Heavy-shielded	7921A	NEC: CMR, CMX- Outdoor CEC: CMR FT4	4	Standard Lengths		Standard Unit Wt.		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							
				1000	304.8	55.0	24.9	.330	8.38	1	2.0	62.3	60.3	60.8	100±15	20.0
				2000†	609.6	106.0	48.1			4	4.1	53.3	49.2	48.7	100±15	23.6
										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	25.6
										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

†2000 ft. put-up available in Black only.
 †† Installation Temperature: -25°C to +75°C; Operating Temperature: -40°C to +75°C* • Cable passes -40°C Cold Bend per UL1581 • RJ-45 Compatible
 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 Stranded BC (7x32) • Overall Beldfoil Shield • See Color Code Chart

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

Shielded, Stranded	7939A	NEC: CMR, CMX- Outdoor CEC: CMR FT4	4	Standard Lengths		Standard Unit Wt.		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							
				1000	304.8	40.0	18.18	.315	8.00	1	2.5	62.3	59.8	60.8	100±15	20.0
				2000†	609.6	79.0	35.83			4	4.9	53.3	48.4	48.7	100±15	23.0
										8	6.9	48.8	41.9	42.7	100±15	24.5
										10	7.8	47.3	39.5	40.8	100±15	25.0
										16	9.9	44.3	34.4	36.7	100±15	25.0
										20	11.1	42.8	31.7	34.7	100±15	25.0
										25	12.5	41.3	28.8	32.8	100±15	24.3
										31.25	14.1	39.9	25.8	30.9	100±15	23.6
										62.5	20.4	35.4	15.0	24.8	100±15	21.5
										100	26.4	32.3	5.9	20.8	100±15	20.1

†2000 ft. put-up available in Black only.
 Installation Temperature: -25°C to +75°C; Operating Temperature: -40°C to +75°C*
 Cable passes -40°C Cold Bend per UL1581 • RJ-45 Compatible†† • Jacket sequentially marked at 2 ft. intervals

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 • Cu = Copper • TPE = Thermoplastic Elastomer

* Subject to length de-rating.
 ** Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration Certification
 †† Special RJ-45 plugs required, see www.belden.com-tools-connector cross reference

4-Pair 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 complete Technical Data go to www.belden.com

All information is subject to change without notice, since Belden reserves the right to change its products as progress in engineering and manufacturing methods or other circumstances may warrant.