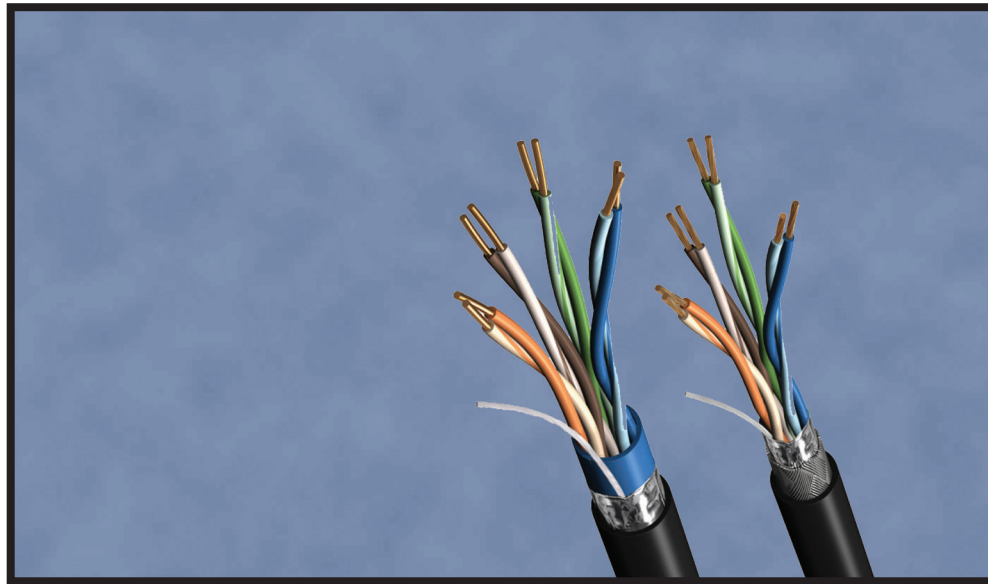


New Product Bulletin

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



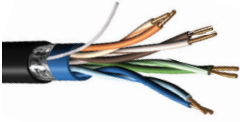
7953A Certificate

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 | 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 | 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 | 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 |

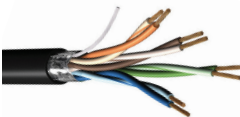
†2000 ft. put-up available in Black only.

†† 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 | 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

For complete Technical Data go to www.belden.com

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 |

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.