



Product: [1051A](#)

Inst, 12 Pr #18 Str BC, PVC-NYL Ins E1, IS/OS, Blk PVC Jkt, 600V TC-ER  
150V NPLF 90C Dry/Wet

[Request Sample](#)

Product Description

UL Instrumentation, 12 Pair 18AWG (7x26) Bare Copper, PVC-NYL Insulation E1 Color Code, Individual & Overall Beldfoil® Shield, Black PVC Outer Jacket, 600V TC-ER 150V NPLF 90C Dry/Wet SUN RES DIR BUR

Technical Specifications

Product Overview

|                        |                                                                                                                                                                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable Applications: | Industrial Control, Raceways Cable trays and ducts, Digital Control, Instruments (4-20ma, 0-10v, ...),low voltage digital control (24v, ...), encoders, control circuits, distributed control system (DCS),programmable logic controller (PLC), Solenoids, Valves, Actuators, Positioners |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Construction Details

Conductor

| Element | Number of Element | Size   | Stranding | Material         |
|---------|-------------------|--------|-----------|------------------|
| Pair(s) | 12                | 18 AWG | 7x26      | BC - Bare Copper |

Insulation

| Element | Material                               | Nom. Thickness     | Nom. Insulation Diameter | Color Code            |
|---------|----------------------------------------|--------------------|--------------------------|-----------------------|
| Pair(s) | PVC/Nylon - Polyvinyl Chloride + Nylon | 0.021 in (0.53 mm) | 0.088 in (2.2 mm)        | Black, White Numbered |

Inner Shield

| Element | Shield Type | Material                | Coverage | Drainwire Type   | Notes                              |
|---------|-------------|-------------------------|----------|------------------|------------------------------------|
| Pair(s) | Tape        | Bi-Laminate (Alum+Poly) | 100%     | 20 AWG (7x28) TC | Extra polyester tape for isolation |

Outer Shield

| Shield Type | Material                | Coverage | Drainwire Type   |
|-------------|-------------------------|----------|------------------|
| Tape        | Bi-Laminate (Alum+Poly) | 100%     | 18 AWG (7x26) TC |

Outer Jacket

| Material                 | Nom. Thickness    | Nom. Diameter      | Ripcord |
|--------------------------|-------------------|--------------------|---------|
| PVC - Polyvinyl Chloride | 0.064 in (1.6 mm) | 0.785 in (19.9 mm) | Yes     |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.785 in (19.9 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR            |
|---------|-------------------------------|
| Pair(s) | 5.86 Ohm/1000ft (19.2 Ohm/km) |

Voltage

| UL Voltage Rating           |
|-----------------------------|
| 600 V (TC-ER), 150 V (NPLF) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|-----------|
|----------------|-----------|

|                    |                          |
|--------------------|--------------------------|
| 90°C Dry, 90°C Wet | -30C to 90C Dry, 75C wet |
|--------------------|--------------------------|

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 9.4 in (240 mm) | 9.4 in (240 mm)   |

|                    |                  |
|--------------------|------------------|
| Max. Pull Tension: | 728 lbs (330 kg) |
| Bulk Cable Weight: | 331 lbs/1000ft   |

Standards and Compliance

|                                  |                                                                                                                           |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:       | Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Burial                                                              |
| Flammability / Reaction to Fire: | UL1685 (FT4 Loading), FT4, 1202                                                                                           |
| NEC / UL Compliance:             | Article 336, Article 760, NPLF, TC-ER                                                                                     |
| European Directive Compliance:   | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)                                                                                           |
| Other Standard Compliance(s):    | ICEA S-73-532 (WC57), S-61-402                                                                                            |

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.404 Revision Date: 04-14-2023 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #        | Color | Putup Type | Length   | UPC          |
|---------------|-------|------------|----------|--------------|
| 1051A 0105000 | Black | Reel       | 5,000 ft | 612825105398 |

© 2023 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.