



**Product:** [1089A](#)

Inst, 36 Pr #16 Str BC, PVC-NYL Ins E1, OS, Blk PVC Jkt, 600V TC-ER 150V NPLF 90C Dry 75C Wet

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## Product Description

UL Instrumentation, 36 Pair 16AWG (7x26) Bare Copper, PVC-NYL Insulation E1 Color Code, Overall Beldfoil® Shield, Black PVC Outer Jacket, 600V TC-ER 150V NPLF 90C Dry 75C 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 | No. of Elements | Size   | Stranding | Material         |
|---------|-----------------|--------|-----------|------------------|
| Pair(s) | 36              | 16 AWG | 7x24      | BC - Bare Copper |

#### Insulation

| Element | Material                               | Nom. Thickness     | Nom. Insulation Diameter | Color Code                |
|---------|--|--------------------|--------------------------|---------------------------|
| Pair(s) | PVC/Nylon - Polyvinyl Chloride + Nylon | 0.022 in (0.56 mm) | 0.101 in (2.57 mm)       | Black, White and Numbered |

#### Outer Shield

| Shield Type | Material                | Coverage | Drainwire Type   |
|-------------|-------------------------|----------|------------------|
| Tape        | Bi-Laminate (Alum+Poly) | 100%     | 16 AWG (7x24) TC |

#### Outer Jacket

| Material                 | Nom. Thickness    | Nom. Diameter       | Ripcord |
|--------------------------|-------------------|---------------------|---------|
| PVC - Polyvinyl Chloride | 0.084 in (2.1 mm) | 1.297 in (32.94 mm) | Yes     |

|                                   |                     |
|-----------------------------------|---------------------|
| Overall Cable Diameter (Nominal): | 1.297 in (32.94 mm) |
|-----------------------------------|---------------------|

### Electrical Characteristics

#### Electricals

| Element | Nom. Conductor DCR            |
|---------|-------------------------------|
| Pair(s) | 3.67 Ohm/1000ft (12.0 Ohm/km) |

#### Voltage

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

### Mechanical Characteristics

#### Temperature

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

#### Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
|                 |                   |

15.6 in (396 mm) | 15.6 in (396 mm)

Max. Pull Tension: 2606 lbs (1182 kg)

Bulk Cable Weight: 1020 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)

## History

Update and Revision: Revision Number: 0.557 Revision Date: 01-04-2024

## Part Numbers

### Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 1089A 0101250 | Black | Reel       | 1,250 ft | 612825106203 | C Z      |
| 1089A 0102500 | Black | Reel       | 2,500 ft | 612825106210 |          |
| 1089A 0105000 | Black | Reel       | 5,000 ft | 612825106234 |          |

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