



Type P-NS

Type ITC/PLTC Instrumentation Cable

Single Pair or Triad - No Shield

300 Volts - 105°C Rating

For Cable Tray Use



- A Bare Stranded Copper Conductor
- B Okoseal Insulation
- C Twisted Pair/Triad
- D Rip Cord
- E Black Okoseal Jacket

Specifications

Conductors: Bare soft annealed copper, Class B, 7-strand concentric per ASTM B-8.

Insulation: Flame-retardant Okoseal® (PVC) per UL 13 and UL 2250, 15 mils nominal thickness, 105°C temperature rating.

Conductor Identification: Pigmented black and white in pairs, black, red and white in triads.

Assembly: Pair or triad assembled with left-hand lay.

Jacket: Black, flame-retardant, low temperature Okoseal per UL 13 and UL 2250. A rip cord is laid longitudinally under the jacket to facilitate removal.

Classifications

UL Listed as Type ITC/PLTC — Instrumentation Tray Cable/Power Limited Tray Cable for use in accordance with Article 335 and Article 722 of the 2023 National Electrical Code.

These cables comply with UL 2250 for ITC and UL 13 for PLTC, CL2 and CL3.

Applications

Okonite Type P-NS (Pair/Triad - No Shield) instrumentation cables are designed for use as instrumentation, process control, and computer cables in ITC non-classified or labeled circuits up to 150 volts and 5 amps (750VA) and in Class 2 or 3 Power-Limited circuits where shielding against external interference is not required; indoors or outdoors; in wet or dry locations with conductor operating temperatures up to 105°C; in cable trays, in raceways; supported by a messenger wire. Suitable Class I, Division 2, Class II, Division 2, or Class III, Division 2 hazardous locations. Also for use as Power-Limited fire protective signaling cable (FPL) per NEC Code 760.

These cables are intended for use where no shielding is required from external interference.

For dc service in wet locations, X-Olene® insulation having an overall aluminum C-L-X armor construction is recommended.

Product Features

- Passes the UL 1581 & IEEE 383-1974 vertical tray flame tests.
- Sunlight resistant and Oil resistant.
- Individual pairs or triads are color coded for simplified hook-up.
- Excellent weathering characteristics.
- Flexible, easy to handle and terminate.
- Suitable for low temperature installation of -40°C.

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Product Data

Section 5: Sheet 1

Okoseal Insulation: 15 mils

| Catalog Number | Conductor Size (AWG) | Number of Pairs | Number of Triads | Jacket Thickness (mils) | Nominal Cable O.D. - (In.) | Cross-Sectional Area † (sq in) | Approx Net Weight (lbs/1000') | Approx Ship Weight (lbs/1000') |
|----------------------------|----------------------|-----------------|------------------|-------------------------|----------------------------|--------------------------------|-------------------------------|--------------------------------|
| 260-10-1101 260-15-1101 | 22 | 1 | 1 | 35 | 0.20 0.21 | 0.03 0.04 | 19 23 | 24 28 |
| 260-10-2201 260-15-2201 | 20 | 1 | 1 | | 0.21 0.22 | 0.04 0.04 | 23 28 | 28 33 |
| 260-10-3301 260-15-3301 | 18 | 1 | 1 | | 0.23 0.24 | 0.04 0.04 | 29 37 | 34 42 |
| 260-10-4401 260-15-4401 | 16 | 1 | 1 | | 0.25 0.27 | 0.05 0.06 | 37 49 | 43 54 |

ELECTRICAL SPECIFICATIONS Per UL Standard 13 & 2250

| | |
|---|---------------------------|
| Conductor Resistance, nominalohms/1000 ft. @20°C | |
| 22 AWG | 16.5 |
| 20 AWG | 10.3 |
| 18 AWG | 6.5 |
| 16 AWG | 4.1 |
| Insulation Test Voltage (spark test)..... | 5000 Volts ac |
| Dielectric Test Voltage..... | 1500 Volts ac for 15 sec. |
| Insulation Resistance Constant @60°F minimum (natural material typical value)..... | 2000 Megohms-1000 ft. |
| Loop Resistance, nominal (2 conductor) ohms-1000 ft @20°C | |
| 22 AWG | 33.0 |
| 20 AWG | 20.6 |
| 18 AWG | 13.0 |
| 16 AWG | 8.2 |

† **Cross-sectional** area for calculation of cable tray fill in accordance with NEC Section 392.22

Length Tolerance: Cut lengths of 1000 feet or longer are subject to a tolerance of ± 10%; less than 1000 feet ± 15%.

