Wire Armored Type P-OS
Type ITC/PLTC Armored Instrumentation Cable
Single Pair or Triads - Overall Shield
300 Volts - 105°C Rating
For Cable Tray Use

Specifications
Conductors: Bare soft annealed copper, Class B, 7-strand concentric per ASTM B-8.
Insulation: Flame-retardant Okoseal® (PVC) per UL 13 and 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.
Cable Shield: Aluminum/Polyester tape overlapped to provide 100% coverage, and a #18 AWG 7-strand tinned copper drain wire.
Inner Jacket: Black, flame-retardant, low temperature Okoseal per UL 13 and 2250. A rip cord is laid longitudinally under the jacket to facilitate removal.
Wire Armor: A serving of soft annealed galvanized steel wires applied with a left-hand lay and 90% minimum coverage.
Outer Jacket: Black, flame-retardant, low temperature Okoseal per UL 13 and 2250.
Classifications: UL Listed as ITC/PLTC — Instrument Tray Cable/Power Limited Tray Cable for use in accordance with Article 727 and Article 725 of the National Electrical Code.

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

Applications
Okonite® SWA Type P-OS (Pairs/triads - Overall Shield) instrumentation cables are designed for use as instrumentation, process control, in Class 2 or 3 Power-Limited circuits where shielding against external interference is 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; in Class I, Division 2, Class II, Division 2 or Class III, Division 2 hazardous locations; suitable for direct burial. Also for use as Power Limited fire protective signaling cable (FPL) per NEC Code 760. For use on ITC non class 2 or 3 circuits up to 150 volts and 5 amps (750VA).

The overall shield eliminates most of the static interference from the electric field radiated by power cables and other electrical equipment.
The wire armor provides excellent longitudinal strength for use as a messenger cable or for support in vertical drops (NEC Section 300-19) and provides physical protection against mechanical damage.

For dc service in wet locations X-Olene® insulation is recommended.

Product Features
- Sunlight & oil resistant.
- 100% shield coverage for reduced electromagnetic noise pick-up.
- Individual pair or triad is color coded for simplified hook-up.
- Good noise rejection
- Excellent longitudinal strength.
- OSHA Acceptable.
- Excellent cut-through resistance.
- Suitable for IEC60502-1 and 60092-376 applications.
- Suitable for low temperature installation of -40°C.

A Bare Stranded Copper Conductor
B Okoseal Insulation
C Twisted Pairs/Triads
D Tinned Stranded Copper Drain Wire
E Aluminum/Polyester Tape
F Rip Cord
G Black Okoseal Jacket
H Wire Armor
J Outer Black Okoseal Jacket
Wire Armored Type P-OS
Type ITC/PLTC Instrumentation Cable
Single Pair or Triad - Overall Shield 300V - 105°C Rating
For Cable Tray Use

Conductors: 16 AWG
Okoseal Insulation: 15 mils

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<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Number of Pairs</th>
<th>Number of Triads</th>
<th>Inner Jacket Thickness - mils</th>
<th>Inner Jacket Nominal OD - Inches</th>
<th>Armor Wires No. x SWG</th>
<th>Armor Nominal O.D. - Inches</th>
<th>Outer Jacket - mils</th>
<th>Nominal Cable O.D. - Inches</th>
<th>Cross-Sectional Area (sq in)</th>
<th>Approx. Net Weight (lbs/1000')</th>
<th>Approx. Ship Weight (lbs/1000')</th>
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ELECTRICAL SPECIFICATIONS
Per UL Standard 13 & 2250
Conductor Resistance, nominal......................ohms/1000 ft. @20°C
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
16 AWG................................................................. 8.2
Mutual Capacitance, Typical......................76PF/ft.

† Cross-sectional area for calculation of cable tray fill in accordance with NEC Section 318-8
Length Tolerance: Cut lengths of 1000 feet or longer are subject to a tolerance of ± 10%; less than 1000 feet ± 15%.