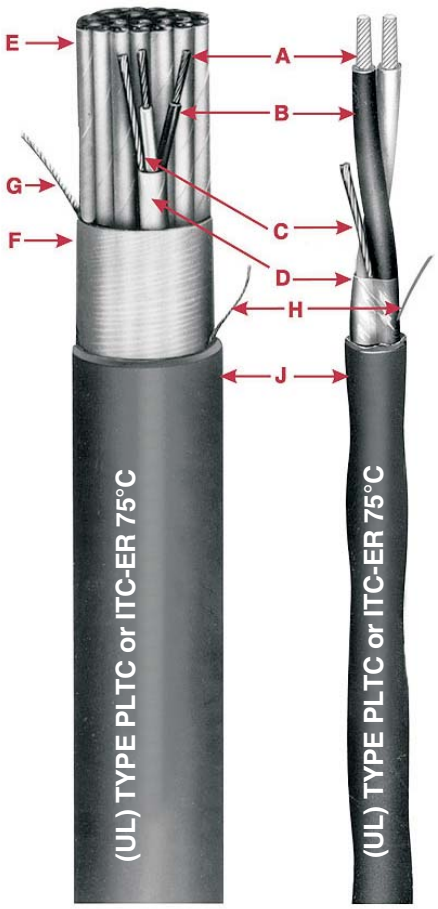
Okobus

Single Pair: Type P-OS — Multi Pair: Type SP-OS Type PLTC & Type ITC-ER Fieldbus Cable

Single Pair or Multiple Shielded Pairs - Overall Shield
300 Volts 75°C Rating



A Tinned Copper Stranded Conductor
B Polypropylene Insulation
C Tinned Stranded Copper Group Drain Wire
D Aluminum/Polyester Tape
E Twisted, Shielded Pairs
F Aluminum/Polyester Tape
G Tinned Stranded Copper Drain Wire
H Rip Cord
J Orange Okoseal Jacket

Specifications

Conductors: #18 AWG tinned copper, Class M, stranded per ASTM B-174.

Insulation: Okolene® (Polypropylene) per UL 13 and UL 2250, 32 mils nominal thickness, 75°C temperature rating.

Conductor Identification: Pigmented orange and blue in pairs, orange conductor numerically printed for group identification.

Pair Shield: Aluminum/Polyester tape overlapped to provide 100% coverage, and a Class M tinned copper drain wire, two sizes smaller than the conductor. All multi-pair shields are isolated from each other.

Multiple Pair Assembly: Pairs assembled with a left-hand lay. Cable fillers included where required to provide a round cable.

Multiple Pair Cable Shield: Aluminum/Polyester tape overlapped to provide 100% coverage, and a class M strand tinned copper drain wire, same size as conductor.

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

Classifications: UL Listed as PLTC-Power Limited Tray Cable and as ITC-ER - Instrument Tray Cable/Exposed Run for use in accordance with Article 335 and Article 722 of the 2023 National Electrical Code.

Cables comply with ISA S50.02, UL 2250 and UL 13 for Fieldbus circuits and CL2 and CL3.

Applications

Okonite® OKOBUS® cables are designed for use in rugged plant environments utilizing networked discrete or process automation and control. ITC-ER (Instrument Tray Cable - Exposed Run) eliminated the need for conduit when installed in accordance with NEC Article 335.4(5).

The isolated individual shields over each pair, when properly grounded, prevent crosstalk or capacitive coupling between adjacent pairs which occurs with ac signals, particularly the pulse type.

The overall shield or multi pair cables eliminates most of the static interference from the electrical field radiated by power cables and other electrical equipment.

Product Features

- Passes the UL 13 and IEEE 383 vertical tray flame tests.
- Single pair passes IEEE 1202 vertical tray flame test.
- Sunlight & oil resistant.
- Individual pairs are completely isolated.
- 100% shield coverage for reduced electromagnetic noise pick-up.
- Excellent external noise rejection.
- Excellent weathering characteristics.
- Flexible, easy to handle and terminate.

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#18 AWG

Catalog Number	Number of Pairs	Jacket Thickness-mils	Nominal Cable O.D. - Inches	Cross-Sectional Area † (sq in)	Approx Net Weight (lbs/1000')	Approx Ship Weight (lbs/1000')
264-92-3901	1	45	0.34	0.09	62	73
261-92-3302	2	50	0.55	0.24	148	172
261-92-3304	4	60	0.71	0.40	212	251
261-92-3063	6	60	0.80	0.50	264	303
261-92-3308	8	70	0.91	0.65	340	404
261-92-3312	12	70	1.04	0.85	474	554
261-92-3316	16	70	1.17	1.08	580	660
261-92-3320	20	80	1.32	1.37	722	828
261-92-3324	24	80	1.46	1.67	880	1023

† **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%.

▲ **Authorized Stock Item:** Available from our Customer Service Centers.

CHARACTERISTICS

a) Characteristic Impedance, z_o, at fr (31.25kHz), minimum .....100 ohms

b) Maximum attenuation at 1.25 fr (39 kHz).....3.0 dB/km

c) Maximum capacitive unbalance to shield.....2 nF/km

d) Maximum DC resistance (per conductor) .....24 ohms/km

e) Maximum propagation delay change 0.25 fr to 1.25 fr.....1.7 μs/km

f) conductor cross-sectional area nominal (wire size) .....0.8 mm^2 (#18 AWG)

g) Minimum shield coverage.....100%