



X-Olene Okoseal

UL Type TC-ER/ITC-ER and cUL Type CIC-TC-ER or Oko-Marine Cable

600 Volt Instrumentation/Signal Cable

600/1000V Marine Shipboard Cable

Single Pair: Type P-OS — Multi-Pair: Type SP-OS

Insulation

X-Olene® is Okonite's trade name for its cross-linked polyethylene insulation, with high dielectric strength.

Cable Jacket

The Okoseal (PVC) jacket supplied with this cable is mechanically rugged and has excellent resistance to acids and most chemicals and is rated for low temperature installations.

Applications

X-Olene Okoseal 600 volt shielded instrumentation cables are designed for use in rugged plant environments, such as Offshore Rig Projects, on Class 1 Remote-Control Signaling circuits or where a 600V instrumentation or control cable is desired. They are designed for use indoors or outdoors; wet or dry locations; in cable trays; in raceways; supported by a messenger wire; for direct burial; in Class I, Division 2, Class II, Division 2 or Class III, Division 2 hazardous locations. TC-ER (Tray Cable – Exposed Run) eliminates the need for conduit when installed in accordance with NEC Article 336.10(7). These cables are also UL labeled Okomarine and are listed for marine applications.

Specifications

Insulated Conductors: Bare soft annealed copper, Class B stranded per ASTM B8.

Insulation: X-Olene® (XLPE), per UL13, 30 mils nominal thickness, 90°C temperature rating. Meets or exceeds requirements of UL 1277, UL 1309 Type X90 and IEEE 1580 Type X cross-linked polyethylene insulation.

Color Coding: Pigmented black and white in pairs, black, red and white in triads; white conductor numerically printed for group identification.

Unit Shield: Aluminum/Polyester tape overlapped to provide 100% coverage, and a tinned copper

Class M drain wire, multi-unit: two sizes smaller than conductor, single unit: same size as conductor. All multi-unit shields are isolated from each other.

Multiple Unit Assembly: Pairs/Triads assembled with a left-hand lay. Cable fillers, included where required, providing a round cable.

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

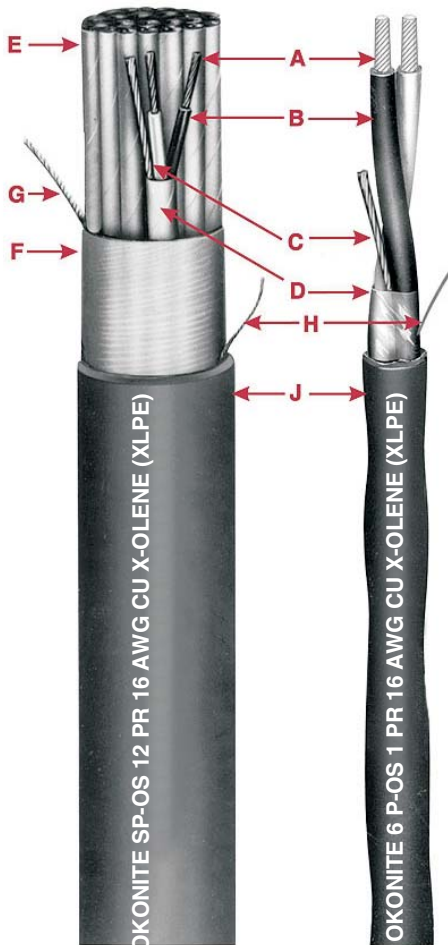
Jacket: Black Okoseal jacket. Complies with UL 1277, UL 1309 & IEEE 1580 PVC, Type T, thermoplastic polyvinyl chloride jacket.

UL Listed as Type TC-ER cable with a sunlight resistant jacket and for direct burial.

UL Listed as Type OKO-MARINE signal cable to the requirements of UL 1309. Also, UL certified as meeting the requirements of IEEE 1580 — Marine Cable.

Product Features

- For cable tray use and direct burial.
- Sunlight resistant.
- Insulated conductors are UL rated 90°C continuous rating in wet or dry locations.
- Flame Retardant - passes the vertical tray flame test requirements of IEEE 383-1974 & 1202-2010 and UL 1277
- X-Olene Okoseal Type TC-ER/ITC-ER cables are quality control inspected to meet or exceed applicable industry standards.
- Resistant to moisture and most chemical atmospheres.
- Thermal stability at elevated temperatures.
- CSA C22.2 No. 239 Type CIC-TC-ER
- CSA C22.2 No. 245 Type Marine Shipboard
- Passes -40°C cold bend test.



- A** Copper Stranded Conductor
- B** X-Olene 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** Okoseal Jacket

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Product Data Section 5: Sheet 50

600 Volt Instrumentation/Signal Cable
600/1000V Marine Shipboard Cable
Single Pair: Type P-OS or Multi-Pair: Type SP-OS

#16 AWG

Catalog Number	Number of Pairs	Number of Triads	Jacket Thickness-mils	Nominal Cable O.D. - Inches	Cross-Sectional Area † (sq in)	Approx Net Weight (lbs/1000')	Approx Ship Weight (lbs/1000')
▲ 267-40-3401	1	45	0.35	0.10	74	85	
▲ 267-41-3401	1	45	0.37	0.11	86	97	
▲ 268-40-3402	2	60	0.60	0.28	201	225	
▲ 268-40-3404	4	60	0.69	0.37	264	303	
▲ 268-40-3408	8	80	0.91	0.65	457	521	
▲ 268-40-3412	12	80	1.08	0.91	618	698	
268-40-3416	16	80	1.24	1.22	784	890	
268-40-3420	20	80	1.35	1.44	938	1044	
▲ 268-40-3424	24	80	1.46	1.66	1070	1213	
268-40-3436	36	110	1.85	2.68	1650	1837	
▲ 268-41-3402	2	60	0.67	0.35	245	284	
▲ 268-41-3404	4	60	0.79	0.49	335	374	
▲ 268-41-3408	8	80	1.04	0.85	588	668	
▲ 268-41-3412	12	80	1.23	1.19	806	912	
268-41-3416	16	80	1.39	1.52	1022	1128	
268-41-3420	20	80	1.54	1.86	1234	1377	
▲ 268-41-3424	24	80	1.67	2.18	1439	1582	

ELECTRICAL SPECIFICATIONS

Conductor Resistance, nominal - ohms/1000 f..... @20°C..... @25°C
 16 AWG4.344.43
 Insulation Test Voltage (spark test) 8000 Volts ac
 Dielectric Test Voltage 1500 Volts ac
 Insulation Resistance Constant @60°F minimum.....10,000 ohms-1000 ft.
 Loop Resistance, nominal (2 cdr.) - ohms/1000 ft @20°C..... @25°C
 16 AWG.....8.68.....8.86
 Mutual Capacitance (PF/ft.)*
 #1623
 *Typical Value

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

† **Cross-sectional** area for calculation of cable tray fill in accordance with NEC Section 392.9.

Copper or bronze C-L-X available on special order.

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

