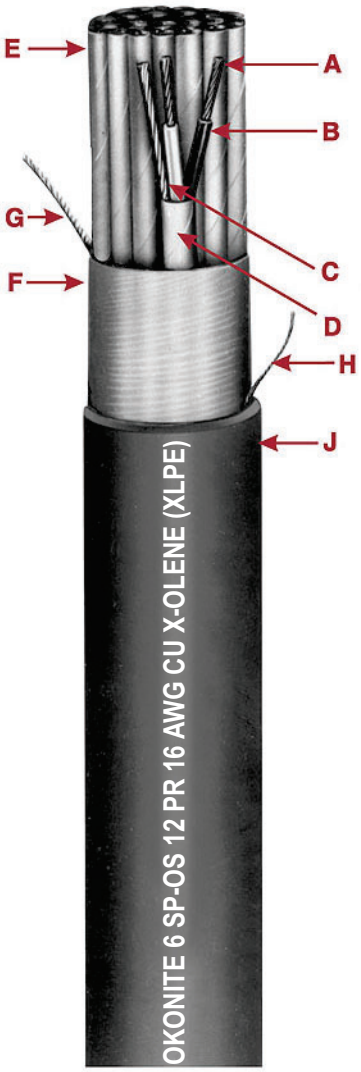
X-Olene® Okoseal®

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

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

For Cable Tray Use - Sunlight Resistant - For Direct Burial
***cUL CIC-TC-ER sizes 14 AWG & larger**



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

Insulation

X-Olene® is Okonite's trade name for its cross-linked polyethylene (XLPE) 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; and for direct burial. Can be installed as Type TC/ITC in Class I, Division 2; Class II, Division 2; Class III, Division 1; and Zone 2 hazardous locations in accordance with NEC Articles 501.10, 502.10, 503.10, and 505.15.
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), 30 mils nominal thickness, 90°C temperature rating. Meets or exceeds requirements of UL 1277, UL 2250, 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, two sizes smaller than conductor. All multi-unit shields are isolated from each other.
Multiple Unit Assembly: Pairs/Triads assembled with a left-hand lay.
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 2250, UL 1309 & IEEE 1580 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 ITC-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 & 230 Type CIC-TC (Type CIC-TC-ER for 14 AWG and larger).
- CSA C22.2 No. 245 Type Marine Shipboard.
- Passes -35°C cold bend test.

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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')
#16 AWG							
▲268-40-3402	2	60	0.59	0.28	201	225
▲268-40-3404	4	60	0.68	0.37	264	303
▲268-40-3408	8	80	0.90	0.65	457	521
▲268-40-3412	12	80	1.06	0.91	681	698
268-40-3416	16	80	1.23	1.22	804	890
268-40-3420	20	80	1.34	1.44	960	1044
▲268-40-3424	24	80	1.44	1.66	1086	1213
268-40-3436	36	110	1.82	2.68	1687	1837
▲268-41-3402	2	60	0.66	0.35	245	287
▲268-41-3404	4	60	0.78	0.49	335	374
▲268-41-3408	8	80	1.03	0.85	605	668
▲268-41-3412	12	80	1.22	1.19	806	912
268-41-3416	16	80	1.38	1.52	1045	1128
268-41-3420	20	80	1.52	1.86	1234	1377
▲268-41-3424	24	80	1.65	2.18	1439	1582
#14 AWG							
268-40-3502	2	60	0.65	0.33	267	288
268-40-3504	4	60	0.73	0.42	354	403
268-40-3508	8	80	0.98	0.75	621	688
268-40-3512	12	80	1.16	1.06	848	923
268-40-3516	16	80	1.32	1.37	1053	1233
268-40-3520	20	80	1.46	1.67	1297	1464
268-40-3524	24	80	1.56	1.91	1507	1648
268-40-3536	36	110	1.90	2.83	2266	2571
268-41-3502	2	60	0.69	0.37	322	351
268-41-3504	4	60	0.77	0.47	443	496
268-41-3508	8	80	1.04	0.85	790	859
268-41-3512	12	80	1.24	1.21	1094	1228
268-41-3516	16	80	1.42	1.58	1376	1559
268-41-3520	20	80	1.56	1.91	1707	1840
268-41-3524	24	80	1.67	2.19	1955	2216

ELECTRICAL SPECIFICATIONS

Conductor Resistance, nominal-ohms/1000 f	@20°C / @25°C
16 AWG	4.10 / 4.18
14 AWG	2.57 / 2.62
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	8.20 / 8.36
14 AWG	5.14 / 5.24
Mutual Capacitance (PF/ft.)*	
#16	23
#14	25

*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 392.22.
Length Tolerance: Cut lengths of 1000 feet or longer are subject to a tolerance of ± 10%; less than 1000 feet ± 15%.

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