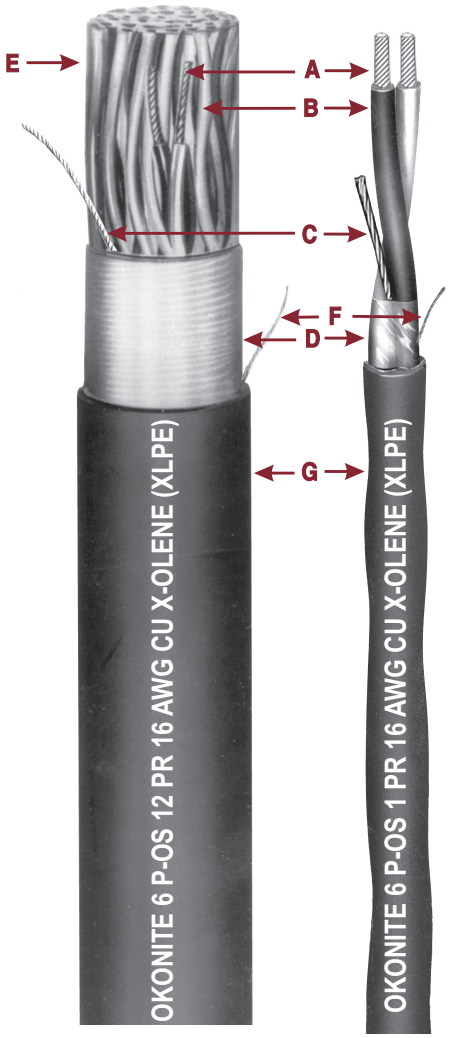
X-Olene® Okoseal®

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
Single Pair/Triads or Multiple Pairs/Triads Type P-OS
For Cable Tray Use - Sunlight Resistant - For Direct Burial
***cUL CIC-TC-ER sizes 14 AWG & larger**



A Copper Strand Conductor
B X-Olene Insulation
C Tinned Stranded Copper Drain Wire
D Aluminum/Polyester Tape
E Twisted Pairs
F Rip Cord
G 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.
Cable Shield: Aluminum/Polyester tape overlapped to provide 100% coverage, and a tinned-copper Class M drain wire same size as conductor. All multi-unit shields are isolated from each other.
Multiple Unit Assembly: Pairs/Triads assembled with a left-hand lay.
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							
▲267-40-3401	1		45	0.35	0.10	77	85
▲267-41-3401		1	45	0.37	0.11	89	97
267-40-3402	2		45	0.52	0.22	173	178
267-40-3404	4		60	0.68	0.36	244	278
267-40-3408	8		80	0.90	0.57	415	430
267-40-3412	12		80	0.99	0.77	521	606
267-40-3416	16		80	1.18	1.10	684	756
267-40-3420	20		80	1.31	1.35	816	915
267-40-3424	24		80	1.40	1.54	937	1094
267-40-3436	36		80	1.60	2.01	1299	1433
268-38-4402		2	60	0.59	0.27	230	251
268-38-4404		4	60	0.72	0.41	307	366
268-38-4408		8	80	1.02	0.81	559	650
268-38-4412		12	80	1.05	0.87	710	896
268-38-4416		16	80	1.36	1.46	931	1083
268-38-4420		20	80	1.50	1.77	1118	1246
268-38-4424		24	80	1.63	2.09	1296	1430
#14 AWG							
267-40-3501	1		45	0.37	0.11	99	115
267-41-3501		1	45	0.40	0.13	117	140
267-40-3502	2		60	0.59	0.27	237	258
267-40-3504	4		60	0.72	0.41	312	351
267-40-3508	8		80	0.97	0.74	537	585
267-40-3512	12		80	1.15	1.03	732	799
267-40-3516	16		80	1.29	1.31	914	1066
267-40-3520	20		80	1.42	1.59	1088	1247
267-40-3524	24		80	1.57	1.93	1264	1398
267-40-3536	36		110	1.93	2.93	1903	2127
267-38-3502		2	60	0.63	0.31	291	314
267-38-3504		4	60	0.77	0.46	430	459
267-38-3508		8	80	1.03	0.84	731	789
267-38-3512		12	80	1.22	1.18	978	1103
267-38-3516		16	80	1.38	1.49	1238	1390
267-38-3520		20	80	1.52	1.82	1496	1630
267-38-3524		24	80	1.68	2.22	1748	1972

ELECTRICAL SPECIFICATIONS

	@20°C	@25°C
Conductor Resistance, nominal-ohms/1000 f		
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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