Okoseal-N® Type P-OS

UL Type TC and cUL Type CIC Instrumentation Cable

Multiple Pairs or Triad - Overall Shield
600 Volts - 90°C Rating Wet or Dry
600/1000V Marine Shipboard Cable

A Stranded Bare Copper Conductor
B Okoseal Insulation with Nylon Jacket
C Twisted Pair/Triad
D Stranded Tinned Copper Drain Wire
E Aluminum/Symthetic Polymer Tape
F Rip Cord
G Black Okoseal Jacket

Specifications

Conductors: Bare soft annealed copper, Class B, 7-strand concentric per ASTM B-8.

Insulation: Flame-retardant Okoseal® (PVC), 15 mils nominal thickness, nylon jacket, 4 mil nominal thickness, 90°C temperature rating, per UL 1277.

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

Assembly: Pairs or triads assembled with left-hand lay.

Cable Shield: Aluminum/Polyester tape overlapped to provide 100% coverage, and a 7-strand tinned copper drain wire, same size as conductor.

Jacket: Black, flame-retardant, low temperature Okoseal per UL 1277, 90°C temperature rating. A rip cord is laid longitudinally under the jacket to facilitate removal.

Classification: UL Listed as Type TC Article 336 of the National Electrical Code.

Applications

Okonite multiple pair or triad type P-OS instrumentation cables are designed for use on Class 1 Remote-Control Signaling circuits or where a 600V cable is desired, as instrumentation, process control, or computer cable transmitting signals at levels above 100 millivolts in circuits where shedding against external interference is required, but shielding against interference among groups is not required. For use indoors or outdoors; wet or dry locations; in raceways; supported by a messenger wire; for direct burial; in Class I, Division 2, Class II, Division 2 or Class III, Division 1 hazardous locations. Also for use as non power limited fire alarm circuit cable (NPLF) per NEC Article 760. Type TC cables can be labeled Okomarine to be used in ABS and Coast Guard approved marine applications.

Product Features

- UL listed for cable tray use (all sizes).
- Passes the UL 1277 and IEEE 383-1974 vertical tray flame tests.
- Passes IEEE 1202/FT4 vertical tray flame test.
- May be combined with 600V power and control cables in the same tray.
- Sunlight resistant & oil resistant.
- UL listed for direct burial (8/pr #16 AWG or larger).
- Individual pair or triads are numbered and color-coded for simplified hook-up.
- 100% shielded coverage for reduced electrostatic noise pick-up.
- Excellent weathering characteristics.
- Flexible, easy to handle and terminate.
- Suitable for low temperature installation to -40°C.
- CSA C22.2 No. 239 Type CIC.
- UL 1309 Oko-Marine.
- UL certified to IEEE 1580-Marine Shipboard Cable rated 600/1000V.

Okoseal-N Type P-OS

UL Type TC and cUL TYPE CIC Instrumentation Cable

Single Pairs or Triads - Overall Shield
600V - 90°C Rating Wet or Dry
600/1000V Marine Shipboard Cable

Okoseal Insulation - 15 mils; Nylon Jacket - 4 mils

Catalog Number	Size AWG Strands	Number of Pairs	Number of Triads	Jacket Thickness- (mils)	Nominal Cable O.D. - (In.)	Cross-Sectional Area † (sq in)	Approx Net Weight (lbs/1000')	Approx Ship Weight (lbs/1000')
264-60-3304	18 (7x)	4		45	0.48	0.18	118	141
264-60-3308		8		50	0.63	0.31	214	238
264-60-3310		10		60	0.72	0.41	261	300
264-60-3312		12		60	0.71	0.44	296	335
264-60-3316		16		60	0.81	0.51	373	412
264-60-3320		20		80	0.94	0.69	490	554
264-60-3324		24		80	0.96	0.79	565	629
264-60-3336		36		80	1.12	0.98	786	866
264-60-3350		50		80	1.31	1.35	1053	1159
264-65-3304			4	60	0.60	0.28	177	201
264-65-3312			12	80	0.97	0.74	461	525
264-65-3316			16	80	1.08	0.92	580	660
264-65-3324			24	80	1.32	1.37	830	936
264-65-3336			36	80	1.51	1.79	1156	1299
264-60-4404	16 (7x)	4		60	0.57	0.25	169	193
264-60-4408		8		60	0.69	0.37	276	315
264-60-4410		10		60	0.80	0.50	337	376
264-60-4412		12		60	0.82	0.53	386	425
264-60-4416		16		80	0.95	0.71	527	591
264-60-4420		20		80	1.05	0.87	636	700
264-60-4424		24		80	1.10	0.95	737	817
264-60-4436		36		80	1.25	1.23	1037	1143
264-60-4450		50		80	1.46	1.67	1398	1504
264-65-4404			4	60	0.66	0.34	226	265
264-65-4412			12	80	1.08	0.92	596	676
264-65-4416			16	80	1.20	1.13	754	834
264-65-4424			24	80	1.48	1.72	1088	1231
264-65-4436			36	80	1.69	2.24	1528	1671
264-60-5504	14 (7x)	4		60	0.64	0.32	229	268
264-60-5508		8		60	0.77	0.47	385	424
264-60-5510		10		80	0.94	0.69	511	575
264-60-5512		12		80	0.97	0.74	584	648
264-60-5516 •		16		80	1.06	0.88	741	821
264-60-5520 •		20		80	1.18	1.09	900	980
264-60-5524 •		24		80	1.24	1.21	1050	1156
264-60-5536 •		36		80	1.41	1.56	1496	1602
264-60-5550 •		50		80	1.65	2.14	2027	2170
264-65-5504			4	60	0.74	0.43	311	350
264-65-5512			12	80	1.21	1.15	837	943
264-65-5516 •			16	80	1.35	1.43	1069	1175
264-65-5524 •			24	80	1.67	2.19	1557	1700
264-65-5536 •			36	110	1.98	3.08	2331	2623

ELECTRICAL SPECIFICATIONS
Per UL Standard 1277

Conductor Resistance, maximum.ohms/1000 ft.

	@20°C.	@25°C
18 AWG	6.51	6.64
16 AWG	4.10	4.18
14 AWG	2.57	2.62

Insulation Test Voltage (spark test)
18 - 16 AWG . . . . . 6000 VOLTS AC
14 AWG . . . . . 7500 VOLTS AC

Dielectric Test Voltage.....2000 Volts ac for 1 minute

Shield Isolation Test
Pair to Cable Shield . . . exceeds 100 Megohms/1000 ft.

Insulation Resistance Constant @ 60F, minimum
(natural material typical value) . 2000 Ohms-1000 ft.

Loop Resistance, maximum (2 conductor) . . . . ohms-1000 ft

	@20°C.	@25°C
18 AWG	13.02	13.28
16 AWG	8.20	8.36
14 AWG	5.14	5.24

• Contains 41-strand tinned copper drain wire, same size as conductor

† **Cross-sectional** area for calculation of cable tray fill in accordance with NEC Section 392.22

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

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