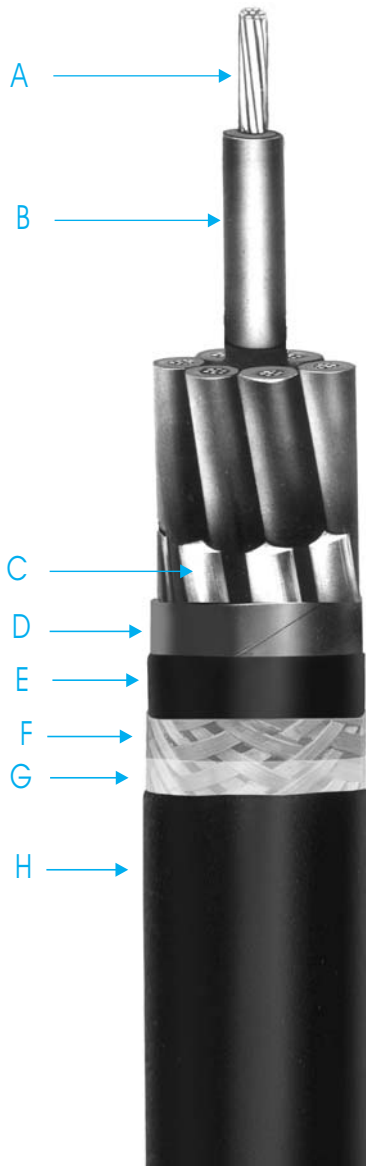




# Okonite FMR-P® Okoseal® Armored Shipboard Cable UL Listed as Type OKO-MARINE

**Multiple Conductor Control Cable**  
**Greater Flexibility - 0.6/1kV - Rated 110°C per UL 1309**



- A Tinned Copper Conductor
- B Okonite FMR-P Insulation
- C Fillers (as needed)
- D Binder Tape
- E Inner Jacket
- F Bronze Wire Armor
- G Separator Tape
- H Outer Jacket

## Conductor

Soft annealed flexible Stranded tinned copper per IEEE 1580 Table 11.

## Insulation

Okonite Type FMR-P Cross-linked flame retardant meeting the requirements for TYPE P of IEEE 1580

## Inner Jacket

A black flame retardant, oil, chemical, abrasion and sunlight resistant thermoplastic compound meeting UL 1309 and IEEE 1580.

## Armor

Basket weave wire armor per IEEE 1580 and UL 1309. Bronze standard - Tinned copper available upon request.

## Outer Jacket

A black flame retardant, oil, chemical, abrasion and sunlight resistant thermoplastic compound meeting UL 1309 and IEEE 1580.

## Applications

Okonite FMR-P Okoseal Armored Shipboard cable is designed for the rigorous requirements of offshore oil drilling and production facilities. UL listed as Type OKO-MARINE cable, it is suitable for use in marine shipboard and offshore platform applications in accordance with API and ABS requirements.

## Specifications

**Conductors:** High strand count flexible conductors make these products easy to install in the hull.

**Insulation:** Okonite FMR-P is heat, moisture, flame and chemical resistant, mechanically rugged ethylene insulating compound. FMR-P meets or exceeds the requirements of UL 1309 Type X110 and IEEE 1580 for Type P.

**Color Coding:** Base colors and tracers as shown on reverse of Data Sheet. Per IEEE 1580 Table 22.

**Grounding Conductor:** Where indicated, stranded copper per IEEE 1580, Table 11.

**Assembly:** Conductors cabled in accordance with UL 1309 & IEEE 1580 using fillers, as necessary.

**Inner and Overall Jacket:** Black Okoseal jacket complies with UL 1309 & IEEE 1580 PVC, Type T, thermoplastic polyvinyl chloride jacket.

**Armor:** Bronze braided wire armor in accordance with UL 1309/IEEE 1580.

UL listed as Type OKO-MARINE multiconductor control and distribution cable to the requirements of UL 1309. Also, UL certified as meeting the requirements of IEEE 1580 — Marine Cable.

## Product Features

- OKO-Marine meets the requirements of IEEE 45, 1202 and 1580, UL 1277, UL 1309 and ABS listed as Marine Shipboard Cable
- Flexible strand construction for easier installation.
- 110°C continuous rating (Type X110) 130°C emergency overload rating 250°C short circuit rating.
- Insulated conductors used in this UL listed cable are Type X110 or Type P.
- Flame Retardant - passes the vertical tray flame test requirements of IEEE 1202-1991.
- Quality control inspected to meet or exceed applicable Industry standards.
- Resistant to moisture and most chemical atmospheres.
- Thermal stability at elevated temperatures.
- Flexible, easy to install and terminate.
- Mechanically rugged.
- High dielectric strength.
- Sunlight resistant.
- Low installation temperature, Passes -40°C cold bend and -35°C cold impact.

# Okonite FMR-P Okoseal Armored Shipboard Cable UL Listed as Type OKO-MARINE

Multiple Conductor Control Cable

## Product Data Section 4: Sheet 17

Catalog Number	Conductor Size AWG	Number of Strands	Number of Conductors	Insulation Thickness-mils	Nominal Diameter over Inner Jacket - Inches	Nominal Diameter over Bronze Armor - Inches	Nominal Diameter over Outer Jacket - Inches	Nominal Net Weight (lbs./kFt.)	Nominal Shipping Weight (lbs./kFt.)	Ampacity* 110°C In Air 45°C Ambient	Ampacity* 100°C In Air 45°C Ambient	Ampacity* 90°C In Air 45°C Ambient
507-16-1452	16 (1.31mm <sup>2</sup> )	19	30	2	0.36	0.41	0.51	174	197	20	19	18
507-16-1453				3	0.38	0.43	0.53	196	220	17	16	15
507-16-1454				4	0.41	0.46	0.60	242	266	14	13	12
507-16-1455				5	0.44	0.49	0.63	269	293	14	13	12
507-16-1457				7	0.48	0.53	0.67	311	343	12	11	11
507-16-1459				9	0.59	0.64	0.78	404	443	12	11	11
507-16-1462				12	1.66	0.71	0.84	476	531	9	8	8
507-16-1469				19	1.76	0.81	0.99	661	725	9	8	8
507-16-1487				37	1.05	1.10	1.28	1099	1189	7	6	6
507-16-1552				14 (2.08 mm <sup>2</sup> )	19	30	2	0.39	0.44	0.54	199	223
507-16-1553	3	0.41	0.46				0.59	243	267	27	25	24
507-16-1554	4	0.44	0.49				0.63	280	304	22	20	19
507-16-1555	5	0.48	0.53				0.67	314	346	22	20	19
507-16-1557	7	0.53	0.58				0.71	370	409	19	18	17
507-16-1559	9	0.64	0.69				0.83	480	535	19	18	17
507-16-1562	12	0.72	0.77				0.95	609	664	14	13	12
507-16-1569	19	0.84	0.89				1.07	807	874	14	13	12
507-16-1587	37	1.16	1.21				1.39	1369	1475	11	10	10
507-16-1652	12 (3.31mm <sup>2</sup> )	19	30				2	0.42	0.47	0.61	250	274
507-16-1653				3	0.45	0.50	0.64	287	319	33	31	29
507-16-1654				4	0.49	0.54	0.68	335	367	26	25	23
507-16-1655				5	0.53	0.58	0.72	381	420	26	25	23
507-16-1657				7	0.61	0.66	0.80	484	523	23	22	20
507-16-1659				9	0.71	0.76	0.94	630	685	23	22	29
507-16-1662				12	0.80	0.85	1.03	756	823	17	16	15
507-16-1669				19	0.97	1.02	1.20	1077	1157	17	16	15
507-16-1687				37	1.29	1.34	1.52	1775	1918	13	12	12
507-16-1752				10 (5.26mm <sup>2</sup> )	37	30	2	0.47	0.52	0.66	298	330
507-16-1753	3	0.50	0.55				0.69	353	392	43	41	38
507-16-1754	4	0.58	0.63				0.77	442	481	34	33	30
507-16-1755	5	0.63	0.68				0.82	507	562	34	33	30
507-16-1757	7	0.69	0.74				0.92	649	704	30	29	27
507-16-1759	9	0.80	0.85				1.03	801	868	30	29	27
507-16-1762	12	0.94	0.99				1.17	1026	1106	22	21	19

Manufacturing tolerance for diameters and weight is +/- 5%.

Okonite's website, [www.okonite.com](http://www.okonite.com) contains the most up to date information.

\*Per UL 1309 &

IEEE 45 parameters.

### Armor -

Alternate tinned or copper armor is available upon request.

### Jacket -

Optional jacket types available upon request.

**Okonite FMR-P Okoseal  
Armored Shipboard Cable  
UL Listed as Type OKO-MARINE  
Multiple Conductor Control Cable**

OKO-MARINE CONDUCTOR COLOR CODE  
IEEE 1580, Table 22, ICEA S-73-532, Method 1 Table E-1

Conductor Number	Base Color	Tracer Color
1	Black	
2	White	
3	Red	
4	Green	
5	Orange	
6	Blue	
7	White	Black
8	Red	Black
9	Green	Black
10	Orange	Black
11	Blue	Black
12	Black	White
13	Red	White
14	Green	White
15	Blue	White
16	Black	Red
17	White	Red
18	Orange	Red
19	Blue	Red
20	Red	Green
21	Orange	Green

Alternate color code shall be used for greater than 21 conductor count.