Type T/N Drilmar® 90 Signal & Instrumentation

Polyvinyl Chloride/Nylon Insulated, Drilling Rig and Marine Cable, 600/1000 V

CME wire and cable®
A Viakable Company

Features

Maximum conductor operating temperature: 90 °C per IEEE, UL and CSA.

DRILMAR® T/N Insulation:

- Rated at 105 °C.
- UL dual listed as TFFN, 18 AWG and 16 AWG.

DRILMAR® PVC Jacket:

- Rated at 90 °C.
- Abrasion resistant.
- Chemical resistant.
- Sunlight resistant.

Completed cable offers superior flame resistance meeting:

- VW-1 rated singles, 18 AWG and 16 AWG.
- 70,000 Btu Flame Tests IEEE 1202/FT4, IEEE 383, UL 1685, ICEA T-30-520.

Application

DRILMAR® 90 cables are specifically designed for the installation and use in marine environments, for use on offshore drilling rigs, aboard marine vessels and on fixed and floating offshore facilities. These cables are used for signal transmission where twisted groups of conductors are desired. Individual or overall group shielding is provided to prevent electrostatic and/or electromagnetic interference, in circuits rated for 300 volts.

Standards

IEEE 1580

Recommended Practice for Marine Cable for Use on Shipboard and Fixed and Floating Platforms.

IEEE 45

Recommended Practice for Electrical Installations on Shipboard Cable.

UL 1309

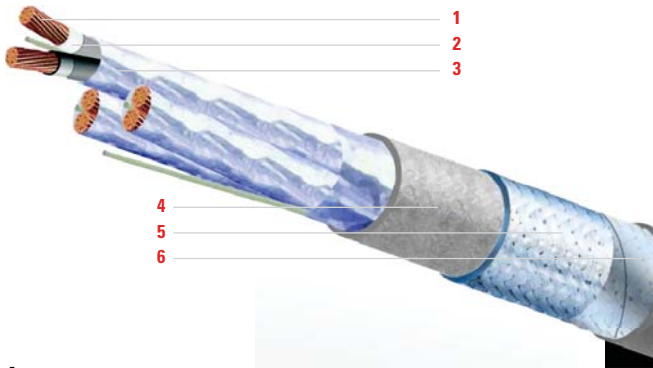
Marine Shipboard Cable.

CSA C22.2 No. 245

Marine Shipboard Cable.

Approvals

- UL and CSA, as Type T/N (IEEE).
- UL and CSA, as Type T/N 90.
- ABS, American Bureau of Shipping.
- LRS, Lloyd's Register of Shipping.
- United States Coast Guard.



Engineering Information

1. Conductor: Uncoated soft annealed stranded copper per IEEE, UL and CSA.

Sizes: 20 AWG up to 16 AWG.

2. Insulation: Flame retardant and sunlight resistant Polyvinyl Chloride and Polyamide (Nylon) covering per IEEE, UL and CSA.

Identification: Color-coded with sequential printed numbers.

Pairs: Black and White.

Assembly: Insulated conductors twisted in pairs.

Cabling: Twisted pairs cabled round with moisture and flame retardant fillers, as required and binder tape.

3. Shielding (optional): Individual and/or Overall Aluminum/ Polyester tape, with drain wire, 100% coverage.

4. Jacket: Flame retardant and sunlight resistant Polyvinyl Chloride (PVC), per IEEE, UL and CSA.

5. Armor (optional): Standard - Aluminum.

Optional - Bronze or Tinned Copper Braid per IEEE, UL and CSA.

6. Jacket (overall): Flame retardant and sunlight resistant Polyvinyl Chloride (PVC), per IEEE, UL and CSA.
Note: Overall Jacket is optional for Bronze armor only, Tinned Copper armor and Aluminum armor require the use of outer jacket.

Type T/N-Pairs Signal & Instrumentation, 20 AWG-10 Strands, Overall Shield

TPS20TIU / A / B

Conductor	Unarmored					Armored				
								Bronze		
Number of Pairs	Nominal OD		Part Number	Net Weight		Nominal OD		Part Number	Net Weight	
	in	mm		lb/kft	kg/km	in	mm		lb/kft	kg/km
1	0.25	6.5	DTPO20TNT-1	32	48	0.30	7.7	DTPO20TNTB-1	77	115
2	0.33	8.4	DTPO20TNT-2	51	76	0.38	9.7	DTPO20TNTB-2	109	162
3	0.38	9.6	DTPO20TNT-3	66	99	0.43	10.8	DTPO20TNTB-3	132	196
4	0.40	10.3	DTPO20TNT-4	80	119	0.45	11.5	DTPO20TNTB-4	150	223
5	0.44	11.2	DTPO20TNT-5	95	141	0.49	12.4	DTPO20TNTB-5	170	253
6	0.48	12.1	DTPO20TNT-6	109	163	0.53	13.4	DTPO20TNTB-6	191	284
8	0.55	13.9	DTPO20TNT-8	150	224	0.60	15.2	DTPO20TNTB-8	243	362
10	0.62	15.8	DTPO20TNT-10	182	271	0.67	17.1	DTPO20TNTB-10	287	427
15	0.70	17.9	DTPO20TNT-15	247	368	0.75	19.2	DTPO20TNTB-15	366	544
20	0.78	19.9	DTPO20TNT-20	313	465	0.83	21.2	DTPO20TNTB-20	444	660
25	0.92	23.3	DTPO20TNT-25	414	616	0.97	24.6	DTPO20TNTB-25	566	843
30	0.98	24.9	DTPO20TNT-30	479	713	1.03	26.1	DTPO20TNTB-30	642	956
40	1.09	27.7	DTPO20TNT-40	609	906	1.14	29.0	DTPO20TNTB-40	790	1175
50	1.20	30.4	DTPO20TNT-50	737	1097	1.25	31.7	DTPO20TNTB-50	935	1392

Conductor	Armored and Sheathed							
			Aluminum			Bronze		
Size AWG / kcmil	Nominal OD		Part Number	Net Weight		Part Number	Net Weight	
	in	mm		lb/kft	kg/km		lb/kft	kg/km
1	0.39	10.0	DTPO20TNTAS-1	76	113	DTPO20TNTBS-1	107	159
2	0.47	12.0	DTPO20TNTAS-2	105	156	DTPO20TNTBS-2	145	215
3	0.55	13.9	DTPO20TNTAS-3	141	210	DTPO20TNTBS-3	187	278
4	0.57	14.6	DTPO20TNTAS-4	159	237	DTPO20TNTBS-4	208	309
5	0.61	15.5	DTPO20TNTAS-5	180	267	DTPO20TNTBS-5	232	345
6	0.65	16.5	DTPO20TNTAS-6	201	299	DTPO20TNTBS-6	257	383
8	0.72	18.2	DTPO20TNTAS-8	253	376	DTPO20TNTBS-8	317	472
10	0.79	20.2	DTPO20TNTAS-10	297	442	DTPO20TNTBS-10	370	551
15	0.91	23.2	DTPO20TNTAS-15	409	609	DTPO20TNTBS-15	491	731
20	0.99	25.2	DTPO20TNTAS-20	490	730	DTPO20TNTBS-20	581	865
25	1.13	28.6	DTPO20TNTAS-25	618	920	DTPO20TNTBS-25	724	1077
30	1.19	30.2	DTPO20TNTAS-30	696	1036	DTPO20TNTBS-30	809	1204
40	1.30	33.0	DTPO20TNTAS-40	848	1261	DTPO20TNTBS-40	973	1448
50	1.41	35.8	DTPO20TNTAS-50	998	1485	DTPO20TNTBS-50	1135	1689

The above data are approximate and subject to normal manufacturing tolerances. Where required, the compatibility with glands, connectors and accessories should be verified using actual dimensions of the product.
Ampacities: Refer to beginning of section.

CME wire and cable
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Technical Data *continued*

Type T/N-Pairs Signal & Instrumentation, 18 AWG-16 Strands, Overall Shield

TPS18TIU / A /B

Conductor	Unarmored					Armored				
								Bronze		
Number of Pairs	Nominal OD		Part Number	Net Weight		Nominal OD		Part Number	Net Weight	
	in	mm		lb/kft	kg/km	in	mm		lb/kft	kg/km
1	0.27	6.9	DTPO18TNT-1	39	59	0.32	8.2	DTPO18TNTB-1	88	130
2	0.36	9.1	DTPO18TNT-2	64	95	0.41	10.4	DTPO18TNTB-2	126	187
3	0.41	10.4	DTPO18TNT-3	85	126	0.46	11.7	DTPO18TNTB-3	155	231
4	0.44	11.2	DTPO18TNT-4	103	154	0.49	12.4	DTPO18TNTB-4	179	266
5	0.48	12.2	DTPO18TNT-5	123	183	0.53	13.5	DTPO18TNTB-5	205	305
6	0.55	14.0	DTPO18TNT-6	158	235	0.60	15.3	DTPO18TNTB-6	251	374
8	0.60	15.1	DTPO18TNT-8	195	290	0.65	16.4	DTPO18TNTB-8	295	439
10	0.68	17.3	DTPO18TNT-10	237	353	0.73	18.6	DTPO18TNTB-10	352	523
15	0.77	19.6	DTPO18TNT-15	327	487	0.82	20.9	DTPO18TNTB-15	456	679
20	0.90	22.8	DTPO18TNT-20	450	670	0.95	24.1	DTPO18TNTB-20	600	893
25	1.00	25.5	DTPO18TNT-25	546	812	1.05	26.8	DTPO18TNTB-25	713	1061
30	1.07	27.3	DTPO18TNT-30	636	946	1.12	28.5	DTPO18TNTB-30	814	1212
40	1.20	30.5	DTPO18TNT-40	814	1212	1.25	31.7	DTPO18TNTB-40	1013	1508
50	1.32	33.5	DTPO18TNT-50	992	1476	1.37	34.7	DTPO18TNTB-50	1210	1800

Conductor	Armored and Sheathed							
			Aluminum			Bronze		
Size AWG / kcmil	Nominal OD		Part Number	Net Weight		Part Number	Net Weight	
	in	mm		lb/kft	kg/km		lb/kft	kg/km
1	0.41	10.5	DTPO18TNTAS-1	85	127	DTPO18TNTBS-1	119	177
2	0.50	12.6	DTPO18TNTAS-2	121	180	DTPO18TNTBS-2	164	244
3	0.58	14.7	DTPO18TNTAS-3	165	245	DTPO18TNTBS-3	214	318
4	0.61	15.5	DTPO18TNTAS-4	188	280	DTPO18TNTBS-4	241	358
5	0.65	16.5	DTPO18TNTAS-5	214	319	DTPO18TNTBS-5	271	404
6	0.72	18.3	DTPO18TNTAS-6	261	389	DTPO18TNTBS-6	326	485
8	0.77	19.4	DTPO18TNTAS-8	305	454	DTPO18TNTBS-8	375	558
10	0.89	22.7	DTPO18TNTAS-10	394	587	DTPO18TNTBS-10	474	705
15	0.98	24.9	DTPO18TNTAS-15	502	747	DTPO18TNTBS-15	592	880
20	1.11	28.2	DTPO18TNTAS-20	651	968	DTPO18TNTBS-20	755	1123
25	1.21	30.8	DTPO18TNTAS-25	768	1142	DTPO18TNTBS-25	883	1314
30	1.28	32.6	DTPO18TNTAS-30	872	1297	DTPO18TNTBS-30	995	1481
40	1.41	35.8	DTPO18TNTAS-40	1075	1600	DTPO18TNTBS-40	1213	1805
50	1.53	38.8	DTPO18TNTAS-50	1276	1899	DTPO18TNTBS-50	1427	2124

The above data are approximate and subject to normal manufacturing tolerances. Where required, the compatibility with glands, connectors and accessories should be verified using actual dimensions of the product.
Ampacities: Refer to beginning of section.

CME wire and cable
A Viakable Company

Technical Data

Type T/N-Pairs Signal & Instrumentation, 16 AWG-26 Strands, Overall Shield

TPS16TIU /A / B

Conductor	Unarmored					Armored				
								Bronze		
Number of Pairs	Nominal OD		Part Number	Net Weight		Nominal OD		Part Number	Net Weight	
	in	mm		lb/kft	kg/km	in	mm		lb/kft	kg/km
1	0.30	7.5	DTPO16TNT-1	49	73	0.35	8.8	DTPO16TNTB-1	101	150
2	0.39	10.0	DTPO16TNT-2	82	122	0.44	11.3	DTPO16TNTB-2	150	223
3	0.45	11.5	DTPO16TNT-3	110	164	0.50	12.8	DTPO16TNTB-3	188	280
4	0.49	12.4	DTPO16TNT-4	137	204	0.54	13.6	DTPO16TNTB-4	220	327
5	0.56	14.3	DTPO16TNT-5	180	267	0.61	15.6	DTPO16TNTB-5	275	409
6	0.61	15.5	DTPO16TNT-6	209	311	0.66	16.8	DTPO16TNTB-6	312	464
8	0.66	16.8	DTPO16TNT-8	261	388	0.71	18.0	DTPO16TNTB-8	372	554
10	0.76	19.3	DTPO16TNT-10	319	475	0.81	20.5	DTPO16TNTB-10	447	665
15	0.90	22.9	DTPO16TNT-15	480	715	0.95	24.1	DTPO16TNTB-15	631	938
20	1.00	25.4	DTPO16TNT-20	612	911	1.05	26.7	DTPO16TNTB-20	779	1159
25	1.12	28.5	DTPO16TNT-25	747	1112	1.17	29.7	DTPO16TNTB-25	933	1389
30	1.20	30.5	DTPO16TNT-30	875	1303	1.25	31.7	DTPO16TNTB-30	1074	1598
40	1.34	34.1	DTPO16TNT-40	1130	1681	1.39	35.4	DTPO16TNTB-40	1351	2011
50	1.48	37.5	DTPO16TNT-50	1383	2058	1.53	38.8	DTPO16TNTB-50	1627	2420

Conductor	Armored and Sheathed							
			Aluminum			Bronze		
Size AWG / kcmil	Nominal OD		Part Number	Net Weight		Part Number	Net Weight	
	in	mm		lb/kft	kg/km		lb/kft	kg/km
1	0.44	11.1	DTPO16TNTAS-1	98	146	DTPO16TNTBS-1	134	199
2	0.56	14.3	DTPO16TNTAS-2	160	237	DTPO16TNTBS-2	207	308
3	0.62	15.8	DTPO16TNTAS-3	198	294	DTPO16TNTBS-3	252	374
4	0.66	16.7	DTPO16TNTAS-4	230	342	DTPO16TNTBS-4	287	427
5	0.73	18.6	DTPO16TNTAS-5	285	424	DTPO16TNTBS-5	351	522
6	0.78	19.8	DTPO16TNTAS-6	322	479	DTPO16TNTBS-6	393	585
8	0.87	22.	DTPO16TNTAS-8	414	616	DTPO16TNTBS-8	491	731
10	0.97	24.6	DTPO16TNTAS-10	492	732	DTPO16TNTBS-10	580	863
15	1.11	28.2	DTPO16TNTAS-15	681	1014	DTPO16TNTBS-15	785	1169
20	1.21	30.8	DTPO16TNTAS-20	833	1240	DTPO16TNTBS-20	949	1412
25	1.33	33.8	DTPO16TNTAS-25	992	1477	DTPO16TNTBS-25	1121	1669
30	1.41	35.8	DTPO16TNTAS-30	1136	1691	DTPO16TNTBS-30	1274	1896
40	1.55	39.4	DTPO16TNTAS-40	1419	2112	DTPO16TNTBS-40	1573	2340
50	1.75	44.4	DTPO16TNTAS-50	1796	2673	DTPO16TNTBS-50	1965	2924

The above data are approximate and subject to normal manufacturing tolerances. Where required, the compatibility with glands, connectors and accessories should be verified using actual dimensions of the product.
Ampacities: Refer to beginning of section.