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

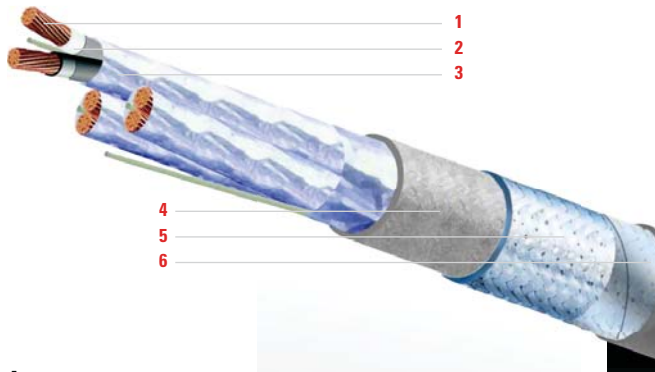
Marine Shipboard Cable.

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, Individual/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
2	0.43	10.9	DTPS20TNT-2	70	104	0.48	12.1	DTPS20TNTB-2	143	214
3	0.45	11.5	DTPS20TNT-3	87	130	0.50	12.8	DTPS20TNTB-3	165	246
4	0.50	12.6	DTPS20TNT-4	107	159	0.55	13.9	DTPS20TNTB-4	191	285
5	0.57	14.6	DTPS20TNT-5	143	213	0.62	15.8	DTPS20TNTB-5	240	357
6	0.62	15.8	DTPS20TNT-6	165	245	0.67	17.1	DTPS20TNTB-6	269	401
8	0.67	17.0	DTPS20TNT-8	201	299	0.72	18.3	DTPS20TNTB-8	314	467
10	0.79	20.0	DTPS20TNT-10	246	366	0.84	21.2	DTPS20TNTB-10	377	561
15	0.94	23.9	DTPS20TNT-15	373	554	0.99	25.2	DTPS20TNTB-15	529	788
20	1.04	26.4	DTPS20TNT-20	464	691	1.09	27.7	DTPS20TNTB-20	637	947
25	1.18	29.9	DTPS20TNT-25	563	837	1.23	31.2	DTPS20TNTB-25	758	1128
30	1.22	31.0	DTPS20TNT-30	645	959	1.27	32.3	DTPS20TNTB-30	847	1261
40	1.37	34.7	DTPS20TNT-40	819	1219	1.42	36.0	DTPS20TNTB-40	1045	1555
50	1.55	39.4	DTPS20TNT-50	1000	1488	1.60	40.6	DTPS20TNTB-50	1255	1868

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
2	0.60	15.2	DTPS20TNTAS-2	158	235	DTPS20TNTBS-2	209	310
3	0.62	15.8	DTPS20TNTAS-3	179	267	DTPS20TNTBS-3	233	347
4	0.67	16.9	DTPS20TNTAS-4	206	306	DTPS20TNTBS-4	264	394
5	0.74	18.9	DTPS20TNTAS-5	256	380	DTPS20TNTBS-5	323	480
6	0.79	20.1	DTPS20TNTAS-6	285	425	DTPS20TNTBS-6	358	533
8	0.88	22.4	DTPS20TNTAS-8	365	543	DTPS20TNTBS-8	443	659
10	1.00	25.3	DTPS20TNTAS-10	434	646	DTPS20TNTBS-10	525	781
15	1.15	29.2	DTPS20TNTAS-15	593	883	DTPS20TNTBS-15	702	1045
20	1.25	31.7	DTPS20TNTAS-20	705	1050	DTPS20TNTBS-20	825	1228
25	1.39	35.3	DTPS20TNTAS-25	834	1241	DTPS20TNTBS-25	969	1442
30	1.43	36.4	DTPS20TNTAS-30	925	1376	DTPS20TNTBS-30	1065	1585
40	1.58	40.1	DTPS20TNTAS-40	1130	1681	DTPS20TNTBS-40	1286	1914
50	1.82	46.2	DTPS20TNTAS-50	1457	2169	DTPS20TNTBS-50	1634	2432

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.

Technical Data *continued*

Type T/N-Pairs Signal & Instrumentation, 18 AWG-16 Strands, Individual/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
2	0.46	11.8	DTPS18TNT-2	86	129	0.51	13.1	DTPS18TNTB-2	166	247
3	0.49	12.5	DTPS18TNT-3	110	164	0.54	13.8	DTPS18TNTB-3	194	289
4	0.57	14.5	DTPS18TNT-4	152	227	0.62	15.7	DTPS18TNTB-4	249	370
5	0.62	15.8	DTPS18TNT-5	180	268	0.67	17.0	DTPS18TNTB-5	285	424
6	0.68	17.2	DTPS18TNT-6	208	310	0.73	18.4	DTPS18TNTB-6	322	479
8	0.73	18.6	DTPS18TNT-8	257	382	0.78	19.8	DTPS18TNTB-8	380	565
10	0.90	22.8	DTPS18TNT-10	351	522	0.95	24.1	DTPS18TNTB-10	500	745
15	1.03	26.0	DTPS18TNT-15	477	709	1.08	27.3	DTPS18TNTB-15	647	963
20	1.14	28.8	DTPS18TNT-20	600	892	1.19	30.1	DTPS18TNTB-20	788	1172
25	1.29	32.8	DTPS18TNT-25	730	1087	1.34	34.0	DTPS18TNTB-25	944	1404
30	1.34	34.0	DTPS18TNT-30	843	1254	1.39	35.2	DTPS18TNTB-30	1064	1583
40	1.50	38.1	DTPS18TNT-40	1079	1605	1.55	39.3	DTPS18TNTB-40	1326	1973
50	1.76	44.7	DTPS18TNT-50	1427	2123	1.81	46.0	DTPS18TNTB-50	1716	2554

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
2	0.63	16.1	DTPS18TNTAS-2	180	268	DTPS18TNTBS-2	235	350
3	0.66	16.8	DTPS18TNTAS-3	209	310	DTPS18TNTBS-3	267	397
4	0.74	18.8	DTPS18TNTAS-4	264	393	DTPS18TNTBS-4	331	492
5	0.79	20.1	DTPS18TNTAS-5	301	447	DTPS18TNTBS-5	373	555
6	0.89	22.5	DTPS18TNTAS-6	373	555	DTPS18TNTBS-6	452	672
8	0.94	23.9	DTPS18TNTAS-8	433	645	DTPS18TNTBS-8	518	771
10	1.11	28.1	DTPS18TNTAS-10	562	837	DTPS18TNTBS-10	666	991
15	1.24	31.4	DTPS18TNTAS-15	715	1064	DTPS18TNTBS-15	833	1240
20	1.35	34.2	DTPS18TNTAS-20	861	1282	DTPS18TNTBS-20	992	1476
25	1.50	38.1	DTPS18TNTAS-25	1025	1525	DTPS18TNTBS-25	1173	1745
30	1.55	39.3	DTPS18TNTAS-30	1147	1707	DTPS18TNTBS-30	1300	1935
40	1.77	44.9	DTPS18TNTAS-40	1523	2266	DTPS18TNTBS-40	1694	2521
50	2.03	51.6	DTPS18TNTAS-50	1941	2889	DTPS18TNTBS-50	2142	3188

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.

Type T/N-Pairs Signal & Instrumentation, 16 AWG-26 Strands, Individual/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
2	0.51	13.0	DTPS16TNT-2	106	158	0.56	14.3	DTPS16TNTB-2	193	288
3	0.57	14.6	DTPS16TNT-3	155	230	0.62	15.8	DTPS16TNTB-3	252	375
4	0.63	15.9	DTPS16TNT-4	190	283	0.68	17.2	DTPS16TNTB-4	296	440
5	0.69	17.4	DTPS16TNT-5	226	337	0.74	18.7	DTPS16TNTB-5	342	508
6	0.75	19.0	DTPS16TNT-6	263	391	0.80	20.3	DTPS16TNTB-6	388	577
8	0.81	20.6	DTPS16TNT-8	327	487	0.86	21.8	DTPS16TNTB-8	463	689
10	0.99	25.2	DTPS16TNT-10	442	658	1.04	26.5	DTPS16TNTB-10	608	904
15	1.14	28.9	DTPS16TNT-15	609	906	1.19	30.2	DTPS16TNTB-15	798	1187
20	1.26	32.1	DTPS16TNT-20	772	1149	1.31	33.3	DTPS16TNTB-20	981	1460
25	1.44	36.5	DTPS16TNT-25	944	1405	1.49	37.8	DTPS16TNTB-25	1181	1758
30	1.49	37.9	DTPS16TNT-30	1095	1630	1.54	39.1	DTPS16TNTB-30	1341	1995
40	1.73	44.0	DTPS16TNT-40	1513	2252	1.78	45.3	DTPS16TNTB-40	1799	2677
50	1.96	49.9	DTPS16TNT-50	1850	2753	2.01	51.1	DTPS16TNTB-50	2173	3233

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
2	0.68	17.3	DTPS16TNTAS-2	208	310	DTPS16TNTBS-2	269	400
3	0.74	18.9	DTPS16TNTAS-3	267	398	DTPS16TNTBS-3	335	498
4	0.80	20.2	DTPS16TNTAS-4	312	464	DTPS16TNTBS-4	385	573
5	0.90	22.8	DTPS16TNTAS-5	393	585	DTPS16TNTBS-5	473	704
6	0.96	24.3	DTPS16TNTAS-6	443	659	DTPS16TNTBS-6	530	788
8	1.02	25.9	DTPS16TNTAS-8	521	775	DTPS16TNTBS-8	615	915
10	1.20	30.6	DTPS16TNTAS-10	674	1003	DTPS16TNTBS-10	789	1174
15	1.35	34.2	DTPS16TNTAS-15	871	1296	DTPS16TNTBS-15	1002	1491
20	1.47	37.4	DTPS16TNTAS-20	1060	1578	DTPS16TNTBS-20	1205	1794
25	1.65	41.9	DTPS16TNTAS-25	1270	1889	DTPS16TNTBS-25	1434	2134
30	1.76	44.7	DTPS16TNTAS-30	1537	2287	DTPS16TNTBS-30	1707	2540
40	2.00	50.9	DTPS16TNTAS-40	2021	3007	DTPS16TNTBS-40	2218	3301
50	2.23	56.7	DTPS16TNTAS-50	2420	3601	DTPS16TNTBS-50	2643	3934

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.