

# Type T/N Drilmar® 90 Power/Distribution Cable Multiconductor

**CME**<sup>®</sup>  
wire and cable

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

A Viakable Company

## Features

Maximum conductor operating temperature: 90 °C per IEEE, UL and CSA. Meets applicable ampacity ratings.

DRILMAR® T/N Insulation:

- Rated at 105 °C.
- UL dual listed as THHN/THWN.
- Chemical resistant, rated Gas and Oil Res II.
- Sunlight resistant for CT use, 1/0 AWG and larger.

DRILMAR® PVC Jacket:

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

Completed cable offers superior flame resistance meeting:

- VW-1 rated singles.
- 70,000 Btu Flame Tests IEEE 1202/FT4, IEEE 383, UL 1685, ICEA T-30-520.
- Listed as TC cable per UL.
- Open wiring listing, meeting Impact and Crushing test per UL for Tray Cables, sizes 14 AWG to 5 Awg.

## 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 the distribution of power in circuits or may be used in lighting, communication and control in circuits rated for 600/1000 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

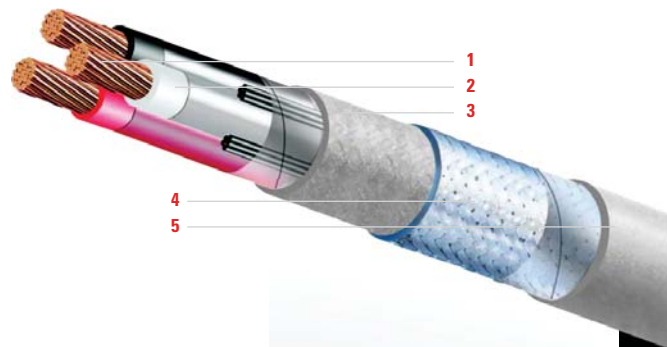
Marine Shipboard Cable.

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:** 14 AWG up to 750 kcmil.

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

**Identification:** Color-coded insulation per IEEE, UL and CSA.

**Assembly:** Conductors cabled round with moisture and flame retardant fillers, as required and binder tape.

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

**4. Armor (optional):** Standard - Aluminum.

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

**5. 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.

Technical Data

Type T/N Power/Distribution Cable, Two Conductors, 600/1000 V

DNIU / DNIA / DNIB

Conductor		Unarmored					Armored				
Size AWG / kcmil	Strands	Nominal OD		Part Number	Net Weight		Nominal OD		Bronze		
		in	mm		lb/kft	kg/km	in	mm	Part Number	lb/kft	kg/km
14	19	0.32	8.1	DDTNT4-2	65	97	0.37	9.3	DDTNTB4-2	121	180
12	19	0.36	9.0	DDTNT6-2	88	130	0.41	10.3	DDTNTB6-2	149	222
10	19	0.42	10.7	DDTNT10-2	128	191	0.47	12.0	DDTNTB10-2	201	299
8	19	0.56	14.1	DDTNT16-2	215	319	0.61	15.4	DDTNTB16-2	309	459
6	19	0.63	16.0	DDTNT26-2	300	446	0.68	17.2	DDTNTB26-2	406	604
4	19	0.77	19.5	DDTNT41-2	454	675	0.82	20.8	DDTNTB41-2	582	867
2	19	0.93	23.5	DDTNT66-2	694	1033	0.98	24.8	DDTNTB66-2	848	1263
1	19	1.04	26.4	DDTNT83-2	871	1296	1.09	27.7	DDTNTB83-2	1044	1553
1/0	19	1.12	28.5	DDTNT105-2	1063	1582	1.17	29.7	DDTNTB105-2	1249	1859
2/0	19	1.21	30.7	DDTNT133-2	1283	1910	1.26	32.0	DDTNTB133-2	1484	2208
3/0	19	1.31	33.2	DDTNT167-2	1562	2324	1.36	34.5	DDTNTB167-2	1778	2646
4/0	19	1.42	36.1	DDTNT211-2	1912	2845	1.47	37.4	DDTNTB211-2	2147	3194
250	37	1.56	39.5	DDTNT250-2	2254	3355	1.61	40.8	DDTNTB250-2	2511	3737
300	37	1.72	43.8	DDTNT300-2	2771	4124	1.77	45.0	DDTNTB300-2	3055	4546
350	37	1.82	46.3	DDTNT350-2	3168	4715	1.87	47.5	DDTNTB350-2	3468	5160
400	37	1.91	48.6	DDTNT400-2	3565	5306	1.96	49.9	DDTNTB400-2	3880	5774
500	37	2.08	52.8	DDTNT500-2	4345	6466	2.13	54.1	DDTNTB500-2	4686	6974
600	61	2.28	57.8	DDTNT600-2	5183	7713	2.33	59.1	DDTNTB600-2	5556	8269
750	61	2.48	63.0	DDTNT750-2	6333	9424	2.53	64.3	DDTNTB750-2	6739	10029

Conductor		Armored and Sheathed							
Size AWG / kcmil	Strands	Nominal OD		Aluminum			Bronze		
		in	mm	Part Number	Net Weight		Part Number	Net Weight	
					lb/kft	kg/km		lb/kft	kg/km
14	19	0.46	11.6	DDTNTAS4-2	120	178	DDTNTBS4-2	158	235
12	19	0.50	12.6	DDTNTAS6-2	147	219	DDTNTBS6-2	190	283
10	19	0.59	15.0	DDTNTAS10-2	215	320	DDTNTBS10-2	265	394
8	19	0.73	18.4	DDTNTAS16-2	324	482	DDTNTBS16-2	389	579
6	19	0.80	20.3	DDTNTAS26-2	422	628	DDTNTBS26-2	495	737
4	19	0.98	24.8	DDTNTAS41-2	638	949	DDTNTBS41-2	727	1082
2	19	1.14	28.9	DDTNTAS66-2	912	1357	DDTNTBS66-2	1019	1516
1	19	1.25	31.8	DDTNTAS83-2	1113	1656	DDTNTBS83-2	1232	1834
1/0	19	1.33	33.8	DDTNTAS105-2	1322	1967	DDTNTBS105-2	1451	2159
2/0	19	1.42	36.0	DDTNTAS133-2	1561	2323	DDTNTBS133-2	1700	2529
3/0	19	1.52	38.6	DDTNTAS167-2	1860	2768	DDTNTBS167-2	2010	2991
4/0	19	1.63	41.4	DDTNTAS211-2	2234	3325	DDTNTBS211-2	2397	3567
250	37	1.83	46.4	DDTNTAS250-2	2714	4039	DDTNTBS250-2	2892	4303
300	37	1.99	50.6	DDTNTAS300-2	3276	4875	DDTNTBS300-2	3472	5168
350	37	2.09	53.1	DDTNTAS350-2	3699	5505	DDTNTBS350-2	3907	5814
400	37	2.18	55.4	DDTNTAS400-2	4122	6134	DDTNTBS400-2	4340	6458
500	37	2.35	59.7	DDTNTAS500-2	4946	7360	DDTNTBS500-2	5183	7713
600	61	2.55	64.7	DDTNTAS600-2	5838	8688	DDTNTBS600-2	6097	9073
750	61	2.81	71.4	DDTNTAS750-2	7211	10732	DDTNTBS750-2	7493	11151

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 Power/Distribution Cable, Three Conductors, 600/1000 V

TNIU / TNIA / TNIB

Conductor		Unarmored					Armored				
Size AWG / kcmil	Strands	Nominal OD		Part Number	Net Weight		Nominal OD		Bronze		
		in	mm		lb/kft	kg/km	in	mm	Part Number	lb/kft	kg/km
14	19	0.33	8.5	DTTNT4-3	77	115	0.38	9.8	DTTNTB4-3	136	202
12	19	0.38	9.5	DTTNT6-3	107	159	0.43	10.8	DTTNTB6-3	172	256
10	19	0.45	11.3	DTTNT10-3	167	249	0.50	12.6	DTTNTB10-3	244	363
8	19	0.59	14.9	DTTNT16-3	279	415	0.64	16.2	DTTNTB16-3	378	563
6	19	0.67	17.0	DTTNT26-3	397	591	0.72	18.2	DTTNTB26-3	510	759
4	19	0.82	20.8	DTTNT41-3	610	908	0.87	22.0	DTTNTB41-3	747	1111
2	19	0.99	25.0	DTTNT66-3	935	1392	1.04	26.3	DTTNTB66-3	1100	1636
1	19	1.11	28.2	DTTNT83-3	1177	1752	1.16	29.4	DTTNTB83-3	1361	2026
1/0	19	1.20	30.4	DTTNT105-3	1430	2129	1.25	31.6	DTTNTB105-3	1628	2423
2/0	19	1.29	32.8	DTTNT133-3	1743	2594	1.34	34.0	DTTNTB133-3	1956	2911
3/0	19	1.40	35.5	DTTNT167-3	2134	3176	1.45	36.8	DTTNTB167-3	2365	3519
4/0	19	1.52	38.6	DTTNT211-3	2634	3920	1.57	39.8	DTTNTB211-3	2884	4292
250	37	1.73	43.8	DTTNT250-3	3204	4769	1.78	45.1	DTTNTB250-3	3488	5191
300	37	1.84	46.7	DTTNT300-3	3761	5597	1.89	48.0	DTTNTB300-3	4063	6047
350	37	1.94	49.4	DTTNT350-3	4315	6422	1.99	50.6	DTTNTB350-3	4635	6897
400	37	2.04	51.9	DTTNT400-3	4870	7248	2.09	53.2	DTTNTB400-3	5206	7747
500	37	2.22	56.4	DTTNT500-3	5964	8875	2.27	57.7	DTTNTB500-3	6328	9417
600	61	2.44	61.9	DTTNT600-3	7111	10583	2.49	63.1	DTTNTB600-3	7511	11177
750	61	2.66	67.5	DTTNT750-3	8822	13128	2.71	68.7	DTTNTB750-3	9257	13776

Conductor		Armored and Sheathed							
Size AWG / kcmil	Strands	Nominal OD		Aluminum			Bronze		
		in	mm	Part Number	Net Weight		Part Number	Net Weight	
					lb/kft	kg/km		lb/kft	kg/km
14	19	0.47	12.0	DTTNTAS4-3	134	200	DTTNTBS4-3	175	260
12	19	0.52	13.1	DTTNTAS6-3	170	252	DTTNTBS6-3	215	319
10	19	0.62	15.6	DTTNTAS10-3	258	384	DTTNTBS10-3	311	463
8	19	0.76	19.3	DTTNTAS16-3	394	586	DTTNTBS16-3	463	688
6	19	0.88	22.3	DTTNTAS26-3	561	834	DTTNTBS26-3	639	950
4	19	1.03	26.1	DTTNTAS41-3	805	1197	DTTNTBS41-3	899	1338
2	19	1.20	30.4	DTTNTAS66-3	1166	1735	DTTNTBS66-3	1279	1904
1	19	1.32	33.5	DTTNTAS83-3	1433	2133	DTTNTBS83-3	1561	2323
1/0	19	1.41	35.7	DTTNTAS105-3	1705	2537	DTTNTBS105-3	1842	2741
2/0	19	1.50	38.1	DTTNTAS133-3	2037	3032	DTTNTBS133-3	2185	3252
3/0	19	1.61	40.8	DTTNTAS167-3	2451	3647	DTTNTBS167-3	2611	3885
4/0	19	1.79	45.4	DTTNTAS211-3	3083	4588	DTTNTBS211-3	3256	4846
250	37	2.00	50.7	DTTNTAS250-3	3710	5520	DTTNTBS250-3	3906	5813
300	37	2.11	53.6	DTTNTAS300-3	4297	6395	DTTNTBS300-3	4507	6707
350	37	2.21	56.2	DTTNTAS350-3	4880	7262	DTTNTBS350-3	5101	7592
400	37	2.31	58.8	DTTNTAS400-3	5462	8128	DTTNTBS400-3	5694	8474
500	37	2.49	63.3	DTTNTAS500-3	6604	9827	DTTNTBS500-3	6856	10203
600	61	2.71	68.7	DTTNTAS600-3	7809	11622	DTTNTBS600-3	8086	12034
750	61	2.99	75.8	DTTNTAS750-3	9758	14522	DTTNTBS750-3	10060	14971

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 Power/Distribution Cable, Four Conductors, 600/1000 V

FNIU / FNIA / FNIB

Conductor		Unarmored					Armored				
Size AWG / kcmil	Strands	Nominal OD		Part Number	Net Weight		Nominal OD		Bronze		
		in	mm		lb/kft	kg/km	in	mm	Part Number	lb/kft	kg/km
14	19	0.36	9.2	DFTNT4-4	97	144	0.41	10.5	DFTNTB4-4	160	238
12	19	0.41	10.4	DFTNT6-4	135	202	0.46	11.7	DFTNTB6-4	206	306
10	19	0.49	12.4	DFTNT10-4	214	319	0.54	13.7	DFTNTB10-4	298	443
8	19	0.64	16.4	DFTNT16-4	357	531	0.69	17.6	DFTNTB16-4	465	693
6	19	0.73	18.6	DFTNT26-4	512	761	0.78	19.9	DFTNTB26-4	634	944
4	19	0.94	23.9	DFTNT41-4	824	1226	0.99	25.1	DFTNTB41-4	980	1458
2	19	1.09	27.6	DFTNT66-4	1206	1794	1.14	28.8	DFTNTB66-4	1386	2062
1	19	1.22	31.0	DFTNT83-4	1521	2264	1.27	32.3	DFTNTB83-4	1724	2565
1/0	19	1.32	33.5	DFTNT105-4	1857	2764	1.37	34.8	DFTNTB105-4	2075	3088
2/0	19	1.43	36.2	DFTNT133-4	2266	3372	1.48	37.5	DFTNTB133-4	2501	3722
3/0	19	1.55	39.3	DFTNT167-4	2779	4136	1.60	40.5	DFTNTB167-4	3034	4515
4/0	19	1.74	44.2	DFTNT211-4	3528	5250	1.79	45.5	DFTNTB211-4	3814	5676
250	37	1.91	48.4	DFTNT250-4	4150	6176	1.96	49.7	DFTNTB250-4	4463	6642
300	37	2.03	51.6	DFTNT300-4	4917	7317	2.08	52.9	DFTNTB300-4	5251	7814
350	37	2.15	54.7	DFTNT350-4	5653	8413	2.20	55.9	DFTNTB350-4	6007	8939
400	37	2.26	57.5	DFTNT400-4	6376	9489	2.31	58.8	DFTNTB400-4	6747	10041
500	37	2.46	62.6	DFTNT500-4	7829	11651	2.51	63.8	DFTNTB500-4	8233	12252
600	61	2.70	68.6	DFTNT600-4	9354	13920	2.75	69.9	DFTNTB600-4	9796	14579
750	61	3.01	76.4	DFTNT750-4	11672	17370	3.06	77.7	DFTNTB750-4	12164	18102

Conductor		Armored and Sheathed							
Size AWG / kcmil	Strands	Nominal OD		Aluminum			Bronze		
		in	mm	Part Number	Net Weight		Part Number	Net Weight	
					lb/kft	kg/km		lb/kft	kg/km
14	19	0.50	12.8	DFTNTAS4-4	158	235	DFTNTBS4-4	201	300
12	19	0.58	14.7	DFTNTAS6-4	220	327	DFTNTBS6-4	269	400
10	19	0.66	16.7	DFTNTAS10-4	312	465	DFTNTBS10-4	370	551
8	19	0.81	20.7	DFTNTAS16-4	481	716	DFTNTBS16-4	557	828
6	19	0.94	24.0	DFTNTAS26-4	688	1024	DFTNTBS26-4	774	1151
4	19	1.15	29.2	DFTNTAS41-4	1044	1554	DFTNTBS41-4	1153	1715
2	19	1.30	32.9	DFTNTAS66-4	1457	2168	DFTNTBS66-4	1582	2354
1	19	1.43	36.4	DFTNTAS83-4	1802	2681	DFTNTBS83-4	1942	2890
1/0	19	1.53	38.8	DFTNTAS105-4	2158	3211	DFTNTBS105-4	2309	3436
2/0	19	1.64	41.5	DFTNTAS133-4	2589	3852	DFTNTBS133-4	2752	4095
3/0	19	1.82	46.1	DFTNTAS167-4	3236	4815	DFTNTBS167-4	3412	5078
4/0	19	2.01	51.1	DFTNTAS211-4	4037	6008	DFTNTBS211-4	4236	6303
250	37	2.18	55.2	DFTNTAS250-4	4704	7000	DFTNTBS250-4	4921	7323
300	37	2.30	58.5	DFTNTAS300-4	5506	8194	DFTNTBS300-4	5737	8538
350	37	2.42	61.5	DFTNTAS350-4	6274	9337	DFTNTBS350-4	6519	9702
400	37	2.53	64.3	DFTNTAS400-4	7027	10458	DFTNTBS400-4	7285	10841
500	37	2.79	70.9	DFTNTAS500-4	8702	12949	DFTNTBS500-4	8981	13366
600	61	3.03	77.0	DFTNTAS600-4	10306	15337	DFTNTBS600-4	10613	15793
750	61	3.34	84.8	DFTNTAS750-4	12725	18937	DFTNTBS750-4	13066	19445

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.