

Type T/N Drilmar® 90 Control Cable

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. Meets applicable ampacity ratings.

DRILMAR® T/N Insulation:

- Rated at 105 °C.
- UL dual listed as THHN/THWN, 14 AWG and larger.
- UL dual listed as TFFN, 18 AWG and 16 AWG.
- Chemical resistant, rated Gas and Oil Res II, 14 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, 14 AWG and larger.
- Open wiring listing, meeting Impact and Crushing test per UL for Tray Cables, sizes 14 AWG to 10 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 control, indicating, communication, electronic and similar circuits where multiple conductors are required, in circuits rated for 600/1000 volts.

Standards

IEEE 1589

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

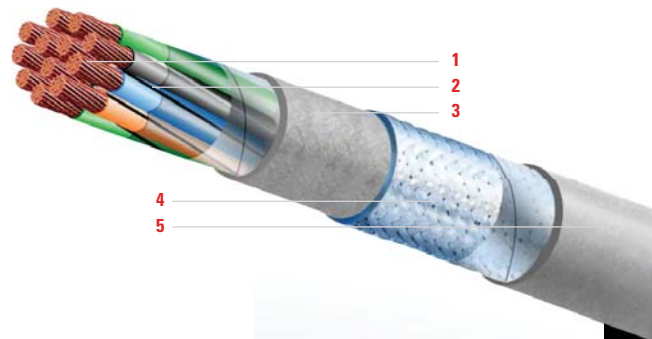
Marine Shipboard Cable.

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: 18 AWG up to 10 AWG.

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 Control Cable, 18 AWG-16 Strands, 600/1000 V

Conductor Number of Conductors	Unarmored					Armored				
	Nominal OD		Part Number	Net Weight		Nominal OD		Bronze		
	in	mm		lb/kft	kg/km	in	mm	Part Number	lb/kft	kg/km
2	0.27	6.8	DC18TNT-2	35	52	0.32	8.1	DC18TNTB-2	82	123
3	0.28	7.1	DC18TNT-3	44	65	0.33	8.4	DC18TNTB-3	93	139
4	0.30	7.7	DC18TNT-4	54	80	0.35	9.0	DC18TNTB-4	107	159
7	0.35	9.0	DC18TNT-7	81	120	0.40	10.2	DC18TNTB-7	142	212
10	0.44	11.2	DC18TNT-10	112	167	0.49	12.4	DC18TNTB-10	187	279
14	0.48	12.1	DC18TNT-14	146	217	0.53	13.3	DC18TNTB-14	227	338
16	0.50	12.7	DC18TNT-16	163	243	0.55	13.9	DC18TNTB-16	248	370
19	0.56	14.1	DC18TNT-19	204	303	0.61	15.4	DC18TNTB-19	298	443
24	0.64	16.2	DC18TNT-24	266	396	0.69	17.4	DC18TNTB-24	373	556
30	0.68	17.2	DC18TNT-30	303	451	0.73	18.5	DC18TNTB-30	417	620
37	0.73	18.5	DC18TNT-37	362	539	0.78	19.7	DC18TNTB-37	484	721
40	0.78	19.8	DC18TNT-40	409	609	0.83	21.1	DC18TNTB-40	540	804

Conductor Size AWG / kcmil	Armored and Sheathed							
	Nominal OD		Aluminum			Bronze		
	in	mm	Part Number	Net Weight		Part Number	Net Weight	
			lb/kft	kg/km		lb/kft	kg/km	
2	0.41	10.3	DC18TNTAS-2	80	119	DC18TNTBS-2	113	168
3	0.42	10.7	DC18TNTAS-3	91	135	DC18TNTBS-3	125	186
4	0.44	11.3	DC18TNTAS-4	104	154	DC18TNTBS-4	141	209
7	0.49	12.5	DC18TNTAS-7	138	205	DC18TNTBS-7	180	268
10	0.61	15.5	DC18TNTAS-10	197	293	DC18TNTBS-10	249	371
14	0.65	16.4	DC18TNTAS-14	237	352	DC18TNTBS-14	293	436
16	0.67	17.0	DC18TNTAS-16	258	384	DC18TNTBS-16	317	472
19	0.73	18.4	DC18TNTAS-19	308	458	DC18TNTBS-19	373	555
24	0.81	20.5	DC18TNTAS-24	383	570	DC18TNTBS-24	458	681
30	0.89	22.5	DC18TNTAS-30	459	683	DC18TNTBS-30	538	801
37	0.94	23.8	DC18TNTAS-37	529	787	DC18TNTBS-37	613	913
40	0.99	25.1	DC18TNTAS-40	583	873	DC18TNTBS-40	677	1007

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 Control Cable, 16 AWG-26 Strands, 600/1000 V

MNIU(3) / MNIA(3) / MNIB(3)

Conductor	Unarmored					Armored				
	Nominal OD		Part Number	Net Weight		Nominal OD		Bronze		
	in	mm		lb/kft	kg/km	in	mm	Part Number	lb/kft	kg/km
2	0.29	7.4	DC16TNT-2	49	73	0.34	8.7	DC16TNTB-2	100	149
3	0.31	7.8	DC16TNT-3	57	85	0.36	9.0	DC16TNTB-3	111	165
4	0.33	8.4	DC16TNT-4	70	105	0.38	9.7	DC16TNTB-4	128	191
7	0.39	9.9	DC16TNT-7	109	162	0.44	11.2	DC16TNTB-7	176	262
10	0.49	12.4	DC16TNT-10	152	226	0.54	13.6	DC16TNTB-10	235	349
14	0.56	14.2	DC16TNT-14	216	321	0.61	15.4	DC16TNTB-14	310	462
16	0.59	14.9	DC16TNT-16	244	363	0.64	16.2	DC16TNTB-16	343	511
19	0.62	15.6	DC16TNT-19	278	414	0.67	16.9	DC16TNTB-19	382	569
24	0.71	18.0	DC16TNT-24	363	540	0.76	19.2	DC16TNTB-24	482	717
30	0.75	19.2	DC16TNT-30	418	623	0.80	20.4	DC16TNTB-30	545	811
37	0.81	20.6	DC16TNT-37	503	749	0.86	21.9	DC16TNTB-37	639	951
40	0.91	23.2	DC16TNT-40	601	895	0.96	24.4	DC16TNTB-40	753	1121

Conductor	Armored and Sheathed							
	Nominal OD		Aluminum			Bronze		
	in	mm	Part Number	lb/kft	kg/km	Part Number	lb/kft	kg/km
2	0.43	10.9	DC16TNTAS-2	97	145	DC16TNTBS-2	133	198
3	0.45	11.3	DC16TNTAS-3	107	160	DC16TNTBS-3	144	215
4	0.47	12.0	DC16TNTAS-4	124	185	DC16TNTBS-4	164	245
7	0.56	14.2	DC16TNTAS-7	186	276	DC16TNTBS-7	232	346
10	0.66	16.7	DC16TNTAS-10	245	364	DC16TNTBS-10	302	450
14	0.73	18.5	DC16TNTAS-14	320	476	DC16TNTBS-14	386	574
16	0.76	19.2	DC16TNTAS-16	353	525	DC16TNTBS-16	422	627
19	0.79	19.9	DC16TNTAS-19	392	583	DC16TNTBS-19	464	690
24	0.92	23.3	DC16TNTAS-24	525	782	DC16TNTBS-24	608	904
30	0.96	24.5	DC16TNTAS-30	590	878	DC16TNTBS-30	678	1009
37	1.02	25.9	DC16TNTAS-37	687	1022	DC16TNTBS-37	781	1162
40	1.12	28.5	DC16TNTAS-40	805	1197	DC16TNTBS-40	910	1354

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

Type T/N Control Cable, 14 AWG-19 Strands, 600/1000 V

MNIU(4) / MNIA(4) / MNIB(4)

Conductor Number of Conductors	Unarmored					Armored				
	Nominal OD		Part Number	Net Weight		Nominal OD		Bronze		
	in	mm		lb/kft	kg/km	in	mm	Part Number	lb/kft	kg/km
2	0.32	8.1	DC14TNT-2	64	95	0.37	9.3	DC14TNTB-2	119	177
3	0.33	8.5	DC14TNT-3	76	113	0.38	9.8	DC14TNTB-3	134	199
4	0.36	9.2	DC14TNT-4	95	141	0.41	10.5	DC14TNTB-4	158	235
7	0.43	10.9	DC14TNT-7	150	224	0.48	12.1	DC14TNTB-7	224	333
10	0.57	14.5	DC14TNT-10	226	337	0.62	15.7	DC14TNTB-10	323	480
14	0.62	15.6	DC14TNT-14	298	444	0.67	16.9	DC14TNTB-14	402	598
16	0.65	16.4	DC14TNT-16	338	503	0.70	17.7	DC14TNTB-16	447	666
19	0.68	17.3	DC14TNT-19	389	578	0.73	18.5	DC14TNTB-19	503	749
24	0.78	19.9	DC14TNT-24	507	755	0.83	21.2	DC14TNTB-24	638	950
30	0.88	22.3	DC14TNT-30	623	927	0.93	23.5	DC14TNTB-30	769	1145
37	0.94	23.9	DC14TNT-37	749	1115	0.99	25.2	DC14TNTB-37	906	1349
40	1.01	25.7	DC14TNT-40	839	1249	1.06	26.9	DC14TNTB-40	1007	1499

Conductor Size AWG / kcmil	Armored and Sheathed							
	Nominal OD		Aluminum			Bronze		
	in	mm	Part Number	Net Weight		Part Number	Net Weight	
			lb/kft	kg/km		lb/kft	kg/km	
2	0.46	11.6	DC14TNTAS-2	115	172	DC14TNTBS-2	154	229
3	0.47	12.0	DC14TNTAS-3	130	193	DC14TNTBS-3	170	253
4	0.50	12.8	DC14TNTAS-4	153	228	DC14TNTBS-4	197	293
7	0.60	15.2	DC14TNTAS-7	233	347	DC14TNTBS-7	284	423
10	0.74	18.8	DC14TNTAS-10	332	495	DC14TNTBS-10	399	594
14	0.79	19.9	DC14TNTAS-14	412	613	DC14TNTBS-14	484	720
16	0.82	20.8	DC14TNTAS-16	457	680	DC14TNTBS-16	533	793
19	0.89	22.6	DC14TNTAS-19	546	812	DC14TNTBS-19	625	930
24	0.99	25.2	DC14TNTAS-24	685	1019	DC14TNTBS-24	776	1155
30	1.09	27.6	DC14TNTAS-30	819	1219	DC14TNTBS-30	921	1370
37	1.15	29.3	DC14TNTAS-37	959	1427	DC14TNTBS-37	1067	1588
40	1.22	31.0	DC14TNTAS-40	1062	1581	DC14TNTBS-40	1179	1754

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 Control Cable, 12 AWG-19 Strands, 600/1000 V

MNIU(6) / MNIA(6) / MNIB(6)

Conductor	Unarmored					Armored				
	Nominal OD		Part Number	Net Weight		Nominal OD		Bronze		
	in	mm		lb/kft	kg/km	in	mm	Part Number	lb/kft	kg/km
2	0.36	9.0	DC12TNT-2	86	127	0.41	10.3	DC12TNTB-2	147	219
3	0.38	9.5	DC12TNT-3	105	156	0.43	10.8	DC12TNTB-3	170	253
4	0.41	10.4	DC12TNT-4	133	198	0.46	11.7	DC12TNTB-4	203	303
7	0.49	12.3	DC12TNT-7	215	319	0.54	13.6	DC12TNTB-7	297	442
10	0.65	16.4	DC12TNT-10	320	476	0.70	17.7	DC12TNTB-10	429	638
14	0.70	17.8	DC12TNT-14	427	636	0.75	19.0	DC12TNTB-14	545	810
16	0.74	18.7	DC12TNT-16	486	723	0.79	20.0	DC12TNTB-16	609	907
19	0.78	19.7	DC12TNT-19	561	835	0.83	21.0	DC12TNTB-19	691	1028
24	0.94	23.8	DC12TNT-24	768	1142	0.99	25.1	DC12TNTB-24	924	1375
30	1.00	25.4	DC12TNT-30	897	1335	1.05	26.6	DC12TNTB-30	1063	1582
37	1.08	27.3	DC12TNT-37	1084	1613	1.13	28.6	DC12TNTB-37	1263	1879
40	1.16	29.4	DC12TNT-40	1212	1803	1.21	30.6	DC12TNTB-40	1403	2088

Conductor	Armored and Sheathed							
	Nominal OD		Part Number	Aluminum		Part Number	Bronze	
	in	mm		Net Weight	Net Weight		lb/kft	kg/km
2	0.50	12.6	DC12TNTAS-2	143	212	DC12TNTBS-2	185	276
3	0.52	13.1	DC12TNTAS-3	164	245	DC12TNTBS-3	209	312
4	0.58	14.7	DC12TNTAS-4	213	317	DC12TNTBS-4	262	390
7	0.66	16.6	DC12TNTAS-7	307	457	DC12TNTBS-7	364	542
10	0.82	20.7	DC12TNTAS-10	439	653	DC12TNTBS-10	514	765
14	0.91	23.1	DC12TNTAS-14	588	875	DC12TNTBS-14	669	996
16	0.95	24.0	DC12TNTAS-16	654	973	DC12TNTBS-16	740	1101
19	0.99	25.0	DC12TNTAS-19	737	1097	DC12TNTBS-19	827	1231
24	1.15	29.1	DC12TNTAS-24	976	1453	DC12TNTBS-24	1084	1614
30	1.21	30.7	DC12TNTAS-30	1118	1663	DC12TNTBS-30	1233	1835
37	1.29	32.6	DC12TNTAS-37	1320	1964	DC12TNTBS-37	1444	2149
40	1.37	34.7	DC12TNTAS-40	1464	2178	DC12TNTBS-40	1597	2376

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

Type T/N Control Cable, 10 AWG-19 Strands, 600/1000 V

Conductor Number of Conductors	Unarmored					Armored				
	Nominal OD		Part Number	Net Weight		Nominal OD		Bronze		
	in	mm		lb/kft	kg/km	in	mm	Part Number	lb/kft	kg/km
2	0.42	10.7	DC10TNT-2	126	188	0.47	12.0	DC10TNTB-2	199	295
3	0.45	11.3	DC10TNT-3	165	246	0.50	12.6	DC10TNTB-3	241	359
4	0.49	12.4	DC10TNT-4	211	315	0.54	13.7	DC10TNTB-4	295	439
7	0.61	15.6	DC10TNT-7	344	512	0.66	16.9	DC10TNTB-7	448	666
10	0.78	19.7	DC10TNT-10	485	721	0.83	21.0	DC10TNTB-10	615	915
14	0.89	22.5	DC10TNT-14	685	1020	0.94	23.7	DC10TNTB-14	833	1240
16	0.93	23.6	DC10TNT-16	779	1160	0.98	24.9	DC10TNTB-16	934	1391
19	0.98	24.9	DC10TNT-19	899	1338	1.03	26.2	DC10TNTB-19	1062	1581
24	1.13	28.8	DC10TNT-24	1173	1746	1.18	30.0	DC10TNTB-24	1361	2026
30	1.21	30.8	DC10TNT-30	1377	2049	1.26	32.0	DC10TNTB-30	1577	2348
37	1.31	33.2	DC10TNT-37	1671	2487	1.36	34.4	DC10TNTB-37	1887	2808
40	1.41	35.7	DC10TNT-40	1869	2782	1.46	37.0	DC10TNTB-40	2102	3127

Conductor Size AWG / kcmil	Armored and Sheathed							
	Nominal OD		Aluminum			Bronze		
	in	mm	Part Number	Net Weight		Part Number	Net Weight	
				lb/kft	kg/km		lb/kft	kg/km
2	0.59	15.0	DC10TNTAS-2	208	310	DC10TNTBS-2	258	385
3	0.62	15.6	DC10TNTAS-3	251	374	DC10TNTBS-3	304	453
4	0.66	16.7	DC10TNTAS-4	305	453	DC10TNTBS-4	362	539
7	0.78	19.9	DC10TNTAS-7	458	681	DC10TNTBS-7	529	788
10	0.99	25.1	DC10TNTAS-10	661	984	DC10TNTBS-10	751	1118
14	1.10	27.8	DC10TNTAS-14	883	1315	DC10TNTBS-14	986	1467
16	1.14	29.0	DC10TNTAS-16	986	1468	DC10TNTBS-16	1094	1628
19	1.19	30.2	DC10TNTAS-19	1116	1661	DC10TNTBS-19	1229	1829
24	1.34	34.1	DC10TNTAS-24	1421	2115	DC10TNTBS-24	1551	2308
30	1.42	36.1	DC10TNTAS-30	1640	2441	DC10TNTBS-30	1779	2648
37	1.52	38.5	DC10TNTAS-37	1953	2906	DC10TNTBS-37	2103	3129
40	1.62	41.1	DC10TNTAS-40	2172	3232	DC10TNTBS-40	2333	3471

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.