

## Power/Distribution Cable Multiconductor Type T/N, 600/1000 volts

DRILMAR™ 90

Polyvinyl Chloride/Nylon Insulated  
Drilling Rig and Marine Cable

### 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
- ▶ Cables meet applicable requirements of IEC 92-350

### Application

These 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 600/1000 volts.

### Standards

**IEEE 1580-2001:** Recommended Practice for Marine Cable for Use on Shipboard and Fixed and Floating Platforms

**IEEE 45-2002:** Recommended Practice for Electrical Installations on Shipboard Cable

**UL 1309-1995:** 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/N90
- ▶ ABS, American Bureau of Shipping
- ▶ DNV, Det Norske Veritas
- ▶ LRS, Lloyd's Register of Shipping
- ▶ United States Coast Guard

### Engineering Information

#### Unarmored Design

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

Sizes: 14 AWG up to 750 kcmil.

**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. See section 5, page 5.2.

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

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

#### Armored Design

*Unarmored Design (see above description)  
Plus:*

**Armor:** Standard - Aluminum.  
Optional - Bronze or Tinned Copper Braid per IEEE, UL, and CSA.

#### Armored and Sheathed Design

*Armored Design (see above description)  
Plus:*

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



## Power / Distribution Cable Two Conductor

### Power/Distribution Cable Two Conductor Type T/N, 600/1000 volts

DRILMAR™ 90 ♦ Polyvinyl Chloride/Nylon Insulated ♦ Drilling Rig and Marine Cable

Catalog Code DDTNT

DNIU/DNIA/DNIB

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Conductor		Unarmored					Armored										
Size AWG/ kcmil	Strand Count						Aluminum				Tinned Copper			Bronze			
		Part No*	Nominal OD		Net Weight		Nominal OD		Part No*		Net Weight		Part No*		Net Weight		
		suffix	inches	mm	Lbs/Mft	kg/km	inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km
14	19	4-2	0.32	8.1	65	97	0.37	9.3	A4-2	82	122	T4-2	122	182	B4-2	121	180
12	19	6-2	0.36	9.0	88	130	0.41	10.3	A6-2	107	158	T6-2	151	225	B6-2	149	222
10	19	10-2	0.42	10.7	128	191	0.47	12.0	A10-2	151	224	T10-2	203	302	B10-2	201	299
8	19	16-2	0.56	14.1	215	319	0.61	15.4	A16-2	244	362	T16-2	312	464	B16-2	309	459
6	19	26-2	0.63	16.0	300	446	0.68	17.2	A26-2	332	495	T26-2	409	609	B26-2	406	604
4	19	41-2	0.77	19.5	454	675	0.82	20.8	A41-2	493	734	T41-2	586	873	B41-2	582	867
2	19	66-2	0.93	23.5	694	1033	0.98	24.8	A66-2	741	1103	T66-2	853	1270	B66-2	848	1263
1	19	83-2	1.04	26.4	871	1296	1.09	27.7	A83-2	924	1375	T83-2	1049	1561	B83-2	1044	1553
1/0	19	105-2	1.12	28.5	1063	1582	1.17	29.7	A105-2	1120	1667	T105-2	1255	1867	B105-2	1249	1859
2/0	19	133-2	1.21	30.7	1283	1910	1.26	32.0	A133-2	1345	2001	T133-2	1490	2217	B133-2	1484	2208
3/0	19	167-2	1.31	33.2	1562	2324	1.36	34.5	A167-2	1628	2423	T167-2	1785	2656	B167-2	1778	2646
4/0	19	211-2	1.42	36.1	1912	2845	1.47	37.4	A211-2	1984	2952	T211-2	2154	3205	B211-2	2147	3194
250	37	250-2	1.56	39.5	2254	3355	1.61	40.8	A250-2	2333	3472	T250-2	2519	3749	B250-2	2511	3737
300	37	300-2	1.72	43.8	2771	4124	1.77	45.0	A300-2	2858	4254	T300-2	3064	4560	B300-2	3055	4546
350	37	350-2	1.82	46.3	3168	4715	1.87	47.5	A350-2	3260	4852	T350-2	3477	5175	B350-2	3468	5160
400	37	400-2	1.91	48.6	3565	5306	1.96	49.9	A400-2	3662	5450	T400-2	3890	5789	B400-2	3880	5774
500	37	500-2	2.08	52.8	4345	6466	2.13	54.1	A500-2	4450	6622	T500-2	4697	6990	B500-2	4686	6974
600	61	600-2	2.28	57.8	5183	7713	2.33	59.1	A600-2	5298	7884	T600-2	5568	8286	B600-2	5556	8269
750	61	750-2	2.48	63.0	6333	9424	2.53	64.3	A750-2	6458	9610	T750-2	6752	10049	B750-2	6739	10029
Conductor		Armored & Sheathed															
Size AWG/ kcmil	Strand Count	Nominal OD		Aluminum			Tinned Copper			Bronze							
				Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight						
		inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km					
14	19	0.46	11.6	AS4-2	120	178	TS4-2	160	238	BS4-2	158	235					
12	19	0.50	12.6	AS6-2	147	219	TS6-2	192	286	BS6-2	190	283					
10	19	0.59	15.0	AS10-2	215	320	TS10-2	267	398	BS10-2	265	394					
8	19	0.73	18.4	AS16-2	324	482	TS16-2	392	584	BS16-2	389	579					
6	19	0.80	20.3	AS26-2	422	628	TS26-2	499	742	BS26-2	495	737					
4	19	0.98	24.8	AS41-2	638	949	TS41-2	731	1088	BS41-2	727	1082					
2	19	1.14	28.9	AS66-2	912	1357	TS66-2	1024	1524	BS66-2	1019	1516					
1	19	1.25	31.8	AS83-2	1113	1656	TS83-2	1238	1842	BS83-2	1232	1834					
1/0	19	1.33	33.8	AS105-2	1322	1967	TS105-2	1457	2168	BS105-2	1451	2159					
2/0	19	1.42	36.0	AS133-2	1561	2323	TS133-2	1706	2539	BS133-2	1700	2529					
3/0	19	1.52	38.6	AS167-2	1860	2768	TS167-2	2017	3002	BS167-2	2010	2991					
4/0	19	1.63	41.4	AS211-2	2234	3325	TS211-2	2404	3578	BS211-2	2397	3567					
250	37	1.83	46.4	AS250-2	2714	4039	TS250-2	2900	4315	BS250-2	2892	4303					
300	37	1.99	50.6	AS300-2	3276	4875	TS300-2	3481	5181	BS300-2	3472	5168					
350	37	2.09	53.1	AS350-2	3699	5505	TS350-2	3916	5828	BS350-2	3907	5814					
400	37	2.18	55.4	AS400-2	4122	6134	TS400-2	4349	6473	BS400-2	4340	6458					
500	37	2.35	59.7	AS500-2	4946	7360	TS500-2	5193	7729	BS500-2	5183	7713					
600	61	2.55	64.7	AS600-2	5838	8688	TS600-2	6109	9091	BS600-2	6097	9073					
750	61	2.81	71.4	AS750-2	7211	10732	TS750-2	7506	11170	BS750-2	7493	11151					

Data provided is subject to manufacturing tolerances.



1074 Kenran Industrial Dr.  
St. Louis, MO 63137  
Phone: 1-800-381-9968

## Power/Distribution Cable Three Conductor

### Power/Distribution Cable Three Conductor Type T/N, 600/1000 volts

DRILMAR™ 90 ♦ Polyvinyl Chloride/Nylon Insulated ♦ Drilling Rig and Marine Cable

Catalog Code DTTNT

TNIU/TNIA/TNIB

Conductor		Unarmored					Armored										
Size AWG/ kcmil	Strand Count	Part No*		Nominal OD		Net Weight		Aluminum			Tinned Copper			Bronze			
		suffix	inches	mm	Lbs/Mft	kg/km	inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km
		14	19	4-3	0.33	8.5	77	115	0.38	9.8	A4-3	95	142	T4-3	138	205	B4-3
12	19	6-3	0.38	9.5	107	159	0.43	10.8	A6-3	127	189	T6-3	174	259	B6-3	172	256
10	19	10-3	0.45	11.3	167	249	0.50	12.6	A10-3	191	284	T10-3	246	367	B10-3	244	363
8	19	16-3	0.59	14.9	279	415	0.64	16.2	A16-3	309	460	T16-3	381	567	B16-3	378	563
6	19	26-3	0.67	17.0	397	591	0.72	18.2	A26-3	432	643	T26-3	513	764	B26-3	510	759
4	19	41-3	0.82	20.8	610	908	0.87	22.0	A41-3	652	970	T41-3	751	1117	B41-3	747	1111
2	19	66-3	0.99	25.0	935	1392	1.04	26.3	A66-3	986	1467	T66-3	1105	1644	B66-3	1100	1636
1	19	83-3	1.11	28.2	1177	1752	1.16	29.4	A83-3	1234	1836	T83-3	1367	2034	B83-3	1361	2026
1/0	19	105-3	1.20	30.4	1430	2129	1.25	31.6	A105-3	1491	2219	T105-3	1635	2433	B105-3	1628	2423
2/0	19	133-3	1.29	32.8	1743	2594	1.34	34.0	A133-3	1808	2691	T133-3	1963	2921	B133-3	1956	2911
3/0	19	167-3	1.40	35.5	2134	3176	1.45	36.8	A167-3	2205	3281	T167-3	2372	3530	B167-3	2365	3519
4/0	19	211-3	1.52	38.6	2634	3920	1.57	39.8	A211-3	2711	4034	T211-3	2892	4304	B211-3	2884	4292
250	37	250-3	1.73	43.8	3204	4769	1.78	45.1	A250-3	3292	4898	T250-3	3497	5205	B250-3	3488	5191
300	37	300-3	1.84	46.7	3761	5597	1.89	48.0	A300-3	3854	5735	T300-3	4073	6061	B300-3	4063	6047
350	37	350-3	1.94	49.4	4315	6422	1.99	50.6	A350-3	4413	6568	T350-3	4645	6912	B350-3	4635	6897
400	37	400-3	2.04	51.9	4870	7248	2.09	53.2	A400-3	4973	7401	T400-3	5216	7763	B400-3	5206	7747
500	37	500-3	2.22	56.4	5964	8875	2.27	57.7	A500-3	6076	9041	T500-3	6340	9435	B500-3	6328	9417
600	61	600-3	2.44	61.9	7111	10583	2.49	63.1	A600-3	7234	10765	T600-3	7523	11196	B600-3	7511	11177
750	61	750-3	2.66	67.5	8822	13128	2.71	68.7	A750-3	8955	13327	T750-3	9271	13796	B750-3	9257	13776

Conductor		Armored & Sheathed										
Size AWG/ kcmil	Strand Count	Nominal OD		Aluminum		Tinned Copper			Bronze			
		inches	mm	Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight	
		suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft
14	19	0.47	12.0	AS4-3	134	200	TS4-3	176	263	BS4-3	175	260
12	19	0.52	13.1	AS6-3	170	252	TS6-3	217	322	BS6-3	215	319
10	19	0.62	15.6	AS10-3	258	384	TS10-3	314	467	BS10-3	311	463
8	19	0.76	19.3	AS16-3	394	586	TS16-3	466	693	BS16-3	463	688
6	19	0.88	22.3	AS26-3	561	834	TS26-3	642	956	BS26-3	639	950
4	19	1.03	26.1	AS41-3	805	1197	TS41-3	904	1345	BS41-3	899	1338
2	19	1.20	30.4	AS66-3	1166	1735	TS66-3	1285	1912	BS66-3	1279	1904
1	19	1.32	33.5	AS83-3	1433	2133	TS83-3	1567	2332	BS83-3	1561	2323
1/0	19	1.41	35.7	AS105-3	1705	2537	TS105-3	1848	2751	BS105-3	1842	2741
2/0	19	1.50	38.1	AS133-3	2037	3032	TS133-3	2192	3262	BS133-3	2185	3252
3/0	19	1.61	40.8	AS167-3	2451	3647	TS167-3	2618	3896	BS167-3	2611	3885
4/0	19	1.79	45.4	AS211-3	3083	4588	TS211-3	3264	4858	BS211-3	3256	4846
250	37	2.00	50.7	AS250-3	3710	5520	TS250-3	3915	5827	BS250-3	3906	5813
300	37	2.11	53.6	AS300-3	4297	6395	TS300-3	4516	6721	BS300-3	4507	6707
350	37	2.21	56.2	AS350-3	4880	7262	TS350-3	5111	7607	BS350-3	5101	7592
400	37	2.31	58.8	AS400-3	5462	8128	TS400-3	5705	8490	BS400-3	5694	8474
500	37	2.49	63.3	AS500-3	6604	9827	TS500-3	6868	10221	BS500-3	6856	10203
600	61	2.71	68.7	AS600-3	7809	11622	TS600-3	8099	12052	BS600-3	8086	12034
750	61	2.99	75.8	AS750-3	9758	14522	TS750-3	10074	14991	BS750-3	10060	14971

Data provided is subject to manufacturing tolerances.



## Power / Distribution Cable Four Conductor

### Power/Distribution Cable Four Conductor Type T/N, 600/1000 volts

DRILMAR™ 90 ♦ Polyvinyl Chloride/Nylon Insulated ♦ Drilling Rig and Marine Cable

Catalog Code DFTNT

FNIU/FNIA/FNIB

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Conductor		Unarmored					Armored											
Size AWG/ kcmil	Strand Count	Part No*		Nominal OD		Net Weight		Nominal OD		Aluminum			Tinned Copper			Bronze		
		suffix	inches	mm	Lbs/Mft	kg/km	inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	
		14	19	4-4	0.36	9.2	97	144	0.41	10.5	A4-4	116	173	T4-4	162	241	B4-4	160
12	19	6-4	0.41	10.4	135	202	0.46	11.7	A6-4	157	234	T6-4	208	310	B6-4	206	306	
10	19	10-4	0.49	12.4	214	319	0.54	13.7	A10-4	240	357	T10-4	300	447	B10-4	298	443	
8	19	16-4	0.64	16.4	357	531	0.69	17.6	A16-4	390	581	T16-4	469	698	B16-4	465	693	
6	19	26-4	0.73	18.6	512	761	0.78	19.9	A26-4	549	817	T26-4	638	950	B26-4	634	944	
4	19	41-4	0.94	23.9	824	1226	0.99	25.1	A41-4	872	1297	T41-4	985	1466	B41-4	980	1458	
2	19	66-4	1.09	27.6	1206	1794	1.14	28.8	A66-4	1261	1876	T66-4	1391	2070	B66-4	1386	2062	
1	19	83-4	1.22	31.0	1521	2264	1.27	32.3	A83-4	1583	2356	T83-4	1730	2575	B83-4	1724	2565	
1/0	19	105-4	1.32	33.5	1857	2764	1.37	34.8	A105-4	1924	2863	T105-4	2082	3098	B105-4	2075	3088	
2/0	19	133-4	1.43	36.2	2266	3372	1.48	37.5	A133-4	2338	3479	T133-4	2508	3733	B133-4	2501	3722	
3/0	19	167-4	1.55	39.3	2779	4136	1.60	40.5	A167-4	2857	4252	T167-4	3042	4527	B167-4	3034	4515	
4/0	19	211-4	1.74	44.2	3528	5250	1.79	45.5	A211-4	3615	5380	T211-4	3823	5689	B211-4	3814	5676	
250	37	250-4	1.91	48.4	4150	6176	1.96	49.7	A250-4	4246	6319	T250-4	4473	6656	B250-4	4463	6642	
300	37	300-4	2.03	51.6	4917	7317	2.08	52.9	A300-4	5020	7470	T300-4	5262	7830	B300-4	5251	7814	
350	37	350-4	2.15	54.7	5653	8413	2.20	55.9	A350-4	5762	8574	T350-4	6018	8955	B350-4	6007	8939	
400	37	400-4	2.26	57.5	6376	9489	2.31	58.8	A400-4	6490	9658	T400-4	6759	10059	B400-4	6747	10041	
500	37	500-4	2.46	62.6	7829	11651	2.51	63.8	A500-4	7953	11835	T500-4	8245	12271	B500-4	8233	12252	
600	61	600-4	2.70	68.6	9354	13920	2.75	69.9	A600-4	9490	14122	T600-4	9810	14599	B600-4	9796	14579	
750	61	750-4	3.01	76.4	11672	17370	3.06	77.7	A750-4	11823	17594	T750-4	12179	18125	B750-4	12164	18102	

Conductor		Armored & Sheathed										
Size AWG/ kcmil	Strand Count	Nominal OD		Aluminum		Tinned Copper			Bronze			
		inches	mm	Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight	
		inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km
14	19	0.50	12.8	AS4-4	158	235	TS4-4	203	303	BS4-4	201	300
12	19	0.58	14.7	AS6-4	220	327	TS6-4	271	403	BS6-4	269	400
10	19	0.66	16.7	AS10-4	312	465	TS10-4	373	554	BS10-4	370	551
8	19	0.81	20.7	AS16-4	481	716	TS16-4	560	833	BS16-4	557	828
6	19	0.94	24.0	AS26-4	688	1024	TS26-4	778	1157	BS26-4	774	1151
4	19	1.15	29.2	AS41-4	1044	1554	TS41-4	1158	1723	BS41-4	1153	1715
2	19	1.30	32.9	AS66-4	1457	2168	TS66-4	1587	2362	BS66-4	1582	2354
1	19	1.43	36.4	AS83-4	1802	2681	TS83-4	1948	2899	BS83-4	1942	2890
1/0	19	1.53	38.8	AS105-4	2158	3211	TS105-4	2316	3446	BS105-4	2309	3436
2/0	19	1.64	41.5	AS133-4	2589	3852	TS133-4	2759	4106	BS133-4	2752	4095
3/0	19	1.82	46.1	AS167-4	3236	4815	TS167-4	3420	5090	BS167-4	3412	5078
4/0	19	2.01	51.1	AS211-4	4037	6008	TS211-4	4245	6317	BS211-4	4236	6303
250	37	2.18	55.2	AS250-4	4704	7000	TS250-4	4931	7338	BS250-4	4921	7323
300	37	2.30	58.5	AS300-4	5506	8194	TS300-4	5748	8554	BS300-4	5737	8538
350	37	2.42	61.5	AS350-4	6274	9337	TS350-4	6530	9718	BS350-4	6519	9702
400	37	2.53	64.3	AS400-4	7027	10458	TS400-4	7296	10858	BS400-4	7285	10841
500	37	2.79	70.9	AS500-4	8702	12949	TS500-4	8994	13385	BS500-4	8981	13366
600	61	3.03	77.0	AS600-4	10306	15337	TS600-4	10627	15814	BS600-4	10613	15793
750	61	3.34	84.8	AS750-4	12725	18937	TS750-4	13082	19468	BS750-4	13066	19445

Data provided is subject to manufacturing tolerances.



## Power / Distribution Cable Multiconductor

### Power/Distribution Cable Multiconductor Type T/N, 600/1000 volts

DRILMAR™ 90 ♦ Polyvinyl Chloride/Nylon Insulated ♦ Drilling Rig and Marine Cable

Two Conductor Power Cables	
Size AWG/kcmil	Ampacity*
	90°C
14	27
12	36
10	46
8	60
6	79
5	92
4	101
2	137
1	161
1/0	183
2/0	233
3/0	245
4/0	284
250	316
300	354
350	387
400	419
500	479
600	539
750	602

Three Conductor Power Cables	
Size AWG/kcmil	Ampacity*
	90°C
14	24
12	29
10	38
8	48
6	65
5	75
4	83
2	111
1	131
1/0	150
2/0	173
3/0	201
4/0	232
250	259
300	290
350	317
400	342
500	393
600	440
750	494

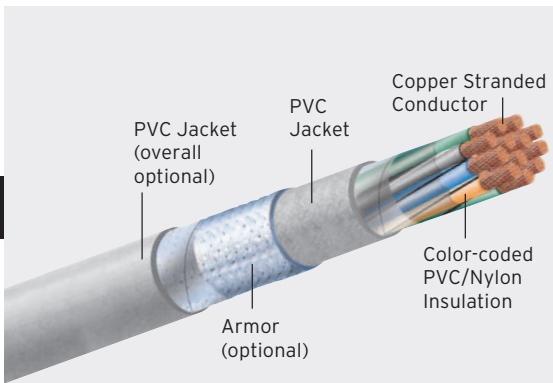
\* Ampacities based on IEEE Std. 45-2002, Table 25, single bank per hanger at 45°C ambient.  
Ampacities for other ambient and conductor temperature values were calculated per IEEE-835-1994, paragraph 3.4

Four Conductor Power Cables	
Size AWG/kcmil	Ampacity*
	90°C
14	19
12	23
10	30
8	38
6	52
5	60
4	66
2	89
1	105
1/0	120
2/0	138
3/0	161
4/0	186
250	207
300	232
350	254
400	274
500	314
600	352
750	395

\* Ampacities based on IEEE Std. 45-2002, Table 25, single bank per hanger at 45°C ambient.  
Adjustments for number of conductors were made per Note on IEEE Std. 45-2002 Table 25.  
NOTE: Current-carrying capacity of four-conductor cables, where one conductor does not act as a normal current carrying conductor (e.g., grounded neutral or grounding conductor), is the same as three-conductor cables.

## Control Cable

2



## Control Cable Type T/N 600/1000 volts

DRILMAR™ 90  
Polyvinyl Chloride/Nylon Insulated  
Drilling Rig and Marine Cable

### 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
- ▶ Cables meet applicable requirements of IEC 92-350

### Application

These 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 1580-2001:** Recommended Practice for Marine Cable for Use on Shipboard and Fixed and Floating Platforms

**IEEE 45-2002:** Recommended Practice for Electrical Installations on Shipboard Cable

**UL 1309-1995:** 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/N90
- ▶ ABS, American Bureau of Shipping
- ▶ DNV, Det Norske Veritas
- ▶ LRS, Lloyd's Register of Shipping
- ▶ United States Coast Guard

### Engineering Information

#### Unarmored Design

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

Sizes: 18 AWG up to 10 AWG.

**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.

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

#### Armored Design

*Unarmored Design (see above description)  
Plus:*

**Armor:** Standard - Aluminum.  
Optional - Bronze or Tinned Copper Braid per IEEE, UL, and CSA.

#### Armored and Sheathed Design

*Armored Design (see above description)  
Plus:*

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



## Control Cable

### Control Cable

### Type T/N

### 600/1000 volts, 16 AWG

DRILMAR™ 90 ♦ Polyvinyl Chloride/Nylon Insulated ♦ Drilling Rig and Marine Cable

Catalog Code DC16TNT

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

Conductor		Unarmored					Armored										
Size AWG	Strand Count								Aluminum			Tinned Copper			Bronze		
16	26	Part No*	Nominal OD		Net Weight		Nominal OD		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight	
Number of Conductors		suffix	inches	mm	Lbs/Mft	kg/km	inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km
2	2		0.29	7.4	49	73	0.34	8.7	A2	65	96	T2	102	152	B2	100	149
3	3		0.31	7.8	57	85	0.36	9.0	A3	73	109	T3	112	167	B3	111	165
4	4		0.33	8.4	70	105	0.38	9.7	A4	88	131	T4	130	194	B4	128	191
7	7		0.39	9.9	109	162	0.44	11.2	A7	130	193	T7	178	265	B7	176	262
10	10		0.49	12.4	152	226	0.54	13.6	A10	177	264	T10	237	353	B10	235	349
14	14		0.56	14.2	216	321	0.61	15.4	A14	245	364	T14	313	466	B14	310	462
16	16		0.59	14.9	244	363	0.64	16.2	A16	274	408	T16	346	515	B16	343	511
19	19		0.62	15.6	278	414	0.67	16.9	A19	310	461	T19	385	573	B19	382	569
24	24		0.71	18.0	363	540	0.76	19.2	A24	400	595	T24	486	723	B24	482	717
30	30		0.75	19.2	418	623	0.80	20.4	A30	457	680	T30	549	817	B30	545	811
37	37		0.81	20.6	503	749	0.86	21.9	A37	545	811	T37	643	957	B37	639	951
40	40		0.91	23.2	601	895	0.96	24.4	A40	648	964	T40	758	1128	B40	753	1121
61	61		1.05	26.6	835	1242	1.10	27.9	A61	888	1322	T61	1014	1509	B61	1009	1501

Conductor		Armored & Sheathed															
Size AWG	Strand Count								Aluminum			Tinned Copper			Bronze		
16	26	Nominal OD		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight			
Number of Conductors		inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km		
2		0.43	10.9	AS2	97	145	TS2	135	200	BS2	133	198					
3		0.45	11.3	AS3	107	160	TS3	146	218	BS3	144	215					
4		0.47	12.0	AS4	124	185	TS4	166	247	BS4	164	245					
7		0.56	14.2	AS7	186	276	TS7	234	349	BS7	232	346					
10		0.66	16.7	AS10	245	364	TS10	305	454	BS10	302	450					
14		0.73	18.5	AS14	320	476	TS14	389	578	BS14	386	574					
16		0.76	19.2	AS16	353	525	TS16	425	632	BS16	422	627					
19		0.79	19.9	AS19	392	583	TS19	467	695	BS19	464	690					
24		0.92	23.3	AS24	525	782	TS24	612	910	BS24	608	904					
30		0.96	24.5	AS30	590	878	TS30	682	1015	BS30	678	1009					
37		1.02	25.9	AS37	687	1022	TS37	785	1168	BS37	781	1162					
40		1.12	28.5	AS40	805	1197	TS40	915	1361	BS40	910	1354					
61		1.26	31.9	AS61	1065	1585	TS61	1191	1773	BS61	1186	1764					

Data provided is subject to manufacturing tolerances.



## Control Cable

### Control Cable

Type T/N

600/1000 volts, 14 AWG

DRILMAR™ 90 + Polyvinyl Chloride/Nylon Insulated + Drilling Rig and Marine Cable

Catalog Code DC14TNT

MNIU(4)/MNI A(4)/MNI B(4)

2

Conductor		Unarmored					Armored											
Size AWG	Strand Count						Aluminum				Tinned Copper			Bronze				
		Part No*	Nominal OD		Net Weight		Nominal OD		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight		
14	19		inches	mm	Lbs/Mft	kg/km	inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	
Number of Conductors		suffix																
2	2	0.32	8.1	64	95	0.37	9.3	A2	81	120	T2	121	180	B2	119	177		
3	3	0.33	8.5	76	113	0.38	9.8	A3	94	139	T3	136	202	B3	134	199		
4	4	0.36	9.2	95	141	0.41	10.5	A4	114	170	T4	160	238	B4	158	235		
7	7	0.43	10.9	150	224	0.48	12.1	A7	173	257	T7	226	336	B7	224	333		
10	10	0.57	14.5	226	337	0.62	15.7	A10	256	381	T10	326	485	B10	323	480		
14	14	0.62	15.6	298	444	0.67	16.9	A14	330	491	T14	405	603	B14	402	598		
16	16	0.65	16.4	338	503	0.70	17.7	A16	372	553	T16	451	671	B16	447	666		
19	19	0.68	17.3	389	578	0.73	18.5	A19	424	631	T19	507	754	B19	503	749		
24	24	0.78	19.9	507	755	0.83	21.2	A24	547	815	T24	643	956	B24	638	950		
30	30	0.88	22.3	623	927	0.93	23.5	A30	668	994	T30	774	1152	B30	769	1145		
37	37	0.94	23.9	749	1115	0.99	25.2	A37	797	1187	T37	911	1356	B37	906	1349		
40	40	1.01	25.7	839	1249	1.06	26.9	A40	891	1325	T40	1012	1507	B40	1007	1499		
61	61	1.16	29.6	1184	1761	1.21	30.8	A61	1243	1849	T61	1383	2057	B61	1376	2048		
Conductor		Armored & Sheathed																
Size AWG	Strand Count						Aluminum				Tinned Copper			Bronze				
		Nominal OD		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight				
14	19		inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km		
Number of Conductors																		
2		0.46	11.6	AS2	115	172	TS2	156	232	BS2	154	229						
3		0.47	12.0	AS3	130	193	TS3	172	256	BS3	170	253						
4		0.50	12.8	AS4	153	228	TS4	199	296	BS4	197	293						
7		0.60	15.2	AS7	233	347	TS7	287	427	BS7	284	423						
10		0.74	18.8	AS10	332	495	TS10	402	599	BS10	399	594						
14		0.79	19.9	AS14	412	613	TS14	487	725	BS14	484	720						
16		0.82	20.8	AS16	457	680	TS16	536	798	BS16	533	793						
19		0.89	22.6	AS19	546	812	TS19	629	935	BS19	625	930						
24		0.99	25.2	AS24	685	1019	TS24	780	1161	BS24	776	1155						
30		1.09	27.6	AS30	819	1219	TS30	926	1377	BS30	921	1370						
37		1.15	29.3	AS37	959	1427	TS37	1072	1596	BS37	1067	1588						
40		1.22	31.0	AS40	1062	1581	TS40	1184	1762	BS40	1179	1754						
61		1.37	34.9	AS61	1437	2139	TS61	1577	2347	BS61	1571	2338						

Data provided is subject to manufacturing tolerances.





## Control Cable

### Control Cable

Type T/N

600/1000 volts, 12 AWG

DRILMAR™ 90 ♦ Polyvinyl Chloride/Nylon Insulated ♦ Drilling Rig and Marine Cable

Catalog Code DC12TNT

MNIU(6)/M Nia(6)/MNIB(6)

Conductor		Unarmored					Armored										
Size AWG	Strand Count								Aluminum			Tinned Copper			Bronze		
		12	19	Part No*	Nominal OD	Net Weight	Nominal OD	Part No*	Net Weight	Part No*	Net Weight	Part No*	Net Weight	Part No*	Net Weight		
Number of Conductors		suffix	inches	mm	Lbs/Mft	kg/km	inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km
2	2	0.36	9.0	86	127	0.41	10.3	A2	104	156	T2	149	222	B2	147	219	
3	3	0.38	9.5	105	156	0.43	10.8	A3	125	186	T3	172	256	B3	170	253	
4	4	0.41	10.4	133	198	0.46	11.7	A4	155	230	T4	206	306	B4	203	303	
7	7	0.49	12.3	215	319	0.54	13.6	A7	240	357	T7	300	446	B7	297	442	
10	10	0.65	16.4	320	476	0.70	17.7	A10	353	526	T10	432	643	B10	429	638	
14	14	0.70	17.8	427	636	0.75	19.0	A14	463	689	T14	548	816	B14	545	810	
16	16	0.74	18.7	486	723	0.79	20.0	A16	524	780	T16	613	913	B16	609	907	
19	19	0.78	19.7	561	835	0.83	21.0	A19	601	894	T19	695	1034	B19	691	1028	
24	24	0.94	23.8	768	1142	0.99	25.1	A24	816	1214	T24	929	1382	B24	924	1375	
30	30	1.00	25.4	897	1335	1.05	26.6	A30	948	1411	T30	1068	1590	B30	1063	1582	
37	37	1.08	27.3	1084	1613	1.13	28.6	A37	1139	1695	T37	1268	1887	B37	1263	1879	
40	40	1.16	29.4	1212	1803	1.21	30.6	A40	1270	1891	T40	1409	2097	B40	1403	2088	
61	61	1.34	33.9	1728	2572	1.39	35.2	A61	1796	2672	T61	1956	2910	B61	1949	2900	

Conductor		Armored & Sheathed												
Size AWG	Strand Count						Aluminum		Tinned Copper			Bronze		
		Nominal OD		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight			
12	19	inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km		
2	2	0.50	12.6	AS2	143	212	TS2	187	279	BS2	185	276		
3	3	0.52	13.1	AS3	164	245	TS3	212	315	BS3	209	312		
4	4	0.58	14.7	AS4	213	317	TS4	264	393	BS4	262	390		
7	7	0.66	16.6	AS7	307	457	TS7	367	546	BS7	364	542		
10	10	0.82	20.7	AS10	439	653	TS10	517	770	BS10	514	765		
14	14	0.91	23.1	AS14	588	875	TS14	673	1001	BS14	669	996		
16	16	0.95	24.0	AS16	654	973	TS16	744	1106	BS16	740	1101		
19	19	0.99	25.0	AS19	737	1097	TS19	831	1237	BS19	827	1231		
24	24	1.15	29.1	AS24	976	1453	TS24	1089	1621	BS24	1084	1614		
30	30	1.21	30.7	AS30	1118	1663	TS30	1238	1843	BS30	1233	1835		
37	37	1.29	32.6	AS37	1320	1964	TS37	1449	2157	BS37	1444	2149		
40	40	1.37	34.7	AS40	1464	2178	TS40	1603	2385	BS40	1597	2376		
61	61	1.55	39.2	AS61	2016	3000	TS61	2176	3238	BS61	2169	3228		

Data provided is subject to manufacturing tolerances.



## Control Cable

### Control Cable

Type T/N

600/1000 volts, 10 AWG

DRILMAR™ 90 ♦ Polyvinyl Chloride/Nylon Insulated ♦ Drilling Rig and Marine Cable

2

### Catalog Code DC10TNT

Conductor		Unarmored					Armored										
Size AWG	Strand Count						Aluminum					Tinned Copper			Bronze		
10	19	Part No*	Nominal OD		Net Weight		Nominal OD		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight	
Number of Conductors		suffix	inches	mm	Lbs/Mft	kg/km	inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km
2	2		0.42	10.7	126	188	0.47	12.0	A2	148	221	T2	201	299	B2	199	295
3	3		0.45	11.3	165	246	0.50	12.6	A3	188	280	T3	244	363	B3	241	359
4	4		0.49	12.4	211	315	0.54	13.7	A4	237	353	T4	297	443	B4	295	439
7	7		0.61	15.6	344	512	0.66	16.9	A7	376	560	T7	451	671	B7	448	666
10	10		0.78	19.7	485	721	0.83	21.0	A10	525	781	T10	619	921	B10	615	915
14	14		0.89	22.5	685	1020	0.94	23.7	A14	731	1087	T14	838	1247	B14	833	1240
16	16		0.93	23.6	779	1160	0.98	24.9	A16	827	1231	T16	939	1398	B16	934	1391
19	19		0.98	24.9	899	1338	1.03	26.2	A19	949	1413	T19	1068	1589	B19	1062	1581
24	24		1.13	28.8	1173	1746	1.18	30.0	A24	1231	1832	T24	1367	2035	B24	1361	2026
30	30		1.21	30.8	1377	2049	1.26	32.0	A30	1438	2141	T30	1584	2357	B30	1577	2348
37	37		1.31	33.2	1671	2487	1.36	34.4	A37	1737	2585	T37	1894	2818	B37	1887	2808
40	40		1.41	35.7	1869	2782	1.46	37.0	A40	1941	2888	T40	2109	3138	B40	2102	3127
61	61		1.63	41.5	2683	3992	1.68	42.7	A61	2765	4115	T61	2960	4405	B61	2952	4393
Conductor		Armored & Sheathed															
Size AWG	Strand Count						Aluminum					Tinned Copper			Bronze		
10	19	Nominal OD		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight		Part No*	Net Weight			
Number of Conductors		inches	mm	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km	suffix	Lbs/Mft	kg/km		
2		0.59	15.0	AS2	208	310	TS2	261	388	BS2	258	385					
3		0.62	15.6	AS3	251	374	TS3	307	456	BS3	304	453					
4		0.66	16.7	AS4	305	453	TS4	365	543	BS4	362	539					
7		0.78	19.9	AS7	458	681	TS7	533	793	BS7	529	788					
10		0.99	25.1	AS10	661	984	TS10	755	1124	BS10	751	1118					
14		1.10	27.8	AS14	883	1315	TS14	990	1474	BS14	986	1467					
16		1.14	29.0	AS16	986	1468	TS16	1099	1635	BS16	1094	1628					
19		1.19	30.2	AS19	1116	1661	TS19	1234	1837	BS19	1229	1829					
24		1.34	34.1	AS24	1421	2115	TS24	1557	2317	BS24	1551	2308					
30		1.42	36.1	AS30	1640	2441	TS30	1785	2657	BS30	1779	2648					
37		1.52	38.5	AS37	1953	2906	TS37	2110	3139	BS37	2103	3129					
40		1.62	41.1	AS40	2172	3232	TS40	2340	3482	BS40	2333	3471					
61		1.90	48.3	AS61	3136	4667	TS61	3331	4957	BS61	3322	4944					



1074 Kenran Industrial Dr.  
 St. Louis, MO 63137  
 Phone: 1-800-381-9968

## Control Cable

### Control Cable Type T/N 600/1000 volts

DRILMAR™ 90 ♦ Polyvinyl Chloride/Nylon Insulated ♦ Drilling Rig and Marine Cable

Number of Conductors	Ampacity*				
	Size 18 AWG	Size 16 AWG	Size 14 AWG	Size 12 AWG	Size 10 AWG
	90°C	90°C	90°C	90°C	90°C
2	13	18	27	36	46
3	11	15	24	29	38
4	9	12	19	23	30
5	9	12	19	23	30
6	9	12	19	23	30
7	8	11	17	20	27
8	8	11	17	20	27
9	8	11	17	20	27
10	6	8	12	15	19
12	6	8	12	15	19
14	6	8	12	15	19
16	6	8	12	15	19
18	6	8	12	15	19
19	6	8	12	15	19
20	6	8	12	15	19
22	5	7	11	13	17
24	5	7	11	13	17
30	5	7	11	13	17
37	4	6	10	12	15
44	4	5	8	10	13
45	4	5	8	10	13
60	4	5	8	10	13
91	4	5	8	10	13

\* Ampacities based on IEEE Std. 45, Table 25, single bank per hanger at 45°C ambient.