

Type LS Drilmar® Signal & Instrumentation

HF XLPE Insulated, SHF1 Jacketed, Drilling Rig and Marine Cable, 150/250 V

CME[®]
wire and cable

A Viakable Company

Features

Engineered for easiest installation.

Maximum conductor operating temperature: 90 °C as per IEC.

DRILMAR® HF XLPE Insulation:

- Low Smoke and Halogen Free XLPE meeting IEC 60092-360

- Rated at 90 °C.

SHF1 Jacket:

- Low Smoke and Halogen Free Polyolefin meeting IEC 60092-360

Completed cable offers superior flame resistance meeting:

- 7IEC 60332-1 and IEC 60332-3-22 Category A.
- Low smoke as per IEC 61034-2
- Halogen free as per IEC 60754-1.

Application

DRILMAR® Type LS cables are for use in signal transmission application where twisted groups of conductors are desired, also with overall or individual shielding to prevent electrostatic and/or electromagnetic interference.

Typical applications include: tank level indicators, fire and gas protection systems, communication systems, CO₂ systems, and smoke detectors.

Standards

IEC 60092-350

General construction and test methods of power, control and instrumentation cables for shipboard and offshore applications.

IEC 60092-351

Insulating materials for shipboard and offshore units, power, control, instrumentation, telecommunication and data cables.

IEC 60092-376

Cables for control and instrumentation circuits 150/250 V (300 V).

IEC 60092-359

Sheathing materials for shipboard power and telecommunication cables.

Approvals

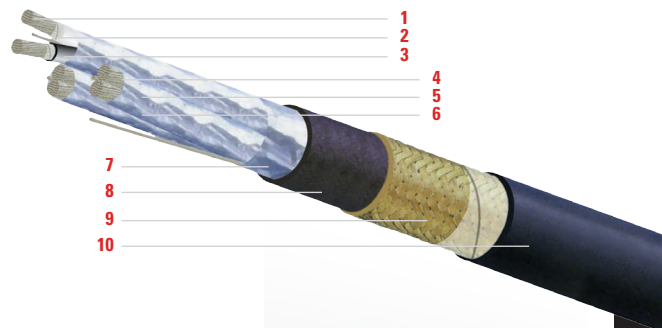
- Intertek, as Type HF XLPE/SHF1
- ABS, American Bureau of Shipping.
- DNV, Det Norske Veritas
- LRS, Lloyd's Register of Shipping.

Engineering Information

1. Conductor: Annealed flexible Tin Coated Copper, Class 5 as per IEC 60228.

Sizes: 20 AWG up to 14 AWG.

2. Separator Tape: Suitable tape as required.



3. Insulation: Low Smoke Halogen Free flame retardent crosslinked polyethylene (HF XLPE).

4. Assembly: Insulated conductors twisted in pairs or triads.

5. Identification: Color coded with sequential printed numbers.

Pairs: Black and White.

Triads: Black, White and Red.

6. Cabling: Pairs/Triads cabled round with moisture and flame resistant fillers as required, and binder tape.

7. Optional Shielding: Individual and/or Overall Aluminum/ Polyester tape, with drain wire, 100% coverage.

8. Jacket: Black Low Smoke Halogen Free flame retardant thermoplastic Polyolefin (SHF1).

9. Armor (optional): Standard - Tinned Copper Braid.

10. Jacket (overall): Black Low Smoke Halogen Free flame retardant thermoplastic Polyolefin (SHF1).

On request: Grey Jacket is available.

Technical Data

Type LS-Triads Signal & Instrumentation, 20 AWG, Individual Shield

Conductor	Unarmored					Armored					Armored and Sheathed				
	Number of Triads	Part Number	Nominal OD		Net Weight		Tinned Copper				Tinned Copper				
			in	mm	lb/kft	kg/km	Part Number	in	mm	lb/kft	kg/km	Part Number	in	mm	lb/kft
2	DTTI20LSSH-F-2	0.43	10.90	92	136	DTTI20LSSH-F-T2	0.48	12.1	169	251	DTTI20LSSH-F-TS2	0.56	14.3	214	318
3	DTTI20LSSH-F-3	0.46	11.7	115	171	DTTI20LSSH-F-T3	0.51	13.0	198	295	DTTI20LSSH-F-TS3	0.60	15.1	246	366
4	DTTI20LSSH-F-4	0.50	12.8	131	195	DTTI20LSSH-F-T4	0.55	14.1	221	329	DTTI20LSSH-F-TS4	0.65	16.4	278	414
5	DTTI20LSSH-F-5	0.56	14.2	169	251	DTTI20LSSH-F-T5	0.61	15.5	269	400	DTTI20LSSH-F-TS5	0.70	17.9	331	493
6	DTTI20LSSH-F-6	0.61	15.5	201	299	DTTI20LSSH-F-T6	0.66	16.8	309	461	DTTI20LSSH-F-TS6	0.75	19.1	377	560
7	DTTI20LSSH-F-7	0.61	15.5	208	310	DTTI20LSSH-F-T7	0.66	16.8	317	471	DTTI20LSSH-F-TS7	0.75	19.1	384	571
8	DTTI20LSSH-F-8	0.72	18.3	279	415	DTTI20LSSH-F-T8	0.77	19.6	406	605	DTTI20LSSH-F-TS8	0.87	22.1	491	731
10	DTTI20LSSH-F-10	0.79	20.1	302	449	DTTI20LSSH-F-T10	0.84	21.3	441	656	DTTI20LSSH-F-TS10	0.94	23.9	533	794
12	DTTI20LSSH-F-12	0.82	20.7	345	514	DTTI20LSSH-F-T12	0.87	22.0	489	728	DTTI20LSSH-F-TS12	0.97	24.7	592	881
14	DTTI20LSSH-F-14	0.86	21.8	392	583	DTTI20LSSH-F-T14	0.91	23.1	542	807	DTTI20LSSH-F-TS14	1.02	25.8	650	968
16	DTTI20LSSH-F-16	0.91	23.1	451	670	DTTI20LSSH-F-T16	0.96	24.4	610	908	DTTI20LSSH-F-TS16	1.07	27.2	724	1078
17	DTTI20LSSH-F-17	0.96	24.4	484	720	DTTI20LSSH-F-T17	1.01	25.7	652	971	DTTI20LSSH-F-TS17	1.12	28.4	772	1148
19	DTTI20LSSH-F-19	0.96	24.4	511	761	DTTI20LSSH-F-T19	1.01	25.7	680	1012	DTTI20LSSH-F-TS19	1.12	28.4	799	1189
20	DTTI20LSSH-F-20	1.02	25.8	569	846	DTTI20LSSH-F-T20	1.07	27.1	747	1111	DTTI20LSSH-F-TS20	1.19	30.1	885	1317
24	DTTI20LSSH-F-24	1.13	28.8	702	1045	DTTI20LSSH-F-T24	1.18	30.0	900	1339	DTTI20LSSH-F-TS24	1.31	33.2	1064	1583

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 LS-Triads Signal & Instrumentation, 18 AWG, Individual Shield

Conductor	Unarmored					Armored					Armored and Sheathed				
	Number of Triads	Part Number	Nominal OD		Net Weight		Tinned Copper				Tinned Copper				
			in	mm	lb/kft	kg/km	Part Number	in	mm	lb/kft	kg/km	Part Number	in	mm	lb/kft
2	DTTI18LSSH-F-2	0.51	12.9	127	189	DTTI18LSSH-F-T2	0.56	14.2	218	324	DTTI18LSSH-F-TS2	0.65	16.5	275	410
3	DTTI18LSSH-F-3	0.54	13.7	157	234	DTTI18LSSH-F-T3	0.59	15.0	254	377	DTTI18LSSH-F-TS3	0.68	17.3	314	467
4	DTTI18LSSH-F-4	0.60	15.3	201	299	DTTI18LSSH-F-T4	0.65	16.5	308	459	DTTI18LSSH-F-TS4	0.74	18.9	374	557
5	DTTI18LSSH-F-5	0.67	16.9	235	350	DTTI18LSSH-F-T5	0.72	18.2	353	526	DTTI18LSSH-F-TS5	0.82	20.7	433	644
6	DTTI18LSSH-F-6	0.73	18.4	282	420	DTTI18LSSH-F-T6	0.78	19.7	410	611	DTTI18LSSH-F-TS6	0.88	22.3	496	738
7	DTTI18LSSH-F-7	0.73	18.4	292	434	DTTI18LSSH-F-T7	0.78	19.7	420	625	DTTI18LSSH-F-TS7	0.88	22.3	506	753
8	DTTI18LSSH-F-8	0.86	21.8	394	587	DTTI18LSSH-F-T8	0.91	23.1	545	812	DTTI18LSSH-F-TS8	1.02	25.8	653	972
10	DTTI18LSSH-F-10	0.94	23.9	420	625	DTTI18LSSH-F-T10	0.99	25.1	585	870	DTTI18LSSH-F-TS10	1.10	27.9	702	1044
12	DTTI18LSSH-F-12	0.98	24.9	491	731	DTTI18LSSH-F-T12	1.03	26.1	663	986	DTTI18LSSH-F-TS12	1.15	29.1	796	1185
14	DTTI18LSSH-F-14	1.03	26.2	558	830	DTTI18LSSH-F-T14	1.08	27.5	738	1099	DTTI18LSSH-F-TS14	1.20	30.5	878	1307
16	DTTI18LSSH-F-16	1.10	27.9	647	962	DTTI18LSSH-F-T16	1.15	29.2	838	1248	DTTI18LSSH-F-TS16	1.27	32.2	987	1468
17	DTTI18LSSH-F-17	1.16	29.4	695	1035	DTTI18LSSH-F-T17	1.21	30.7	897	1335	DTTI18LSSH-F-TS17	1.33	33.9	1064	1584
19	DTTI18LSSH-F-19	1.16	29.4	734	1093	DTTI18LSSH-F-T19	1.21	30.7	937	1394	DTTI18LSSH-F-TS19	1.33	33.9	1104	1642
20	DTTI18LSSH-F-20	1.23	31.1	816	1215	DTTI18LSSH-F-T20	1.29	32.8	1085	1615	DTTI18LSSH-F-TS20	1.42	36.0	1263	1879
24	DTTI18LSSH-F-24	1.36	34.6	1006	1497	DTTI18LSSH-F-T24	1.43	36.2	1304	1941	DTTI18LSSH-F-TS24	1.56	39.6	1513	2252

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 LS-Triads Signal & Instrumentation, 16 AWG, Individual Shield

Conductor	Unarmored					Armored					Armored and Sheathed					
	Number of Triads	Part Number	Nominal OD		Net Weight		Tinned Copper					Tinned Copper				
			in	mm	lb/kft	kg/km	Part Number	in	mm	lb/kft	kg/km	Part Number	in	mm	lb/kft	kg/km
2	DTT116LSSH-F-2	0.59	15.0	177	264	DTT116LSSH-F-T2	0.64	16.3	283	421	DTT116LSSH-F-TS2	0.73	18.6	348	518	
3	DTT116LSSH-F-3	0.63	16.0	220	328	DTT116LSSH-F-T3	0.68	17.2	332	494	DTT116LSSH-F-TS3	0.77	19.6	401	597	
4	DTT116LSSH-F-4	0.70	17.7	282	420	DTT116LSSH-F-T4	0.75	19.0	405	603	DTT116LSSH-F-TS4	0.85	21.5	488	726	
5	DTT116LSSH-F-5	0.77	19.7	330	491	DTT116LSSH-F-T5	0.82	20.9	466	694	DTT116LSSH-F-TS5	0.92	23.5	557	829	
6	DTT116LSSH-F-6	0.85	21.5	397	590	DTT116LSSH-F-T6	0.90	22.7	545	811	DTT116LSSH-F-TS6	1.00	25.5	652	970	
7	DTT116LSSH-F-7	0.85	21.5	413	614	DTT116LSSH-F-T7	0.90	22.7	562	836	DTT116LSSH-F-TS7	1.00	25.5	668	994	
8	DTT116LSSH-F-8	1.01	25.6	563	838	DTT116LSSH-F-T8	1.06	26.8	739	1100	DTT116LSSH-F-TS8	1.17	29.8	876	1304	
10	DTT116LSSH-F-10	1.11	28.1	604	899	DTT116LSSH-F-T10	1.16	29.4	798	1187	DTT116LSSH-F-TS10	1.27	32.4	947	1409	
12	DTT116LSSH-F-12	1.14	29.0	697	1038	DTT116LSSH-F-T12	1.19	30.3	897	1335	DTT116LSSH-F-TS12	1.32	33.5	1062	1580	
14	DTT116LSSH-F-14	1.21	30.8	805	1197	DTT116LSSH-F-T14	1.28	32.4	1070	1593	DTT116LSSH-F-TS14	1.40	35.6	1246	1855	
16	DTT116LSSH-F-16	1.28	32.5	917	1365	DTT116LSSH-F-T16	1.34	34.1	1197	1782	DTT116LSSH-F-TS16	1.48	37.5	1395	2076	
17	DTT116LSSH-F-17	1.36	34.5	998	1485	DTT116LSSH-F-T17	1.42	36.1	1295	1927	DTT116LSSH-F-TS17	1.56	39.5	1503	2237	
19	DTT116LSSH-F-19	1.36	34.5	1057	1574	DTT116LSSH-F-T19	1.42	36.1	1355	2016	DTT116LSSH-F-TS19	1.56	39.5	1563	2326	
20	DTT116LSSH-F-20	1.44	36.5	1173	1745	DTT116LSSH-F-T20	1.50	38.2	1487	2213	DTT116LSSH-F-TS20	1.64	41.7	1717	2555	
24	DTT116LSSH-F-24	1.60	40.6	1444	2148	DTT116LSSH-F-T24	1.66	42.2	1792	2667	DTT116LSSH-F-TS24	1.81	46.0	2061	3067	

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 LS-Triads Signal & Instrumentation, 14 AWG, Individual Shield

Conductor	Unarmored					Armored					Armored and Sheathed					
	Number of Triads	Part Number	Nominal OD		Net Weight		Tinned Copper					Tinned Copper				
			in	mm	lb/kft	kg/km	Part Number	in	mm	lb/kft	kg/km	Part Number	in	mm	lb/kft	kg/km
2	DTT114LSSH-F-2	0.66	16.9	235	350	DTT114LSSH-F-T2	0.71	18.1	353	525	DTT114LSSH-F-TS2	0.81	20.7	432	643	
3	DTT114LSSH-F-3	0.71	17.9	294	437	DTT114LSSH-F-T3	0.76	19.2	418	623	DTT114LSSH-F-TS3	0.86	21.7	502	747	
4	DTT114LSSH-F-4	0.78	19.9	378	562	DTT114LSSH-F-T4	0.83	21.2	516	767	DTT114LSSH-F-TS4	0.93	23.7	607	904	
5	DTT114LSSH-F-5	0.86	21.8	434	645	DTT114LSSH-F-T5	0.91	23.1	585	870	DTT114LSSH-F-TS5	1.02	25.9	693	1031	
6	DTT114LSSH-F-6	0.95	24.1	531	790	DTT114LSSH-F-T6	1.00	25.3	697	1037	DTT114LSSH-F-TS6	1.11	28.1	815	1213	
7	DTT114LSSH-F-7	0.95	24.1	556	827	DTT114LSSH-F-T7	1.00	25.3	722	1074	DTT114LSSH-F-TS7	1.11	28.1	840	1250	
8	DTT114LSSH-F-8	1.13	28.8	755	1123	DTT114LSSH-F-T8	1.18	30.0	953	1418	DTT114LSSH-F-TS8	1.31	33.2	1116	1661	
10	DTT114LSSH-F-10	1.24	31.5	812	1209	DTT114LSSH-F-T10	1.31	33.2	1085	1614	DTT114LSSH-F-TS10	1.43	36.4	1264	1882	
12	DTT114LSSH-F-12	1.28	32.6	942	1401	DTT114LSSH-F-T12	1.35	34.2	1223	1820	DTT114LSSH-F-TS12	1.48	37.6	1421	2115	
14	DTT114LSSH-F-14	1.36	34.6	1087	1618	DTT114LSSH-F-T14	1.43	36.2	1385	2061	DTT114LSSH-F-TS14	1.56	39.6	1594	2372	
16	DTT114LSSH-F-16	1.45	36.7	1253	1865	DTT114LSSH-F-T16	1.51	38.4	1569	2335	DTT114LSSH-F-TS16	1.65	41.9	1800	2679	
17	DTT114LSSH-F-17	1.54	39.0	1362	2026	DTT114LSSH-F-T17	1.60	40.6	1697	2525	DTT114LSSH-F-TS17	1.74	44.2	1941	2888	
19	DTT114LSSH-F-19	1.54	39.0	1448	2154	DTT114LSSH-F-T19	1.60	40.6	1783	2653	DTT114LSSH-F-TS19	1.74	44.2	2027	3016	
20	DTT114LSSH-F-20	1.63	41.3	1602	2384	DTT114LSSH-F-T20	1.69	42.9	1956	2912	DTT114LSSH-F-TS20	1.84	46.7	2230	3318	
24	DTT114LSSH-F-24	1.81	45.9	1972	2934	DTT114LSSH-F-T24	1.87	47.5	2364	3519	DTT114LSSH-F-TS24	2.03	51.5	2687	3999	

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Ampacities: Refer to beginning of section.

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