

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

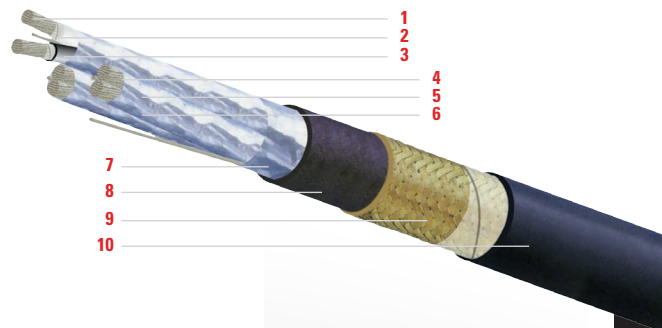
- Intertek, as Type HF XLPE/SHF1
- ABS, American Bureau of Shipping.
- DNV, Det Norske Veritas
- LRS, Lloyd's Register of Shipping.

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/Overall 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	DTTS20LSSH-F-2	0.43	11.0	97	144	DTTS20LSSH-F-T2	0.48	12.3	175	260	DTTS20LSSH-F-TS2	0.57	14.4	220	328
3	DTTS20LSSH-F-3	0.47	11.8	120	179	DTTS20LSSH-F-T3	0.52	13.1	204	304	DTTS20LSSH-F-TS3	0.60	15.2	253	376
4	DTTS20LSSH-F-4	0.51	12.9	136	203	DTTS20LSSH-F-T4	0.56	14.2	227	339	DTTS20LSSH-F-TS4	0.65	16.5	285	424
5	DTTS20LSSH-F-5	0.57	14.4	174	259	DTTS20LSSH-F-T5	0.62	15.6	275	410	DTTS20LSSH-F-TS5	0.71	18.0	338	503
6	DTTS20LSSH-F-6	0.62	15.6	207	308	DTTS20LSSH-F-T6	0.67	16.9	316	471	DTTS20LSSH-F-TS6	0.76	19.2	384	571
7	DTTS20LSSH-F-7	0.62	15.6	214	319	DTTS20LSSH-F-T7	0.67	16.9	323	481	DTTS20LSSH-F-TS7	0.76	19.2	391	582
8	DTTS20LSSH-F-8	0.73	18.4	285	425	DTTS20LSSH-F-T8	0.78	19.7	413	615	DTTS20LSSH-F-TS8	0.88	22.2	499	743
10	DTTS20LSSH-F-10	0.80	20.2	308	459	DTTS20LSSH-F-T10	0.85	21.5	449	668	DTTS20LSSH-F-TS10	0.95	24.0	541	806
12	DTTS20LSSH-F-12	0.82	20.8	352	524	DTTS20LSSH-F-T12	0.87	22.1	497	739	DTTS20LSSH-F-TS12	0.98	24.8	600	893
14	DTTS20LSSH-F-14	0.86	21.9	399	593	DTTS20LSSH-F-T14	0.91	23.2	550	819	DTTS20LSSH-F-TS14	1.02	25.9	659	980
16	DTTS20LSSH-F-16	0.92	23.3	458	681	DTTS20LSSH-F-T16	0.97	24.5	619	920	DTTS20LSSH-F-TS16	1.07	27.3	733	1091
17	DTTS20LSSH-F-17	0.97	24.5	492	731	DTTS20LSSH-F-T17	1.02	25.8	661	983	DTTS20LSSH-F-TS17	1.13	28.8	793	1180
19	DTTS20LSSH-F-19	0.97	24.5	519	772	DTTS20LSSH-F-T19	1.02	25.8	688	1024	DTTS20LSSH-F-TS19	1.13	28.8	820	1220
20	DTTS20LSSH-F-20	1.02	26.0	576	858	DTTS20LSSH-F-T20	1.07	27.2	755	1124	DTTS20LSSH-F-TS20	1.19	30.2	894	1331
24	DTTS20LSSH-F-24	1.14	28.9	710	1057	DTTS20LSSH-F-T24	1.19	30.1	909	1353	DTTS20LSSH-F-TS24	1.31	33.4	1073	1597

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/Overall 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	DTTS18LSSH-F-2	0.51	13.0	132	197	DTTS18LSSH-F-T2	0.56	14.3	224	334	DTTS18LSSH-F-TS2	0.66	16.6	282	420
3	DTTS18LSSH-F-3	0.55	14.1	169	251	DTTS18LSSH-F-T3	0.60	15.3	268	398	DTTS18LSSH-F-TS3	0.70	17.7	329	490
4	DTTS18LSSH-F-4	0.61	15.4	207	308	DTTS18LSSH-F-T4	0.66	16.7	315	469	DTTS18LSSH-F-TS4	0.75	19.0	382	568
5	DTTS18LSSH-F-5	0.67	17.0	241	359	DTTS18LSSH-F-T5	0.72	18.3	360	536	DTTS18LSSH-F-TS5	0.82	20.9	440	655
6	DTTS18LSSH-F-6	0.73	18.6	288	429	DTTS18LSSH-F-T6	0.78	19.8	418	621	DTTS18LSSH-F-TS6	0.88	22.4	504	750
7	DTTS18LSSH-F-7	0.73	18.6	298	444	DTTS18LSSH-F-T7	0.78	19.8	428	636	DTTS18LSSH-F-TS7	0.88	22.4	514	764
8	DTTS18LSSH-F-8	0.86	21.9	401	597	DTTS18LSSH-F-T8	0.91	23.2	553	823	DTTS18LSSH-F-TS8	1.02	25.9	662	985
10	DTTS18LSSH-F-10	0.95	24.0	427	636	DTTS18LSSH-F-T10	1.00	25.3	593	882	DTTS18LSSH-F-TS10	1.10	28.0	711	1057
12	DTTS18LSSH-F-12	0.98	25.0	499	742	DTTS18LSSH-F-T12	1.03	26.3	671	999	DTTS18LSSH-F-TS12	1.15	29.3	805	1199
14	DTTS18LSSH-F-14	1.04	26.3	565	842	DTTS18LSSH-F-T14	1.09	27.6	747	1111	DTTS18LSSH-F-TS14	1.20	30.6	887	1321
16	DTTS18LSSH-F-16	1.10	28.0	655	974	DTTS18LSSH-F-T16	1.15	29.3	847	1261	DTTS18LSSH-F-TS16	1.27	32.3	996	1482
17	DTTS18LSSH-F-17	1.16	29.5	703	1047	DTTS18LSSH-F-T17	1.21	30.8	907	1349	DTTS18LSSH-F-TS17	1.34	34.0	1074	1599
19	DTTS18LSSH-F-19	1.16	29.5	743	1105	DTTS18LSSH-F-T19	1.21	30.8	946	1407	DTTS18LSSH-F-TS19	1.34	34.0	1113	1657
20	DTTS18LSSH-F-20	1.23	31.3	825	1227	DTTS18LSSH-F-T20	1.30	32.9	1095	1629	DTTS18LSSH-F-TS20	1.42	36.1	1273	1894
24	DTTS18LSSH-F-24	1.37	34.7	1015	1511	DTTS18LSSH-F-T24	1.43	36.3	1314	1956	DTTS18LSSH-F-TS24	1.57	39.8	1524	2268

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/Overall 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	DTTS16LSSH-F-2	0.60	15.2	185	275	DTTS16LSSH-F-T2	0.65	16.4	291	433	DTTS16LSSH-F-TS2	0.74	18.8	357	531	
3	DTTS16LSSH-F-3	0.63	16.1	228	340	DTTS16LSSH-F-T3	0.68	17.4	341	507	DTTS16LSSH-F-TS3	0.78	19.7	410	611	
4	DTTS16LSSH-F-4	0.70	17.9	290	432	DTTS16LSSH-F-T4	0.75	19.1	414	617	DTTS16LSSH-F-TS4	0.85	21.7	498	741	
5	DTTS16LSSH-F-5	0.78	19.8	338	503	DTTS16LSSH-F-T5	0.83	21.1	476	708	DTTS16LSSH-F-TS5	0.93	23.6	567	843	
6	DTTS16LSSH-F-6	0.85	21.6	405	603	DTTS16LSSH-F-T6	0.90	22.9	555	826	DTTS16LSSH-F-TS6	1.01	25.6	662	985	
7	DTTS16LSSH-F-7	0.85	21.6	422	628	DTTS16LSSH-F-T7	0.90	22.9	571	850	DTTS16LSSH-F-TS7	1.01	25.6	678	1009	
8	DTTS16LSSH-F-8	1.01	25.7	573	852	DTTS16LSSH-F-T8	1.06	26.9	750	1115	DTTS16LSSH-F-TS8	1.18	29.9	887	1320	
10	DTTS16LSSH-F-10	1.11	28.2	614	914	DTTS16LSSH-F-T10	1.16	29.5	808	1203	DTTS16LSSH-F-TS10	1.28	32.5	958	1426	
12	DTTS16LSSH-F-12	1.15	29.2	707	1053	DTTS16LSSH-F-T12	1.20	30.4	908	1351	DTTS16LSSH-F-TS12	1.32	33.6	1074	1598	
14	DTTS16LSSH-F-14	1.22	30.9	815	1213	DTTS16LSSH-F-T14	1.28	32.5	1082	1610	DTTS16LSSH-F-TS14	1.41	35.7	1258	1873	
16	DTTS16LSSH-F-16	1.29	32.6	928	1380	DTTS16LSSH-F-T16	1.35	34.3	1209	1799	DTTS16LSSH-F-TS16	1.48	37.7	1407	2094	
17	DTTS16LSSH-F-17	1.36	34.6	1009	1501	DTTS16LSSH-F-T17	1.43	36.3	1307	1945	DTTS16LSSH-F-TS17	1.56	39.7	1516	2256	
19	DTTS16LSSH-F-19	1.36	34.6	1068	1590	DTTS16LSSH-F-T19	1.43	36.3	1367	2034	DTTS16LSSH-F-TS19	1.56	39.7	1576	2345	
20	DTTS16LSSH-F-20	1.44	36.7	1184	1762	DTTS16LSSH-F-T20	1.51	38.3	1499	2231	DTTS16LSSH-F-TS20	1.65	41.8	1730	2575	
24	DTTS16LSSH-F-24	1.60	40.7	1456	2166	DTTS16LSSH-F-T24	1.67	42.3	1805	2686	DTTS16LSSH-F-TS24	1.82	46.1	2075	3088	

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/Overall 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	DTTS14LSSH-F-2	0.67	17.0	246	366	DTTS14LSSH-F-T2	0.72	18.3	364	542	DTTS14LSSH-F-TS2	0.82	20.8	444	661	
3	DTTS14LSSH-F-3	0.71	18.1	304	453	DTTS14LSSH-F-T3	0.76	19.3	430	640	DTTS14LSSH-F-TS3	0.86	21.9	514	765	
4	DTTS14LSSH-F-4	0.79	20.0	389	579	DTTS14LSSH-F-T4	0.84	21.3	528	785	DTTS14LSSH-F-TS4	0.94	23.8	620	922	
5	DTTS14LSSH-F-5	0.87	22.1	451	671	DTTS14LSSH-F-T5	0.92	23.4	604	899	DTTS14LSSH-F-TS5	1.03	26.1	713	1061	
6	DTTS14LSSH-F-6	0.95	24.2	543	808	DTTS14LSSH-F-T6	1.00	25.5	710	1056	DTTS14LSSH-F-TS6	1.11	28.2	828	1233	
7	DTTS14LSSH-F-7	0.95	24.2	568	845	DTTS14LSSH-F-T7	1.00	25.5	735	10923	DTTS14LSSH-F-TS7	1.11	28.2	853	1270	
8	DTTS14LSSH-F-8	1.14	28.9	768	1142	DTTS14LSSH-F-T8	1.19	30.1	966	1438	DTTS14LSSH-F-TS8	1.31	33.4	1130	1682	
10	DTTS14LSSH-F-10	1.25	31.7	826	1229	DTTS14LSSH-F-T10	1.31	33.3	1099	1635	DTTS14LSSH-F-TS10	1.44	36.5	1279	1904	
12	DTTS14LSSH-F-12	1.29	32.7	955	1421	DTTS14LSSH-F-T12	1.35	34.4	1238	1842	DTTS14LSSH-F-TS12	1.49	37.8	1436	2137	
14	DTTS14LSSH-F-14	1.37	34.7	1101	1639	DTTS14LSSH-F-T14	1.43	36.3	1400	2083	DTTS14LSSH-F-TS14	1.56	39.7	1609	2395	
16	DTTS14LSSH-F-16	1.45	36.9	1267	1886	DTTS14LSSH-F-T16	1.52	38.5	1584	2358	DTTS14LSSH-F-TS16	1.66	42.0	1816	2703	
17	DTTS14LSSH-F-17	1.54	39.1	1376	2048	DTTS14LSSH-F-T17	1.60	40.7	1712	2548	DTTS14LSSH-F-TS17	1.74	44.3	1957	2913	
19	DTTS14LSSH-F-19	1.54	39.1	1462	2176	DTTS14LSSH-F-T19	1.60	40.7	1798	2676	DTTS14LSSH-F-TS19	1.74	44.3	2043	3040	
20	DTTS14LSSH-F-20	1.63	41.4	1617	2406	DTTS14LSSH-F-T20	1.70	43.1	1973	2935	DTTS14LSSH-F-TS20	1.84	46.8	2247	3343	
24	DTTS14LSSH-F-24	1.81	46.0	1987	2957	DTTS14LSSH-F-T24	1.88	47.6	2381	3544	DTTS14LSSH-F-TS24	2.03	51.6	2705	4025	

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.

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