

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

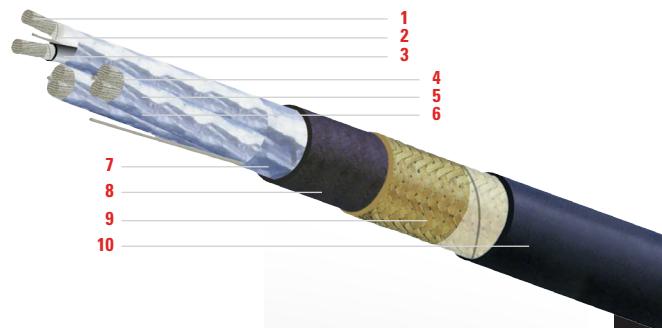
- Intertek, as Type HF XLPE/SHF1
- ABS, American Bureau of Shipping.
- DNV, Det Norske Veritas
- LRS, Lloyd's Register of Shipping.

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, 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
1	DTT020LSSH-F-1	0.25	6.3	38	57	DTT020LSSH-F-T1	0.27	6.8	60	89	DTT020LSSH-F-TS1	0.36	9.0	92	137
2	DTT020LSSH-F-2	0.41	10.3	72	107	DTT020LSSH-F-T2	0.34	8.6	85	127	DTT020LSSH-F-TS2	0.54	13.7	189	282
3	DTT020LSSH-F-3	0.43	10.9	90	134	DTT020LSSH-F-T3	0.39	9.9	108	161	DTT020LSSH-F-TS3	0.56	14.3	213	317
4	DTT020LSSH-F-4	0.48	12.1	114	169	DTT020LSSH-F-T4	0.41	10.5	124	184	DTT020LSSH-F-TS4	0.61	15.5	249	370
5	DTT020LSSH-F-5	0.52	13.2	134	199	DTT020LSSH-F-T5	0.46	11.8	168	250	DTT020LSSH-F-TS5	0.66	16.8	286	425
6	DTT020LSSH-F-6	0.58	14.6	160	239	DTT020LSSH-F-T6	0.51	12.9	193	288	DTT020LSSH-F-TS6	0.72	18.2	327	487
7	DTT020LSSH-F-7	0.58	14.6	176	261	DTT020LSSH-F-T7	0.51	12.9	204	303	DTT020LSSH-F-TS7	0.72	18.2	342	509
8	DTT020LSSH-F-8	0.68	17.2	209	310	DTT020LSSH-F-T8	0.54	13.8	224	333	DTT020LSSH-F-TS8	0.83	21.0	409	609
10	DTT020LSSH-F-10	0.74	18.7	247	367	DTT020LSSH-F-T10	0.62	15.8	272	405	DTT020LSSH-F-TS10	0.89	22.5	463	690
12	DTT020LSSH-F-12	0.77	19.5	287	427	DTT020LSSH-F-T12	0.65	16.5	301	447	DTT020LSSH-F-TS12	0.92	23.3	512	762
14	DTT020LSSH-F-14	0.81	20.5	323	481	DTT020LSSH-F-T14	0.68	17.2	330	491	DTT020LSSH-F-TS14	0.96	24.3	559	832
16	DTT020LSSH-F-16	0.85	21.6	360	536	DTT020LSSH-F-T16	0.72	18.3	367	546	DTT020LSSH-F-TS16	1.01	25.6	616	917
17	DTT020LSSH-F-17	0.90	22.9	388	577	DTT020LSSH-F-T17	0.74	18.7	383	570	DTT020LSSH-F-TS17	1.06	26.9	658	980
19	DTT020LSSH-F-19	0.90	22.9	418	622	DTT020LSSH-F-T19	0.75	19.2	408	607	DTT020LSSH-F-TS19	1.06	26.9	689	1025
20	DTT020LSSH-F-20	0.95	24.0	440	655	DTT020LSSH-F-T20	0.78	19.7	425	632	DTT020LSSH-F-TS20	1.10	28.0	724	1077
24	DTT020LSSH-F-24	1.05	26.7	525	781	DTT020LSSH-F-T24	0.86	21.7	496	738	DTT020LSSH-F-TS24	1.22	30.9	851	1266

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, 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
1	DTT018LSSH-F-1	0.28	7.2	50	75	DTT018LSSH-F-T1	0.32	8.0	84	125	DTT018LSSH-F-TS1	0.39	10.0	111	166
2	DTT018LSSH-F-2	0.49	12.4	102	151	DTT018LSSH-F-T2	0.54	13.6	189	282	DTT018LSSH-F-TS2	0.62	15.8	239	356
3	DTT018LSSH-F-3	0.52	13.1	129	192	DTT018LSSH-F-T3	0.57	14.4	222	330	DTT018LSSH-F-TS3	0.66	16.7	280	416
4	DTT018LSSH-F-4	0.57	14.6	165	245	DTT018LSSH-F-T4	0.62	15.8	267	398	DTT018LSSH-F-TS4	0.72	18.2	331	493
5	DTT018LSSH-F-5	0.63	16.0	196	292	DTT018LSSH-F-T5	0.68	17.2	308	458	DTT018LSSH-F-TS5	0.77	19.6	376	560
6	DTT018LSSH-F-6	0.69	17.6	233	347	DTT018LSSH-F-T6	0.74	18.8	356	529	DTT018LSSH-F-TS6	0.84	21.4	438	651
7	DTT018LSSH-F-7	0.69	17.6	257	383	DTT018LSSH-F-T7	0.74	18.8	380	565	DTT018LSSH-F-TS7	0.84	21.4	462	687
8	DTT018LSSH-F-8	0.82	20.7	304	452	DTT018LSSH-F-T8	0.87	22.0	448	666	DTT018LSSH-F-TS8	0.97	24.7	551	820
10	DTT018LSSH-F-10	0.89	22.7	368	548	DTT018LSSH-F-T10	0.94	24.0	525	781	DTT018LSSH-F-TS10	1.05	26.7	637	948
12	DTT018LSSH-F-12	0.92	23.4	421	626	DTT018LSSH-F-T12	0.97	24.7	583	867	DTT018LSSH-F-TS12	1.08	27.4	698	1038
14	DTT018LSSH-F-14	0.98	24.8	485	721	DTT018LSSH-F-T14	1.03	26.1	656	976	DTT018LSSH-F-TS14	1.15	29.1	790	1175
16	DTT018LSSH-F-16	1.03	26.2	541	806	DTT018LSSH-F-T16	1.08	27.5	722	1074	DTT018LSSH-F-TS16	1.20	30.5	862	1283
17	DTT018LSSH-F-17	1.10	27.9	586	872	DTT018LSSH-F-T17	1.15	29.2	778	1158	DTT018LSSH-F-TS17	1.27	32.2	926	1378
19	DTT018LSSH-F-19	1.10	27.9	634	944	DTT018LSSH-F-T19	1.15	29.2	826	1230	DTT018LSSH-F-TS19	1.27	32.2	975	1450
20	DTT018LSSH-F-20	1.15	29.3	668	994	DTT018LSSH-F-T20	1.20	30.6	869	1294	DTT018LSSH-F-TS20	1.33	33.8	1036	1542
24	DTT018LSSH-F-24	1.28	32.6	796	1184	DTT018LSSH-F-T24	1.35	34.2	1077	1602	DTT018LSSH-F-TS24	1.48	37.6	1274	1896

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, 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
1	DTTO16LSSH-F-1	0.32	8.2	68	101	DTTO16LSSH-F-T1	0.35	9.0	105	156	DTTO16LSSH-F-TS1	0.43	10.9	136	202	
2	DTTO16LSSH-F-2	0.57	14.5	142	211	DTTO16LSSH-F-T2	0.62	15.8	244	363	DTTO16LSSH-F-TS2	0.71	18.1	307	457	
3	DTTO16LSSH-F-3	0.61	15.4	182	271	DTTO16LSSH-F-T3	0.66	16.7	290	432	DTTO16LSSH-F-TS3	0.75	19.0	357	531	
4	DTTO16LSSH-F-4	0.67	17.1	231	344	DTTO16LSSH-F-T4	0.72	18.3	351	522	DTTO16LSSH-F-TS4	0.82	20.9	431	641	
5	DTTO16LSSH-F-5	0.74	18.7	276	411	DTTO16LSSH-F-T5	0.79	20.0	406	604	DTTO16LSSH-F-TS5	0.89	22.5	493	733	
6	DTTO16LSSH-F-6	0.81	20.6	328	488	DTTO16LSSH-F-T6	0.86	21.9	471	701	DTTO16LSSH-F-TS6	0.97	24.6	574	854	
7	DTTO16LSSH-F-7	0.81	20.6	364	542	DTTO16LSSH-F-T7	0.86	21.9	507	754	DTTO16LSSH-F-TS7	0.97	24.6	610	907	
8	DTTO16LSSH-F-8	0.96	24.3	426	634	DTTO16LSSH-F-T8	1.01	25.6	594	884	DTTO16LSSH-F-TS8	1.11	28.3	713	1061	
10	DTTO16LSSH-F-10	1.05	26.6	520	774	DTTO16LSSH-F-T10	1.10	27.9	703	1047	DTTO16LSSH-F-TS10	1.22	30.9	846	1258	
12	DTTO16LSSH-F-12	1.09	27.8	609	906	DTTO16LSSH-F-T12	1.14	29.1	800	1191	DTTO16LSSH-F-TS12	1.26	32.1	948	1411	
14	DTTO16LSSH-F-14	1.15	29.3	691	1028	DTTO16LSSH-F-T14	1.20	30.5	892	1327	DTTO16LSSH-F-TS14	1.33	33.7	1058	1575	
16	DTTO16LSSH-F-16	1.22	31.1	784	1167	DTTO16LSSH-F-T16	1.29	32.7	1053	1566	DTTO16LSSH-F-TS16	1.41	35.9	1230	1831	
17	DTTO16LSSH-F-17	1.30	33.0	843	1255	DTTO16LSSH-F-T17	1.36	34.6	1128	1678	DTTO16LSSH-F-TS17	1.50	38.0	1328	1976	
19	DTTO16LSSH-F-19	1.30	33.0	915	1362	DTTO16LSSH-F-T19	1.36	34.6	1200	1785	DTTO16LSSH-F-TS19	1.50	38.0	1400	2083	
20	DTTO16LSSH-F-20	1.37	34.7	964	1434	DTTO16LSSH-F-T20	1.43	36.3	1262	1879	DTTO16LSSH-F-TS20	1.56	39.7	1472	2190	
24	DTTO16LSSH-F-24	1.53	38.8	1160	1727	DTTO16LSSH-F-T24	1.59	40.4	1493	2222	DTTO16LSSH-F-TS24	1.73	43.9	1736	2584	

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, 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
1	DTTO14LSSH-F-1	0.36	9.2	91	135	DTTO14LSSH-F-T1	0.39	10.0	133	197	DTTO14LSSH-F-TS1	0.48	12.1	170	253	
2	DTTO14LSSH-F-2	0.64	16.1	182	271	DTTO14LSSH-F-T2	0.69	17.4	295	438	DTTO14LSSH-F-TS2	0.78	19.7	364	542	
3	DTTO14LSSH-F-3	0.68	17.3	243	362	DTTO14LSSH-F-T3	0.73	18.6	364	542	DTTO14LSSH-F-TS3	0.83	21.2	445	663	
4	DTTO14LSSH-F-4	0.75	19.0	303	450	DTTO14LSSH-F-T4	0.80	20.3	435	647	DTTO14LSSH-F-TS4	0.90	22.8	523	778	
5	DTTO14LSSH-F-5	0.83	21.1	370	551	DTTO14LSSH-F-T5	0.88	22.4	516	768	DTTO14LSSH-F-TS5	0.99	25.1	621	924	
6	DTTO14LSSH-F-6	0.91	23.2	437	651	DTTO14LSSH-F-T6	0.96	24.5	598	889	DTTO14LSSH-F-TS6	1.07	27.2	712	1059	
7	DTTO14LSSH-F-7	0.91	23.2	488	726	DTTO14LSSH-F-T7	0.96	24.5	648	965	DTTO14LSSH-F-TS7	1.07	27.2	762	1134	
8	DTTO14LSSH-F-8	1.09	27.7	583	868	DTTO14LSSH-F-T8	1.14	29.0	774	1151	DTTO14LSSH-F-TS8	1.26	32.0	921	1370	
10	DTTO14LSSH-F-10	1.20	30.4	711	1058	DTTO14LSSH-F-T10	1.26	32.0	973	1448	DTTO14LSSH-F-TS10	1.39	35.2	1147	1706	
12	DTTO14LSSH-F-12	1.24	31.4	819	1218	DTTO14LSSH-F-T12	1.30	33.0	1090	1621	DTTO14LSSH-F-TS12	1.43	36.2	1268	1888	
14	DTTO14LSSH-F-14	1.31	33.2	943	1403	DTTO14LSSH-F-T14	1.37	34.9	1229	1829	DTTO14LSSH-F-TS14	1.51	38.3	1431	2129	
16	DTTO14LSSH-F-16	1.38	35.1	1057	1573	DTTO14LSSH-F-T16	1.45	36.7	1359	2023	DTTO14LSSH-F-TS16	1.58	40.1	1571	2338	
17	DTTO14LSSH-F-17	1.47	37.3	1135	1688	DTTO14LSSH-F-T17	1.53	38.9	1455	2165	DTTO14LSSH-F-TS17	1.67	42.4	1689	2514	
19	DTTO14LSSH-F-19	1.47	37.3	1236	1839	DTTO14LSSH-F-T19	1.53	38.9	1556	2315	DTTO14LSSH-F-TS19	1.67	42.4	1790	2664	
20	DTTO14LSSH-F-20	1.55	39.4	1314	1956	DTTO14LSSH-F-T20	1.62	41.0	1653	2460	DTTO14LSSH-F-TS20	1.76	44.6	1900	2827	
24	DTTO14LSSH-F-24	1.73	44.0	1583	2355	DTTO14LSSH-F-T24	1.80	45.7	1960	2917	DTTO14LSSH-F-TS24	1.95	49.4	2250	3349	

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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