

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

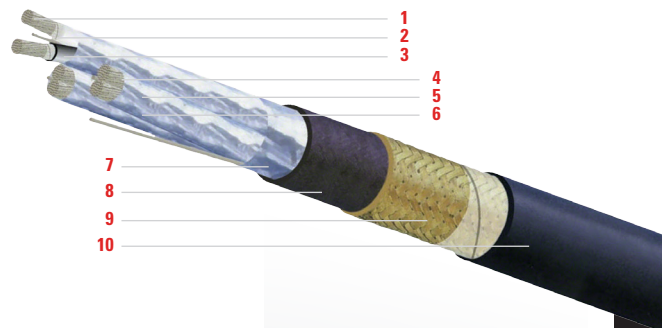
- Intertek, as Type HF XLPE/SHF1
- ABS, American Bureau of Shipping.
- DNV, Det Norske Veritas
- LRS, Lloyd's Register of Shipping.

Engineering Information

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

Sizes: 20 AWG up to 14 AWG.

Separator **Tape:** Suitable tape as required.



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

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

4. Identification: Color coded with sequential printed numbers.

Pairs: Black and White.

Triads: Black, White and Red.

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

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

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

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

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

On request: Grey Jacket is available.

Technical Data

Type LS-Pairs Signal & Instrumentation, 20 AWG, Overall Shield

Conductor	Unarmored					Armored					Armored and Sheathed				
	Number of Pairs	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	DTPO20LSSH-F-1	0.24	6.0	32	48	DTPO20LSSH-F-T1	0.27	6.8	60	89	DTPO20LSSH-F-TS1	0.35	8.8	84	125
2	DTPO20LSSH-F-2	0.31	7.8	49	73	DTPO20LSSH-F-T2	0.34	8.6	85	127	DTPO20LSSH-F-TS2	0.42	10.5	115	171
3	DTPO20LSSH-F-3	0.36	9.1	67	99	DTPO20LSSH-F-T3	0.39	9.9	108	161	DTPO20LSSH-F-TS3	0.47	12.0	145	217
4	DTPO20LSSH-F-4	0.38	9.7	80	118	DTPO20LSSH-F-T4	0.41	10.5	124	184	DTPO20LSSH-F-TS4	0.50	12.6	163	243
5	DTPO20LSSH-F-5	0.41	10.5	93	139	DTPO20LSSH-F-T5	0.46	11.8	168	250	DTPO20LSSH-F-TS5	0.55	13.9	212	316
6	DTPO20LSSH-F-6	0.46	11.6	111	165	DTPO20LSSH-F-T6	0.51	12.9	193	288	DTPO20LSSH-F-TS6	0.59	15.0	241	359
7	DTPO20LSSH-F-7	0.46	11.6	121	180	DTPO20LSSH-F-T7	0.51	12.9	204	303	DTPO20LSSH-F-TS7	0.59	15.0	251	374
8	DTPO20LSSH-F-8	0.49	12.5	136	202	DTPO20LSSH-F-T8	0.54	13.8	224	333	DTPO20LSSH-F-TS8	0.63	16.1	280	416
10	DTPO20LSSH-F-10	0.57	14.5	170	253	DTPO20LSSH-F-T10	0.62	15.8	272	405	DTPO20LSSH-F-TS10	0.71	18.1	336	499
12	DTPO20LSSH-F-12	0.60	15.2	194	289	DTPO20LSSH-F-T12	0.65	16.5	301	447	DTPO20LSSH-F-TS12	0.74	18.8	367	546
14	DTPO20LSSH-F-14	0.63	16.0	218	324	DTPO20LSSH-F-T14	0.68	17.2	330	491	DTPO20LSSH-F-TS14	0.77	19.6	399	593
16	DTPO20LSSH-F-16	0.67	17.0	248	369	DTPO20LSSH-F-T16	0.72	18.3	367	546	DTPO20LSSH-F-TS16	0.82	20.8	446	664
17	DTPO20LSSH-F-17	0.69	17.5	261	388	DTPO20LSSH-F-T17	0.74	18.7	383	570	DTPO20LSSH-F-TS17	0.84	21.3	464	691
19	DTPO20LSSH-F-19	0.70	17.9	283	422	DTPO20LSSH-F-T19	0.75	19.2	408	607	DTPO20LSSH-F-TS19	0.85	21.7	491	731
20	DTPO20LSSH-F-20	0.73	18.4	296	441	DTPO20LSSH-F-T20	0.78	19.7	425	632	DTPO20LSSH-F-TS20	0.88	22.2	510	759
24	DTPO20LSSH-F-24	0.81	20.4	354	527	DTPO20LSSH-F-T24	0.86	21.7	496	738	DTPO20LSSH-F-TS24	0.96	24.3	589	877

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-Pairs Signal & Instrumentation, 18 AWG, Overall Shield

Conductor	Unarmored					Armored					Armored and Sheathed				
	Number of Pairs	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	DTPO18LSSH-F-1	0.27	6.9	41	61	DTPO18LSSH-F-T1	0.30	7.7	73	109	DTPO18LSSH-F-TS1	0.38	9.6	100	148
2	DTPO18LSSH-F-2	0.37	9.3	69	103	DTPO18LSSH-F-T2	0.40	10.1	112	166	DTPO18LSSH-F-TS2	0.48	12.2	150	223
3	DTPO18LSSH-F-3	0.42	10.6	91	135	DTPO18LSSH-F-T3	0.47	11.9	167	248	DTPO18LSSH-F-TS3	0.55	14.0	211	314
4	DTPO18LSSH-F-4	0.46	11.6	114	170	DTPO18LSSH-F-T4	0.51	12.9	197	293	DTPO18LSSH-F-TS4	0.59	15.0	244	363
5	DTPO18LSSH-F-5	0.50	12.6	135	201	DTPO18LSSH-F-T5	0.55	13.9	225	334	DTPO18LSSH-F-TS5	0.64	16.3	281	418
6	DTPO18LSSH-F-6	0.54	13.7	156	232	DTPO18LSSH-F-T6	0.59	15.0	253	376	DTPO18LSSH-F-TS6	0.68	17.3	313	466
7	DTPO18LSSH-F-7	0.54	13.7	172	256	DTPO18LSSH-F-T7	0.59	15.0	269	400	DTPO18LSSH-F-TS7	0.68	17.3	329	490
8	DTPO18LSSH-F-8	0.59	15.1	200	297	DTPO18LSSH-F-T8	0.64	16.4	305	455	DTPO18LSSH-F-TS8	0.74	18.7	371	552
10	DTPO18LSSH-F-10	0.69	17.5	249	370	DTPO18LSSH-F-T10	0.74	18.8	371	552	DTPO18LSSH-F-TS10	0.84	21.3	453	674
12	DTPO18LSSH-F-12	0.72	18.4	286	425	DTPO18LSSH-F-T12	0.77	19.6	413	615	DTPO18LSSH-F-TS12	0.87	22.2	499	742
14	DTPO18LSSH-F-14	0.77	19.5	329	490	DTPO18LSSH-F-T14	0.82	20.8	465	692	DTPO18LSSH-F-TS14	0.92	23.3	555	825
16	DTPO18LSSH-F-16	0.81	20.5	367	546	DTPO18LSSH-F-T16	0.86	21.8	510	758	DTPO18LSSH-F-TS16	0.97	24.5	612	910
17	DTPO18LSSH-F-17	0.83	21.1	387	575	DTPO18LSSH-F-T17	0.88	22.4	533	793	DTPO18LSSH-F-TS17	0.99	25.1	638	950
19	DTPO18LSSH-F-19	0.85	21.6	422	628	DTPO18LSSH-F-T19	0.90	22.9	572	851	DTPO18LSSH-F-TS19	1.01	25.7	679	1011
20	DTPO18LSSH-F-20	0.88	22.4	447	665	DTPO18LSSH-F-T20	0.93	23.7	602	896	DTPO18LSSH-F-TS20	1.04	26.4	713	1061
24	DTPO18LSSH-F-24	0.98	24.9	533	793	DTPO18LSSH-F-T24	1.03	26.2	705	1049	DTPO18LSSH-F-TS24	1.15	29.2	839	1248

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-Pairs Signal & Instrumentation, 16 AWG, Overall Shield

Conductor	Unarmored					Armored					Armored and Sheathed					
	Number of Pairs	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	DTPO16LSSH-F-1	0.31	7.7	65	97	DTPO16LSSH-F-T1	0.34	8.6	106	158	DTPO16LSSH-F-TS1	0.41	10.5	135	201	
2	DTPO16LSSH-F-2	0.42	10.6	93	138	DTPO16LSSH-F-T2	0.47	11.9	168	250	DTPO16LSSH-F-TS2	0.55	14.0	212	316	
3	DTPO16LSSH-F-3	0.49	12.4	127	189	DTPO16LSSH-F-T3	0.54	13.6	215	320	DTPO16LSSH-F-TS3	0.62	15.8	265	394	
4	DTPO16LSSH-F-4	0.52	13.3	156	232	DTPO16LSSH-F-T4	0.57	14.6	249	371	DTPO16LSSH-F-TS4	0.67	16.9	308	459	
5	DTPO16LSSH-F-5	0.58	14.8	191	285	DTPO16LSSH-F-T5	0.63	16.1	295	440	DTPO16LSSH-F-TS5	0.73	18.4	360	536	
6	DTPO16LSSH-F-6	0.63	16.1	222	330	DTPO16LSSH-F-T6	0.68	17.4	335	498	DTPO16LSSH-F-TS6	0.78	19.7	404	601	
7	DTPO16LSSH-F-7	0.63	16.1	246	366	DTPO16LSSH-F-T7	0.68	17.4	359	534	DTPO16LSSH-F-TS7	0.78	19.7	428	637	
8	DTPO16LSSH-F-8	0.69	17.6	282	420	DTPO16LSSH-F-T8	0.74	18.9	405	603	DTPO16LSSH-F-TS8	0.84	21.4	488	726	
10	DTPO16LSSH-F-10	0.81	20.5	351	523	DTPO16LSSH-F-T10	0.86	21.8	494	735	DTPO16LSSH-F-TS10	0.97	24.5	596	887	
12	DTPO16LSSH-F-12	0.85	21.5	405	603	DTPO16LSSH-F-T12	0.90	22.8	554	824	DTPO16LSSH-F-TS12	1.00	25.5	660	983	
14	DTPO16LSSH-F-14	0.90	22.8	465	692	DTPO16LSSH-F-T14	0.95	24.1	623	927	DTPO16LSSH-F-TS14	1.06	26.8	735	1094	
16	DTPO16LSSH-F-16	0.95	24.0	520	775	DTPO16LSSH-F-T16	1.00	25.3	686	1021	DTPO16LSSH-F-TS16	1.10	28.0	804	1196	
17	DTPO16LSSH-F-17	0.98	24.9	557	829	DTPO16LSSH-F-T17	1.03	26.2	729	1085	DTPO16LSSH-F-TS17	1.15	29.2	863	1284	
19	DTPO16LSSH-F-19	1.01	25.5	609	906	DTPO16LSSH-F-T19	1.06	26.8	785	1168	DTPO16LSSH-F-TS19	1.17	29.8	922	1372	
20	DTPO16LSSH-F-20	1.04	26.3	638	949	DTPO16LSSH-F-T20	1.09	27.6	819	1218	DTPO16LSSH-F-TS20	1.20	30.6	959	1428	
24	DTPO16LSSH-F-24	1.15	29.3	763	1135	DTPO16LSSH-F-T24	1.20	30.5	964	1435	DTPO16LSSH-F-TS24	1.33	33.7	1130	1682	

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-Pairs Signal & Instrumentation, 14 AWG, Overall Shield

Conductor	Unarmored					Armored					Armored and Sheathed					
	Number of Pairs	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	DTPO14LSSH-F-2	0.34	8.7	86	129	DTPO14LSSH-F-T2	0.38	9.5	133	198	DTPO14LSSH-F-TS2	0.45	11.5	166	246	
2	DTPO14LSSH-F-2	0.47	11.9	123	184	DTPO14LSSH-F-T2	0.52	13.2	208	310	DTPO14LSSH-F-TS2	0.60	15.3	257	382	
3	DTPO14LSSH-F-3	0.54	13.7	165	246	DTPO14LSSH-F-T3	0.59	15.0	262	390	DTPO14LSSH-F-TS3	0.68	17.3	323	480	
4	DTPO14LSSH-F-4	0.59	15.1	210	313	DTPO14LSSH-F-T4	0.64	16.3	316	470	DTPO14LSSH-F-TS4	0.74	18.7	381	567	
5	DTPO14LSSH-F-5	0.65	16.5	251	373	DTPO14LSSH-F-T5	0.70	17.8	366	545	DTPO14LSSH-F-TS5	0.80	20.3	444	660	
6	DTPO14LSSH-F-6	0.72	18.2	298	443	DTPO14LSSH-F-T6	0.77	19.4	424	632	DTPO14LSSH-F-TS6	0.87	22.0	509	757	
7	DTPO14LSSH-F-7	0.72	18.2	332	494	DTPO14LSSH-F-T7	0.77	19.4	458	682	DTPO14LSSH-F-TS7	0.87	22.0	543	807	
8	DTPO14LSSH-F-8	0.78	19.9	380	566	DTPO14LSSH-F-T8	0.83	21.2	518	771	DTPO14LSSH-F-TS8	0.93	23.7	610	907	
10	DTPO14LSSH-F-10	0.91	23.1	470	700	DTPO14LSSH-F-T10	0.96	24.4	630	938	DTPO14LSSH-F-TS10	1.07	27.1	744	1107	
12	DTPO14LSSH-F-12	0.95	24.2	545	810	DTPO14LSSH-F-T12	1.00	25.5	712	1059	DTPO14LSSH-F-TS12	1.11	28.2	830	1236	
14	DTPO14LSSH-F-14	1.01	25.7	628	935	DTPO14LSSH-F-T14	1.06	27.0	806	1199	DTPO14LSSH-F-TS14	1.18	30.0	943	1404	
16	DTPO14LSSH-F-16	1.07	27.1	704	1048	DTPO14LSSH-F-T16	1.12	28.4	891	1326	DTPO14LSSH-F-TS16	1.24	31.4	1036	1541	
17	DTPO14LSSH-F-17	1.11	28.2	755	1123	DTPO14LSSH-F-T17	1.16	29.5	949	1412	DTPO14LSSH-F-TS17	1.28	32.5	1098	1635	
19	DTPO14LSSH-F-19	1.14	28.9	827	1230	DTPO14LSSH-F-T19	1.19	30.2	1026	1526	DTPO14LSSH-F-TS19	1.31	33.4	1190	1771	
20	DTPO14LSSH-F-20	1.17	29.8	866	1289	DTPO14LSSH-F-T20	1.22	31.0	1071	1593	DTPO14LSSH-F-TS20	1.35	34.2	1240	1845	
24	DTPO14LSSH-F-24	1.31	33.3	1044	1554	DTPO14LSSH-F-T24	1.38	34.9	1331	1981	DTPO14LSSH-F-TS24	1.51	38.3	1533	2281	

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.

This page intentionally left blank