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 ºC.

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, CO_2 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

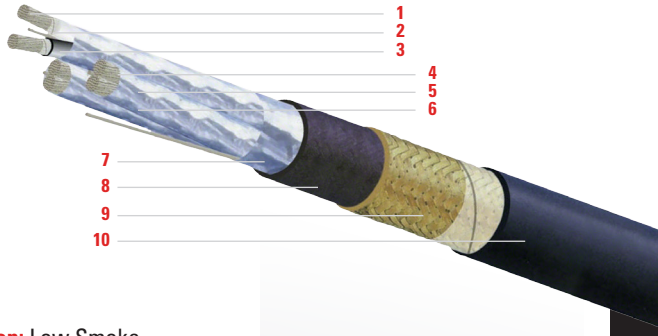
- Intertek, as Type HF XLPE/SHF1
- ABS, American Bureau of Shipping.
- DNV, Det Norske Veritas
- LRS, Lloyd's Register of Shipping.

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.

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

Conductor	Unarmored					Armored					Armored and Sheathed				
						Tinned Copper					Tinned Copper				
Number of Pairs	Part Number	Nominal OD		Net Weight		Part Number	Nominal OD		Net Weight		Part Number	Nominal OD		Net Weight	
		in	mm	lb/kft	kg/km		in	mm	lb/kft	kg/km		in	mm	lb/kft	kg/km
2	DTPI20LSSHF-2	0.39	9.9	75	112	DTPI20LSSHF-T2	0.42	10.7	120	179	DTPI20LSSHF-TS2	0.51	12.9	161	239
3	DTPI20LSSHF-3	0.43	10.9	92	137	DTPI20LSSHF-T3	0.48	12.2	170	253	DTPI20LSSHF-TS3	0.56	14.3	215	320
4	DTPI20LSSHF-4	0.47	11.9	106	158	DTPI20LSSHF-T4	0.52	13.2	191	284	DTPI20LSSHF-TS4	0.60	15.3	239	356
5	DTPI20LSSHF-5	0.49	12.5	129	192	DTPI20LSSHF-T5	0.54	13.7	217	323	DTPI20LSSHF-TS5	0.63	15.9	267	398
6	DTPI20LSSHF-6	0.54	13.6	155	230	DTPI20LSSHF-T6	0.59	14.9	250	373	DTPI20LSSHF-TS6	0.68	17.2	311	462
7	DTPI20LSSHF-7	0.59	15.0	170	252	DTPI20LSSHF-T7	0.64	16.3	275	409	DTPI20LSSHF-TS7	0.73	18.6	340	507
8	DTPI20LSSHF-8	0.64	16.2	218	325	DTPI20LSSHF-T8	0.69	17.5	332	494	DTPI20LSSHF-TS8	0.78	19.8	401	597
10	DTPI20LSSHF-10	0.66	16.8	227	338	DTPI20LSSHF-T10	0.71	18.1	345	513	DTPI20LSSHF-TS10	0.81	20.6	424	631
12	DTPI20LSSHF-12	0.70	17.7	262	390	DTPI20LSSHF-T12	0.75	19.0	385	573	DTPI20LSSHF-TS12	0.85	21.5	468	697
14	DTPI20LSSHF-14	0.76	19.2	299	445	DTPI20LSSHF-T14	0.81	20.5	433	644	DTPI20LSSHF-TS14	0.91	23.0	521	776
16	DTPI20LSSHF-16	0.79	20.1	345	513	DTPI20LSSHF-T16	0.84	21.4	484	721	DTPI20LSSHF-TS16	0.94	23.9	577	858
17	DTPI20LSSHF-17	0.85	21.7	374	556	DTPI20LSSHF-T17	0.90	22.9	524	780	DTPI20LSSHF-TS17	1.01	25.7	631	939
19	DTPI20LSSHF-19	0.85	21.7	392	584	DTPI20LSSHF-T19	0.90	22.9	542	807	DTPI20LSSHF-TS19	1.01	25.7	650	967
20	DTPI20LSSHF-20	0.91	23.0	438	651	DTPI20LSSHF-T20	0.96	24.3	597	888	DTPI20LSSHF-TS20	1.06	27.0	710	1056
24	DTPI20LSSHF-24	1.01	25.6	542	806	DTPI20LSSHF-T24	1.06	26.9	719	1069	DTPI20LSSHF-TS24	1.18	29.9	856	1274

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, Individual Shield

Conductor	Unarmored					Armored					Armored and Sheathed				
						Tinned Copper					Tinned Copper				
Number of Pairs	Part Number	Nominal OD		Net Weight		Part Number	Nominal OD		Net Weight		Part Number	Nominal OD		Net Weight	
		in	mm	lb/kft	kg/km		in	mm	lb/kft	kg/km		in	mm	lb/kft	kg/km
2	DTPI18LSSHF-2	0.46	11.8	104	155	DTPI18LSSHF-T2	0.51	13.0	187	279	DTPI18LSSHF-TS2	0.60	15.2	235	350
3	DTPI18LSSHF-3	0.51	13.0	127	188	DTPI18LSSHF-T3	0.56	14.2	218	325	DTPI18LSSHF-TS3	0.65	16.6	276	411
4	DTPI18LSSHF-4	0.56	14.2	161	240	DTPI18LSSHF-T4	0.61	15.5	261	388	DTPI18LSSHF-TS4	0.70	17.8	323	481
5	DTPI18LSSHF-5	0.59	14.9	179	266	DTPI18LSSHF-T5	0.64	16.2	283	421	DTPI18LSSHF-TS5	0.73	18.5	348	518
6	DTPI18LSSHF-6	0.64	16.3	215	319	DTPI18LSSHF-T6	0.69	17.6	329	489	DTPI18LSSHF-TS6	0.78	19.9	399	593
7	DTPI18LSSHF-7	0.71	17.9	232	345	DTPI18LSSHF-T7	0.76	19.2	357	531	DTPI18LSSHF-TS7	0.86	21.7	441	656
8	DTPI18LSSHF-8	0.77	19.6	311	462	DTPI18LSSHF-T8	0.82	20.8	446	664	DTPI18LSSHF-TS8	0.92	23.4	537	798
10	DTPI18LSSHF-10	0.79	20.0	312	464	DTPI18LSSHF-T10	0.84	21.3	451	671	DTPI18LSSHF-TS10	0.94	23.9	543	808
12	DTPI18LSSHF-12	0.83	21.2	360	536	DTPI18LSSHF-T12	0.88	22.4	507	754	DTPI18LSSHF-TS12	0.99	25.2	612	911
14	DTPI18LSSHF-14	0.91	23.1	418	622	DTPI18LSSHF-T14	0.96	24.4	578	860	DTPI18LSSHF-TS14	1.07	27.1	692	1029
16	DTPI18LSSHF-16	0.94	24.0	474	705	DTPI18LSSHF-T16	0.99	25.2	639	951	DTPI18LSSHF-TS16	1.10	28.0	757	1126
17	DTPI18LSSHF-17	1.03	26.1	522	777	DTPI18LSSHF-T17	1.08	27.4	702	1045	DTPI18LSSHF-TS17	1.20	30.4	842	1253
19	DTPI18LSSHF-19	1.03	26.1	548	816	DTPI18LSSHF-T19	1.08	27.4	728	1083	DTPI18LSSHF-TS19	1.20	30.4	868	1291
20	DTPI18LSSHF-20	1.09	27.8	618	919	DTPI18LSSHF-T20	1.14	29.0	809	1204	DTPI18LSSHF-TS20	1.26	32.0	957	1424
24	DTPI18LSSHF-24	1.22	31.0	766	1139	DTPI18LSSHF-T24	1.28	32.6	1033	1537	DTPI18LSSHF-TS24	1.41	35.8	1210	1800

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, Individual Shield

Conductor	Unarmored					Armored					Armored and Sheathed				
						Tinned Copper					Tinned Copper				
Number of Pairs	Part Number	Nominal OD		Net Weight		Part Number	Nominal OD		Net Weight		Part Number	Nominal OD		Net Weight	
		in	mm	lb/kft	kg/km		in	mm	lb/kft	kg/km		in	mm	lb/kft	kg/km
2	DTPI16LSSHF-2	0.53	13.4	137	204	DTPI16LSSHF-T2	0.58	14.7	232	345	DTPI16LSSHF-TS2	0.67	17.0	291	433
3	DTPI16LSSHF-3	0.59	15.1	178	265	DTPI16LSSHF-T3	0.64	16.4	284	422	DTPI16LSSHF-TS3	0.74	18.7	349	520
4	DTPI16LSSHF-4	0.64	16.3	219	325	DTPI16LSSHF-T4	0.69	17.5	332	495	DTPI16LSSHF-TS4	0.78	19.9	402	599
5	DTPI16LSSHF-5	0.68	17.2	249	371	DTPI16LSSHF-T5	0.73	18.5	370	550	DTPI16LSSHF-TS5	0.83	21.1	450	670
6	DTPI16LSSHF-6	0.75	18.9	301	448	DTPI16LSSHF-T6	0.80	20.2	432	644	DTPI16LSSHF-TS6	0.90	22.7	520	774
7	DTPI16LSSHF-7	0.82	20.8	324	482	DTPI16LSSHF-T7	0.87	22.1	468	697	DTPI16LSSHF-TS7	0.98	24.8	572	851
8	DTPI16LSSHF-8	0.89	22.6	432	643	DTPI16LSSHF-T8	0.94	23.9	589	876	DTPI16LSSHF-TS8	1.05	26.6	700	1042
10	DTPI16LSSHF-10	0.91	23.2	436	649	DTPI16LSSHF-T10	0.96	24.5	597	888	DTPI16LSSHF-TS10	1.07	27.2	711	1058
12	DTPI16LSSHF-12	0.97	24.6	507	754	DTPI16LSSHF-T12	1.02	25.8	676	1006	DTPI16LSSHF-TS12	1.14	28.8	808	1203
14	DTPI16LSSHF-14	1.06	26.9	590	879	DTPI16LSSHF-T14	1.11	28.2	776	1154	DTPI16LSSHF-TS14	1.23	31.2	919	1368
16	DTPI16LSSHF-16	1.11	28.1	683	1016	DTPI16LSSHF-T16	1.16	29.4	876	1304	DTPI16LSSHF-TS16	1.28	32.4	1026	1527
17	DTPI16LSSHF-17	1.21	30.6	751	1117	DTPI16LSSHF-T17	1.27	32.2	1015	1511	DTPI16LSSHF-TS17	1.40	35.4	1190	1771
19	DTPI16LSSHF-19	1.21	30.6	790	1175	DTPI16LSSHF-T19	1.27	32.2	1054	1568	DTPI16LSSHF-TS19	1.40	35.4	1229	1829
20	DTPI16LSSHF-20	1.27	32.3	873	1299	DTPI16LSSHF-T20	1.34	33.9	1151	1713	DTPI16LSSHF-TS20	1.47	37.3	1347	2005
24	DTPI16LSSHF-24	1.43	36.2	1094	1627	DTPI16LSSHF-T24	1.49	37.8	1405	2091	DTPI16LSSHF-TS24	1.63	41.4	1633	2431

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, Individual Shield

Conductor	Unarmored					Armored					Armored and Sheathed				
						Tinned Copper					Tinned Copper				
Number of Pairs	Part Number	Nominal OD		Net Weight		Part Number	Nominal OD		Net Weight		Part Number	Nominal OD		Net Weight	
		in	mm	lb/kft	kg/km		in	mm	lb/kft	kg/km		in	mm	lb/kft	kg/km
2	DTPI14LSSHF-2	0.60	15.1	182	271	DTPI14LSSHF-T2	0.65	16.4	288	429	DTPI14LSSHF-TS2	0.74	18.7	354	527
3	DTPI14LSSHF-3	0.67	16.9	233	347	DTPI14LSSHF-T3	0.72	18.2	352	523	DTPI14LSSHF-TS3	0.82	20.8	431	642
4	DTPI14LSSHF-4	0.72	18.2	290	431	DTPI14LSSHF-T4	0.77	19.5	417	620	DTPI14LSSHF-TS4	0.87	22.0	501	746
5	DTPI14LSSHF-5	0.75	19.2	327	486	DTPI14LSSHF-T5	0.80	20.4	460	684	DTPI14LSSHF-TS5	0.90	23.0	548	816
6	DTPI14LSSHF-6	0.84	21.3	403	600	DTPI14LSSHF-T6	0.89	22.5	550	819	DTPI14LSSHF-TS6	1.00	25.3	656	976
7	DTPI14LSSHF-7	0.92	23.3	433	644	DTPI14LSSHF-T7	0.97	24.6	594	883	DTPI14LSSHF-TS7	1.08	27.3	708	1054
8	DTPI14LSSHF-8	1.00	25.4	577	859	DTPI14LSSHF-T8	1.05	26.7	753	1120	DTPI14LSSHF-TS8	1.17	29.7	889	1323
10	DTPI14LSSHF-10	1.03	26.1	588	875	DTPI14LSSHF-T10	1.08	27.4	768	1143	DTPI14LSSHF-TS10	1.20	30.4	907	1350
12	DTPI14LSSHF-12	1.10	27.9	697	1038	DTPI14LSSHF-T12	1.15	29.1	889	1323	DTPI14LSSHF-TS12	1.27	32.1	1037	1543
14	DTPI14LSSHF-14	1.20	30.5	811	1207	DTPI14LSSHF-T14	1.26	32.1	1075	1599	DTPI14LSSHF-TS14	1.39	35.3	1249	1859
16	DTPI14LSSHF-16	1.25	31.6	923	1373	DTPI14LSSHF-T16	1.31	33.2	1196	1779	DTPI14LSSHF-TS16	1.44	36.4	1376	2047
17	DTPI14LSSHF-17	1.35	34.4	1011	1505	DTPI14LSSHF-T17	1.42	36.0	1307	1946	DTPI14LSSHF-TS17	1.55	39.4	1515	2255
19	DTPI14LSSHF-19	1.35	34.4	1068	1590	DTPI14LSSHF-T19	1.42	36.0	1365	2031	DTPI14LSSHF-TS19	1.55	39.4	1572	2340
20	DTPI14LSSHF-20	1.44	36.5	1190	1771	DTPI14LSSHF-T20	1.50	38.1	1504	2238	DTPI14LSSHF-TS20	1.64	41.7	1734	2580
24	DTPI14LSSHF-24	1.60	40.7	1474	2194	DTPI14LSSHF-T24	1.67	42.3	1823	2714	DTPI14LSSHF-TS24	1.82	46.1	2093	3115

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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