

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.

IEC 60092-352

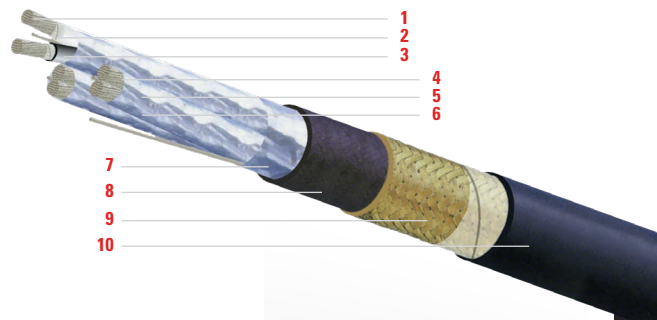
Electrical installations in ships - Part 352: Choice and installation of electrical cables.

IEEE 45 - 2002

Recommended Practice for Electrical Installations on Shipboard Cable, as noted in Clause 23.3 for products manufactured per IEC 60092-350 series.

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: 0.5 mm² up to 2.5 mm².

2. Separator Tape: Suitable tape as required.

3. Insulation: Low Smoke Halogen Free flame retardant 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-Pairs Signal & Instrumentation, 0.5 mm², Individual/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
2	DTPS0.5LSSH-F-2	0.40	10.0	77	115	DTPS0.5LSSH-F-T2	0.45	11.3	149	221	DTPS0.5LSSH-F-TS2	0.53	13.4	191	284
3	DTPS0.5LSSH-F-3	0.43	11.0	95	141	DTPS0.5LSSH-F-T3	0.48	12.3	173	258	DTPS0.5LSSH-F-TS3	0.57	14.4	219	326
4	DTPS0.5LSSH-F-4	0.47	12.0	110	163	DTPS0.5LSSH-F-T4	0.52	13.3	195	290	DTPS0.5LSSH-F-TS4	0.61	15.4	244	363
5	DTPS0.5LSSH-F-5	0.50	12.6	133	198	DTPS0.5LSSH-F-T5	0.55	13.9	222	331	DTPS0.5LSSH-F-TS5	0.64	16.2	278	414
6	DTPS0.5LSSH-F-6	0.54	13.8	160	238	DTPS0.5LSSH-F-T6	0.59	15.0	257	382	DTPS0.5LSSH-F-TS6	0.68	17.4	317	472
7	DTPS0.5LSSH-F-7	0.60	15.2	176	261	DTPS0.5LSSH-F-T7	0.65	16.5	282	420	DTPS0.5LSSH-F-TS7	0.74	18.8	348	519
8	DTPS0.5LSSH-F-8	0.65	16.4	226	337	DTPS0.5LSSH-F-T8	0.70	17.7	341	507	DTPS0.5LSSH-F-TS8	0.79	20.0	411	612
10	DTPS0.5LSSH-F-10	0.67	17.0	236	351	DTPS0.5LSSH-F-T10	0.72	18.3	354	527	DTPS0.5LSSH-F-TS10	0.82	20.8	434	646
12	DTPS0.5LSSH-F-12	0.71	17.9	272	405	DTPS0.5LSSH-F-T12	0.76	19.2	397	591	DTPS0.5LSSH-F-TS12	0.86	21.7	480	715
14	DTPS0.5LSSH-F-14	0.77	19.6	317	472	DTPS0.5LSSH-F-T14	0.82	20.9	454	675	DTPS0.5LSSH-F-TS14	0.92	23.4	544	810
16	DTPS0.5LSSH-F-16	0.80	20.3	358	533	DTPS0.5LSSH-F-T16	0.85	21.6	499	743	DTPS0.5LSSH-F-TS16	0.95	24.2	592	882
17	DTPS0.5LSSH-F-17	0.86	21.9	388	577	DTPS0.5LSSH-F-T17	0.91	23.2	540	803	DTPS0.5LSSH-F-TS17	1.02	25.9	648	965
19	DTPS0.5LSSH-F-19	0.86	21.9	408	607	DTPS0.5LSSH-F-T19	0.91	23.2	560	833	DTPS0.5LSSH-F-TS19	1.02	25.9	668	994
20	DTPS0.5LSSH-F-20	0.92	23.2	454	676	DTPS0.5LSSH-F-T20	0.97	24.5	615	915	DTPS0.5LSSH-F-TS20	1.07	27.3	729	1085
24	DTPS0.5LSSH-F-24	1.02	25.9	563	838	DTPS0.5LSSH-F-T24	1.07	27.2	742	1104	DTPS0.5LSSH-F-TS24	1.19	30.2	881	1311

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, 0.75 mm², Individual/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
2	DTPS0.75LSSH-F-2	0.46	11.8	104	155	DTPS0.75LSSH-F-T2	0.51	13.0	188	280	DTPS0.75LSSH-F-TS2	0.60	15.2	236	351
3	DTPS0.75LSSH-F-3	0.51	13.0	127	189	DTPS0.75LSSH-F-T3	0.56	14.2	219	326	DTPS0.75LSSH-F-TS3	0.65	16.6	277	412
4	DTPS0.75LSSH-F-4	0.56	14.2	162	241	DTPS0.75LSSH-F-T4	0.61	15.5	262	390	DTPS0.75LSSH-F-TS4	0.70	17.8	324	482
5	DTPS0.75LSSH-F-5	0.59	14.9	180	267	DTPS0.75LSSH-F-T5	0.64	16.2	284	423	DTPS0.75LSSH-F-TS5	0.73	18.5	349	519
6	DTPS0.75LSSH-F-6	0.64	16.3	216	321	DTPS0.75LSSH-F-T6	0.69	17.6	330	491	DTPS0.75LSSH-F-TS6	0.78	19.9	400	595
7	DTPS0.75LSSH-F-7	0.71	17.9	234	348	DTPS0.75LSSH-F-T7	0.76	19.2	359	534	DTPS0.75LSSH-F-TS7	0.86	21.7	442	658
8	DTPS0.75LSSH-F-8	0.77	19.6	312	465	DTPS0.75LSSH-F-T8	0.82	20.8	448	667	DTPS0.75LSSH-F-TS8	0.92	23.4	538	801
10	DTPS0.75LSSH-F-10	0.79	20.0	314	467	DTPS0.75LSSH-F-T10	0.84	21.3	453	674	DTPS0.75LSSH-F-TS10	0.94	23.9	545	812
12	DTPS0.75LSSH-F-12	0.83	21.2	363	540	DTPS0.75LSSH-F-T12	0.88	22.4	509	758	DTPS0.75LSSH-F-TS12	0.99	25.2	615	915
14	DTPS0.75LSSH-F-14	0.91	23.1	421	627	DTPS0.75LSSH-F-T14	0.96	24.4	581	865	DTPS0.75LSSH-F-TS14	1.07	27.1	695	1034
16	DTPS0.75LSSH-F-16	0.94	24.0	477	710	DTPS0.75LSSH-F-T16	0.99	25.2	643	956	DTPS0.75LSSH-F-TS16	1.10	28.0	760	1131
17	DTPS0.75LSSH-F-17	1.03	26.1	526	783	DTPS0.75LSSH-F-T17	1.08	27.4	706	1050	DTPS0.75LSSH-F-TS17	1.20	30.4	845	1258
19	DTPS0.75LSSH-F-19	1.03	26.1	552	822	DTPS0.75LSSH-F-T19	1.08	27.4	732	1090	DTPS0.75LSSH-F-TS19	1.20	30.4	872	1297
20	DTPS0.75LSSH-F-20	1.09	27.8	622	926	DTPS0.75LSSH-F-T20	1.14	29.0	813	1210	DTPS0.75LSSH-F-TS20	1.26	32.0	961	1430
24	DTPS0.75LSSH-F-24	1.22	31.0	771	1147	DTPS0.75LSSH-F-T24	1.28	32.6	1038	1545	DTPS0.75LSSH-F-TS24	1.41	35.8	1215	1808

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, 1.0 mm², Individual/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
2	DTPS1.0LSSH-F-2	0.49	12.4	122	182	DTPS1.0LSSH-F-T2	0.54	13.7	210	313	DTPS1.0LSSH-F-TS2	0.62	15.8	261	388	
3	DTPS1.0LSSH-F-3	0.54	13.7	152	226	DTPS1.0LSSH-F-T3	0.59	15.0	248	370	DTPS1.0LSSH-F-TS3	0.68	17.3	309	460	
4	DTPS1.0LSSH-F-4	0.59	15.0	192	286	DTPS1.0LSSH-F-T4	0.64	16.3	298	443	DTPS1.0LSSH-F-TS4	0.73	18.6	363	541	
5	DTPS1.0LSSH-F-5	0.62	15.8	216	321	DTPS1.0LSSH-F-T5	0.67	17.0	326	485	DTPS1.0LSSH-F-TS5	0.76	19.4	394	587	
6	DTPS1.0LSSH-F-6	0.69	17.5	266	395	DTPS1.0LSSH-F-T6	0.74	18.8	388	577	DTPS1.0LSSH-F-TS6	0.84	21.3	470	699	
7	DTPS1.0LSSH-F-7	0.75	19.0	282	419	DTPS1.0LSSH-F-T7	0.80	20.3	414	616	DTPS1.0LSSH-F-TS7	0.90	22.8	502	747	
8	DTPS1.0LSSH-F-8	0.82	20.8	374	556	DTPS1.0LSSH-F-T8	0.87	22.0	517	770	DTPS1.0LSSH-F-TS8	0.98	24.8	621	924	
10	DTPS1.0LSSH-F-10	0.84	21.3	381	568	DTPS1.0LSSH-F-T10	0.89	22.6	529	787	DTPS1.0LSSH-F-TS10	1.00	25.3	635	944	
12	DTPS1.0LSSH-F-12	0.89	22.7	449	668	DTPS1.0LSSH-F-T12	0.94	23.9	605	901	DTPS1.0LSSH-F-TS12	1.05	26.7	717	1067	
14	DTPS1.0LSSH-F-14	0.97	24.6	514	766	DTPS1.0LSSH-F-T14	1.02	25.9	684	1018	DTPS1.0LSSH-F-TS14	1.14	28.9	816	1215	
16	DTPS1.0LSSH-F-16	1.01	25.7	593	882	DTPS1.0LSSH-F-T16	1.06	27.0	770	1146	DTPS1.0LSSH-F-TS16	1.18	30.0	908	1351	
17	DTPS1.0LSSH-F-17	1.10	28.0	654	973	DTPS1.0LSSH-F-T17	1.15	29.3	847	1260	DTPS1.0LSSH-F-TS17	1.27	32.3	996	1482	
19	DTPS1.0LSSH-F-19	1.10	28.0	689	1026	DTPS1.0LSSH-F-T19	1.15	29.3	882	1313	DTPS1.0LSSH-F-TS19	1.27	32.3	1031	1534	
20	DTPS1.0LSSH-F-20	1.16	29.5	759	1129	DTPS1.0LSSH-F-T20	1.21	30.8	962	1431	DTPS1.0LSSH-F-TS20	1.34	34.0	1129	1681	
24	DTPS1.0LSSH-F-24	1.31	33.2	950	1414	DTPS1.0LSSH-F-T24	1.37	34.8	1236	1840	DTPS1.0LSSH-F-TS24	1.50	38.2	1437	2139	

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, 1.5 mm², Individual/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
2	DTPS1.5LSSH-F-2	0.57	14.5	166	248	DTPS1.5LSSH-F-T2	0.62	15.8	268	400	DTPS1.5LSSH-F-TS2	0.71	18.1	332	494	
3	DTPS1.5LSSH-F-3	0.63	16.1	206	306	DTPS1.5LSSH-F-T3	0.68	17.3	318	474	DTPS1.5LSSH-F-TS3	0.78	19.7	388	577	
4	DTPS1.5LSSH-F-4	0.69	17.5	261	388	DTPS1.5LSSH-F-T4	0.74	18.8	383	570	DTPS1.5LSSH-F-TS4	0.84	21.3	465	692	
5	DTPS1.5LSSH-F-5	0.72	18.4	293	436	DTPS1.5LSSH-F-T5	0.77	19.7	421	626	DTPS1.5LSSH-F-TS5	0.87	22.2	506	753	
6	DTPS1.5LSSH-F-6	0.80	20.4	362	539	DTPS1.5LSSH-F-T6	0.85	21.7	503	749	DTPS1.5LSSH-F-TS6	0.95	24.2	597	888	
7	DTPS1.5LSSH-F-7	0.88	22.4	388	577	DTPS1.5LSSH-F-T7	0.93	23.6	543	808	DTPS1.5LSSH-F-TS7	1.04	26.4	653	972	
8	DTPS1.5LSSH-F-8	0.95	24.2	510	759	DTPS1.5LSSH-F-T8	1.00	25.5	677	1008	DTPS1.5LSSH-F-TS8	1.11	28.2	796	1184	
10	DTPS1.5LSSH-F-10	0.99	25.0	526	782	DTPS1.5LSSH-F-T10	1.04	26.3	698	1039	DTPS1.5LSSH-F-TS10	1.15	29.3	833	1239	
12	DTPS1.5LSSH-F-12	1.04	26.5	611	910	DTPS1.5LSSH-F-T12	1.09	27.7	794	1181	DTPS1.5LSSH-F-TS12	1.21	30.7	935	1391	
14	DTPS1.5LSSH-F-14	1.14	29.0	714	1063	DTPS1.5LSSH-F-T14	1.19	30.3	914	1360	DTPS1.5LSSH-F-TS14	1.32	33.5	1079	1606	
16	DTPS1.5LSSH-F-16	1.19	30.3	822	1224	DTPS1.5LSSH-F-T16	1.26	32.0	1084	1614	DTPS1.5LSSH-F-TS16	1.38	35.2	1258	1872	
17	DTPS1.5LSSH-F-17	1.29	32.7	892	1327	DTPS1.5LSSH-F-T17	1.35	34.4	1174	1747	DTPS1.5LSSH-F-TS17	1.49	37.8	1373	2043	
19	DTPS1.5LSSH-F-19	1.29	32.7	940	1399	DTPS1.5LSSH-F-T19	1.35	34.4	1223	1820	DTPS1.5LSSH-F-TS19	1.49	37.8	1421	2115	
20	DTPS1.5LSSH-F-20	1.37	34.8	1050	1562	DTPS1.5LSSH-F-T20	1.43	36.4	1349	2007	DTPS1.5LSSH-F-TS20	1.57	39.8	1559	2320	
24	DTPS1.5LSSH-F-24	1.54	39.0	1314	1955	DTPS1.5LSSH-F-T24	1.60	40.6	1649	2454	DTPS1.5LSSH-F-TS24	1.74	44.2	1893	2818	

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, 2.5 mm², Individual/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
2	DTPS2.5LSSH-F-2	0.64	16.3	220	328	DTPS2.5LSSH-F-T2	0.69	17.6	334	497	DTPS2.5LSSH-F-TS2	0.78	19.9	404	602
3	DTPS2.5LSSH-F-3	0.72	18.3	287	427	DTPS2.5LSSH-F-T3	0.77	19.5	414	616	DTPS2.5LSSH-F-TS3	0.87	22.1	499	742
4	DTPS2.5LSSH-F-4	0.78	19.9	364	541	DTPS2.5LSSH-F-T4	0.83	21.2	502	747	DTPS2.5LSSH-F-TS4	0.93	23.7	593	883
5	DTPS2.5LSSH-F-5	0.82	20.9	412	613	DTPS2.5LSSH-F-T5	0.87	22.1	557	828	DTPS2.5LSSH-F-TS5	0.98	24.9	660	983
6	DTPS2.5LSSH-F-6	0.91	23.1	506	753	DTPS2.5LSSH-F-T6	0.96	24.4	666	991	DTPS2.5LSSH-F-TS6	1.07	27.1	779	1160
7	DTPS2.5LSSH-F-7	1.00	25.4	547	813	DTPS2.5LSSH-F-T7	1.05	26.7	722	1074	DTPS2.5LSSH-F-TS7	1.17	29.7	858	1277
8	DTPS2.5LSSH-F-8	1.09	27.8	725	1079	DTPS2.5LSSH-F-T8	1.14	29.0	916	1363	DTPS2.5LSSH-F-TS8	1.26	32.0	1064	1583
10	DTPS2.5LSSH-F-10	1.12	28.5	748	1114	DTPS2.5LSSH-F-T10	1.17	29.7	944	1405	DTPS2.5LSSH-F-TS10	1.29	32.7	1095	1630
12	DTPS2.5LSSH-F-12	1.20	30.4	884	1316	DTPS2.5LSSH-F-T12	1.26	32.0	1147	1706	DTPS2.5LSSH-F-TS12	1.39	35.2	1320	1965
14	DTPS2.5LSSH-F-14	1.31	33.2	1029	1531	DTPS2.5LSSH-F-T14	1.37	34.8	1315	1957	DTPS2.5LSSH-F-TS14	1.51	38.2	1516	2256
16	DTPS2.5LSSH-F-16	1.36	34.5	1171	1743	DTPS2.5LSSH-F-T16	1.42	36.1	1468	2185	DTPS2.5LSSH-F-TS16	1.56	39.5	1676	2495
17	DTPS2.5LSSH-F-17	1.48	37.5	1281	1906	DTPS2.5LSSH-F-T17	1.54	39.1	1603	2385	DTPS2.5LSSH-F-TS17	1.68	42.6	1838	2736
19	DTPS2.5LSSH-F-19	1.48	37.5	1358	2022	DTPS2.5LSSH-F-T19	1.54	39.1	1680	2501	DTPS2.5LSSH-F-TS19	1.68	42.6	1916	2851
20	DTPS2.5LSSH-F-20	1.57	39.8	1509	2245	DTPS2.5LSSH-F-T20	1.63	41.4	1850	2753	DTPS2.5LSSH-F-TS20	1.77	44.9	2099	3123
24	DTPS2.5LSSH-F-24	1.76	44.6	1882	2801	DTPS2.5LSSH-F-T24	1.82	46.2	2265	3370	DTPS2.5LSSH-F-TS24	1.98	50.2	2579	3838

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.