

UNITRONIC® LiHH/LiHCH/LiHCH (TP)

Low-voltage halogen-free multi-conductor & multi-pair communication & control cable



UNITRONIC® LiHH/LiHCH is a halogen-free multi-conductor cable for communication, signal, and control applications. It is designed for general purpose installations of electrical machinery where human safety is a concern in case of a fire. UNITRONIC® LiHCH has a tinned copper braid for RFI & EMC protection. UNITRONIC® LiHCH (TP) is an overall-shielded multi-paired version for data, communication, and signal applications.

Recommended applications

RS-232; data buses; process control instrumentation; low-voltage signaling and interconnect; broadcast; applications with European DIN 47100 color code where human safety is a concern

Approvals



Cable attributes		page 648	
OIL	OR-01	FLAME	FR-02
MOTION	FL-01	MECH.	MP-02

Unshielded construction

- Conductors:** stranded bare copper
- Insulation:** special halogen-free compound
- Jacket:** special halogen-free compound; pebble gray

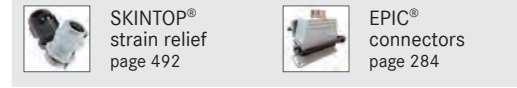
Shielded construction

- Conductors:** stranded bare copper
- Pairs:** special halogen-free compound
- Insulation:** special halogen-free compound
- Shielding:** tinned copper braid
- Jacket:** special halogen-free compound; pebble gray

Application advantage

- Low Smoke, Zero Halogen
- European color code DIN 47100
- Extended temperature range of -30°C to +80°C
- Low smoke density and low amount of corrosive gases if on fire

Complete the installation



Technical data

Minimum bend radius:		Inductance:	nominal 0.65 mH/km
- for installation:	6 x cable diameter	Mutual capacitance:	
- shielded:	6 x cable diameter	- conductor/conductor:	24 pF/ft
Temperature range:		- conductor/shield:	37 pF/ft
- for stationary use:	-30°C to +80°C	Color code:	
- for flexible use:	-5°C to +70°C	- UNITRONIC® LiHH/LiHCH:	DIN 47100: chart 8, page 682
Nominal voltage:	250V	- UNITRONIC® LiHCH (TP):	DIN 47100: chart 7, page 682
Test voltage:	1200V	Approvals:	based on VDE 0812 CE & RoHS
Conductor stranding:	fine wire		

UNITRONIC® LIHH

Part number	Number of conductors	Nominal outer diameter in mm		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® SL PG thread
24 AWG (0.25 mm²)						
0037120	2	0.157	4.0	4	15	S1107
0037121	3	0.165	4.2	5	17	S1107
0037122	4	0.177	4.5	7	19	S1107
0037124	6	0.209	5.3	10	26	S1107
0037125	7	0.209	5.3	12	28	S1107
0037126	8	0.252	6.4	13	34	S1109
0037128	12	0.283	7.2	20	45	S1111
22 AWG (0.34 mm²)						
0037140	2	0.173	4.4	5	19	S1107
0037141	3	0.181	4.6	7	20	S1107
0037142	4	0.197	5.0	9	27	S1107
0037143	5	0.224	5.7	11	30	S1107
0037147	12	0.315	8.0	27	65	S1111

Part number	Number of conductors	Nominal outer diameter in mm		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® SL PG thread
20 AWG (0.5 mm²)						
0037150	2	0.193	4.9	7	21	S1107
0037151	3	0.205	5.2	10	25	S1107
0037152	4	0.228	5.8	13	30	S1107
0037153	5	0.248	6.3	17	39	S1109
0037154	7	0.276	7.0	23	48	S1111
18 AWG (1 mm²)						
0037171	3	0.240	6.1	20	38	S1107
0037172	4	0.260	6.6	26	45	S1109

UNITRONIC® LIHCH

Part number	Number of conductors	Nominal outer diameter in mm		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
26 AWG (0.14 mm²)						
0037302	2	0.161	4.1	9	15	53112210
0037304	4	0.177	4.5	11	19	53112210
0037308	8	0.236	6.0	18	28	53112210
0037312	12	0.256	6.5	21	52	53112210
0037325	25	0.343	8.7	43	100	53112220
24 AWG (0.25 mm²)						
0037402	2	0.185	4.7	11	17	53112210
0037403	3	0.193	4.9	13	20	53112210
0037404	4	0.205	5.2	15	24	53112210
0037406	6	0.244	6.2	21	33	53112210
0037407	7	0.244	6.2	22	35	53112210
0037408	8	0.287	7.3	24	39	53112220
0037410	10	0.303	7.7	29	54	53112220
0037425	25	0.429	10.9	77	116	53112230
22 AWG (0.34 mm²)						
0037502	2	0.201	5.1	12	20	53112210
0037503	3	0.209	5.3	15	24	53112210
0037504	4	0.232	5.9	17	28	53112210
0037507	7	0.276	7.0	29	49	53112210
0037508	8	0.315	8.0	31	56	53112220
0037510	10	0.335	8.5	43	68	53112220
0037516	16	0.378	9.6	64	108	53112230
0037525	25	0.476	12.1	97	174	53112240

Part number	Number of conductors	Nominal outer diameter in mm		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
20 AWG (0.5 mm²)						
0037602	2	0.228	5.8	20	26	53112210
0037603	3	0.240	6.1	24	32	53112210
0037604	4	0.256	6.5	31	45	53112210
0037605	5	0.283	7.2	34	51	53112220
0037606	6	0.307	7.8	40	56	53112220
0037607	7	0.307	7.8	46	61	53112220
0037608	8	0.350	8.9	51	70	53112220
0037610	10	0.374	9.5	63	88	53112230
0037612	12	0.386	9.8	67	119	53112230
0037618	18	0.461	11.7	91	161	53112240
18 AWG (1 mm²)						
0037802	2	0.256	6.5	29	48	53112210
0037803	3	0.276	7.0	38	60	53112210
0037804	4	0.295	7.5	46	73	53112220
0037807	7	0.346	8.8	80	115	53112220
16 AWG (1.5 mm²)						
0037902	2	0.303	7.7	39	60	53112220
0037903	3	0.319	8.1	50	77	53112220

UNITRONIC® LIHCH (TP)

Part number	Number of pairs	Nominal outer diameter in mm		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
26 AWG (0.14 mm²)						
0038302	2	0.232	5.9	13	26	53112210
0038303	3	0.236	6.0	16	32	53112210
0038304	4	0.252	6.4	18	36	53112210
0038308	8	0.331	8.4	37	65	53112220
0038312	12	0.358	9.1	45	95	53112220
0038316	16	0.409	10.4	54	103	53112230
0038325	25	0.500	12.7	76	160	53112240
24 AWG (0.25 mm²)						
0038402	2	0.283	7.2	19	36	53112220
0038403	3	0.287	7.3	27	44	53112220
0038404	4	0.307	7.8	31	54	53112220
0038406	6	0.343	8.7	47	77	53112220
0038408	8	0.413	10.5	52	87	53112230
0038412	12	0.453	11.5	81	128	53112240
0038416	16	0.500	12.7	99	160	53112240

Part number	Number of pairs	Nominal outer diameter in mm		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
20 AWG (0.5 mm²)						
0038602	2	0.346	8.8	33	62	53112220
0038603	3	0.350	8.9	50	87	53112220
0038604	4	0.378	9.6	56	98	53112230
0038606	6	0.445	11.3	74	133	53112240
0038608	8	0.524	13.3	94	174	53112240
0038612	12	0.594	15.1	134	238	53112250
0038616	16	0.657	16.7	162	308	53112250
18 AWG (1 mm²)						
0038802	2	0.413	10.5	57	95	53112230
0038803	3	0.417	10.6	65	116	53112230
0038804	4	0.453	11.5	82	142	53112240



Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available; please see our SKINTOP® section. If not otherwise specified, all values relating to the product are nominal values.

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