

UNITRONIC® LiYY/LiYCY/LiYCY (TP)

Low-voltage multi-conductor & multi-pair communication & control cable; unshielded & shielded

LAPP KABEL STUTTGART UNITRONIC® LiYY



LAPP KABEL STUTTGART UNITRONIC® LiYCY



LAPP KABEL STUTTGART UNITRONIC® LiYCY (TP)



UNITRONIC® LiYY/LiYCY is a multi-conductor cable for communication, signal, and control applications. It is designed for general purpose installations of electrical machinery. UNITRONIC® LiYCY has a tinned copper braid for RFI & EMI protection. UNITRONIC® LiYCY (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

Approvals



Unshielded construction

Conductors: stranded bare copper

Insulation: PVC

Jacket: PVC; pebble gray

Shielded construction

Conductors: stranded bare copper

Insulation: PVC

Pairs: PVC

Shielding: tinned copper braid

Jacket: PVC; pebble gray

Application advantage

- Extended temperature range of -40°C to +80°C
- European color code DIN 47100
- Flexible for easy installation

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

Complete the installation	
SKINTOP® strain relief page 492	EPIC® connectors page 284

Technical data

Minimum bend radius:		Inductance:	
- for installation:	4 x cable diameter	- UNITRONIC® LiYY/LiYCY:	nominal 0.65 mH/km
- shielded:	6 x cable diameter	- UNITRONIC® LiYCY (TP):	nominal 0.50 mH/km
Temperature range:		Mutual capacitance:	
- for stationary use:	-40°C to +80°C	- conductor/conductor:	37 pF/ft
- for flexible use:	-5°C to +70°C	- conductor/shield:	48 pF/ft
Nominal voltage:	250V	Color code:	
Test voltage:		- UNITRONIC® LiYY/LiYCY:	DIN 47100: chart 8, page 682
- 26 AWG:	1200V	- UNITRONIC® LiYCY (TP):	DIN 47100: chart 7, page 682
- larger than 26 AWG:	1500V	Approvals:	based on VDE 0812 CE & RoHS
Conductor stranding:	fine wire		

UNITRONIC® LiYY

Part number	Number of conductors	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® SL	
		in	mm			PG thread	
26 AWG (0.14 mm²)							
0028202	2	0.126	3.2	2	9		S1107
0028203	3	0.134	3.4	4	11		S1107
0028204	4	0.142	3.6	5	13		S1107
0028205	5	0.154	3.9	6	15		S1107
0028207	7	0.165	4.2	8	19		S1107
0028208	8	0.193	4.9	7	24		S1107
0028210	10	0.205	5.2	10	28		S1107
0028212	12	0.220	5.6	12	32		S1107
0028214	14	0.228	5.8	14	36		S1107
0028216	16	0.240	6.1	16	40		S1107
0028220	20	0.276	7.0	19	48		S1111
0028225	25	0.307	7.8	23	58		S1111
0028236	36	0.339	8.6	33	85		S1111
0028237	37	0.350	8.9	34	79		S1111
0028240	40	0.366	9.3	37	93		S1111
0028250	50	0.409	10.4	46	115		S1113
0028256	56	0.421	10.7	53	126		S1113
24 AWG (0.25 mm²)							
0028302	2	0.150	3.8	4	12		S1107
0028303	3	0.157	4.0	5	15		S1107
0028304	4	0.169	4.3	7	17		S1107
0028305	5	0.185	4.7	9	21		S1107
0028307	7	0.201	5.1	12	28		S1107
0028308	8	0.244	6.2	13	33		S1107
0028310	10	0.268	6.8	17	39		S1109
0028312	12	0.276	7.0	20	45		S1111
0028314	14	0.287	7.3	23	50		S1111
0028316	16	0.303	7.7	26	56		S1111
0028318	18	0.319	8.1	30	62		S1111
0028320	20	0.339	8.6	33	69		S1111
0028325	25	0.378	9.6	41	90		S1113
0028330	30	0.406	10.3	49	104		S1113
0028332	32	0.421	10.7	52	110		S1113
0028336	36	0.437	11.1	59	122		S1113
0028337	37	0.449	11.4	60	124		S1113
0028340	40	0.472	12.0	65	134		S1116
0028350	50	0.508	12.9	81	173		S1116

Part number	Number of conductors	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® SL	
		in	mm			PG thread	
22 AWG (0.34 mm²)							
0028402	2	0.165	4.2	5	17		S1107
0028403	3	0.173	4.4	7	21		S1107
0028404	4	0.189	4.8	9	29		S1107
0028405	5	0.217	5.5	12	36		S1107
0028407	7	0.232	5.9	16	42		S1107
0028408	8	0.280	7.1	18	49		S1111
0028410	10	0.299	7.6	22	55		S1111
0028412	12	0.307	7.8	27	69		S1111
0028414	14	0.323	8.2	31	73		S1111
0028416	16	0.343	8.7	35	85		S1111
0028420	20	0.378	9.6	44	107		S1113
0028421	21	0.409	10.4	47	112		S1113
0028425	25	0.441	11.2	55	128		S1113
0028430	30	0.457	11.6	66	152		S1113
0028436	36	0.492	12.5	80	191		S1116
0028440	40	0.531	13.5	89	213		S1121
0028450	50	0.591	15.0	110	274		S1121
20 AWG (0.5 mm²)							
0028502	2	0.185	4.7	7	27		S1107
0028503	3	0.197	5.0	10	32		S1107
0028504	4	0.220	5.6	13	38		S1107
0028505	5	0.240	6.1	17	44		S1107
0028507	7	0.272	6.9	23	55		S1109
0028508	8	0.315	8.0	26	60		S1111
0028510	10	0.339	8.6	33	79		S1111
0028512	12	0.350	8.9	39	89		S1111
0028516	16	0.402	10.2	52	114		S1113
0028520	20	0.449	11.4	65	144		S1113
0028525	25	0.484	12.3	81	178		S1116
0028530	30	0.520	13.2	98	204		S1116
0028540	40	0.622	15.8	130	263		S1121
18 AWG (1 mm²)							
0028702	2	0.220	5.6	13	37		S1107
0028703	3	0.232	5.9	20	47		S1107
0028705	5	0.287	7.3	33	66		S1111
16 AWG (1.5 mm²)							
0028802	2	0.268	6.8	20	50		S1109
0028803	3	0.283	7.2	30	60		S1111
0028804	4	0.307	7.8	40	71		S1111

UNITRONIC® LiYCY

Part number	Number of conductors	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC	
		in	mm			PG thread	
26 AWG (0.14 mm²)							
0034302	2	0.154	3.9	9	13		53112210
0034303	3	0.161	4.1	9	19		53112210
0034304	4	0.169	4.3	10	22		53112210
0034305	5	0.181	4.6	11	26		53112210
0034306	6	0.193	4.9	13	26		53112210
0034307	7	0.193	4.9	13	33		53112210
0034308	8	0.228	5.8	15	38		53112210
0034310	10	0.240	6.1	20	44		53112210
0034312	12	0.248	6.3	21	52		53112210
0034314	14	0.264	6.7	22	54		53112210
0034315	15	0.272	6.9	26	58		53112210
0034316	16	0.276	7.0	29	60		53112210
0034318	18	0.287	7.3	33	70		53112220
0034320	20	0.303	7.7	37	78		53112220
0034321	21	0.311	7.9	38	81		53112220
0034325	25	0.331	8.4	43	100		53112220
0034328	28	0.335	8.5	45	103		53112220
0034330	30	0.343	8.7	47	106		53112220
0034332	32	0.354	9.0	50	110		53112220
0034336	36	0.366	9.3	56	123		53112230
0034340	40	0.409	10.4	59	141		53112230
0034344	44	0.421	10.7	75	151		53112230
0034350	50	0.437	11.1	83	170		53112230

Part number	Number of conductors	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC	
		in	mm			PG thread	
24 AWG (0.25 mm²)							
0034402	2	0.177	4.5	11	22		53112210
0034403	3	0.185	4.7	15	25		53112210
0034404	4	0.197	5.0	17	28		53112210
0034405	5	0.220	5.6	20	34		53112210
0034406	6	0.236	6.0	21	39		53112210
0034407	7	0.236	6.0	25	44		53112210
0034408	8	0.280	7.1	29	49		53112210
0034410	10	0.295	7.5	31	55		53112220
0034412	12	0.303	7.7	36	66		53112220
0034414	14	0.315	8.0	40	67		53112220
0034415	15	0.327	8.3	41	75		53112220
0034416	16	0.331	8.4	44	83		53112220
0034418	18	0.346	8.8	56	96		53112220
0034420	20	0.366	9.3	60	102		53112230
0034421	21	0.378	9.6	63	108		53112230
0034425	25	0.421	10.7	77	116		53112230
0034428	28	0.425	10.8	85	122		53112230
0034430	30	0.433	11.0	89	127		53112230
0034432	32	0.449	11.4	93	136		53112240
0034436	36	0.465	11.8	100	148		53112240
0034440	40	0.500	12.7	106	167		53112240
0034450	50	0.543	13.8	120	214		53112250
0034461	61	0.591	15.0	138	245		53112250

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.

UNITRONIC® LiYCY

Part number	Number of conductors	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® MS-SC
		in	mm	lbs/mft	lbs/mft	PG thread
22 AWG (0.34 mm²)						
0034502	2	0.193	4.9	15	25	53112210
0034503	3	0.201	5.1	19	33	53112210
0034504	4	0.224	5.7	19	40	53112210
0034505	5	0.244	6.2	21	44	53112210
0034506	6	0.268	6.8	31	53	53112210
0034507	7	0.268	6.8	33	56	53112210
0034508	8	0.307	7.8	35	63	53112220
0034510	10	0.327	8.3	50	87	53112220
0034512	12	0.335	8.5	54	95	53112220
0034514	14	0.350	8.9	58	103	53112220
0034515	15	0.362	9.2	61	104	53112220
0034516	16	0.370	9.4	64	108	53112230
0034518	18	0.402	10.2	70	116	53112230
0034520	20	0.421	10.7	76	129	53112230
0034521	21	0.437	11.1	78	134	53112230
0034525	25	0.469	11.9	91	174	53112240
0034528	28	0.472	12.0	103	188	53112240
0034530	30	0.484	12.3	107	196	53112240
0034532	32	0.512	13.0	111	205	53112240
0034536	36	0.528	13.4	121	222	53112240
0034540	40	0.583	14.8	135	245	53112250
0034550	50	0.626	15.9	158	290	53112250
20 AWG (0.5 mm²)						
0034602	2	0.220	5.6	20	36	53112210
0034603	3	0.232	5.9	26	45	53112210
0034604	4	0.248	6.3	29	52	53112210
0034605	5	0.276	7.0	35	60	53112210

Part number	Number of conductors	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® MS-SC
		in	mm	lbs/mft	lbs/mft	PG thread
0034606	6	0.299	7.6	40	70	53112220
0034607	7	0.299	7.6	44	75	53112220
0034608	8	0.343	8.7	48	91	53112220
0034610	10	0.366	9.3	60	108	53112230
0034612	12	0.378	9.6	67	119	53112230
0034618	18	0.465	11.8	91	161	53112240
0034620	20	0.476	12.1	101	185	53112240
0034625	25	0.539	13.7	142	237	53112250
0034630	30	0.571	14.5	155	267	53112250
18 AWG (1 mm²)						
0034802	2	0.248	6.3	29	48	53112210
0034803	3	0.268	6.8	38	60	53112210
0034804	4	0.287	7.3	46	73	53112220
0034805	5	0.315	8.0	54	85	53112220
0034807	7	0.339	8.6	80	115	53112220
0034810	10	0.437	11.1	95	153	53112230
0034812	12	0.449	11.4	113	174	53112240
0034818	18	0.528	13.4	170	261	53112240
0034825	25	0.638	16.2	226	347	53112250
16 AWG (1.5 mm²)						
0034902	2	0.295	7.5	39	60	53112220
0034903	3	0.311	7.9	50	77	53112220
0034904	4	0.335	8.5	73	103	53112220
0034905	5	0.366	9.3	87	118	53112230
0034907	7	0.413	10.5	111	148	53112230
0034912	12	0.539	13.7	171	253	53112250
0034918	18	0.642	16.3	236	349	53112250
0034925	25	0.783	19.9	370	605	53112260

UNITRONIC® LiYCY (TP)

Part number	Number of pairs	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® MS-SC
		in	mm	lbs/mft	lbs/mft	PG thread
26 AWG (0.14 mm²)						
0035131	2	0.224	5.7	13	26	53112210
0035141	3	0.228	5.8	16	32	53112210
0035132	4	0.244	6.2	18	36	53112210
0035133	6	0.280	7.1	33	57	53112210
0035150	8	0.323	8.2	37	65	53112220
0035134	10	0.343	8.7	40	74	53112220
0035135	12	0.350	8.9	45	95	53112220
0035136	16	0.402	10.2	54	103	53112230
0035142	20	0.445	11.3	66	124	53112240
0035137	25	0.492	12.5	76	160	53112240
24 AWG (0.25 mm²)						
0035800	2	0.248	6.3	19	36	53112210
0035801	3	0.280	7.1	27	46	53112210
0035802	4	0.299	7.6	31	54	53112220
0035803	6	0.335	8.5	47	77	53112220
0035804	8	0.406	10.3	52	87	53112230
0035805	10	0.433	11.0	69	106	53112230
0035806	12	0.445	11.3	81	128	53112240
0035807	16	0.492	12.5	99	160	53112240
0035808	25	0.634	16.1	138	231	53112250

Part number	Number of pairs	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® MS-SC
		in	mm	lbs/mft	lbs/mft	PG thread
20 AWG (0.5 mm²)						
0035810	2	0.339	8.6	33	62	53112220
0035811	3	0.343	8.7	50	87	53112220
0035812	4	0.370	9.4	56	98	53112230
0035813	6	0.437	11.1	74	133	53112230
0035814	8	0.516	13.1	94	174	53112240
0035816	12	0.587	14.9	134	238	53112250
0035817	16	0.650	16.5	162	308	53112250
18 AWG (1 mm²)						
0035830	2	0.354	9.0	57	95	53112220
0035831	3	0.409	10.4	65	116	53112230
0035832	4	0.445	11.3	82	142	53112240
0035836	5	0.465	11.8	109	179	53112240

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