

UNITRONIC® LiYY/LiYCY/LiYCY (TP)

Multi-Conductor & Multi-Pair, Low-Voltage Communication & Control Cable; Unshielded & Shielded



UNITRONIC® LiYY Construction

Conductors: Stranded bare copper

Insulation: PVC

Jacket: PVC; pebble gray

UNITRONIC® LiYCY/LiYCY (TP) Construction

Conductors: Stranded bare copper

Insulation: PVC

Pairs: PVC

Shielding: Tinned copper braid

Jacket: PVC; pebble gray

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 the European DIN 47100 color code

Application Advantage

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

Approvals



Cable Attributes, see page 659

OR-01	FR-02	FL-01	MP-01
OIL	FLAME	MOTION	MECHANICAL

Similar Cables

- UNITRONIC® 300 series
- D 304 IS/D 304 OS
- C 304/C 304 S

Complete the Installation

	SKINTOP® Strain Relief: page 502		EPIC® Connectors: page 278
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Technical Data

Minimum Bend Radius:	- for installation: 4 x cable diameter - shielded: 6 x cable diameter	Inductance:	- UNITRONIC® LiYY/LiYCY: Nominal 0.65 mH/km - UNITRONIC® LiYCY (TP): Nominal 0.50 mH/km
Temperature Range:	- for stationary use: -40°C to +80°C - for flexible use: -5°C to +70°C	Mutual Capacitance:	- Conductor/conductor: 37 pF/ft - Conductor/shield: 48 pF/ft
Nominal Voltage:	250V	Color Code:	- UNITRONIC® LiYY/LiYCY: DIN 47100: Chart 8, page 697 - UNITRONIC® LiYCY (TP): DIN 47100: Chart 7, page 697
Test Voltage:	- 26 AWG: 1200V - larger than 26 AWG: 1500V	Approvals:	Based on VDE 0812 RoHS
Conductor Stranding:	Fine wire		
Insulation Resistance:	20 GΩ x cm		

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UNITRONIC® LiYY

Part Number	Number of Conductors	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread	Part Number	Number of Conductors	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread
26 AWG (0.14 mm²)						22 AWG (0.34 mm²)					
0028202	2	0.126 3.2	2	9	S1107	0028402	2	0.165 4.2	5	17	S1107
0028203	3	0.134 3.4	4	11	S1107	0028403	3	0.173 4.4	7	21	S1107
0028204	4	0.142 3.6	5	13	S1107	0028404	4	0.189 4.8	9	29	S1107
0028205	5	0.154 3.9	6	15	S1107	0028405	5	0.217 5.5	12	36	S1107
0028207	7	0.165 4.2	8	19	S1107	0028407	7	0.232 5.9	16	42	S1107
0028208	8	0.193 4.9	7	24	S1107	0028408	8	0.280 7.1	18	49	S1111
0028210	10	0.205 5.2	10	28	S1107	0028410	10	0.299 7.6	22	55	S1111
0028212	12	0.220 5.6	12	32	S1107	0028412	12	0.307 7.8	27	69	S1111
0028214	14	0.228 5.8	14	36	S1107	0028414	14	0.323 8.2	31	73	S1111
0028216	16	0.240 6.1	16	40	S1107	0028416	16	0.343 8.7	35	85	S1111
0028220	20	0.276 7.0	19	48	S1111	0028420	20	0.378 9.6	44	107	S1113
0028225	25	0.307 7.8	23	58	S1111	0028421	21	0.409 10.4	47	112	S1113
0028236	36	0.339 8.6	33	85	S1111	0028425	25	0.441 11.2	55	128	S1113
0028237	37	0.350 8.9	34	79	S1111	0028430	30	0.457 11.6	66	152	S1113
0028240	40	0.366 9.3	37	93	S1111	0028436	36	0.492 12.5	80	191	S1116
0028250	50	0.409 10.4	46	115	S1113	0028440	40	0.531 13.5	89	213	S1121
0028256	56	0.421 10.7	53	126	S1113	0028450	50	0.591 15.0	110	274	S1121
24 AWG (0.25 mm²)						20 AWG (0.50 mm²)					
0028302	2	0.150 3.8	4	12	S1107	0028502	2	0.185 4.7	7	27	S1107
0028303	3	0.157 4.0	5	15	S1107	0028203	3	0.197 5.0	10	32	S1107
0028304	4	0.169 4.3	7	17	S1107	0028504	4	0.220 5.6	13	38	S1107
0028305	5	0.185 4.7	9	21	S1107	0028505	5	0.240 6.1	17	44	S1107
0028307	7	0.201 5.1	12	28	S1107	0028507	7	0.272 6.9	23	55	S1109
0028308	8	0.244 6.2	13	33	S1107	0028508	8	0.315 8.0	26	60	S1111
0028310	10	0.268 6.8	17	39	S1109	0028510	10	0.339 8.6	33	79	S1111
0028312	12	0.276 7.0	20	45	S1111	0028512	12	0.350 8.9	39	89	S1111
0028314	14	0.287 7.3	23	50	S1111	0028516	16	0.402 10.2	52	114	S1113
0028316	16	0.303 7.7	26	56	S1111	0028520	20	0.449 11.4	65	144	S1113
0028318	18	0.319 8.1	30	62	S1111	0028525	25	0.484 12.3	81	178	S1116
0028320	20	0.339 8.6	33	69	S1111	0028530	30	0.520 13.2	98	204	S1116
0028325	25	0.378 9.6	41	90	S1113	0028540	40	0.622 15.8	130	263	S1121
0028330	30	0.406 10.3	49	104	S1113	18 AWG (1.00 mm²)					
0028332	32	0.421 10.7	52	110	S1113	0028702	2	0.220 5.6	13	37	S1107
0028336	36	0.437 11.1	59	122	S1113	0028703	3	0.232 5.9	20	47	S1107
0028337	37	0.449 11.4	60	124	S1113	0028705	5	0.287 7.3	33	66	S1111
0028340	40	0.472 12.0	65	134	S1116	16 AWG (1.50 mm²)					
0028350	50	0.508 12.9	81	173	S1116	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 (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread	Part Number	Number of Conductors	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread
26 AWG (0.14 mm²)						24 AWG (0.25 mm²)					
0034302	2	0.154 3.9	9	13	53112210	0034402	2	0.177 4.5	11	22	53112210
0034303	3	0.161 4.1	9	19	53112210	0034403	3	0.185 4.7	15	25	53112210
0034304	4	0.169 4.3	10	22	53112210	0034404	4	0.197 5.0	17	28	53112210
0034305	5	0.181 4.6	11	26	53112210	0034405	5	0.220 5.6	20	34	53112210
0034306	6	0.193 4.9	13	26	53112210	0034406	6	0.236 6.0	21	39	53112210
0034307	7	0.193 4.9	13	33	53112210	0034407	7	0.236 6.0	25	44	53112210
0034308	8	0.228 5.8	15	38	53112210	0034408	8	0.280 7.1	29	49	53112210
0034310	10	0.240 6.1	20	44	53112210	0034410	10	0.295 7.5	31	55	53112220
0034312	12	0.248 6.3	21	52	53112210	0034412	12	0.303 7.7	36	66	53112220
0034314	14	0.264 6.7	22	54	53112210	0034414	14	0.315 8.0	40	67	53112220
0034315	15	0.272 6.9	26	58	53112210	0034415	15	0.327 8.3	41	75	53112220
0034316	16	0.276 7.0	29	60	53112210	0034416	16	0.331 8.4	44	83	53112220
0034318	18	0.287 7.3	33	70	53112220	0034418	18	0.346 8.8	56	96	53112220
0034320	20	0.303 7.7	37	78	53112220	0034420	20	0.366 9.3	60	102	53112230
0034321	21	0.311 7.9	38	81	53112220	0034421	21	0.378 9.6	63	108	53112230
0034325	25	0.331 8.4	43	100	53112220	0034425	25	0.421 10.7	77	116	53112230
0034328	28	0.335 8.5	45	103	53112220	0034425	25	0.425 10.8	85	122	53112230
0034330	30	0.343 8.7	47	106	53112220	0034430	30	0.433 11.0	89	127	53112230
0034332	32	0.354 9.0	50	110	53112220	0034432	32	0.449 11.4	93	136	53112240
0034336	36	0.366 9.3	56	123	53112230	0034436	36	0.465 11.8	100	148	53112240
0034340	40	0.409 10.4	59	141	53112230	0034440	40	0.500 12.7	106	167	53112240
0034344	44	0.421 10.7	75	151	53112230	0034450	50	0.543 13.8	120	214	53112250
0034350	50	0.437 11.1	83	170	53112230	0034461	61	0.591 15.0	138	245	53112250

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UNITRONIC® LiYCY

Part Number	Number of Conductors	Nominal Outer Diameter (inches) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread	Part Number	Number of Conductors	Nominal Outer Diameter (inches) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread
22 AWG (0.34 mm²)							18 AWG (1.00 mm²)						
0034502	2	0.193	4.9	15	25	53112210	0034802	2	0.248	6.3	29	48	53112210
0034503	3	0.201	5.1	19	33	53112210	0034803	3	0.268	6.8	38	60	53112210
0034504	4	0.224	5.7	19	40	53112210	0034804	4	0.287	7.3	46	73	53112220
0034505	5	0.244	6.2	21	44	53112210	0034805	5	0.315	8.0	54	85	53112220
0034506	6	0.268	6.8	31	53	53112210	0034807	7	0.339	8.6	80	115	53112220
0034507	7	0.268	6.8	33	56	53112210	0034810	10	0.437	11.1	95	153	53112230
0034508	8	0.307	7.8	35	63	53112220	0034812	12	0.449	11.4	113	174	53112240
0034510	10	0.327	8.3	50	87	53112220	0034818	18	0.528	13.4	170	261	53112240
0034512	12	0.335	8.5	54	95	53112220	0034825	25	0.638	16.2	226	347	53112250
0034514	14	0.350	8.9	58	103	53112220	16 AWG (1.50 mm²)						
0034515	15	0.362	9.2	61	104	53112220	0034902	2	0.295	7.5	39	60	53112220
0034516	16	0.370	9.4	64	108	53112230	0034903	3	0.311	7.9	50	77	53112220
0034518	18	0.402	10.2	70	116	53112230	0034904	4	0.335	8.5	73	103	53112220
0034520	20	0.421	10.7	76	129	53112230	0034905	5	0.366	9.3	87	118	53112230
0034521	21	0.437	11.1	78	134	53112230	0034907	7	0.413	10.5	111	148	53112230
0034525	25	0.469	11.9	91	174	53112240	0034912	12	0.539	13.7	171	253	53112250
0034528	28	0.472	12.0	103	188	53112240	0034918	18	0.642	16.3	236	349	53112250
0034530	30	0.484	12.3	107	196	53112240	0034925	25	0.783	19.9	370	605	53112260
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 (0.50 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							
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							

UNITRONIC® LiYCY (TP)

Part Number	Number of Pairs	Nominal Outer Diameter (inches) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread	Part Number	Number of Pairs	Nominal Outer Diameter (inches) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread
26 AWG (0.14 mm²)							20 AWG (0.50 mm²)						
0035131	2	0.224	5.7	13	26	53112210	0035810	2	0.339	8.6	33	62	53112220
0035141	3	0.228	5.8	16	32	53112210	0035811	3	0.343	8.7	50	87	53112220
0035132	4	0.244	6.2	18	36	53112210	0035812	4	0.370	9.4	56	98	53112230
0035133	6	0.280	7.1	33	57	53112210	0035813	6	0.437	11.1	74	133	53112230
0035150	8	0.323	8.2	37	65	53112220	0035814	8	0.516	13.1	94	174	53112240
0035134	10	0.343	8.7	40	74	53112220	0035816	12	0.587	14.9	134	238	53112250
0035135	12	0.350	8.9	45	95	53112220	0035817	16	0.650	16.5	162	308	53112250
0035136	16	0.402	10.2	54	103	53112230	18 AWG (1.00 mm²)						
0035142	20	0.445	11.3	66	124	53112240	0035830	2	0.354	9.0	57	95	53112220
0035137	25	0.492	12.5	76	160	53112240	0035831	3	0.409	10.4	65	116	53112230
24 AWG (0.25 mm²)							0035832	4	0.445	11.3	82	142	53112240
0035800	2	0.248	6.3	19	36	53112210	0035836	5	0.465	11.8	109	179	53112240
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							

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