

Flexible Signal & Control Cable

8 **UNITRONIC®**



Flexible Signal & Control Cables

QUICK SELECT CHART

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UNITRONIC® 300 Flexible Signal and Control Cables

UNITRONIC® 300

Multi-Conductor, Unshielded
300V Flexible Industrial Signal & Control Cable



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UNITRONIC® 300 F

Multi-Conductor, Foil Shielded
300V Flexible Industrial Signal & Control Cable



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UNITRONIC® 300 S

Multi-Conductor Foil & Braid Shielded
300V Flexible Industrial Signal & Control Cable



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UNITRONIC® 300 TP

Multi-Pair, Unshielded
300V Flexible Industrial Signal & Control Cable



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UNITRONIC® 300 FTP

Multi-Pair, Foil Shielded
300V Paired Foil Shielded Flexible Industrial Signal & Control Cable



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UNITRONIC® 300 STP

Multi-Pair, Foil Braid Shielded
300V Flexible Industrial Signal & Control Cable



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UNITRONIC® 190 Communication Cables

UNITRONIC® 190/ 190 CY/ 190 CY TP

Multi-Conductor, Multi-Paired, Unshielded & Shielded
300V Industrial Communication Cable



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Flexible European Electronic Cables

UNITRONIC® LiYY/ LiYCY

Multi-Conductor, Unshielded & Shielded, DIN Color Code
250V Industrial Communication & Control Cable



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Flexible Signal & Control Cables

UNITRONIC® LiYY (TP) / LiYCY(TP)

Multi-Pair, Unshielded & Shielded, DIN Color Code
250V Industrial Communication & Control Cable



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UNITRONIC® LiHH/ LiHCH

Multi-Conductor, Unshielded & Shielded, DIN Color Code
250V Halogen-Free Industrial Communication & Control Cable



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UNITRONIC® LiHCH (TP)

Multi-Pair, Shielded, DIN Color Code
250V Halogen-Free Industrial Communication Cable



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UNITRONIC® CY PiDY (TP)

Multi-Pair, Individually Shielded & Jacketed, DIN Color Code
250V Halogen-Free Industrial Communication Cable



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Quick Select Chart

Products	Application						Performance			
	RS-232	Industrial Sensors / Actuators	Stepper Motor, Encoder, Resolver	4-20 mA Signaling	Electronic Instrumentation	Halogen-Free	UL/CSA	Peak Working Voltage (Volts)		Min. Bend Radius (Stationary) X Diameter
UNITRONIC® 300		•			•		•	300	4	
UNITRONIC® 300 F		•	•		•		•	300	6	
UNITRONIC® 300 S		•	•		•		•	300	6	
UNITRONIC® 300 TP	•	•	•		•		•	300	4	
UNITRONIC® 300 FTP	•	•	•	•	•		•	300	6	
UNITRONIC® 300 STP	•	•	•	•	•		•	300	6	
UNITRONIC® 190		•			•		•	300	5	
UNITRONIC® 190 CY		•	•		•		•	300	8	
UNITRONIC® 190 TP CY	•	•	•	•	•		•	300	8	
UNITRONIC® LiYY / LiYCY			•		•			250	6	
UNITRONIC® LiYY (TP) / LiYCY (TP)	•		•	•	•			250	6	
UNITRONIC® LiHH / LiHCH			•		•	•		250	10	
UNITRONIC® LiHCH (TP)	•		•	•	•	•		250	6	
UNITRONIC® CY PiDY (TP)	•		•	•	•			250	6	

	Specifications				Construction			Page #
	Low Temperature (Stationary)	High Temperature (Stationary)	Oil Resistance	Flame Resistance	Jacket Material Options	Insulation	AWG Range	
	-25°C	105°C	OR-02	FR-03	PVC, PUR, TPE	PVC	28 - 16	154
	-25°C	105°C	OR-02	FR-03	PVC, PUR, TPE	PVC	28 - 16	156
	-25°C	105°C	OR-02	FR-03	PVC, PUR, TPE	PVC	28 - 16	157
	-25°C	105°C	OR-02	FR-03	PVC, PUR, TPE	PVC	28 - 18	160
	-25°C	105°C	OR-02	FR-03	PVC, PUR, TPE	PVC	28 - 18	161
	-25°C	105°C	OR-02	FR-03	PVC, PUR, TPE	PVC	28 - 18	162
	-10°C	105°C	OR-02	FR-03	PVC	PVC	22 - 28	163
	-10°C	105°C	OR-02	FR-03	PVC	PVC	22 - 28	163
	-10°C	105°C	OR-02	FR-03	PVC	PVC	22 - 26	163
	-30°C	70°C	OR-01	FR-02	PVC	PVC	26 - 16	166
	-30°C	70°C	OR-01	FR-02	PVC	PVC	26 - 18	169
	-30°C	70°C	OR-01	FR-02	PVC	PVC	26 - 16	171
	-30°C	70°C	OR-01	FR-02	PVC	PVC	26 - 18	173
	-30°C	70°C	OR-01	FR-02	PVC	PVC	24	174

UNITRONIC® 300

Multi-Conductor, Unshielded

300V Flexible Industrial Signal and Control Cable



The UNITRONIC® 300 Series of signal and control cables have been carefully engineered to provide the highest performance and ease of installation in industrial signal and control applications. Available shielding options provide EMC protection in the harshest industrial environments.

Recommended Applications:

Process Instrumentation, Low Voltage control interconnect.

Application Advantages:

- Extended temperature rating of -40°C to +105°C
- Flexible design for ease of routing
- Suitable for use in cable tray
- Oil and UV resistant (Oil Res I)
- Sequential foot marking for ease of installation

UNITRONIC® 300 Construction:

Finely stranded tinned copper conductors; PVC blended insulation; oil resistant gray PVC jacket.

Control Cable (20 AWG - 16 AWG)

LAPP KABEL STUTTGART UNITRONIC® 300 (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V RoHS



Signal Cable (28 AWG* - 22 AWG)

LAPP KABEL STUTTGART UNITRONIC® 300 (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V RoHS



Cable Attributes, See Page 653

	Oil Resistance: OR-02		Flame Resistance: FR-03
	Motion Type: FL-01		Mechanical Properties: MP-02

Availability:

Standard put-ups are 100ft, 500ft, and 1,000ft.

Complete the installation with:

	SKINTOP® Strain Relief: Page 486		EPIC® Connectors: Page 251
			Assemblies: Page 627

Technical Data:

- Minimum Bend Radius:
 - for installation: 4 x cable diameter
 - shielded: 6 x cable diameter
- Temperature Range: -40°C to +105°C
- Nominal Voltage: 300 V
- Conductor Stranding: Fine Wire
- Color Code:
 - 28-22 AWG: Chart 4, Page 672
 - 20-16 AWG: Chart 5, Page 672

- Approvals:
 - UL: - CMG per UL 444
 - PLTC-ER per UL 13
 - ITC-ER per UL 2250
 - AWM 2464
 - Attributes:
 - UL Oil Res I
 - Sunlight Resistant
 - Direct Burial
 - Canada:
 - CSA AWM I/II AB FT4
 - c(UL) CMG FT4
- * 28 AWG, 26 AWG, & 24 AWG not PLTC
 ** Exposed run for 18 AWG & 16 AWG
 Meets NEC Art. 725, 760, & 800. Also Class I Div. 2 (PLTC only)

UNITRONIC® 300

Multi-Conductor, Unshielded

300V Flexible Industrial Signal and Control Cable



UNITRONIC® 300: Multi-conductor Control & Signal Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter		Copper Weight	Approx. Weight		Part Number	Number of Conductors includes ground	Nominal Outer Diameter		Copper Weight	Approx. Weight	
		inches	mm	lbs/mft	lbs/mft	kg/km			inches	mm	lbs/mft	lbs/mft	kg/km
28 AWG (19/40) 0.10 mm²							20 AWG (19/32) 0.62 mm²						
302802	2	.149	3.8	1	8	12	302002	2	.225	5.7	8	38	57
302803	3	.155	3.9	2	12	17	302003	3	.237	6.0	11	40	60
302804	4	.164	4.2	2	14	20	302004	4	.256	6.5	15	50	74
302806	6	.185	4.7	3	19	29	302006	6	.308	7.8	22	65	97
302808	8	.196	5.0	5	20	30	302008	8	.331	8.4	30	90	134
302810	10	.221	5.6	6	23	35	302010	10	.381	9.7	37	96	143
302815	15	.246	6.3	9	29	43	302015	15	.452	11.5	56	120	179
302820	20	.268	6.8	12	36	54	302020	20	.497	12.6	60	174	259
302825	25	.307	7.8	15	43	64	302025	25	.554	14.1	94	238	354
302830	30	.318	8.1	17	49	72	302030	30	.577	14.7	113	282	419
302840	40	.350	8.9	23	61	91	302040	40	.662	16.8	150	376	559
302850	50	.389	8.9	29	73	108	302050	50	.742	18.9	188	470	699
26 AWG (19/38) 0.15 mm²							18 AWG (19/30) 1.00 mm²						
302602	2	.155	3.9	2	12	2	301802	2	.243	6.2	12	41	61
302603	3	.161	4.1	3	14	14	301803	3	.256	6.5	18	43	64
302604	4	.171	4.4	4	16	16	301804	4	.287	7.3	24	53	79
302606	6	.194	4.9	6	20	20	301806	6	.335	8.5	36	69	103
302608	8	.206	5.2	7	23	23	301808	8	.360	9.2	48	94	140
302610	10	.233	5.9	9	28	28	301810	10	.437	11.1	60	131	195
302615	15	.260	6.6	14	36	36	301815	15	.494	12.6	90	166	247
302620	20	.294	7.5	18	45	45	301820	20	.544	13.8	121	221	329
302625	25	.325	8.3	23	54	54	301825	25	.629	16.0	151	275	409
302630	30	.337	8.6	28	63	63	301830	30	.655	16.6	181	361	538
302640	40	.372	9.4	37	78	78	301840	40	.728	18.5	241	482	717
302650	50	.415	10.5	46	98	98	301850	50	.818	20.8	301	602	896
24 AWG (19/36) 0.24 mm²							16 AWG (26/30) 1.32 mm²						
302402	2	.165	4.2	3	13	19	301602	2	.265	6.7	16	56	83
302403	3	.172	4.4	4	15	22	301603	3	.290	7.4	24	60	89
302404	4	.183	4.7	6	18	27	301604	4	.314	8.0	32	74	110
302406	6	.209	5.3	9	23	34	301606	6	.368	9.3	49	110	164
302408	8	.223	5.7	12	28	42	301608	8	.417	10.6	65	164	244
302410	10	.253	6.4	15	34	51	301610	10	.481	12.2	81	180	268
302415	15	.284	7.2	22	46	68	301615	15	.546	13.9	122	243	362
302420	20	.321	8.1	30	58	86	301620	20	.603	15.3	163	331	493
302425	25	.355	9.0	37	70	104	301625	25	.696	17.7	204	409	609
302430	30	.369	9.4	45	88	131	301630	30	.725	18.4	244	488	727
302440	40	.430	10.9	60	117	174	301640	40	.808	20.5	326	651	969
302450	50	.479	12.2	75	146	218	301650	50	.910	23.1	407	814	1211
22 AWG (19/34) 0.38 mm²													
302202	2	.179	4.5	5	15	22							
302203	3	.187	4.7	7	19	28							
302204	4	.200	5.1	9	22	33							
302206	6	.229	5.8	14	31	46							
302208	8	.245	6.2	19	37	55							
302210	10	.289	7.3	24	45	67							
302215	15	.324	8.2	35	61	91							
302220	20	.355	9.0	47	78	116							
302225	25	.414	10.5	59	95	141							
302230	30	.430	10.9	71	118	175							
302240	40	.474	12.0	94	157	234							
302250	50	.529	13.4	118	196	292							

UNITRONIC® 300 F

Multi-Conductor, Foil Shielded
300V Flexible Industrial Signal and Control Cable



The UNITRONIC® 300 Series of signal and control cables have been carefully engineered to provide the highest performance and ease of installation in industrial signal and control applications. Available shielding options provide EMC protection in the harshest industrial environments.

Recommended Applications:

Process Instrumentation, Low Voltage control interconnect.

Application Advantages:

- Extended temperature rating of -40°C to +105°C
- Flexible design for ease of routing
- Suitable for use in cable tray
- Oil and UV resistant (Oil Res I)
- Sequential foot marking for ease of installation

UNITRONIC® 300 F Construction:

Finely stranded tinned copper conductors with drain wire; PVC blended insulation; tri-laminated AMA foil shield (100%); oil resistant gray PVC jacket.

Control Cable (20 AWG - 16 AWG)

LAPP KABEL STUTTGART UNITRONIC® 300 F (UL) TYPE CMG or PLTC 105 CSA CMG or AWM II A/B 300V RoHS



Signal Cable (28 AWG* - 22 AWG)

LAPP KABEL STUTTGART UNITRONIC® 300 F (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V RoHS



Cable Attributes, See Page 653

	Oil Resistance: OR-02		Flame Resistance: FR-03
	Motion Type: FL-01		Mechanical Properties: MP-02

Availability:









Standard put-ups are 100ft, 500ft, and 1,000ft.

Complete the installation with:

	SKINTOP® Strain Relief: Page 486		EPIC® Connectors: Page 251
			Assemblies: Page 627

Technical Data:

-  Minimum Bend Radius:
 - for installation: 4 x cable diameter
 - shielded: 6 x cable diameter
-  Temperature Range: -40°C to +105°C
-  Nominal Voltage: 300 V
-  Conductor Stranding: Fine Wire
-  Color Code:
 - 28 - 22 AWG: Chart 4, Page 672
 - 20 - 16 AWG: Chart 5, Page 672

-  Approvals:
 - UL: - CMG per UL 444
 - PLTC-ER per UL 13
 - ITC-ER per UL 2250
 - AWM 2464
 - Attributes: - UL Oil Res I
 - Sunlight Resistant
 - Direct Burial
 - Canada: - CSA AWM I/II AB FT4
 - c(UL) CMG FT4
- * 28 AWG, 26 AWG, & 24 AWG not PLTC
- ** Exposed run for 18 AWG & 16 AWG
- Meets NEC Art. 725, 760, & 800. Also Class I Div. 2 (PLTC only)

UNITRONIC® 300 F

Multi-Conductor, Foil Shielded

300V Flexible Industrial Signal and Control Cable



UNITRONIC® 300 F: Foil Shielded Multi-conductor Control & Signal Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
28 AWG (19/40) 0.10 mm							20 AWG (19/32) 0.62 mm²						
302802F	2	.154	3.9	2	9	13	302002F	2	.230	5.8	11	42	62
302803F	3	.160	4.1	2	12	18	302003F	3	.242	6.1	15	44	65
302804F	4	.169	4.3	3	14	21	302004F	4	.261	6.6	19	54	80
302806F	6	.190	4.8	4	20	30	302006F	6	.313	8.0	26	69	102
302808F	8	.201	5.1	5	21	31	302008F	8	.336	8.5	34	94	139
302810F	10	.226	5.7	6	24	36	302010F	10	.386	9.8	41	100	148
302815F	15	.251	6.4	9	30	44	302015F	15	.457	11.6	60	124	184
302820F	20	.273	6.9	12	37	55	302020F	20	.502	12.7	63	178	264
302825F	25	.312	7.9	15	44	65	302025F	25	.559	14.2	98	242	360
302830F	30	.323	8.2	18	49	73	302030F	30	.582	14.8	116	285	425
302840F	40	.355	9.0	24	62	92	302040F	40	.667	16.9	154	379	564
302850F	50	.414	10.5	30	74	109	302050F	50	.747	19.0	192	473	704
26 AWG (19/38) 0.15 mm²							18 AWG (19/30) 1.00 mm²						
302602F	2	.160	4.1	3	13	20	301802F	2	.248	6.3	18	47	70
302603F	3	.166	4.2	4	15	22	301803F	3	.261	6.6	24	49	73
302604F	4	.176	4.5	5	17	25	301804F	4	.292	7.4	30	59	88
302606F	6	.199	5.1	7	21	32	301806F	6	.340	8.6	42	75	112
302608F	8	.211	5.4	8	24	36	301808F	8	.365	9.3	54	100	149
302610F	10	.238	6.0	10	29	43	301810F	10	.442	11.2	66	137	204
302615F	15	.265	6.7	15	37	56	301815F	15	.499	12.7	96	172	256
302620F	20	.299	7.6	19	46	68	301820F	20	.549	14.0	127	227	338
302625F	25	.330	8.4	24	55	81	301825F	25	.634	16.1	157	281	418
302630F	30	.342	8.7	29	64	95	301830F	30	.660	16.8	187	367	547
302640F	40	.377	9.6	38	79	118	301840F	40	.733	18.6	247	488	726
302650F	50	.440	11.2	47	99	147	301850F	50	.823	20.9	307	608	905
24 AWG (19/36) 0.24 mm²							16 AWG (26/30) 1.32 mm²						
302402F	2	.170	4.3	5	15	22	301602F	2	.270	6.9	24	64	95
302403F	3	.177	4.5	6	17	25	301603F	3	.295	7.5	32	68	101
302404F	4	.188	4.8	7	20	29	301604F	4	.319	8.1	40	82	122
302406F	6	.214	5.4	10	25	36	301606F	6	.373	9.5	57	118	176
302408F	8	.228	5.8	13	30	44	301608F	8	.422	10.7	73	172	256
302410F	10	.258	6.6	16	36	53	301610F	10	.486	12.3	89	188	280
302415F	15	.289	7.3	24	48	71	301615F	15	.551	14.0	130	251	374
302420F	20	.326	8.3	31	60	89	301620F	20	.608	15.4	171	339	504
302425F	25	.360	9.2	39	72	106	301625F	25	.701	17.8	212	417	621
302430F	30	.374	9.5	46	89	133	301630F	30	.730	18.5	252	496	739
302440F	40	.413	10.5	61	119	176	301640F	40	.813	20.6	334	659	981
302450F	50	.482	12.2	76	148	220	301650F	50	.915	23.2	415	822	1223
22 AWG (19/34) 0.38 mm²													
302202F	2	.184	4.7	7	17	26							
302203F	3	.192	4.9	9	21	32							
302204F	4	.205	5.2	12	24	36							
302206F	6	.234	5.9	16	33	50							
302208F	8	.250	6.3	21	39	58							
302210F	10	.294	7.5	26	47	70							
302215F	15	.329	8.4	38	63	94							
302220F	20	.360	9.1	49	80	119							
302225F	25	.419	10.6	61	97	145							
302230F	30	.435	11.0	73	120	179							
302240F	40	.479	12.2	97	159	237							
302250F	50	.534	13.6	120	199	296							

UNITRONIC® 300 S

Multi-Conductor Foil & Braid Shielded
300V Flexible Industrial Signal and Control Cable



The UNITRONIC® 300 Series of signal and control cables have been carefully engineered to provide the highest performance and ease of installation in industrial signal and control applications. Available shielding options provide EMC protection in the harshest industrial environments.

Recommended Applications:

Process Instrumentation, Low voltage control interconnect.

Application Advantages:

- Extended temperature rating of -40°C to +105°C
- Flexible design for ease of routing
- Suitable for use in cable tray
- Oil and UV resistant (Oil Res I)
- Sequential foot marking for ease of installation
- All items available from inventory in 100, 500 & 1,000 ft. put ups

UNITRONIC® 300 S Construction:

Finely stranded tinned copper conductors with drain wire; PVC blended insulation; tri-laminated foil shield and tinned copper braid (75%); oil resistant gray PVC jacket.

Control Cable (20 AWG - 16 AWG)

LAPP KABEL STUTTGART UNITRONIC® 300 CY (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V



Signal Cable (28 AWG* - 22 AWG)

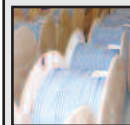
LAPP KABEL STUTTGART UNITRONIC® 300 CY (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V



Cable Attributes, See Page 653

	Oil Resistance: OR-02		Flame Resistance: FR-03
	Motion Type: FL-01		Mechanical Properties: MP-02

Availability:



Standard put-ups are 100ft, 500ft, and 1,000ft.

Complete the installation with:

	SKINTOP® Strain Relief: Page 486		EPIC® Connectors: Page 251
			Assemblies: Page 627

Technical Data:

- ☑ Minimum Bend Radius:
 - for installation: 4 x cable diameter
 - shielded: 6 x cable diameter
- ☒ Temperature Range: -40°C to +105°C
- ⚡ Nominal Voltage: 300 V
- 🌀 Conductor Stranding: Fine Wire
- 🎨 Color Code:
 - 28 - 22 AWG: Chart 4, Page 672
 - 20 - 16 AWG: Chart 5, Page 672

- ☑ Approvals:
 - UL: - CMG per UL 444
 - PLTC-ER per UL 13
 - ITC-ER per UL 2250
 - AWM 2464
 - Attributes: - UL Oil Res I
 - Sunlight Resistant
 - Direct Burial
 - Canada: - CSA AWM I/II AB FT4
 - c(UL) CMG FT4
- * 28 AWG, 26 AWG, & 24 AWG not PLTC
- ** Exposed run for 18 AWG & 16 AWG
- Meets NEC Art. 725, 760, & 800. Also Class I Div. 2 (PLTC only)

UNITRONIC® 300 S

Multi-Conductor Foil & Braid Shielded

300V Flexible Industrial Signal and Control Cable



UNITRONIC® 300 S: Foil & Braid Shielded Multi-Conductor Control & Signal Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
28 AWG (19/40) 0.10 mm²							20 AWG (19/32) 0.62 mm²						
302802S	2	.176	4.5	4	11	17	302002S	2	.252	6.4	19	49	73
302803S	3	.182	4.6	5	15	22	302003S	3	.264	6.7	23	52	77
302804S	4	.191	4.9	6	18	26	302004S	4	.283	7.2	27	62	92
302806S	6	.212	5.4	8	24	36	302006S	6	.335	8.5	37	80	119
302808S	8	.223	5.7	10	25	38	302008S	8	.358	9.1	46	107	158
302810S	10	.248	6.3	12	29	44	302010S	10	.408	10.4	56	115	171
302815S	15	.273	6.9	16	36	54	302015S	15	.485	12.3	80	144	214
302820S	20	.295	7.5	20	45	67	302020S	20	.530	13.5	88	202	301
302825S	25	.334	8.5	25	53	79	302025S	25	.587	14.9	126	270	402
302830S	30	.345	8.8	29	60	89	302030S	30	.610	15.5	150	319	475
302840S	40	.377	9.6	37	75	112	302040S	40	.695	17.7	192	417	621
302850S	50	.442	11.2	45	89	132	302050S	50	.775	19.7	225	507	754
26 AWG (19/38) 0.15 mm²							18 AWG (19/30) 1.00 mm²						
302602S	2	.182	4.6	6	16	24	301802S	2	.270	6.9	25	54	80
302603S	3	.188	4.8	7	18	27	301803S	3	.283	7.2	33	58	86
302604S	4	.198	5.0	8	21	31	301804S	4	.314	8.0	40	69	103
302606S	6	.221	5.6	11	26	38	301806S	6	.362	9.2	55	88	131
302608S	8	.233	5.9	13	29	43	301808S	8	.387	9.8	68	114	170
302610S	10	.260	6.6	16	35	52	301810S	10	.470	11.9	83	154	229
302615S	15	.287	7.3	21	44	65	301815S	15	.527	13.4	121	197	293
302620S	20	.321	8.2	27	53	79	301820S	20	.577	14.7	156	257	382
302625S	25	.352	8.9	33	63	94	301825S	25	.662	16.8	187	311	463
302630S	30	.364	9.2	38	73	109	301830S	30	.688	17.5	216	397	590
302640S	40	.399	10.1	49	91	136	301840S	40	.761	19.3	280	521	775
302650S	50	.468	11.9	60	112	167	301850S	50	.851	21.6	340	641	954
24 AWG (19/36) 0.24 mm²							16 AWG (26/30) 1.32 mm²						
302402S	2	.192	4.9	10	20	29	301602S	2	.292	7.4	34	74	110
302403S	3	.199	5.1	11	22	32	301603S	3	.317	8.0	42	78	116
302404S	4	.210	5.3	13	25	38	301604S	4	.341	8.7	52	93	138
302406S	6	.236	6.0	18	32	47	301606S	6	.395	10.0	71	132	196
302408S	8	.250	6.3	21	37	56	301608S	8	.450	11.4	91	190	283
302410S	10	.280	7.1	26	45	67	301610S	10	.514	13.1	114	213	317
302415S	15	.311	7.9	35	58	87	301615S	15	.579	14.7	156	277	412
302420S	20	.348	8.8	43	72	106	301620S	20	.636	16.2	201	369	549
302425S	25	.382	9.7	53	86	127	301625S	25	.729	18.5	246	452	673
302430S	30	.396	10.1	62	105	156	301630S	30	.758	19.3	288	532	792
302440S	40	.441	11.2	80	137	204	301640S	40	.841	21.4	368	694	1033
302450S	50	.510	12.9	98	169	252	301650S	50	.950	24.1	450	857	1275
22 AWG (19/34) 0.38 mm²													
302202S	2	.206	5.2	13	23	34							
302203S	3	.214	5.4	15	27	40							
302204S	4	.227	5.8	18	31	46							
302206S	6	.256	6.5	24	41	61							
302208S	8	.272	6.9	30	48	71							
302210S	10	.316	8.0	36	58	86							
302215S	15	.351	8.9	52	78	115							
302220S	20	.382	9.7	63	94	140							
302225S	25	.447	11.4	81	117	174							
302230S	30	.463	11.7	93	140	209							
302240S	40	.507	12.9	120	183	272							
302250S	50	.562	14.3	145	224	333							

UNITRONIC® 300 TP

Multi-Pair, Unshielded

300V Flexible Industrial Signal and Control Cable



The UNITRONIC® 300 Series of signal and control cables have been carefully engineered to provide the highest performance and ease of installation in industrial signal and control applications. Available shielding options provide EMC protection in the harshest industrial environments.

Recommended Applications:

RS-232, Data buses, Process Instrumentation, Low voltage control interconnect.

Application Advantages:

- Extended temperature rating of -25°C to +105°C
- Flexible design for ease of routing
- Suitable for use in cable tray
- Oil and UV resistant (Oil Res I)
- Sequential foot marking for ease of installation
- All items available from inventory in 100, 500 & 1,000 ft. put ups

UNITRONIC® 300 TP Construction:

Finely stranded tinned copper conductors; PVC blended insulation; oil resistant gray PVC jacket.

Control Cable (20 AWG - 18 AWG)

LAPP KABEL STUTTGART UNITRONIC® 300 TP (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V RoHS



Signal Cable (24 AWG* - 22 AWG)

LAPP KABEL STUTTGART UNITRONIC® 300 TP (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V RoHS



Cable Attributes, See Page 653 Oil Resistance: OR-02 Motion Type: FL-01 Flame Resistance: FR-03 Mechanical Properties: MP-03		Availability: Standard put-ups are 100ft, 500ft, and 1,000ft.	Complete the installation with: SKINTOP® Strain Relief: Page 486 EPIC® Connectors: Page 251 Assemblies: Page 627
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Technical Data:

- Minimum Bend Radius: - with shield: 6 x cable diameter
- Temperature Range: -25°C to +105°C
- Nominal Voltage: 300 V
- Test Voltage: 2000 V
- Conductor Stranding: Class 5
- Color Code:
 - 24 AWG & 22 AWG: Chart 14, Page 677
 - 20 AWG & 18 AWG: Chart 13, Page 677

- Approvals:
 - UL: - CMG per UL 444
 - PLTC-ER per UL 13
 - ITC-ER per UL 2250
 - AWM 2464
 - Attributes:
 - UL Oil Res I
 - Sunlight Resistant
 - Direct Burial
 - Canada:
 - CSA AWM I/II AB FT4
 - c(UL) CMG FT4
- * 24 AWG not PLTC
 ** Exposed Run for 18 AWG & 16 AWG (22 & 20 AWG Available)
 Meets NEC Art. 725, 760, & 800. Also Class I Div. 2 (PLTC only)

Part Number	Number of Pairs	Nominal Outer Diameter		Copper Weight	Approx. Weight		Part Number	Number of Pairs	Nominal Outer Diameter		Copper Weight	Approx. Weight	
		inches	mm	lbs/mft	lbs/mft	kg/km			inches	mm	lbs/mft	lbs/mft	kg/km
24 AWG (19/36) 0.24 mm²							20 AWG (19/32) 0.62 mm²						
302401TP	1	.154	3.9	3	13	19	302001TP	1	.205	5.2	8	38	57
302402TP	2	.231	5.9	6	18	27	302002TP	2	.345	8.8	15	50	74
302403TP	3	.243	6.2	9	23	34	302003TP	3	.365	9.3	23	65	97
302406TP	6	.320	8.1	18	44	66	302006TP	6	.492	12.5	46	130	194
302409TP	9	.368	9.3	27	60	90	302009TP	9	.571	14.5	69	180	268
302415TP	15	.471	12.0	45	88	131	302015TP	15	.729	18.5	113	282	419
22 AWG (19/34) 0.38 mm²							18 AWG (19/30) 1.00 mm²						
302201TP	1	.165	4.2	5	15	22	301801TP	1	.221	5.6	12	41	61
302202TP	2	.252	6.4	9	22	33	301802TP	2	.376	9.6	24	53	79
302203TP	3	.266	6.8	14	31	46	301803TP	3	.419	10.6	36	69	103
302206TP	6	.352	8.9	28	56	84	301806TP	6	.540	13.7	73	146	217
302209TP	9	.426	10.8	42	80	119	301809TP	9	.648	16.5	110	219	326
302215TP	15	.520	13.2	71	118	175	301815TP	15	.803	20.4	182	363	540

UNITRONIC® 300 FTP

Multi-Pair, Foil Shielded

300V Paired Foil Shielded Flexible Industrial Signal and Control Cable



The UNITRONIC® 300 Series of signal and control cables have been carefully engineered to provide the highest performance and ease of installation in industrial signal and control applications. Available shielding options provide EMC protection in the harshest industrial environments.

Recommended Applications:

RS-232, Data buses, Process Instrumentation, Low voltage control interconnect.

Application Advantages:

- Extended temperature rating of -25°C to +105°C
- Flexible design for ease of routing
- Suitable for use in cable tray
- Oil and UV resistant (Oil Res I)
- Sequential foot marking for ease of installation
- All items available from inventory in 100, 500 & 1,000 ft. put ups

UNITRONIC® 300 FTP Construction:

Finely stranded tinned copper conductors with drain wire; PVC blended insulation; foil shield; oil resistant gray PVC jacket.

LAPP KABEL STUTTGART UNITRONIC® 300 FTP (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V RoHS



Cable Attributes, See Page 653

Oil Resistance: OR-02	Flame Resistance: FR-03
Motion Type: FL-01	Mechanical Properties: MP-03

Availability:

Standard put-ups are 100ft, 500ft, and 1,000ft.

Complete the installation with:

SKINTOP® Strain Relief: Page 486	EPIC® Connectors: Page 251
	Assemblies: Page 627

Technical Data:

- Minimum Bend Radius: - with shield: 6 x cable diameter
- Temperature Range: -25°C to +105°C
- Nominal Voltage: 300 V
- Test Voltage: 2000 V
- Conductor Stranding: Class 5
- Color Code:
 - 24 AWG & 22 AWG: Chart 14, Page 677
 - 20 AWG & 18 AWG: Chart 13, Page 677

- Approvals:
 - UL: - CMG per UL 444
 - PLTC-ER per UL 13
 - ITC-ER per UL 2250
 - AWM 2464
 - Attributes: - UL Oil Res I
 - Sunlight Resistant
 - Direct Burial
 - Canada: - CSA AWM I/II AB FT4
 - c(UL) CMG FT4
- * 24 AWG not PLTC
- ** Exposed Run for 18 AWG
- Meets NEC Art. 725, 760, & 800. Also Class I Div. 2 (PLTC only)

Part Number	Number of Pairs	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	Approx. Weight kg/km	Part Number	Number of Pairs	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	Approx. Weight kg/km
24 AWG (19/36) 0.24 mm²							20 AWG (19/32) 0.62mm²						
302401FTP	1	.159	4.0	5	15	22	302001FTP	1	.210	5.3	11	42	62
302402FTP	2	.236	6.0	8	20	29	302002FTP	2	.350	8.9	19	54	80
302403FTP	3	.248	6.3	11	25	37	302003FTP	3	.370	9.4	26	69	103
302406FTP	6	.325	8.3	20	46	68	302006FTP	6	.497	12.6	49	134	199
302409FTP	9	.373	9.5	29	62	92	302009FTP	9	.576	14.6	72	184	274
302415FTP	15	.476	12.1	47	90	133	302015FTP	15	.734	18.7	116	285	424
22 AWG (19/34) 0.38 mm²							18 AWG (19/30) 1.00 mm²						
302201FTP	1	.170	4.3	7	17	26	301801FTP	1	.226	5.7	18	47	70
302202FTP	2	.257	6.5	12	24	36	301802FTP	2	.381	9.7	30	59	88
302203FTP	3	.271	6.9	16	33	50	301803FTP	3	.424	10.8	42	75	112
302206FTP	6	.357	9.1	31	59	87	301806FTP	6	.545	13.8	79	152	226
302209FTP	9	.431	10.9	45	82	122	301809FTP	9	.653	16.6	116	225	335
302215FTP	15	.525	13.3	73	120	178	301815FTP	15	.808	20.5	185	367	546

UNITRONIC® 300 STP

Multi-Pair, Foil Braid Shielded
300V Flexible Industrial Signal and Control Cable



The UNITRONIC® 300 Series of signal and control cables have been carefully engineered to provide the highest performance and ease of installation in industrial signal and control applications. Available shielding options provide EMC protection in the harshest industrial environments.

Recommended Applications:

RS-232, Data buses, Process Instrumentation, Low voltage control interconnect.

Application Advantages:

- Extended temperature rating of -25°C to +105°C
- Flexible design for ease of routing
- Suitable for use in cable tray
- Oil and UV resistant (Oil Res I)
- Sequential foot marking for ease of installation
- All items available from inventory in 100, 500 & 1,000 ft. put ups

UNITRONIC® 300 STP Construction:

Finely stranded copper conductors with drain wire; PVC blended insulation; foil & braid shield (75% coverage); oil resistant gray PVC jacket.

LAPP KABEL STUÏGART UNITRONIC® 300 STP (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V



Cable Attributes, See Page 653 Oil Resistance: OR-02 Motion Type: FL-01 Flame Resistance: FR-03 Mechanical Properties: MP-03		Availability: Standard put-ups are 100ft, 500ft, and 1,000ft. Bulk reels can be cut to length.	Complete the installation with: SKINTOP® Strain Relief: Page 486 EPIC® Connectors: Page 251 Assemblies: Page 627
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Technical Data:

- Minimum Bend Radius: - with shield: 6 x cable diameter
- Temperature Range: -25°C to +105°C
- Nominal Voltage: 300 V
- Test Voltage: 2000 V
- Conductor Stranding: Class 5
- Color Code:
 - 24 AWG & 22 AWG: Chart 3, Page 671
 - 20 AWG & 18 AWG: Chart 13, Page 677

- Approvals:
 - UL: - CMG per UL 444
 - PLTC-ER per UL 13
 - ITC-ER per UL 2250
 - AWM 2464
 - Attributes: - UL Oil Res I
 - Sunlight Resistant
 - Direct Burial
 - Canada: - CSA AWM I/II AB FT4
 - c(UL) CMG FT4
- * 24 AWG not PLTC
- ** Exposed Run for 18 AWG
- Meets NEC Art. 725, 760, & 800. Also Class I Div. 2 (PLTC only)

Part Number	Number of Pairs	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Pairs	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
24 AWG (19/36) 0.24 mm²							20 AWG (19/32) 0.62 mm²						
302401STP	1	.181	4.6	7	23	34	302001STP	1	.232	5.9	15	69	102
302402STP	2	.258	6.6	14	30	45	302002STP	2	.372	9.4	32	85	127
302403STP	3	.270	6.9	17	37	55	302003STP	3	.412	10.5	42	108	160
302406STP	6	.347	8.8	29	70	104	302006STP	6	.525	13.3	68	215	320
302409STP	9	.415	10.5	36	94	138	302009STP	9	.604	15.4	93	292	435
302415STP	15	.504	12.8	48	131	195	302015STP	15	.762	19.4	143	451	671
22 AWG (19/34) 0.38 mm²							18 AWG (19/30) 1.00 mm²						
302201STP	1	.192	4.9	11	25	38	301801STP	1	.248	6.3	19	70	104
302202STP	2	.279	7.1	23	35	52	301802STP	2	.403	10.2	38	82	122
302203STP	3	.305	7.7	30	48	71	301803STP	3	.452	11.5	51	102	152
302206STP	6	.379	9.6	49	85	126	301806STP	6	.573	14.5	93	219	326
302209STP	9	.459	11.7	54	117	175	301809STP	9	.681	17.3	141	329	490
302215STP	15	.553	14.1	75	165	245	301815STP	15	.836	21.2	240	545	810
							16 AWG (26/30) 1.32 mm²						
							301601STP	1	.298	7.6	17	74	110

UNITRONIC® 190 / 190 CY / 190 CY TP



Multi-Conductor, Multi-Paired, Unshielded and Shielded
300V Industrial Communication Cable

The UNITRONIC® 190 series of communication cables have been designed for general purpose installation in industrial signal and bus applications. EMC resistant designs with foil and braid shielding construction is available in all conductor and pair styles.

Recommended Applications:

RS-232, Data Buses, Process Control Instrumentation, Low Voltage Signaling and Interconnect.

Application Advantages:

- Extended temperature rating of -10°C to +90°C
- Oil and UV resistant (Oil Res I)
- Sequential foot marking for ease of installation

UNITRONIC® 190 Construction:

Finely stranded tinned copper conductors; SR-PVC insulation; dry lubricant; non-wicking fillers; gray PVC jacket.



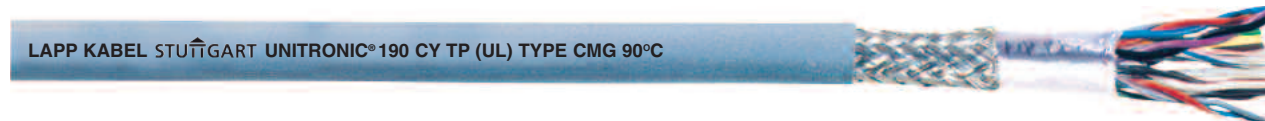
UNITRONIC® 190 CY Construction:

Finely stranded tinned copper conductors; SR-PVC insulation; dry lubricant; non-wicking fillers; overall foil tape wrap; drain wire; tinned copper braid (85% coverage); gray PVC jacket.



UNITRONIC® 190 CY TP (Twisted Pair) Construction:

Stranded tinned copper conductors; SR-PVC insulation; dry lubricant; non-wicking fillers; overall foil tape wrap; drain wire; tinned copper braid (85% coverage); gray PVC jacket.



Cable Attributes, See Page 653			Availability:	Complete the installation with:			
	Oil Resistance: OR-02				SKINTOP® Strain Relief: Page 486		EPIC® Connectors: Page 251
	Motion Type: FL-01			Standard put-ups are 100ft, 500ft, and 1,000ft. Bulk reels can be cut to length.		Assemblies: Page 627	

Technical Data:

- | | | | |
|--|---|--|--|
| | Minimum Bend Radius:
- for installation: 5 x cable diameter
- with shield: 8 x cable diameter | | Conductor Stranding: Fine Wire |
| | Temperature Range: -10°C to +90°C | | Color Code: Chart 2, Page 671
Chart 3 (CY) TP, Page 671 |
| | Nominal Voltage: 300 V | | Approvals: UL: CMG
CSA: CMG/FT4, AWM II A/B |
| | Test Voltage: 2000 V | | |

UNITRONIC® 190 / 190 CY / 190 CY TP



Multi-Conductor, Multi-Paired, Unshielded and Shielded
300V Industrial Communication Cable

UNITRONIC® 190: Unshielded Multi-Conductor Flexible Signal & Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
28 AWG (7/36) .08 mm²							24 AWG (7/32) 0.25 mm²						
602802	2	.143	3.6	1	10	15	602402	2	.161	4.1	3	13	19
602803	3	.149	3.8	2	12	18	602403	3	.168	4.3	4	15	22
602804	4	.158	4.0	2	14	21	602404	4	.179	4.5	6	18	27
602805	5	.168	4.3	3	16	24	602405	5	.192	4.9	7	21	31
602807	7	.178	4.5	4	18	27	602407	7	.205	5.2	10	25	37
602808	8	.189	4.8	5	20	30	602408	8	.219	5.6	12	28	42
602810	10	.213	5.4	6	23	34	602410	10	.249	6.3	15	34	51
602815	15	.248	6.3	9	29	43	602415	15	.290	7.4	22	46	69
602816	16	.253	6.4	9	31	46	602416	16	.295	7.5	23	49	73
602820	20	.269	6.8	12	36	54	602420	20	.317	8.1	29	58	86
602825	25	.297	7.5	15	43	64	602425	25	.351	8.9	37	70	104
602836	36	.328	8.3	21	56	83	602436	36	.401	10.2	53	99	148
602840	40	.339	8.6	23	61	91	602440	40	.414	10.5	59	108	161
602850	50	.375	9.5	29	73	109	602450	50	.473	12.0	73	135	201
26 AWG (7/34) 0.14 mm²							22 AWG (7/30) 0.34 mm²						
602602	2	.151	3.8	2	12	18	602202	2	.179	4.5	5	15	22
602603	3	.157	4.0	3	14	21	602203	3	.187	4.7	7	19	28
602604	4	.167	4.2	4	16	24	602204	4	.200	5.1	9	22	33
602605	5	.178	4.5	5	18	27	602205	5	.214	5.4	12	26	39
602607	7	.190	4.8	7	21	31	602207	7	.229	5.8	16	33	49
602608	8	.202	5.1	7	23	34	602208	8	.245	6.2	19	37	55
602610	10	.229	5.8	9	28	42	602210	10	.279	7.1	23	45	67
602615	15	.266	6.8	14	36	54	602215	15	.324	8.2	35	61	91
602616	16	.271	6.9	15	38	57	602216	16	.329	8.4	37	65	97
602620	20	.290	7.4	18	45	67	602220	20	.355	9.0	46	78	116
602625	25	.321	8.2	23	54	80	602225	25	.409	10.4	58	95	142
602636	36	.366	9.3	33	72	107	602236	36	.459	11.7	84	138	205
602640	40	.378	9.6	37	79	118	602240	40	.464	11.8	93	151	225
602650	50	.420	10.7	46	98	146	602250	50	.519	13.2	116	185	276

UNITRONIC® 190 CY: Foil Braid Shielded Multi-Conductor Flexible Signal & Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
28 AWG (7/36) .08 mm²							24 AWG (7/32) 0.25 mm²						
602802S	2	.178	4.5	1	21	31	602402S	2	.196	5.0	3	25	37
602803S	3	.184	4.7	2	23	34	602403S	3	.203	5.2	4	28	42
602804S	4	.193	4.9	2	26	39	602404S	4	.214	5.4	6	32	48
602805S	5	.203	5.2	3	28	42	602405S	5	.227	5.8	7	35	52
602807S	7	.213	5.4	4	31	46	602407S	7	.240	6.1	10	41	61
602808S	8	.224	5.7	5	32	48	602408S	8	.254	6.5	12	45	67
602810S	10	.248	6.3	6	38	57	602410S	10	.284	7.2	15	53	79
602815S	15	.283	7.2	9	46	69	602415S	15	.325	8.3	22	66	98
602816S	16	.288	7.3	9	48	72	602416S	16	.330	8.4	23	69	103
602820S	20	.304	7.7	12	54	80	602420S	20	.352	8.9	29	80	119
602825S	25	.332	8.4	15	62	92	602425S	25	.386	9.8	37	95	142
602836S	36	.363	9.2	21	78	116	602436S	36	.426	10.8	53	132	197
602840S	40	.374	9.5	23	83	124	602440S	40	.439	11.2	59	143	213
602850S	50	.422	10.7	29	101	150	602450S	50	.488	12.4	73	170	253
26 AWG (7/34) 0.14 mm²							22 AWG (7/30) 0.34 mm²						
602602S	2	.186	4.7	2	23	34	602202S	2	.204	5.2	5	29	43
602603S	3	.192	4.9	3	25	37	602203S	3	.212	5.4	7	33	49
602604S	4	.202	5.1	4	28	42	602204S	4	.225	5.7	9	38	57
602605S	5	.213	5.4	5	30	45	602205S	5	.239	6.1	12	42	63
602607S	7	.225	5.7	7	34	51	602207S	7	.254	6.5	16	50	75
602608S	8	.237	6.0	7	37	55	602208S	8	.270	6.9	19	55	82
602610S	10	.264	6.7	9	44	66	602210S	10	.314	8.0	23	66	98
602615S	15	.301	7.6	14	54	80	602215S	15	.349	8.9	35	84	125
602616S	16	.306	7.8	15	56	83	602216S	16	.349	8.9	37	88	131
602620S	20	.325	8.3	18	64	95	602220S	20	.380	9.7	46	103	153
602625S	25	.356	9.0	23	75	112	602225S	25	.440	11.2	58	132	197
602636S	36	.401	10.2	33	99	148	602236S	36	.490	12.4	84	173	258
602640S	40	.413	10.5	37	107	159	602240S	40	.505	12.8	93	187	279
602650S	50	.461	11.7	46	132	198	602250S	50	.560	14.2	116	220	328

UNITRONIC® 190 / 190 CY / 190 CY TP



Multi-Conductor, Multi-Paired, Unshielded and Shielded
300V Industrial Communication Cable

UNITRONIC® 190 CY TP: Foil Braid Shielded Twisted Pair Flexible Signal & Control Cable

Part Number	Number of Pairs	Nominal Outer Diameter		Copper Weight		Approx. Weight		Part Number	Number of Pairs	Nominal Outer Diameter		Copper Weight		Approx. Weight	
		inches	mm	lbs/mft		lbs/mft	kg/km			inches	mm	lbs/mft		lbs/mft	kg/km
26 AWG (7/34) 0.14 mm ²								22 AWG (7/30) 0.34 mm ²							
602602TP	2	.242	6.1	4		31	46	602202TP	2	.270	6.9	9		42	63
602603TP	3	.252	6.4	6		35	52	602203TP	3	.294	7.5	14		50	75
602604TP	4	.268	6.8	7		40	60	602204TP	4	.315	8.0	19		58	86
602605TP	5	.287	7.3	9		46	69	602205TP	5	.338	8.6	23		68	101
602606TP	6	.306	7.8	11		52	77	602206TP	6	.363	9.2	28		78	118
602608TP	8	.347	8.8	15		62	92	602208TP	8	.409	10.4	37		106	158
24 AWG (7/32) 0.25 mm ²															
602402TP	2	.254	6.5	6		36	54								
602403TP	3	.266	6.8	9		42	63								
602404TP	4	.285	7.2	12		48	72								
602405TP	5	.305	7.7	15		55	82								
602406TP	6	.337	8.6	18		64	95								
602408TP	8	.360	9.1	23		77	115								

* Additional configurations are available, please call your Lapp representative for more information.

UNITRONIC® LiYY / LiYCY



Multi-Conductor, Unshielded and Shielded, DIN Color Code
250V Industrial Communication & Control Cable

The UNITRONIC® European series of communication and control cables have been designed for general purpose installation in industrial signal and bus applications that utilize the DIN-47100 color code. EMC resistant designs with foil and braid shielding construction is available in all conductor styles.

Recommended Applications:

RS-232, Data Buses, Process Control Instrumentation, Low Voltage Signaling and Interconnect

Application Advantage:

- Extended Temperature Rating of -40°C to 80°C
- Excellent resistance to Acids, Caustics and Oils
- Highly flexible for ease of installation (not recommended for flexing applications)

UNITRONIC® LiYY Construction:









Stranded bare copper conductors; PVC insulation; dry lubricant; gray PVC jacket








UNITRONIC® LiYCY Construction:

Stranded bare copper conductors; PVC insulation; clear mylar wrap, tinned copper braid (85% coverage); gray PVC jacket



Cable Attributes, See Page 653  Oil Resistance: OR-01  Motion Type: FL-01		 Flame Resistance: FR-02  Mechanical Properties: MP-01		Availability:  Standard put-ups are 328ft 1640ft, and 3280ft. Bulk reels can be cut to length.		Complete the installation with:  SKINTOP® Strain Relief: Page 486  EPIC® Connectors: Page 251  Assemblies: Page 627	
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Technical Data:

 Minimum Bend Radius: - UNITRONIC® LiYY: for installation: 4 x cable diameter - UNITRONIC® LiYCY: for installation: 6 x cable diameter	 Inductance: Nominal 0.65 mH/km
 Temperature Range: -40°C to +80°C	 Mutual Capacitance: - Cond./cond: 120 nF/km - Cond./shield: 160 nF/km
 Nominal Voltage: 250 V	 Conductor Stranding: Fine Wire
 Test Voltage: 1500 V	 Color Code: DIN 47100, Chart 8, Page 674
	 Approvals: Based on VDE specifications

UNITRONIC® LiYY / LiYCY



Multi-Conductor, Unshielded and Shielded, DIN Color Code
250V Industrial Communication & Control Cable

UNITRONIC® LiYY: Multi-Conductor Signal and Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
26 AWG (18/38) 0.14 mm ²							22 AWG (7/30) 0.34 mm ²						
0028202	2	.126	3.2	2	9	13	0028402	2	.165	4.2	4	15	22
0028203	3	.134	3.4	3	11	16	0028403	3	.173	4.4	7	21	31
0028204	4	.142	3.6	4	13	19	0028404	4	.189	4.8	9	29	43
0028205	5	.154	3.9	5	15	22	0028405	5	.217	5.5	11	36	54
0028207	7	.165	4.2	6	19	28	0028407	7	.232	5.9	15	42	62
0028208	8	.193	4.9	7	24	35	0028408	8	.280	7.1	18	49	73
0028210	10	.205	5.2	9	28	41	0028410	10	.299	7.6	22	55	82
0028212	12	.220	5.6	11	32	48	0028412	12	.307	7.8	26	69	102
0028214	14	.228	5.8	13	36	53	0028414	14	.323	8.2	31	73	109
0028216	16	.240	6.1	15	40	59	0028416	16	.343	8.7	35	85	127
0028220	20	.276	7.0	18	48	71	0028420	20	.378	9.6	44	107	159
0028221	21	.283	7.2	19	52	77	0028421	21	.409	10.4	46	112	167
0028225	25	.307	7.8	23	59	87	0028425	25	.441	11.2	55	128	190
0028228	28	.307	7.8	25	69	103	0028430	30	.457	11.6	66	152	226
0028230	30	.315	8.0	27	73	108	0028432	32	.476	12.1	70	165	245
0028236	36	.339	8.6	33	85	127	0028436	36	.492	12.5	79	191	284
0028237	37	.350	8.9	33	79	118	0028440	40	.531	13.5	88	213	317
0028240	40	.366	9.3	36	93	139	0028450	50	.591	15.0	110	273	407
0028244	44	.378	9.6	40	103	153	20 AWG (16/32) 0.50 mm ²						
0028250	50	.409	10.4	45	115	171	0028502	2	.185	4.7	6	27	40
0028256	56	.421	10.7	51	126	187	0028503	3	.197	5.0	10	32	47
24 AWG (14/34) 0.25 mm ²							0028504	4	.220	5.6	13	38	56
0028302	2	.150	3.8	3	12	18	0028505	5	.240	6.1	16	44	65
0028303	3	.157	4.0	5	15	22	0028507	7	.272	6.9	23	55	82
0028304	4	.169	4.3	6	18	26	0028508	8	.315	8.0	26	60	90
0028305	5	.185	4.7	8	21	31	0028510	10	.339	8.6	32	79	117
0028307	7	.201	5.1	11	28	42	0028512	12	.350	8.9	39	89	133
0028308	8	.244	6.2	13	33	49	0028516	16	.402	10.2	52	114	170
0028310	10	.268	6.8	16	39	58	0028520	20	.449	11.4	65	144	214
0028312	12	.276	7.0	19	45	67	0028525	25	.484	12.3	81	178	265
0028314	14	.287	7.3	23	51	75	0028530	30	.520	13.2	97	204	304
0028316	16	.303	7.7	26	57	84	0028540	40	.622	15.8	129	263	392
0028318	18	.319	8.1	29	62	93	18 AWG (32/32) 1.00 mm ²						
0028320	20	.339	8.6	32	69	102	0028702	2	.220	5.6	13	37	55
0028325	25	.378	9.6	40	90	134	0028703	3	.232	5.9	19	47	70
0028330	30	.406	10.3	48	104	155	0028705	5	.287	7.3	32	66	98
0028332	32	.421	10.7	52	110	164	16 AWG (30/30) 1.50 mm ²						
0028336	36	.437	11.1	58	122	182	0028802	2	.268	6.8	19	50	74
0028337	37	.449	11.4	60	124	185	0028803	3	.283	7.2	29	60	89
0028340	40	.472	12.0	65	134	200	0028804	4	.307	7.8	39	71	105
0028350	50	.508	12.9	81	173	257							
0028361	61	.539	13.7	99	205	305							

UNITRONIC® LiYCY: Shielded Multi-Conductor Signal and Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
26 AWG (18/38) 0.14 mm ²							0034336						
0034302	2	.154	3.9	8	13	20	0034340	40	.409	10.4	59	141	210
0034303	3	.161	4.1	9	19	28	0034344	44	.421	10.7	74	151	225
0034304	4	.169	4.3	10	22	33	0034350	50	.437	11.1	82	170	253
0034305	5	.181	4.6	10	26	38	24 AWG (14/34) 0.25 mm ²						
0034306	6	.193	4.9	12	26	38	0034402	2	.177	4.5	11	22	32
0034307	7	.193	4.9	13	33	49	0034403	3	.185	4.7	14	25	37
0034308	8	.228	5.8	14	38	56	0034404	4	.197	5.0	16	28	41
0034310	10	.240	6.1	19	44	66	0034405	5	.220	5.6	19	34	51
0034312	12	.248	6.3	20	52	78	0034406	6	.236	6.0	20	39	58
0034314	14	.264	6.7	22	54	80	0034407	7	.236	6.0	25	44	65
0034315	15	.272	6.9	25	58	86	0034408	8	.280	7.1	28	49	73
0034316	16	.276	7.0	29	60	90	0034410	10	.295	7.5	31	55	82
0034318	18	.287	7.3	33	70	104	0034412	12	.303	7.7	36	97	145
0034320	20	.303	7.7	36	78	116	0034414	14	.315	8.0	40	67	99
0034321	21	.311	7.9	37	81	121	0034415	15	.327	8.3	41	75	111
0034325	25	.331	8.4	42	100	149	0034416	16	.331	8.4	43	83	124
0034328	28	.335	8.5	44	103	153	0034418	18	.346	8.8	56	96	143
0034330	30	.343	8.7	46	106	158	0034420	20	.366	9.3	59	102	152
0034332	32	.354	9.0	49	110	164	0034421	21	.378	9.6	62	108	161

UNITRONIC® LiYY / LiYCY



Multi-Conductor, Unshielded and Shielded, DIN Color Code
250V Industrial Communication & Control Cable

UNITRONIC® LiYCY: Shielded Multi-Conductor Signal and Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mt	Approx. Weight lbs/mt	Approx. Weight kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	Nominal Outer Diameter mm	Copper Weight lbs/mt	Approx. Weight lbs/mt	Approx. Weight kg/km
0034425	25	.421	10.7	77	116	172	20 AWG (16/32) 0.50 mm ²						
0034428	28	.425	10.8	85	122	181	0034602	2	.220	5.6	19	36	54
0034430	30	.433	11.0	89	127	189	0034603	3	.232	5.9	26	45	67
0034432	32	.449	11.4	93	136	203	0034604	4	.248	6.3	29	52	77
0034436	36	.465	11.8	99	148	220	0034605	5	.276	7.0	34	60	90
0034440	40	.500	12.7	106	167	248	0034606	6	.299	7.6	40	70	104
0034444	44	.524	13.3	111	196	292	0034607	7	.299	7.6	44	75	112
0034450	50	.543	13.8	120	214	318	0034608	8	.343	8.7	47	91	135
0034461	61	.591	15.0	138	245	365	0034610	10	.366	9.3	59	108	160
22 AWG (7/30) 0.34 mm ²							0034612	12	.378	9.6	67	119	177
0034502	2	.193	4.9	14	25	37	0034618	18	.465	11.8	90	161	239
0034503	3	.201	5.1	18	33	49	0034620	20	.476	12.1	100	185	276
0034504	4	.224	5.7	19	40	59	0034625	25	.539	13.7	142	237	352
0034505	5	.244	6.2	20	44	66	0034630	30	.571	14.5	155	267	397
0034506	6	.268	6.8	30	53	79	18 AWG (32/32) 1.00 mm ²						
0034507	7	.268	6.8	32	56	83	0034802	2	.248	6.3	29	48	72
0034508	8	.307	7.8	35	63	94	0034803	3	.268	6.8	38	60	90
0034510	10	.327	8.3	50	87	129	0034804	4	.287	7.3	46	73	109
0034512	12	.335	8.5	54	95	142	0034805	5	.315	8.0	53	85	126
0034514	14	.350	8.9	58	103	154	0034807	7	.339	8.6	79	115	171
0034515	15	.362	9.2	60	104	155	0034810	10	.437	11.1	94	153	228
0034516	16	.370	9.4	63	108	160	0034812	12	.449	11.4	113	174	259
0034518	18	.402	10.2	69	116	173	0034818	18	.528	13.4	169	261	389
0034520	20	.421	10.7	75	129	192	0034825	25	.638	16.2	225	347	517
0034521	21	.437	11.1	78	134	199	16 AWG (30/30) 1.50 mm ²						
0034525	25	.469	11.9	91	174	259	0034902	2	.295	7.5	39	60	90
0034528	28	.472	12.0	103	188	280	0034903	3	.311	7.9	50	77	115
0034530	30	.484	12.3	107	196	291	0034904	4	.335	8.5	73	103	153
0034532	32	.512	13.0	111	205	305	0034905	5	.366	9.3	87	118	176
0034536	36	.528	13.4	120	222	331	0034907	7	.413	10.5	110	148	220
0034540	40	.583	14.8	134	245	365	0034912	12	.539	13.7	171	253	376
0034544	44	.602	15.3	144	211	314	0034918	18	.642	16.3	235	349	519
0034550	50	.626	15.9	158	290	431	0034925	25	.783	19.9	370	605	901

UNITRONIC® LiYY (TP) / LiYCY (TP)



Multi-Pair, Unshielded and Shielded, DIN Color Code
250V Industrial Communication & Control Cable

The UNITRONIC® European series of communication and control cables have been designed for general purpose installation in industrial signal and bus applications that utilize the DIN-47100 color code. EMC resistant designs with foil and braid shielding construction is available in all conductor styles.

Recommended Applications:

RS-232, Data Buses, Process Control Instrumentation, Low Voltage Signaling and Interconnect.

Application Advantage:

- Extended Temperature Rating of -40°C to 80°C
- Excellent resistance to Acids, Caustics and Oils
- Highly flexible for ease of installation (not recommended for flexing applications)

UNITRONIC® LiYY (TP) Twisted Pair Construction:

Stranded bare copper conductors; PVC insulation; foil wrap; gray PVC jacket



UNITRONIC® LiYCY (TP) Twisted Pair Construction:

Stranded bare copper conductors; PVC insulation; conductors paired and cabled together; clear mylar wrap; tinned copper braid (85% coverage); gray PVC jacket.



Cable Attributes, See Page 653			Availability:		Complete the installation with:			
	Oil Resistance: OR-01		Flame Resistance: FR-02	Standard put-ups are 328ft 1640ft, and 3280ft. Bulk reels can be cut to length.		SKINTOP® Strain Relief: Page 486		EPIC® Connectors: Page 251
	Motion Type: FL-01		Mechanical Properties: MP-01			Assemblies: Page 627		

Technical Data:

- | | |
|---|---|
| Minimum Bend Radius:
- UNITRONIC® LiYY (TP):
for installation: 5 x cable diameter
- UNITRONIC® LiYCY (TP):
for installation: 6 x cable diameter | Mutual Capacitance:
- Cond./cond: 120 nF/km
- Cond./shield: 160 nF/km |
| Temperature Range:
- LiYY (TP): -40°C to +80°C
- LiYCY (TP): -40°C to +80°C | Conductor Stranding: Fine Wire |
| Nominal Voltage: 250 V | Color Code: DIN 47100, Chart 7, Page 673 |
| Test Voltage:
- 26 AWG: 1200 V
- > 26 AWG: 1500 V | Approvals: Based on VDE specifications |
| Inductance: Nominal 0.65 mH/km | |

UNITRONIC® LIYY (TP) / LIYCY (TP)



Multi-Pair, Unshielded and Shielded, DIN Color Code

250V Industrial Communication & Control Cable

UNITRONIC® LIYY (TP): Twisted Pair Signal and Control Cable

Part Number	Number of Pairs	Nominal Outer Diameter inches mm	Copper Weight lbs/mft	Approx. Weight lbs/mft kg/km	Part Number	Number of Pairs	Nominal Outer Diameter inches mm	Copper Weight lbs/mft	Approx. Weight lbs/mft kg/km
26 AWG (18/38) 0.14 mm ²					24 AWG (14/34) 0.25 mm ²				
0035101	2	.189 4.8	4	17 26	0035160	2	.240 6.1	6	26 38
0035102	3	.193 4.9	5	22 32	0035161	3	.244 6.2	10	32 48
0035103	4	.217 5.5	7	26 39	0035162	4	.272 6.9	13	40 59
0035104	5	.224 5.7	9	31 46	0035163	6	.307 7.8	19	54 80
0035105	6	.244 6.2	11	34 51	0035164	8	.362 9.2	26	66 98
0035108	10	.315 8.0	18	52 78	0035165	10	.406 10.3	32	77 115
0035110	12	.323 8.2	22	63 95	20 AWG (16/32) 0.50 mm ²				
0035111	14	.339 8.6	25	71 106	0035170	2	.311 7.9	13	48 72
0035113	16	.358 9.1	29	74 111	0035171	3	.315 8.0	19	56 83
0035114	18	.378 9.6	33	80 120	0035172	4	.343 8.7	26	77 115
0035118	25	.465 11.8	45	121 181	0035174	8	.480 12.2	52	138 206
0035122	30	.480 12.2	54	134 200	0035175	10	.520 13.2	65	166 247
0035130	50	.622 15.8	90	260 387					

UNITRONIC® LIYCY (TP): Shielded Twisted Pair Signal and Control Cable

Part Number	Number of Pairs	Nominal Outer Diameter inches mm	Copper Weight lbs/mft	Approx. Weight lbs/mft kg/km	Part Number	Number of Pairs	Nominal Outer Diameter inches mm	Copper Weight lbs/mft	Approx. Weight lbs/mft kg/km
26 AWG (18/38) 0.14 mm ²					20 AWG (16/32) 0.50 mm ²				
0035131	2	.224 5.7	12	26 39	0035805	10	.433 11.0	69	106 158
0035141	3	.228 5.8	15	32 48	0035806	12	.445 11.3	81	128 190
0035132	4	.244 6.2	18	36 54	0035807	16	.492 12.5	98	160 238
0035133	6	.280 7.1	33	57 85	0035808	25	.634 16.1	138	231 344
0035150	8	.323 8.2	36	65 97	0035810	2	.339 8.6	32	62 93
0035134	10	.343 8.7	40	74 110	0035811	3	.343 8.7	50	87 129
0035135	12	.350 8.9	44	95 142	0035812	4	.370 9.4	55	98 146
0035136	16	.402 10.2	53	103 154	0035813	6	.437 11.1	74	133 198
0035142	20	.445 11.3	65	124 184	0035814	8	.516 13.1	93	174 259
0035137	25	.492 12.5	76	160 238	0035816	12	.587 14.9	133	238 354
0035138	30	.516 13.1	94	181 270	0035817	16	.650 16.5	161	308 459
24 AWG (14/34) 0.25 mm ²					18 AWG (32/32) 1.00 mm ²				
0035800	2	.276 7.0	19	36 54	0035830	2	.406 10.3	56	95 142
0035801	3	.280 7.1	27	44 66	0035831	3	.409 10.4	65	116 173
0035802	4	.299 7.6	30	54 81	0035832	4	.445 11.3	81	142 212
0035803	6	.335 8.5	47	77 115	0035836	5	.465 11.8	108	179 266
0035804	8	.406 10.3	52	87 130					

UNITRONIC® LiHH / LiHCH



Multi-Conductor, Unshielded and Shielded, DIN Color Code
250V Halogen-Free Industrial Communication & Control Cable

The UNITRONIC® European series of communication and control cables have been designed for general purpose installation in industrial signal and bus applications that utilize the DIN-47100 color code. EMC resistant designs with foil and braid shielding construction is available in all conductor styles.

Recommended Applications:

RS-232, Data Buses, Process Control Instrumentation, Low Voltage Signaling and Interconnect.

Application Advantage:

- Low Smoke Zero Halogen
- Extended Temperature Rating of -30°C to 70°C
- Excellent resistance to Acids, Caustics and Oils
- Highly flexible for ease of installation (not recommended for flexing applications)

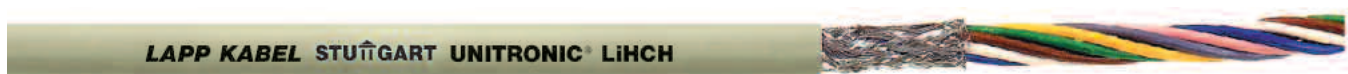
UNITRONIC® LiHH Construction:









Finely stranded bare copper; halogen-free insulation; gray halogen-free jacket.











UNITRONIC® LiHCH Construction:

Finely stranded bare copper; halogen-free insulation; clear mylar wrap tinned copper braided shield; gray halogen-free jacket.



Cable Attributes, See Page 653			Availability:	Complete the installation with:			
	Oil Resistance: OR-01				SKINTOP® Strain Relief: Page 486		EPIC® Connectors: Page 251
	Motion Type: FL-01			Standard put-ups are 328ft, 1640ft, and 3280ft. Bulk reels can be cut to length.			Assemblies: Page 627

Technical Data:

- | | | | |
|---|---|---|---|
|  | Minimum Bend Radius:
- UNITRONIC® LiHH:
for installation: 4 x cable diameter
- UNITRONIC® LiHCH:
for installation: 6 x cable diameter |  | Mutual Capacitance:
- Cond./cond: 120 nF/km
- Cond./shield: 160 nF/km |
|  | Temperature Range: -30°C to +70°C |  | Conductor Stranding: Fine Wire |
|  | Nominal Voltage: 250 V |  | Color Code: DIN 47100, Chart 8, Page 674 |
|  | Test Voltage: 1200 V |  | Approvals: Based on VDE specifications |
|  | Inductance: Nominal 0.65 mH/km | | |

UNITRONIC® LiHH / LiHCH



Multi-Conductor, Unshielded and Shielded, DIN Color Code
250V Halogen-Free Industrial Communication & Control Cable

UNITRONIC® LiHH: Halogen-Free Signal & Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
26 AWG (18/38) 0.14 mm ²							22 AWG (7/30) 0.34 mm ²						
0037100	2	.134	3.4	2	8	12	0037140	2	.173	4.4	4	19	28
0037101	3	.142	3.6	3	10	15	0037141	3	.181	4.6	7	20	30
0037102	4	.150	3.8	4	11	17	0037142	4	.197	5.0	9	27	40
0037103	5	.161	4.1	5	15	22	0037143	5	.224	5.7	11	30	44
0037104	6	.173	4.4	5	17	25	0037144	7	.240	6.1	15	40	60
0037105	7	.173	4.4	6	17	26	0037145	8	.287	7.3	18	44	65
0037106	8	.201	5.1	7	19	29	0037146	10	.307	7.8	22	54	80
0037107	10	.213	5.4	9	24	35	0037147	12	.315	8.0	26	65	97
0037108	12	.228	5.8	11	29	43	20 AWG (16/32) 0.50 mm ²						
0037109	20	.283	7.2	18	49	73	0037150	2	.193	4.9	6	21	31
0037110	25	.315	8.0	23	61	91	0037151	3	.205	5.2	10	25	37
24 AWG (14/34) 0.25 mm ²							0037152	4	.228	5.8	13	30	45
0037120	2	.157	4.0	3	15	22	0037153	5	.248	6.3	16	39	58
0037121	3	.165	4.2	5	17	25	0037154	7	.276	7.0	23	48	72
0037122	4	.177	4.5	6	19	28	0037155	12	.358	9.1	39	79	117
0037123	5	.193	4.9	8	23	34	18 AWG (32/32) 1.00 mm ²						
0037124	6	.209	5.3	10	26	39	0037170	2	.228	5.8	13	34	50
0037125	7	.209	5.3	11	28	42	0037171	3	.240	6.1	19	38	57
0037126	8	.252	6.4	13	34	50	0037172	4	.260	6.6	26	45	67
0037127	10	.276	7.0	16	40	60	0037173	5	.295	7.5	32	55	82
0037128	12	.283	7.2	19	45	67	16 AWG (30/30) 1.50 mm ²						
0037129	16	.311	7.9	26	57	85	0037180	2	.276	7.0	19	40	59
0037130	18	.327	8.3	29	67	100	0037181	3	.291	7.4	29	48	72
0037131	25	.386	9.8	40	94	140	0037182	4	.315	8.0	39	58	87

UNITRONIC® LiHCH: Shielded Halogen-Free Signal & Control Cable

Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Conductors includes ground	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
26 AWG (18/38) 0.14 mm ²							20 AWG (16/32) 0.50 mm ²						
0037302	2	.161	4.1	8	15	22	0037507	7	.276	7.0	28	49	73
0037303	3	.169	4.3	9	17	25	0037508	8	.315	8.0	30	56	84
0037304	4	.177	4.5	11	19	29	0037510	10	.335	8.5	42	68	101
0037305	5	.189	4.8	13	22	32	0037512	12	.343	8.7	54	95	142
0037306	6	.201	5.1	15	24	35	0037516	16	.378	9.6	63	108	160
0037307	7	.201	5.1	16	26	38	0037525	25	.476	12.1	97	174	259
0037308	8	.236	6.0	17	28	41	24 AWG (14/34) 0.25 mm ²						
0037310	10	.248	6.3	19	39	58	0037602	2	.228	5.8	19	26	38
0037312	12	.256	6.5	20	52	78	0037603	3	.240	6.1	24	32	47
0037316	16	.283	7.2	29	60	90	0037604	4	.256	6.5	30	45	67
0037325	25	.343	8.7	42	100	149	0037605	5	.283	7.2	34	51	76
24 AWG (14/34) 0.25 mm ²							0037606	6	.307	7.8	40	56	84
0037402	2	.185	4.7	10	17	25	0037607	7	.307	7.8	46	61	91
0037403	3	.193	4.9	12	20	30	0037608	8	.350	8.9	50	70	104
0037404	4	.205	5.2	15	24	35	0037610	10	.374	9.5	62	88	131
0037405	5	.228	5.8	17	27	40	0037612	12	.386	9.8	67	119	177
0037406	6	.244	6.2	20	33	49	0037618	18	.461	11.7	90	161	239
0037407	7	.244	6.2	22	35	52	0037625	25	.547	13.9	142	237	352
0037408	8	.287	7.3	24	39	58	18 AWG (32/32) 1.00 mm ²						
0037410	10	.303	7.7	28	54	81	0037802	2	.256	6.5	29	48	72
0037412	12	.311	7.9	40	97	145	0037803	3	.276	7.0	38	60	90
0037416	16	.339	8.6	43	83	124	0037804	4	.295	7.5	46	73	109
0037425	25	.429	10.9	77	116	172	0037805	5	.323	8.2	53	85	126
22 AWG (7/30) 0.34 mm ²							0037807	7	.346	8.8	79	115	171
0037502	2	.201	5.1	11	20	30	16 AWG (30/30) 1.50 mm ²						
0037503	3	.209	5.3	14	24	35	0037902	2	.303	7.7	39	60	90
0037504	4	.232	5.9	17	28	42	0037903	3	.319	8.1	50	77	115
0037505	5	.252	6.4	20	36	53	0037904	4	.343	8.7	73	103	153
0037506	6	.276	7.0	24	40	59	0037905	5	.374	9.5	87	118	176
							0037907	7	.421	10.7	110	148	220

UNITRONIC® LIHCH (TP)



Multi-Pair, Shielded, DIN Color Code

250V Halogen-Free Industrial Communication Cable

The UNITRONIC® European series of communication cables have been designed for general purpose installation in industrial signal and bus applications that utilize the DIN-47100 color code. EMC resistant designs with foil and braid shielding construction is available in all conductor styles.

Recommended Applications:

RS-232, Data Buses, Process Control Instrumentation, Low Voltage Signaling and Interconnect.

Application Advantage:

- Low Smoke Zero Halogen
- Extended Temperature Rating of -30°C to 80°C
- Excellent resistance to Acids, Caustics and Oils
- Highly flexible for ease of installation (not recommended for flexing applications)

UNITRONIC® LIHCH (TP) Twisted Pair Construction:

Finely stranded bare copper; halogen-free insulation; clear mylar wrap; tinned copper braided shield; gray halogen-free jacket.



Cable Attributes, See Page 653

	Oil Resistance: OR-01		Flame Resistance: FR-02
	Motion Type: FL-01		Mechanical Properties: MP-01

Availability:

Standard put-ups are 328ft, 1640ft, and 3280ft. Bulk reels can be cut to length.

Complete the installation with:

	SKINTOP® Strain Relief: Page 486		EPIC® Connectors: Page 251
			Assemblies: Page 627

Technical Data:

- Minimum Bend Radius:
- for installation: 6 x cable diameter
- Temperature Range: -30°C to +80°C
- Nominal Voltage: 250 V
- Test Voltage: 1200 V
- Inductance: Nominal 0.65 mH/km

- Mutual Capacitance:
- Cond./cond: 80 nF/km
- Cond./shield: 120 nF/km
- Conductor Stranding: Fine Wire
- Color Code: DIN 47100, Chart 7, Page 673
- Approvals: Based on VDE specifications

Part Number	Number of Pairs	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Pairs	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
26 AWG (18/38) 0.14 mm ²							20 AWG (16/32) 0.50 mm ²						
0038302	2	.232	5.9	12	26	39	0038410	10	.441	11.2	69	106	158
0038303	3	.236	6.0	15	32	48	0038412	12	.453	11.5	81	128	190
0038304	4	.252	6.4	18	36	54	0038416	16	.500	12.7	98	160	238
0038306	6	.287	7.3	33	57	85	0038602	2	.346	8.8	32	62	93
0038308	8	.331	8.4	36	65	97	0038603	3	.350	8.9	50	87	129
0038310	10	.350	8.9	40	74	110	0038604	4	.378	9.6	55	98	146
0038312	12	.358	9.1	44	95	142	0038606	6	.445	11.3	74	133	198
0038316	16	.409	10.4	53	103	154	0038608	8	.524	13.3	93	174	259
0038320	20	.453	11.5	65	124	184	0038612	12	.594	15.1	133	238	354
0038325	25	.500	12.7	76	160	238	0038616	16	.657	16.7	161	308	459
24 AWG (14/34) 0.25 mm ²							18 AWG (32/32) 1.00 mm ²						
0038402	2	.283	7.2	19	36	54	0038802	2	.413	10.5	56	95	142
0038403	3	.287	7.3	27	44	66	0038803	3	.417	10.6	65	116	173
0038404	4	.307	7.8	30	54	81	0038804	4	.453	11.5	81	142	212
0038406	6	.343	8.7	47	77	115	0038805	5	.472	12.0	108	179	266
0038408	8	.413	10.5	52	87	130							

UNITRONIC® CY PiDY (TP)



Multi-Pair, Individually Shielded and Jacketed, DIN Color Code
250V Industrial Communication Cable

The UNITRONIC® European series of communication cables have been designed for general purpose installation in industrial signal and bus applications that utilize the DIN-47100 color code. EMC resistant designs with foil and braid shielding construction is available in all conductor styles.

Recommended Applications:

RS-232, Data Buses, Process Control Instrumentation, Low Voltage Signaling and Interconnect.









Application Advantage:

- Outstanding EMC protection against signal coupling
- Extended Temperature Rating of -30°C to 70°C
- Excellent resistance to Acids, Caustics and Oils
- Highly flexible for ease of installation (not recommended for flexing applications)

UNITRONIC® CY PiDY (TP) Twisted Pair Construction:

Stranded bare copper conductors; PVC insulation; conductors cabled into pairs; tinned copper braid over each pair with an inner PVC jacket; clear mylar wrap; overall tinned copper braid; gray PVC jacket.



Cable Attributes, See Page 653  Oil Resistance: OR-01  Flame Resistance: FR-02  Motion Type: FL-01  Mechanical Properties: MP-01		Availability:  Standard put-ups are 328ft, 1640ft, and 3280ft. Bulk reels can be cut to length.	Complete the installation with:  SKINTOP® Strain Relief: Page 486  EPIC® Connectors: Page 251  Assemblies: Page 627
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Technical Data:

- | | |
|--|---|
|  Minimum Bend Radius:
- for installation: 6 x cable diameter |  Mutual Capacitance:
- Cond./cond: 120 nF/km
- Cond./shield: 160 nF/km |
|  Temperature Range: -30°C to +70°C |  Conductor Stranding: Fine Wire |
|  Working Voltage: 250 V |  Color Code: DIN 47100, Chart 7, Page 673 |
|  Test Voltage: 1200 V |  Approvals: Based on VDE specifications |
|  Inductance: Nominal 0.45 mH/km | |

Part Number	Number of Pairs	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km	Part Number	Number of Pairs	Nominal Outer Diameter inches	mm	Copper Weight lbs/mft	Approx. Weight lbs/mft	kg/km
24 AWG (14/34) 0.25 mm ²													
0034250	2	.366	9.3	40	75	112	0034255	7	.555	13.1	96	184	274
0034251	3	.390	9.8	49	91	136	0034256	8	.606	15.7	108	218	325
0034252	4	.437	10.7	59	113	168	0034257	10	.673	16.9	126	230	342
0034253	5	.465	11.7	70	135	201	0034258	12	.720	17.4	161	279	416
0034254	6	.504	13.1	84	164	244	0034259	16	.799	19.3	213	364	542