



UNITRONIC® 100

Control and signal cable with small cross-sections



Info

- UNITRONIC® colour code with protective conductor

UNITRONIC® 100 CY

Screened control and signal cable with small cross-sections



Application range

- These control and signal cables are used in the milliamper range for computer systems, electronic control equipment, office machines, balances etc. and wherever the thinnest possible control cables are required.

Product features

UNITRONIC® 100

- Robust, flexible and resistant outer sheath
- Small outer diameter despite high number of cores
- Flame-retardant according IEC 60332-1-2
- 3 cores with earth wire (green-yellow)
2 cores (black/blue)

UNITRONIC® 100 CY

- Robust, flexible and resistant outer sheath
- Small outer diameter despite high number of cores
- Cable similar to UNITRONIC® 100, but with copper braiding
- Flame-retardant according IEC 60332-1-2
- 3 cores with earth wire (green-yellow)
2 cores (black/blue)

Norm references / Approvals

- Based on: VDE 0814 or VDE 0812

Product Make-up

UNITRONIC® 100

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of PVC
- Outer sheath made of PVC
Outer sheath colour: grey (RAL 7001)

UNITRONIC® 100 CY

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of PVC
- Inner sheath made of PVC
- For the cross section of 0.14 mm², a polyester tape is used underneath the screen braiding instead of the inner sheath.
- Tinned-copper braiding
- Outer sheath made of PVC
Outer sheath colour: grey (RAL 7001)

Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

Refer to Appendix T7 for the UNITRONIC® colour codes



Mutual capacitance

Approx. 120 nF/km



Inductivity

approx. 0.7 mH/km



Conductor stranding

Stranded, fine-wire
0.34 mm²: 7-wire



Minimum bending radius UNITRONIC® 100

Occasional flexing: 15 x outer diameter
Fixed installation: 4 x outer diameter

UNITRONIC® 100 CY

Occasional flexing: 20 x outer diameter
Fixed installation: 6 x outer diameter



Protective conductor

Green-yellow



Temperature range

Occasional flexing: -5°C to +70°C
Fixed installation: -40°C to +80°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® 100				
0028009	2 x 0,14	3	2.8	12
0028010	3 x 0,14	3.2	4.2	17
0028012	5 x 0,14	3.7	7	22
0028014	7 x 0,14	4	9.8	27
0028015	10 x 0,14	5	14	41
0028019	24 x 0,14	7.2	33.6	94
0028025	52 x 0,14	10	72.8	198
0028030	3 x 0,25	3.8	7.5	21
0028031	7 x 0,25	4.9	17.5	48
0028032	10 x 0,25	6.4	25	77
0028033	14 x 0,25	6.9	35	95
0028034	16 x 0,25	7.3	40	112
0028035	21 x 0,25	8.5	52.5	139
0028036	24 x 0,25	9	60	163
0028037	27 x 0,25	9.2	67.5	171
0028038	30 x 0,25	9.9	75	187
0028039	36 x 0,25	10.7	90	235
0028040	40 x 0,25	11.6	100	266
0028042	52 x 0,25	12.5	130	343
0028044	61 x 0,25	13.3	152.5	398
0028047	3 x 0,34	4.2	10.5	33
0028048	7 x 0,34	5.5	22.8	62
0028051	16 x 0,34	8.3	54.4	131

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® 100 CY				
0034006	2 x 0,14	3.7	12	20
0034007	3 x 0,14	3.9	13	28
0034008	4 x 0,14	4.1	14.3	33
0034009	5 x 0,14	4.4	15.5	38
0034010	7 x 0,14	4.7	20.3	49
0034011	10 x 0,14	5.7	34.3	66
0034012	14 x 0,14	6.3	32	80
0034013	16 x 0,14	6.6	40.9	90
0034016	27 x 0,14	8.1	70.6	148
0031031	3 x 0,25	5.4	20.2	48
0031066	4 x 0,25	5.7	24	61
0031067	5 x 0,25	6.3	29	72
0031032	7 x 0,25	6.7	37.6	82
0031033	10 x 0,25	8.2	48.8	129
0031034	14 x 0,25	8.7	64.6	147
0031068	2 x 0,34	5.6	20	45
0031048	3 x 0,34	5.8	24.1	62
0031069	4 x 0,34	6.4	29	65
0031070	5 x 0,34	6.9	42	95
0031049	7 x 0,34	7.3	50	106
0031050	10 x 0,34	9	67.7	167
0031052	16 x 0,34	10.5	95	219
0031060	52 x 0,34	17.6	336	629

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® LiYY refer to page 282
- UNITRONIC® LiYCY refer to page 283

Accessories

UNITRONIC® 100

- UNIVERSAL STRIP stripping tool refer to page 963
- STAR STRIP stripping tool refer to page 957

UNITRONIC® 100 CY

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- Multipurpose shears A and B
- UNIVERSAL STRIP stripping tool refer to page 963
- STAR STRIP stripping tool refer to page 957

**UNITRONIC® LiYY**

Data transmission cable with colour code acc. to DIN 47100

**Info**

- The classic for multi-functional use
- Further dimensions/colours on request
- CPR: Article number choice under www.lappkabel.com/cpr

Benefits

- Space-saving installation due to small cable diameters
- Multifunctional application possibilities
- Depending on the quantity, the outer sheath can also be produced in other colours to match your application needs

Application range

- UNITRONIC® LiYY is also used as a control and signal cable in electronics of computer systems, electronic control equipment, office machines, balances, etc.
- Dry or damp rooms
- Occasional flexing

Product features

- Despite the large number of cores, LiYY data cables have small outer diameters
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of PVC
- Outer sheath made of PVC
Outer sheath colour: pebble grey (RAL 7032)

Technical data**Classification ETIM 5/6**

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable

**Core identification code**

DIN 47100 without colour repetition, refer to Appendix T9

**Mutual capacitance**

Approx. 120 nF/km

**Inductivity**

approx. 0.65 mH/km

**Conductor stranding**

Stranded, fine-wire
0.34 mm²: 7-wire

**Minimum bending radius**

Occasional flexing: 10 x outer diameter
Fixed installation: 4 x outer diameter

**Temperature range**

Occasional flexing: -5°C to +70°C
Fixed installation: -40°C to +80°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® LiYY				
0028202	2 x 0.14	3.2	2.7	13.2
0028203	3 x 0.14	3.4	4.05	16
0028204	4 x 0.14	3.6	5.4	18.9
0028205	5 x 0.14	3.9	6.72	22.2
0028207	7 x 0.14	4.2	9.45	28.4
0028208	8 x 0.14	4.9	10.2	35.2
0028210	10 x 0.14	5.2	13.5	41.2
0028212	12 x 0.14	5.6	16.2	48.4
0028214	14 x 0.14	5.8	18.9	52.9
0028216	16 x 0.14	6.1	21.6	59.1
0028220	20 x 0.14	7	27	70.8
0028225	25 x 0.14	7.8	33.6	87.2
0028236	36 x 0.14	8.6	48.6	126.8
0028237	37 x 0.14	8.9	49.7	118
0028240	40 x 0.14	9.3	54	139.1
0028250	50 x 0.14	10.4	67.5	170.9
0028256	56 x 0.14	10.7	78.4	187
0028302	2 x 0.25	3.8	4.8	18
0028303	3 x 0.25	4	7.2	22
0028304	4 x 0.25	4.3	9.6	26.2
0028305	5 x 0.25	4.7	12	31
0028306	6 x 0.25	5.1	14.4	39
0028307	7 x 0.25	5.1	16.8	42
0028308	8 x 0.25	6.2	19.2	49.2
0028310	10 x 0.25	6.8	24	58
0028312	12 x 0.25	7	28.8	67
0028314	14 x 0.25	7.3	33.6	75.3
0028316	16 x 0.25	7.7	38.4	84.3
0028318	18 x 0.25	8.1	43.2	93
0028320	20 x 0.25	8.6	48	102
0028325	25 x 0.25	9.6	60	134
0028330	30 x 0.25	10.3	72	155
0028332	32 x 0.25	10.7	76.8	164
0028336	36 x 0.25	11.1	86.4	182.2
0028337	37 x 0.25	11.4	88.8	185
0028340	40 x 0.25	12	96.1	200
0028350	50 x 0.25	12.9	120	257.1

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
0028402	2 x 0.34	4.2	6.6	25
0028403	3 x 0.34	4.4	9.9	31
0028404	4 x 0.34	4.8	13.1	43.2
0028405	5 x 0.34	5.5	16.5	53.8
0028406	6 x 0.34	5.9	19.6	55
0028407	7 x 0.34	5.9	22.8	62
0028408	8 x 0.34	7.1	26.1	73.1
0028410	10 x 0.34	7.6	32.6	82
0028412	12 x 0.34	7.8	39.1	102
0028414	14 x 0.34	8.2	45.7	109
0028416	16 x 0.34	8.7	52	127
0028420	20 x 0.34	9.6	65.2	159.3
0028421	21 x 0.34	10.4	68.6	167
0028425	25 x 0.34	11.2	81.6	190
0028430	30 x 0.34	11.6	98	226
0028436	36 x 0.34	12.5	118	284
0028440	40 x 0.34	13.5	131	317
0028450	50 x 0.34	15	163	407
0028502	2 x 0.50	4.7	9.6	30
0028503	3 x 0.50	5	14.4	39
0028504	4 x 0.50	5.6	19.2	49
0028505	5 x 0.50	6.1	24	65
0028507	7 x 0.50	6.9	33.6	82
0028508	8 x 0.50	8	38.4	90
0028510	10 x 0.50	8.6	48	117
0028512	12 x 0.50	8.9	58	133
0028516	16 x 0.50	10.2	77	170
0028520	20 x 0.50	11.4	96	214
0028525	25 x 0.50	12.7	120	265
0028530	30 x 0.50	13.2	144	304
0028540	40 x 0.50	15.8	192	392
0028602	2 x 0.75	5.1	14.4	48
0028603	3 x 0.75	5.6	21.6	57
0028604	4 x 0.75	6.1	28.8	69
0028605	5 x 0.75	6.9	36	78
0028607	7 x 0.75	7.5	50	112
0028608	8 x 0.75	8.7	58	126
0028610	10 x 0.75	9.4	72	149

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
0028612	12 x 0.75	10.1	86	176
0028616	16 x 0.75	11.2	115	218
0028620	20 x 0.75	12.4	144	274
0028625	25 x 0.75	14	180	320
0028702	2 x 1.00	5.6	19.2	55
0028703	3 x 1.00	5.9	29	70

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® LiYY (TP) refer to page 285
- UNITRONIC® LiYY A refer to page 303

Accessories

- SKINTOP® ST-M refer to page 680
- SKINTOP® ST-M Small PU
- STAR STRIP stripping tool refer to page 957
- SENSOR STRIP stripping tool refer to page 961



Info

- CPR: Article number choice under www.lappkabel.com/cpr

Benefits

- Overall braid minimises electrical interference
- Multifunctional application possibilities

Application range

- Screened cables with small dimensions are suitable for use in computer systems, instrumentation technology, office equipment, balances.
- Dry or damp rooms

Product features

- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of PVC
- Tinned-copper braiding
- Outer sheath made of PVC
Outer sheath colour: pebble grey (RAL 7032)



Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104

ETIM 5.0/6.0 Class-Description:

Control cable



Core identification code

DIN 47100 without colour repetition, refer to Appendix T9



Mutual capacitance

C/C: approx. 120 nF/km

C/S: approx. 160 nF/km



Inductivity

approx. 0.65 mH/km



Conductor stranding

Stranded, fine-wire

0.34 mm²: 7-wire



Minimum bending radius

Occasional flexing: 15 x outer diameter

Fixed installation: 6 x outer diameter



Temperature range

Occasional flexing: -5°C to +70°C

Fixed installation: -40°C to +80°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® LiYY				
0034302	2 x 0.14	3.9	12	20
0034303	3 x 0.14	4.1	13	28
0034304	4 x 0.14	4.3	14.3	33
0034305	5 x 0.14	4.6	15.5	38
0034306	6 x 0.14	4.9	18.2	38
0034307	7 x 0.14	4.9	19	49
0034308	8 x 0.14	5.8	21.2	56
0034310	10 x 0.14	6.1	28.5	66
0034312	12 x 0.14	6.3	30.4	78
0034314	14 x 0.14	6.7	32	80
0034315	15 x 0.14	6.9	37.8	86
0034316	16 x 0.14	7	43	90
0034318	18 x 0.14	7.3	48.8	95
0034320	20 x 0.14	7.7	53.9	100
0034321	21 x 0.14	7.9	55.5	105
0034324	24 x 0.14	8.3	61	112
0034325	25 x 0.14	8.5	63	120
0034328	28 x 0.14	8.5	66.1	141
0034330	30 x 0.14	8.7	69	155
0034336	36 x 0.14	9.3	83	170
0034340	40 x 0.14	10.4	87.5	178
0034344	44 x 0.14	10.7	110.5	185
0034350	50 x 0.14	11.1	122.5	195
0034402	2 x 0.25	4.5	16	32
0034403	3 x 0.25	4.7	21	37

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
0034404	4 x 0.25	5	24	41.3
0034405	5 x 0.25	5.6	29	51.2
0034406	6 x 0.25	6	30	58
0034407	7 x 0.25	6	37	65
0034408	8 x 0.25	7.1	42	73
0034410	10 x 0.25	7.5	46	82
0034412	12 x 0.25	7.7	53	98
0034414	14 x 0.25	8	59	99
0034415	15 x 0.25	8.3	61	111
0034416	16 x 0.25	8.4	64	119
0034418	18 x 0.25	8.8	83	125
0034420	20 x 0.25	9.3	88	136
0034421	21 x 0.25	9.6	93	161
0034425	25 x 0.25	10.7	114	172
0034428	28 x 0.25	10.8	126	181.1
0034432	32 x 0.25	11.4	138	203
0034436	36 x 0.25	11.8	148	220
0034440	40 x 0.25	12.7	157	248
0034450	50 x 0.25	13.8	178	318
0034461	61 x 0.25	15	205	365.2
0034502	2 x 0.34	4.9	21	37
0034503	3 x 0.34	5.1	27	42
0034504	4 x 0.34	5.7	28	52
0034505	5 x 0.34	6.2	30	60
0034506	6 x 0.34	6.8	45	64
0034507	7 x 0.34	6.8	48	75
0034508	8 x 0.34	7.8	52	94
0034510	10 x 0.34	8.3	74	105
0034512	12 x 0.34	8.5	80	123
0034514	14 x 0.34	8.9	86	154
0034515	15 x 0.34	9.2	90	155
0034516	16 x 0.34	9.4	94	160
0034518	18 x 0.34	10.2	103	173
0034520	20 x 0.34	10.7	112	192
0034521	21 x 0.34	11.1	116	199.2
0034525	25 x 0.34	11.9	135	259
0034528	28 x 0.34	12	153	280
0034530	30 x 0.34	12.3	159	291.1
0034532	32 x 0.34	13	165	305
0034536	36 x 0.34	13.4	179	331
0034540	40 x 0.34	14.8	200	365
0034550	50 x 0.34	15.9	235	431
0034602	2 x 0.50	5.6	29	47
0034603	3 x 0.50	5.9	38	55
0034604	4 x 0.50	6.3	43	70
0034605	5 x 0.50	7	51	90
0034606	6 x 0.50	7.6	59	104
0034607	7 x 0.50	7.6	65	112
0034608	8 x 0.50	8.7	70	120
0034610	10 x 0.50	9.3	88	139
0034612	12 x 0.50	9.6	99	177
0034618	18 x 0.50	11.8	134	239
0034620	20 x 0.50	12.1	149	276
0034625	25 x 0.50	13.7	211	352
0034630	30 x 0.50	14.5	230	397
0034702	2 x 0.75	6	38	53
0034703	3 x 0.75	6.3	49	65
0034704	4 x 0.75	7	58	79
0034705	5 x 0.75	7.6	67	109
0034707	7 x 0.75	8.2	100	156
0034710	10 x 0.75	10.5	130	187
0034712	12 x 0.75	10.8	154	218
0034718	18 x 0.75	13	195	327
0034725	25 x 0.75	15.3	280	454
0034730	30 x 0.75	15.8	312	486
0034802	2 x 1.00	6.3	43	72
0034803	3 x 1.00	6.8	56	90
0034804	4 x 1.00	7.3	68	109
0034805	5 x 1.00	8	79	126
0034807	7 x 1.00	8.6	118	171
0034810	10 x 1.00	11.1	140	228
0034812	12 x 1.00	11.4	168	259
0034818	18 x 1.00	13.4	252	389
0034825	25 x 1.00	16.2	335	517
0034902	2 x 1.50	7.1	58	90
0034903	3 x 1.50	7.5	74	115
0034904	4 x 1.50	8.1	108	129
0034905	5 x 1.50	8.8	129	176
0034907	7 x 1.50	9.5	164	220
0034912	12 x 1.50	12.7	254	376
0034918	18 x 1.50	15.3	350	519
0034925	25 x 1.50	17.9	550	901

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths / Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

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Similar products

- UNITRONIC® LiYCY (TP) refer to page 286
- UNITRONIC® PUR CP refer to page 292
- UNITRONIC® LiYCY A refer to page 304

Accessories

- SKINTOP® MS-SC refer to page 776
- Multipurpose shears A and B
- UNIVERSAL STRIP stripping tool refer to page 963



UNITRONIC® LiYY (TP)

Data transmission cable with colour code acc. to DIN 47100 and twisted pairs



Info

- TP = twisted pair
- CPR: Article number choice under www.lappkabel.com/cpr



Benefits

- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

- Electronic devices tend to leave little room for installing cables, meaning short travel distances and small bending radii are required. This cable ideally meets these requirements.
- Dry or damp rooms

Product features

- Twisted in pairs to reduce decoupling. As a result, additional screening is often not required.
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire strand made of bare copper wires
- Core insulation made of PVC
- TP structure
- Outer sheath made of PVC
Outer sheath colour: pebble grey (RAL 7032)

Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

DIN 47100, refer to Appendix T9



Mutual capacitance

Approx. 120 nF/km



Inductivity

approx. 0.65 mH/km



Conductor stranding

Fine copper wire strands



Minimum bending radius

Occasional flexing: 10 x outer diameter
Fixed installation: 4 x Outer diameter



Temperature range

Occasional flexing: -5°C to +70°C
Fixed installation: -40°C to +80°C

Article number	Number of pairs and conductor cross section (mm²)	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® LiYY (TP)				
0035101	2 x 2 x 0.14	4.5	5.4	25.5
0035102	3 x 2 x 0.14	5	8	32
0035103	4 x 2 x 0.14	5.6	10.7	38.5
0035104	5 x 2 x 0.14	5.8	13.4	45.5
0035105	6 x 2 x 0.14	6.3	16.1	51
0035108	10 x 2 x 0.14	8.1	26.9	77.5
0035110	12 x 2 x 0.14	8.3	32.3	94.5
0035113	16 x 2 x 0.14	9.2	43	110.5
0035160	2 x 2 x 0.25	5.7	9.6	38
0035161	3 x 2 x 0.25	6.3	14.4	48
0035162	4 x 2 x 0.25	7	19.2	59
0035163	6 x 2 x 0.25	7.9	28.8	80
0035164	8 x 2 x 0.25	9.3	38.4	98
0035170	2 x 2 x 0.5	7.3	19.2	72
0035171	3 x 2 x 0.5	8.1	28.8	83
0035172	4 x 2 x 0.5	8.8	38.4	115
0035174	8 x 2 x 0.5	12.3	76.8	206
0035175	10 x 2 x 0.5	13.3	96	247

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Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® LiYCY (TP) refer to page 286
- UNITRONIC® LiYCY (TP) A refer to page 305

Accessories

- SKINTOP® CLICK refer to page 682
- KS 15 cable shears



UNITRONIC® LiYCY (TP)

Screened data transmission cable with colour code acc. to DIN 47100 and twisted pairs



Info

- TP = twisted pair
- Further dimensions/colours on request
- CPR: Article number choice under www.lappkabel.com/cpr

Benefits

- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)
- Overall braid minimises electrical interference

Application range

- Can be used multifunctional in electronics of computer systems, electronic control equipment, office machines, balances, etc.
- Dry or damp rooms

Product features

- Good protection against capacitive interference from electric fields (e.g. power cable)
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire strand made of bare copper wires
- Core insulation made of PVC
- TP structure
- Tinned-copper braiding
- Outer sheath made of PVC
Outer sheath colour: pebble grey (RAL 7032)

Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

DIN 47100, refer to Appendix T9



Mutual capacitance

C/C: approx. 120 nF/km
C/S: approx. 160 nF/km



Inductivity

approx. 0.65 mH/km



Conductor stranding

Fine copper wire strands



Minimum bending radius

Occasional flexing: 15 x outer diameter
Fixed installation: 6 x outer diameter



Temperature range

Occasional flexing: -5 °C to +70 °C
Fixed installation: -40 °C to +80 °C

Article number	Dimension and cross section in mm ²	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® LiYCY (TP)				
0035131	2 x 2 x 0.14	5.3	18.5	39
0035141	3 x 2 x 0.14	5.8	23	48
0035132	4 x 2 x 0.14	6.2	26.6	54
0035133	6 x 2 x 0.14	7.1	48.5	85
0035150	8 x 2 x 0.14	8.2	53.7	97
0035134	10 x 2 x 0.14	8.7	59	110
0035135	12 x 2 x 0.14	8.9	66	142
0035136	16 x 2 x 0.14	10.2	79	154
0035142	20 x 2 x 0.14	11.3	97	184
0035137	25 x 2 x 0.14	12.5	113	238
0035800	2 x 2 x 0.25	6.3	28	54
0035801	3 x 2 x 0.25	7.1	39.6	68.5
0035802	4 x 2 x 0.25	7.6	44.9	81
0035803	6 x 2 x 0.25	8.5	69.5	115
0035804	8 x 2 x 0.25	10.3	76.9	130
0035805	10 x 2 x 0.25	11	102	158
0035806	12 x 2 x 0.25	11.3	120	190
0035807	16 x 2 x 0.25	12.5	146.5	238

Article number	Dimension and cross section in mm ²	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
0035808	25 x 2 x 0.25	16.1	205	344
0035810	2 x 2 x 0.50	7.9	48.1	93
0035811	3 x 2 x 0.50	8.7	73.7	116
0035812	4 x 2 x 0.50	9.4	82	127
0035813	6 x 2 x 0.50	11.1	110	198
0035814	8 x 2 x 0.50	13.1	139	259
0035816	12 x 2 x 0.50	14.9	198.3	354
0035817	16 x 2 x 0.50	16.5	240	459
0035820	2 x 2 x 0.75	8.5	58	106
0035821	3 x 2 x 0.75	9.4	84	140
0035822	4 x 2 x 0.75	10.7	108	179
0035827	5 x 2 x 0.75	11.1	126	215
0035823	6 x 2 x 0.75	12.1	146	246
0035824	8 x 2 x 0.75	14.7	180	305
0035825	12 x 2 x 0.75	16.2	261	456
0035830	2 x 2 x 1.00	9	84	142
0035831	3 x 2 x 1.00	10	96	173
0035832	4 x 2 x 1.00	11.3	121	212
0035836	5 x 2 x 1.00	11.8	161	266

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® CY PiDY (TP) refer to page 289
- UNITRONIC® PUR CP (TP) refer to page 293
- UNITRONIC® Li2YCY (TP) fine-wire refer to page 294
- UNITRONIC® LiYCY (TP) A refer to page 305

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- Multipurpose shears A and B
- STAR STRIP stripping tool refer to page 957



UNITRONIC® EB CY (TP)

Screened data transmission cable with twisted pairs and blue outer sheath



Info

- Hazard protection type -i- is required where there is a risk of explosion
- CPR: Article number choice under www.lappkabel.com/cpr



Benefits

- Overall braid minimises electrical interference
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

- Reliable data transmission in intrinsically safe circuits
- In EMC-sensitive environments (electromagnetic compatibility)

Product features

- For intrinsically safe circuits (type of protection i - intrinsic safety) according to IEC 60079-14:2013 / EN 60079-14:2014 / VDE 0165-1:2014, section 16.2.2
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire strand made of bare copper wires
- Core insulation made of PVC
- TP structure
- Tinned-copper braiding
- Outer sheath made of PVC
- Outer sheath colour: sky blue (RAL 5015)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100, refer to Appendix T9
	Mutual capacitance C/C approx. 100 nF/km C/S approx. 140 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Strand, fine-wire in accordance with IEC 60228 Cl. 5
	Minimum bending radius Occasional flexing: 15 x outer diameter Fixed installation: 6 x outer diameter
	Test voltage 2500 V
	Temperature range Occasional flexing: -5°C to +70°C Fixed installation: -40°C to +80°C

Article number	Number of pairs and conductor cross section (mm²)	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® EB CY (TP)				
0012620	2 x 2 x 0.75	8.7	58	106
0012621	3 x 2 x 0.75	9.6	84	140
0012622	4 x 2 x 0.75	10.9	108	179
0012624	6 x 2 x 0.75	12.3	146	246
0012626	10 x 2 x 0.75	16.1	220	392

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- JE-LiYCY...BD EB refer to page 319

Accessories

- SKINTOP® K-M ATEX plus blue refer to page 689
- Multipurpose shears A and B



UNITRONIC® LiYCY-CY

Screened data transmission cable with individually screened cores



Benefits

- Overall braid minimises electrical interference
- Individually screened cores minimise crosstalk between cables routed in parallel

Application range

- When a lossless transmission of data has to be guaranteed in fields with strong interference, cables with individually screened cores and an additional overall screening are used
- Dry or damp rooms

Product features

- Wire-screen can be used as outer conductor
- The cable remains flexible despite multiple screening
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire strand made of bare copper wires
- Core insulation made of PVC
- Tinned-copper braiding for each core
- Inner sheath made of PVC over each screened core
- Tinned-copper braiding
- Outer sheath made of PVC
- Outer sheath colour: pebble grey (RAL 7032)

Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

DIN 47100, refer to Appendix T9



Mutual capacitance

Approx. 230 nF/km



Inductivity

Approx. 0.2 mH/km



Conductor stranding

Stranded conductor, fine-wire



Minimum bending radius

Occasional flexing: 15 x outer diameter
Fixed installation: 7.5 x outer diameter



Temperature range

Occasional flexing: -5°C to +70°C
Fixed installation: -40°C to +80°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® LiYCY-CY				
0032302	2 x 0.25	6.9	41.5	69
0032303	3 x 0.25	7.2	53	106
0032304	4 x 0.25	7.8	65	130
0032305	5 x 0.25	8.5	78	161

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® CY PiDY (TP) refer to page 289

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- Multipurpose shears A and B
- UNIVERSAL STRIP stripping tool refer to page 963
- DATA STRIP stripping tool refer to page 959



UNITRONIC® CY PiDY (TP)

Screened data transmission cable with copper-wrapped twisted pairs



Info

- PiDY = Pairs with copper wire wrapping and PVC sheath



Benefits

- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)
- Individually screened pairs and the overall braid minimise electrical interference

Application range

- Cable should be used in areas with high levels of electromagnetic interferences
- Data processing, process control systems, machining centres, security systems and electronics
- Suitable for the transmission with varying in frequency and voltage or sensitive signals
- For fixed installation and flexible use
- Dry or damp rooms

Product features

- The cable remains flexible despite multiple screening
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire strand made of bare copper wires
- Core insulation made of PVC
- Cores twisted into pairs
- Copper wrapping over pairs
- Inner sheath made of PVC over screened pairs
- Tinned-copper braiding
- Outer sheath made of PVC
- Outer sheath colour: pebble grey (RAL 7032)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100, refer to Appendix T9
	Mutual capacitance C/C: approx. 120 nF/km C/S: approx. 160 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded conductor, fine-wire
	Minimum bending radius Fixed installation: 6 x outer diameter
	Loop resistance < 160 Ohm/km
	Characteristic impedance Approx. 65 Ohm
	Temperature range Occasional flexing: -5°C to +70°C Fixed installation: -40°C to +80°C

Article number	Dimension and cross section in mm ²	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® CY PiDY (TP)				
0034250	2 x 2 x 0.25	9.3	59.6	112
0034251	3 x 2 x 0.25	9.8	72.7	136
0034252	4 x 2 x 0.25	10.7	88.2	168
0034253	5 x 2 x 0.25	11.7	103.8	201
0034254	6 x 2 x 0.25	13.1	125.7	244
0034256	8 x 2 x 0.25	15.7	161	325
0034257	10 x 2 x 0.25	16.9	186.8	342
0034258	12 x 2 x 0.25	17.4	239.5	416
0034259	16 x 2 x 0.25	19.3	316.7	542

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® Li2YCY PiMF refer to page 296

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- UNIVERSAL STRIP stripping tool refer to page 963
- STAR STRIP stripping tool refer to page 957



UNITRONIC® ST

Static screened data transmission cable similar to UL AWM 2092



Benefits

- Aluminium-laminated plastic foil static screen with tin-plated drain wire minimises the interference of high frequency, electromagnetic fields

Application range

- Especially designed for the transmission of the smallest measurement and control signals at minimal space requirements
- Internal wiring of electronic equipment
- For fixed and limited flexible installation
- For use in dry, damp and wet rooms

Product features

- Protection against interferences at medium and high frequencies by aluminium-laminated plastic foil, combination of flexibility and good screening (normal requirements)
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on UL AWM Style 2092 / 2093

Product Make-up

- 7-wire tinned stranded copper conductor
- Core insulation made of polyethylene (PE)
- Plastic-laminated aluminium foil with tinned copper drain wire
- Outer sheath made of PVC, Colour of the outer sheath: Similar to Silver-grey / RAL 7001

Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

2 cores: black, transparent
3 cores: black, red, transparent



Mutual capacitance

C/C approx. 90 nF/km
C/S approx. 160 nF/km



Inductivity

approx. 0.65 mH/km



Minimum bending radius

Occasional flexing: 10 x outer diameter
Fixed installation: 6 x outer diameter



Characteristic impedance

Approx. 95 Ohm



Temperature range

Occasional flexing: -5°C to +70°C
Fixed installation: -40°C to +80°C

Article number	Number of conductors and AWG size	Conductor cross-section (mm²)	Core insulation material	Outer sheath material	Outer diameter [mm]	Copper index (kg/km)
UNITRONIC® ST						
0033000	2 x AWG 20/7	0.52	PE	PVC	5.2	17.2
0033001	3 x AWG 20/7	0.52	PE	PVC	5.3	23

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- UNIVERSAL STRIP stripping tool refer to page 963
- DATA STRIP stripping tool refer to page 959



UNITRONIC® LiYD11Y

Data transmission cable with copper wrapping and PUR outer sheath



Benefits

- Increased durability under harsh conditions thanks to robust PUR outer sheath
- Resistant to contact with many mineral oil-based lubricants, diluted acids, aqueous alkaline solutions and other chemical media

Application range

- Intended for use in industrial environments, where cables should have excellent mechanical and chemical resistance.
- Screened cables with small dimensions are suitable for use in computer systems, instrumentation technology, office equipment, balances.
- Can be used in dry or damp rooms
- Outdoor use is possible within the indicated operating temperature range

Product features

- PUR outer sheath, tear and notch-resistant, resistant to mineral oils and abrasion
- Low-adhesive surface
- Good UV-resistance
- Flame retardant according to IEC 60332-2-2
- Spiral versions with similar properties are also available: "UNITRONIC® SPIRAL"

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Extra-fine wire strand made of bare copper wires
- Core insulation made of PVC
- Wrapped with bare copper wires
- Outer sheath made of PUR
Outer sheath colour: black (RAL 9005)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100 without colour repetition, refer to Appendix T9
	Mutual capacitance C/C approx. 140 nF/km C/S approx. 150 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, extra-fine wire
	Minimum bending radius Occasional flexing: 10 x outer diameter Fixed installation: 6 x outer diameter
	Temperature range Occasional flexing: -5°C to +70°C Fixed installation: -40°C to +80°C

Article number	Number of cores and mm² per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® LiYD11Y				
0033202	2 x 0.14	4.1	9.6	20
0033203	3 x 0.14	4.3	11	25
0033204	4 x 0.14	4.5	12	27
0033205	5 x 0.14	4.8	14.4	33
0033206	6 x 0.14	5.5	17.6	38
0033207	7 x 0.14	5.9	21.5	41
0033212	12 x 0.14	7.2	33.2	62
0033218	18 x 0.14	8	44.2	83
0033302	2 x 0.25	4.7	11.8	25
0033303	3 x 0.25	5.3	15.6	31
0033304	4 x 0.25	5.6	18.2	36
0033305	5 x 0.25	6	21.4	42
0033306	6 x 0.25	6.8	26.1	49
0033307	7 x 0.25	7.3	27.8	53
0033312	12 x 0.25	8.4	48.1	81
0033318	18 x 0.25	9.7	69	117

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® SPIRAL LiF2Y11Y refer to page 265
- UNITRONIC® SPIRAL refer to page 267

Accessories

- Multipurpose shears A and B
- UNIVERSAL STRIP stripping tool refer to page 963
- DATA STRIP stripping tool refer to page 959



UNITRONIC® PUR CP

Screened data transmission cable with PUR outer sheath for harsh conditions



Benefits

- Data transmission cable with PUR sheath for increased mechanical stress, wear- and tear-resistant
- Increased durability under harsh conditions thanks to robust PUR outer sheath
- Overall braid minimises electrical interference

Application range

- Further development of the UNITRONIC® range for harsher ambient conditions where robust and screened cables in small dimensions are required.

Product features

- Low-adhesive surface
- PUR outer sheath is resistant to most oils and hydraulic fluids
- Special notch and tear-resistance
- Good UV-resistance
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of PVC
- Tinned-copper braiding
- Outer sheath made of PUR
- Outer sheath colour: pebble grey (RAL 7032)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100, refer to Appendix T9
	Mutual capacitance C/C: approx. 120 nF/km C/S: approx. 160 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, fine-wire 0.34 mm ² : 7-wire
	Minimum bending radius Occasional flexing: 15 x outer diameter Fixed installation: 6 x outer diameter
	Temperature range Occasional flexing: -5 °C to +70 °C Fixed installation: -40 °C to +80 °C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® PUR CP				
0032801	3 x 0.25	4.7	21	40
0032802	4 x 0.25	5	24	44
0032803	5 x 0.25	5.6	29	55
0032804	7 x 0.25	6	37	68
0032805	10 x 0.25	7.5	46	85
0032806	12 x 0.25	7.7	59	91
0032812	4 x 0.34	5.7	28	49
0032813	5 x 0.34	6.2	30	60
0032821	3 x 0.50	5.9	38	70
0032822	4 x 0.50	6.3	43	80
0032824	7 x 0.50	7.6	65	115
0032830	2 x 0.75	6	38	67
0032836	12 x 0.75	10.8	154	225

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® FD Li2YCY (TP) A BE refer to page 310
- UNITRONIC® FD Li2YCY (TP) A BA refer to page 311
- UNITRONIC® PUR CP (TP) refer to page 293
- UNITRONIC® FD CP plus refer to page 314
- UNITRONIC® FD CP (TP) plus refer to page 315

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- SMART STRIP stripping tool



UNITRONIC® PUR CP (TP)

Screened data transmission cable with PUR outer sheath and twisted pairs for harsh conditions



Info

- TP = twisted pair



Benefits

- Data transmission cable with PUR sheath for increased mechanical stress, wear- and tear-resistant
- Increased durability under harsh conditions thanks to robust PUR outer sheath
- Overall braid minimises electrical interference
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

- For harsh environmental conditions where robust and screened cables with small dimensions are necessary

Product features

- Low-adhesive surface
- PUR outer sheath is resistant to most oils and hydraulic fluids
- Special notch and tear-resistance
- Good UV-resistance
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire strand made of bare copper wires
- Core insulation made of PVC
- TP structure
- Tinned-copper braiding
- Outer sheath made of PUR
- Outer sheath colour: pebble grey (RAL 7032)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100, refer to Appendix T9
	Mutual capacitance C/C: approx. 120 nF/km C/S: approx. 160 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Fine copper wire strands
	Minimum bending radius Occasional flexing: 15 x outer diameter Fixed installation: 6 x outer diameter
	Temperature range Occasional flexing: -5°C to +70°C Fixed installation: -40°C to +80°C

Article number	Number of pairs and conductor cross section (mm ²)	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® PUR CP (TP)				
0032850	2 x 2 x 0.25	6.3	28	54
0032851	3 x 2 x 0.25	7.1	40	66
0032852	4 x 2 x 0.25	7.6	45	81
0032854	6 x 2 x 0.25	8.5	70	115
0032860	2 x 2 x 0.5	7.9	48	93
0032861	3 x 2 x 0.5	8.7	74	129
0032862	4 x 2 x 0.5	9.4	82	146
0032864	6 x 2 x 0.5	11.1	110	198

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® FD Li2YCY (TP) A BE refer to page 310
- UNITRONIC® FD Li2YCY (TP) A BA refer to page 311
- UNITRONIC® FD CP (TP) plus refer to page 315

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- SMART STRIP stripping tool



UNITRONIC® Li2YCY (TP)

Screened data transmission cable mit PE core insulation, 7-wire strands and twisted pairs



Info

- Cables for RS485/RS422

UNITRONIC® Li2YCY (TP) fine-wire

Screened data transmission cable mit PE core insulation, fine wire strands and twisted pairs



Info

- Cables for RS485/RS422

UNITRONIC® Li2YCYv (TP)

Screened data transmission cable mit PE core insulation, reinforced outer sheath and twisted pairs



Info

- Cables for RS485/RS422

Benefits

- Overall braid minimises electrical interference
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

- Particularly suitable for wiring data systems with transmission rates up to 10 Megabits per second, and is qualified for the RS422 and RS485 interfaces.
- For fixed and limited flexible installation
- Can be used in dry or damp rooms
- Signal-, control- and measuring cable, for transmission of low, sensitive signals and high bit rates
- **UNITRONIC® Li2YCYv (TP)** with its reinforced, nominal/ minimum average wall thickness of at least 1.8 mm of the black outer sheath (Yv) is designed for indoor and outdoor use as well as for applications where a reinforced outer sheath may turn out to be advantageous

Product features

- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

UNITRONIC® Li2YCY (TP)

- 7-wire bare stranded copper conductor
- Core insulation made of polyethylene (PE)
- TP structure
- Tinned-copper braiding
- Outer sheath made of PVC
- Outer sheath colour: pebble grey (RAL 7032)

UNITRONIC® Li2YCY (TP) fine-wire

- Conductors: Finely stranded bare copper
- Core insulation made of polyethylene (PE)
- TP structure
- Tinned-copper braiding
- Outer sheath made of PVC
- Outer sheath colour: pebble grey (RAL 7032)

UNITRONIC® Li2YCYv (TP)

- 7-wire bare stranded copper conductor
- Core insulation made of polyethylene (PE)
- TP structure
- Tinned-copper braiding
- Wall thickness of the outer sheath is increased ("Yv")
- Outer sheath colour: black (RAL 9005)

Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

DIN 47100, refer to Appendix T9



Mutual capacitance

At 800 Hz: max. 60 nF/km



Inductivity

approx. 0.65 mH/km



Conductor stranding

UNITRONIC® Li2YCY (TP)

Stranded conductor, based on VDE 0881, 7-wire

UNITRONIC® Li2YCY (TP) fine-wire

Stranded conductor, fine-wire

UNITRONIC® Li2YCYv (TP)

Stranded conductor, based on VDE 0881, 7-wire



Minimum bending radius

Occasional flexing: 15 x outer diameter
Fixed installation: 6 x outer diameter

Short-range crosstalk attenuation

Up to 1 MHz min. 50 dB
Up to 10 MHz min. 40 dB



Test voltage

Core/core: 2000 V
Core/screen: 1000 V



Characteristic impedance

100 ± 15 Ohm (> 1 MHz)



Temperature range

Occasional flexing: -5°C to +70°C
Fixed installation: -40°C to +80°C

Article number	Number of pairs and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® Li2YCY (TP)				
0031320	2 x 2 x 0,22	6.5	24.2	59
0031321	3 x 2 x 0,22	7.1	28.6	66
0031322	4 x 2 x 0,22	7.3	34.2	78
0031323	8 x 2 x 0,22	9.1	70	125
0031324	10 x 2 x 0,22	10.4	76	143
0031335	1 x 2 x 0,34	5.8	20	44
0031325	2 x 2 x 0,34	7.7	34.1	79
0031326	3 x 2 x 0,34	8.4	43	89
0031327	4 x 2 x 0,34	8.7	47	101
0031328	8 x 2 x 0,34	11	85.8	176
0031336	1 x 2 x 0,5	6.3	29	53
0031330	2 x 2 x 0,5	8.5	37	85
0031331	3 x 2 x 0,5	9.3	55	105
0031332	4 x 2 x 0,5	9.6	60	122
0031333	8 x 2 x 0,5	12.7	113.3	213
0031334	10 x 2 x 0,5	14.8	154	261
UNITRONIC® Li2YCY (TP) fine-wire				
0031370	1 x 2 x 0,25	5.7	14	38
0031371	2 x 2 x 0,25	6.9	28	43
0031372	3 x 2 x 0,25	7.5	39.6	64
0031373	5 x 2 x 0,25	8.3	50	93
UNITRONIC® Li2YCYv (TP) black for outdoor installation and direct burial, 7-wire				
0031350	2 x 2 x 0,22	8.1	24.2	79
0031351	3 x 2 x 0,22	8.7	28.6	93
0031352	4 x 2 x 0,22	8.9	34.2	100
0031353	8 x 2 x 0,22	10.7	70	156
0031354	10 x 2 x 0,22	12	76	185
0031365	1 x 2 x 0,34	7.4	20	69
0031355	2 x 2 x 0,34	9.3	34.1	102
0031356	3 x 2 x 0,34	10	43	117
0031357	4 x 2 x 0,34	10.3	52.8	130
0031358	8 x 2 x 0,34	12.6	85.8	206
0031366	1 x 2 x 0,5	7.9	29	79
0031360	2 x 2 x 0,5	10.1	37	120
0031361	3 x 2 x 0,5	10.9	55	142
0031362	4 x 2 x 0,5	11.2	60	160
0031363	8 x 2 x 0,5	13.9	113.3	251
0031364	10 x 2 x 0,5	16	148	303

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

TERMI-POINT® is a registered trademark of AMP

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® BUS LD refer to page 324

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- Multipurpose shears A and B
- STAR STRIP stripping tool refer to page 957
- Steel Gun HT-338 Cable tie pliers refer to page 1010
- LS steel cable ties refer to page 1008



UNITRONIC® Li2YCY PiMF

Screened data transmission cable with PE core insulation and pairs in metalfoil



Benefits

- Data transmission cable with low capacitance, pair screening and overall copper braiding
- Particularly suitable for wiring data systems and controls in large industrial plants
- Individually screened pairs and the overall braid minimise electrical interference
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

- For enhanced requirements in near-end cross-talk attenuation and high electrical interference in the circuits
- Suitable for the transmission with varying in frequency and voltage or sensitive signals
- Can be used multifunctional in electronics of computer systems, electronic control equipment, office machines, balances, etc.
- For measurement value transmission and serial 2-wire interfaces
- Intended for limited flexible use, and for fixed installation in dry or damp interiors

Product features

- Flame-retardant according IEC 60332-1-2

Product Make-up

- 7-wire or fine-wire (from 1 mm²) strands made of bare copper wires
- Core insulation made of polyethylene (PE)
- Cores twisted into pairs
- Foil wrapping, static screening made of aluminium-laminated plastic film with copper drain wire for each pair
- Bare copper screen braiding
- Outer sheath made of PVC
- Outer sheath colour: pebble grey (RAL 7032)



Info

- Metal foil screened pairs

Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

0.22 mm²-0.5 mm²:
according to DIN 47100, see table T9
1.0 mm²:
a-core: white, b-core: black



Mutual capacitance

At 800 Hz:
0.22 mm²: max. 70 nF/km
0.34 mm²: max. 70 nF/km
0.5 mm²: max. 75 nF/km
1.0 mm²: max. 85 nF/km



Inductivity

Approx. 0.4 mH/km



Conductor stranding

Stranded conductor, based on
VDE 0881, 7-wire



Minimum bending radius

Occasional flexing: 20 x outer diameter
Fixed installation: 10 x outer diameter



Test voltage

Core/core: 2000 V
Core/screen: 1000 V



Characteristic impedance

approx. 85 Ohm (> 1 MHz)



Temperature range

Occasional flexing: -5°C to +70°C
Fixed installation: -40°C to +80°C

Article number	Number of pairs and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® Li2YCY PiMF				
7-wire				
0034040	2 x 2 x 0,22	7.7	33	75.4
0034041	3 x 2 x 0,22	8.1	42	86
0034042	4 x 2 x 0,22	8.7	50	99
0034043	8 x 2 x 0,22	10.9	85	161.4
0034044	10 x 2 x 0,22	12	100	186.4
0034045	2 x 2 x 0,34	9	43	70
0034046	3 x 2 x 0,34	9.4	55	85
0034047	4 x 2 x 0,34	9.8	64	103
0034048	8 x 2 x 0,34	12.9	127	191
0034060	2 x 2 x 0,5	9.9	51	96
0034061	3 x 2 x 0,5	10.4	66	116
0034062	4 x 2 x 0,5	11.3	71	141
0034063	5 x 2 x 0,5	11.8	92	180
0034064	8 x 2 x 0,5	14.5	153	271
0034065	10 x 2 x 0,5	16.6	182	327
Fine wire				
0034070	2 x 2 x 1	11.7	82	126
0034071	3 x 2 x 1	11.8	109	196
0034072	4 x 2 x 1	12.7	133	220
0034073	10 x 2 x 1	19.7	326	492

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths / Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

TERMI-POINT® is a registered trademark of AMP

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® RE-2Y(ST)Yv PiMF refer to page 317

Accessories

- KNIPEX Cable shear refer to page 952
- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- STAR STRIP stripping tool refer to page 957
- KS 20 cable shears



UNITRONIC® ROBUST

Halogen-free data transmission cable with colour code acc. to DIN 47100 - resistant to a wide range of chemical media



Info

- Excellent weather resistance
- Good chemical resistance

Benefits

- Outstanding weather, ozone and UV resistance together with the wide temperature range enable versatile use for indoor and outdoor applications
- Resistant to contact with organic oils and the related emulsions as well as a multitude of plant, animal or synthetic-based greases and waxes
- Good resistance to ammonia compounds and bio-gases
- Good resistance to cold and hot water as well as water-soluble cleaning and cooling agents
- Well-suited to steam cleaning

Application range

- Machine tool building, medical technology, laundries, car washing equipment, chemical industry, composting plants, sewage works
- Food and beverage industry, especially for production and processing equipment of milk and meat products
- For data processing, measurement and control engineering, safety related systems and as electronics cable
- For indoor and outdoor use

Product features

- Good chemical resistance to ester-based hydraulic fluids
- Ozone, UV and weather-resistant according to EN 50396 and HD 605 S2
- Halogen-free as per IEC 60754-1, Low corrosivity/ acidity of combustion gases per IEC 60754-2, Low toxicity of comb. gases per EN 50305
- Low smoke density according to IEC 61034-2

Norm references / Approvals

- Based on VDE 0812
- Certified resistance to disinfection and cleaning solutions used in food and beverage industry

Product Make-up

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of special halogen-free compound
- Outer sheath made of special TPE
- Outer sheath colour: Black

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000830 ETIM 5.0/6.0 Class-Description: Data cable
	Core identification code DIN 47100 without colour repetition, refer to Appendix T9
	Mutual capacitance C/C approx. 60 nF/km
	Specific insulation resistance > 20 GOhm x cm
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, fine-wire 0.34 mm ² : 7-wire
	Torsion movement in WTG TW-0 & TW-2, refer to Appendix T0
	Minimum bending radius Occasional flexing: 10 x outer diameter Fixed installation: 4 x outer diameter
	Test voltage At 0.14 mm ² : 1200 V
	Temperature range Occasional flexing: -40°C to +90°C Fixed installation: -50°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ROBUST				
1032000	2 x 0.14	3.2	2.8	15
1032001	3 x 0.14	3.4	4.2	17
1032002	4 x 0.14	3.6	5.6	21
1032003	5 x 0.14	3.9	7	25
1032004	7 x 0.14	4.2	9.8	30
1032005	8 x 0.14	4.9	11.2	40
1032006	10 x 0.14	5.2	14	41
1032007	12 x 0.14	5.6	16.8	50
1032009	16 x 0.14	6.1	22.4	63
1032011	25 x 0.14	7.7	35	95
1032012	2 x 0.25	3.8	4.8	21
1032013	3 x 0.25	4	7.2	25
1032014	4 x 0.25	4.3	9.6	31
1032015	5 x 0.25	4.7	12	38
1032016	7 x 0.25	5.1	16.8	47

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
1032017	8 x 0.25	6.2	19.2	66
1032018	10 x 0.25	6.8	24	71
1032019	12 x 0.25	7	28.8	81
1032021	16 x 0.25	7.7	38.4	104
1032024	25 x 0.25	9.5	60	151
1032025	2 x 0.34	4.2	6.5	29
1032026	3 x 0.34	4.4	9.8	32
1032027	4 x 0.34	4.8	13.1	41
1032028	5 x 0.34	5.5	16.3	52
1032030	7 x 0.34	5.9	22.9	65
1032031	8 x 0.34	7.1	26.1	90
1032032	10 x 0.34	7.6	32.6	93
1032033	12 x 0.34	7.8	39.2	107
1032035	16 x 0.34	8.7	52.2	138
1032038	25 x 0.34	11.2	81.6	213

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths
Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum
Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).
Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- SKINTOP® ST-HF-M refer to page 687
- DATA STRIP stripping tool refer to page 959
- KT 11 cable shears



UNITRONIC® ROBUST C

Halogen-free data transmission cable with colour code acc. to DIN 47100 - resistant to a wide range of chemical media

LAPP KABEL STUTTGART UNITRONIC® ROBUST C



Info

- Excellent weather resistance
- Good chemical resistance

Benefits

- Outstanding weather, ozone and UV resistance together with the wide temperature range enable versatile use for indoor and outdoor applications
- Resistant to contact with organic oils and the related emulsions as well as a multitude of plant, animal or synthetic-based greases and waxes
- Good resistance to ammonia compounds and bio-gases
- Good resistance to cold and hot water as well as water-soluble cleaning and cooling agents
- Well-suited to steam cleaning

Application range

- Machine tool building, medical technology, laundries, car washing equipment, chemical industry, composting plants, sewage works
- Food and beverage industry, especially for production and processing equipment of milk and meat products
- For data processing, measurement and control engineering, safety related systems and as electronics cable
- For indoor and outdoor use

Product features

- Good chemical resistance to ester-based hydraulic fluids
- Ozone, UV and weather-resistant according to EN 50396 and HD 605 S2
- Halogen-free as per IEC 60754-1, Low corrosivity/ acidity of combustion gases per IEC 60754-2, Low toxicity of comb. gases per EN 50305
- Low smoke density according to IEC 61034-2

Norm references / Approvals

- Based on VDE 0812
- Certified resistance to disinfection and cleaning solutions used in food and beverage industry

Product Make-up

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of special halogen-free compound
- Tinned-copper braiding
- Outer sheath made of special TPE
- Outer sheath colour: Black

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000830 ETIM 5.0/6.0 Class-Description: Data cable
	Core identification code DIN 47100 without colour repetition, refer to Appendix T9
	Mutual capacitance C/C approx. 60 nF/km C/S approx. 100 nF/km
	Specific insulation resistance > 20 GOhm x cm
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, fine-wire 0.34 mm ² : 7-wire
	Torsion movement in WTG TW-0 & TW-2, refer to Appendix T0
	Minimum bending radius Occasional flexing: 10 x outer diameter Fixed installation: 4 x outer diameter
	Test voltage At 0.14 mm ² : 1200 V
	Temperature range Occasional flexing: -40°C to +90°C Fixed installation: -50°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ROBUST C				
1032050	2 x 0.14	3.9	9.3	25
1032051	3 x 0.14	4.1	10.8	28
1032052	4 x 0.14	4.3	13.5	34
1032053	5 x 0.14	4.6	15	38
1032055	7 x 0.14	4.9	19	46
1032056	8 x 0.14	5.8	22	60
1032057	10 x 0.14	6.1	25.8	63
1032058	12 x 0.14	6.3	28.9	70
1032061	25 x 0.14	8.4	56.1	128
1032062	2 x 0.25	4.5	12.7	33
1032063	3 x 0.25	4.7	16.3	40
1032064	4 x 0.25	5	18.8	46
1032065	5 x 0.25	5.6	22.5	57
1032067	7 x 0.25	6	28.6	69

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
1032068	8 x 0.25	7.1	33.6	92
1032069	10 x 0.25	7.5	42.8	101
1032070	12 x 0.25	7.7	47.7	111
1032073	25 x 0.25	10.6	86.5	202
1032074	2 x 0.34	4.9	15.7	44
1032075	3 x 0.34	5.1	20.4	54
1032076	4 x 0.34	5.7	23.6	66
1032077	5 x 0.34	6.2	28.2	78
1032079	7 x 0.34	6.8	36	95
1032080	8 x 0.34	7.8	45.3	127
1032081	10 x 0.34	8.3	53.9	137
1032082	12 x 0.34	8.5	60.7	152
1032084	16 x 0.34	9.4	77.9	191
1032086	25 x 0.34	11.9	115.7	288

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths
Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum
Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).
Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- SKINTOP® ST-HF-M refer to page 687
- DATA STRIP stripping tool refer to page 959
- KT 11 cable shears



UNITRONIC® ROBUST C (TP)

Halogen-free data transmission cable with colour code acc. to DIN 47100 - resistant to a wide range of chemical media



Info

- Excellent weather resistance
- Good chemical resistance

LAPP KABEL STUTTGART UNITRONIC® ROBUST C (TP)



Benefits

- Outstanding weather, ozone and UV resistance together with the wide temperature range enable versatile use for indoor and outdoor applications
- Resistant to contact with organic oils and the related emulsions as well as a multitude of plant, animal or synthetic-based greases and waxes
- Good resistance to ammonia compounds and bio-gases
- Good resistance to cold and hot water as well as water-soluble cleaning and cooling agents
- Well-suited to steam cleaning

Application range

- Machine tool building, medical technology, laundries, car washing equipment, chemical industry, composting plants, sewage works
- Food and beverage industry, especially for production and processing equipment of milk and meat products
- For data processing, measurement and control engineering, safety related systems and as electronics cable
- For indoor and outdoor use

Product features

- Good chemical resistance to ester-based hydraulic fluids
- Ozone, UV and weather-resistant according to EN 50396 and HD 605 S2
- Halogen-free as per IEC 60754-1, Low corrosivity/ acidity of combustion gases per IEC 60754-2, Low toxicity of comb. gases per EN 50305
- Low smoke density according to IEC 61034-2

Norm references / Approvals

- Based on VDE 0812
- Certified resistance to disinfection and cleaning solutions used in food and beverage industry

Product Make-up

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of special halogen-free compound
- TP structure
- Tinned-copper braiding
- Outer sheath made of special TPE
- Outer sheath colour: black (RAL 9005)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000830 ETIM 5.0/6.0 Class-Description: Data cable
	Core identification code DIN 47100 without colour repetition, refer to Appendix T9
	Mutual capacitance C/C approx. 60 nF/km C/S approx. 100 nF/km
	Specific insulation resistance > 20 GOhm x cm
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, fine-wire 0.34 mm ² : 7-wire
	Torsion movement in WTG TW-0 & TW-2, refer to Appendix T0
	Minimum bending radius Occasional flexing: 10 x outer diameter Fixed installation: 4 x outer diameter
	Test voltage At 0.14 mm ² : 1200 V
	Temperature range Occasional flexing: -40°C to +90°C Fixed installation: -50°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ROBUST C (TP)				
1032100	2 x 2 x 0.14	5.3	16.1	31
1032101	3 x 2 x 0.14	5.8	19	38
1032102	4 x 2 x 0.14	6.2	23.1	46
1032103	5 x 2 x 0.14	6.4	27.2	54
1032104	6 x 2 x 0.14	7.1	31.3	63
1032105	8 x 2 x 0.14	8.2	43.4	90
1032106	10 x 2 x 0.14	8.7	50.9	93
1032107	12 x 2 x 0.14	8.9	56.6	102
1032108	2 x 2 x 0.25	6.3	22.7	43
1032109	3 x 2 x 0.25	7.1	28.9	56
1032110	4 x 2 x 0.25	7.6	38.3	72
1032111	5 x 2 x 0.25	7.9	45.1	85
1032112	6 x 2 x 0.25	8.5	48.7	96
1032113	8 x 2 x 0.25	10.3	64.3	135
1032114	2 x 2 x 0.34	7.1	27.6	56
1032115	3 x 2 x 0.34	7.8	38.8	74
1032116	4 x 2 x 0.34	8.4	47.5	90

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
1032117	5 x 2 x 0.34	8.8	58.2	110
1032118	1 x 2 x 0.5	5.6	20.1	37
1032119	2 x 2 x 0.5	7.9	40.3	72
1032120	3 x 2 x 0.5	8.7	51.7	91
1032121	4 x 2 x 0.5	9.4	64.1	112
1032122	5 x 2 x 0.5	10.3	76.6	141
1032123	6 x 2 x 0.5	11.1	91.7	170
1032124	8 x 2 x 0.5	13.1	123.2	238
1032125	10 x 2 x 0.5	14.5	146.4	247
1032126	2 x 2 x 0.75	8.5	48.4	84
1032127	3 x 2 x 0.75	9.4	68.9	114
1032128	4 x 2 x 0.75	10.7	86.2	149
1032129	6 x 2 x 0.75	12.1	131.9	225
1032130	8 x 2 x 0.75	14.7	168.2	315
1032131	2 x 2 x 1.0	9	64.1	98
1032132	3 x 2 x 1.0	10.4	83.5	135
1032133	4 x 2 x 1.0	11.3	105.7	168

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths
Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum
Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).
Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- SKINTOP® ST-HF-M refer to page 687
- DATA STRIP stripping tool refer to page 959
- KT 11 cable shears

**UNITRONIC® LIHH**

Halogen-free data transmission cable with colour code acc. to DIN 47100

**Info**

- For use within public buildings and industrial plants
- Further dimensions/colours on request
- CPR: Article number choice under www.lappkabel.com/cpr

Benefits

- Halogen-free: to protect human life and valuable assets in the event of a fire, through low smoke density and low amount of corrosive gases
- Low capacitance due to polyolefin-based insulation
- Small outer diameters despite a high number of cores

Application range

- Suitable for areas with a high density of people as well as high-value property that must be protected in the event of a fire
- For use within public buildings, transport systems and industrial plants
- For data processing, measurement and control engineering, safety related systems and as electronics cable
- Dry or damp rooms

Product features

- Flame-retardant according IEC 60332-1-2
- Low smoke zero halogen (LSZH)
- Halogen-free as per IEC 60754-1, Low corrosivity/ acidity of combustion gases per IEC 60754-2, Low toxicity of comb. gases per EN 50305
- Low smoke density according to IEC 61034-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of special halogen-free compound
- Outer sheath made of special halogen-free compound
Outer sheath colour: pebble grey (RAL 7032)

Technical data**Classification ETIM 5/6**

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable

**Core identification code**

DIN 47100 without colour repetition, refer to Appendix T9

**Mutual capacitance**

Approx. 80 nF/km

**Inductivity**

approx. 0.65 mH/km

**Conductor stranding**

Stranded, fine-wire
0.34 mm²: 7-wire

**Minimum bending radius**

Occasional flexing: 10 x outer diameter
Fixed installation: 6 x outer diameter

**Test voltage**

1200 V

**Temperature range**

Occasional flexing: -5 °C to +70 °C
Fixed installation: -30 °C to +80 °C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® LIHH				
0037104	6 x 0.14	4.4	8.1	25
0037120	2 x 0.25	4	4.8	22
0037121	3 x 0.25	4.2	7.2	25
0037122	4 x 0.25	4.5	9.6	28
0037124	6 x 0.25	5.3	14.4	39
0037125	7 x 0.25	5.3	16.8	42
0037126	8 x 0.25	6.4	19.2	50
0037128	12 x 0.25	7.2	28.8	67
0037140	2 x 0.34	4.4	6.5	28
0037141	3 x 0.34	4.6	9.8	30
0037142	4 x 0.34	5	13.1	40

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0037143	5 x 0.34	5.7	16.3	44
0037147	12 x 0.34	8	39.2	97
0037150	2 x 0.5	4.9	9.6	31
0037151	3 x 0.5	5.2	14.4	37
0037152	4 x 0.5	5.8	19.2	45
0037153	5 x 0.5	6.3	24	58
0037154	7 x 0.5	7.1	33.6	72
0037160	2 x 0.75	5.3	14.4	41
0037162	4 x 0.75	6.3	28.8	60
0037165	12 x 0.75	10.4	86.4	165
0037171	3 x 1.0	6.1	28.8	57
0037172	4 x 1.0	6.6	38.4	67

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

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Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® LIHCH refer to page 301

Accessories

- SKINTOP® ST-HF-M refer to page 687
- KT 11 cable shears
- DATA STRIP stripping tool refer to page 959

**UNITRONIC® LiHCH**

Screened halogen-free data transmission cable with colour code acc. to DIN 47100

**Info**

- For use within public buildings and industrial plants
- Further dimensions/colours on request
- CPR: Article number choice under www.lappkabel.com/cpr

**Benefits**

- Halogen-free: to protect human life and valuable assets in the event of a fire, through low smoke density and low amount of corrosive gases
- Low capacitance due to polyolefin-based insulation
- Overall braid minimises electrical interference

Application range

- Suitable for areas with a high density of people as well as high-value property that must be protected in the event of a fire
- For use within public buildings, transport systems and industrial plants
- For data processing, measurement and control engineering, safety related systems and as electronics cable
- For use in computer systems, instrumentation systems, office equipment, balances - wherever screened, halogen-free, small-diameter cables are needed.

Product features

- Flame-retardant according IEC 60332-1-2
- Low smoke zero halogen (LSZH)
- Halogen-free as per IEC 60754-1, Low corrosivity/ acidity of combustion gases per IEC 60754-2, Low toxicity of comb. gases per EN 50305
- Low smoke density according to IEC 61034-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires
- Core insulation made of special halogen-free compound
- Tinned-copper braiding
- Outer sheath made of special halogen-free compound
Outer sheath colour: pebble grey (RAL 7032)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100 without colour repetition, refer to Appendix T9
	Mutual capacitance C/C approx. 80 nF/km C/S approx. 120 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, fine-wire 0.34 mm ² : 7-wire
	Minimum bending radius Occasional flexing: 10 x outer diameter Fixed installation: 6 x outer diameter
	Test voltage 1200 V
	Temperature range Occasional flexing: -5°C to +70°C Fixed installation: -30°C to +80°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® LiHCH				
0037302	2 x 0.14	4.1	12	22
0037304	4 x 0.14	4.5	15.9	29
0037308	8 x 0.14	6	26	41
0037312	12 x 0.14	6.5	30.4	78
0037325	25 x 0.14	8.7	63	149
0037402	2 x 0.25	4.7	15	25
0037403	3 x 0.25	4.9	18	30
0037404	4 x 0.25	5.2	22	35
0037406	6 x 0.25	6.2	30	49
0037407	7 x 0.25	6.2	32	52
0037408	8 x 0.25	7.3	35	58
0037410	10 x 0.25	7.7	42	81
0037425	25 x 0.25	10.9	114	172
0037502	2 x 0.34	5.1	17	30
0037503	3 x 0.34	5.3	21	35
0037504	4 x 0.34	5.9	25	42
0037507	7 x 0.34	7	42	73
0037508	8 x 0.34	8	45	84
0037510	10 x 0.34	8.5	63	101
0037516	16 x 0.34	9.6	94	160

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0037525	25 x 0.34	12.1	144	259
0037602	2 x 0.5	5.8	29	38
0037603	3 x 0.5	6.1	35	47
0037604	4 x 0.5	6.5	45	67
0037605	5 x 0.5	7.2	50	76
0037606	6 x 0.5	7.8	59	84
0037607	7 x 0.5	7.8	68	91
0037608	8 x 0.5	8.9	75	135
0037610	10 x 0.5	9.5	93	160
0037612	12 x 0.5	9.8	99	177
0037618	18 x 0.5	11.7	134	239
0037702	2 x 0.75	6.2	35	45
0037703	3 x 0.75	6.5	46	69
0037704	4 x 0.75	7.2	56	80
0037802	2 x 1.0	6.5	43	72
0037803	3 x 1.0	7	56	90
0037804	4 x 1.0	7.5	68	109
0037807	7 x 1.0	8.8	118	171
0037902	2 x 1.5	7.3	58	90
0037903	3 x 1.5	7.7	74	115

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

TERMI-POINT® is a registered trademark of AMP

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® LiHCH (TP) refer to page 302

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- Multipurpose shears A and B



UNITRONIC® LIHCH (TP)

Screened halogen-free data transmission cable with colour code acc. to DIN 47100 and twisted pairs



Info

- TP = twisted pair
- CPR: Article number choice under www.lappkabel.com/cpr

Benefits

- Halogen-free: to protect human life and valuable assets in the event of a fire, through low smoke density and low amount of corrosive gases
- Low capacitance due to polyolefin-based insulation
- Overall braid minimises electrical interference
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

- Suitable for areas with a high density of people as well as high-value property that must be protected in the event of a fire
- For use within public buildings, transport systems and industrial plants
- For data processing, measurement and control engineering, safety related systems and as electronics cable
- For use in computer systems, instrumentation systems, office equipment, balances - wherever screened, halogen-free, small-diameter cables are needed.

Product features

- Flame-retardant according IEC 60332-1-2
- Low smoke zero halogen (LSZH)
- Halogen-free as per IEC 60754-1, Low corrosivity/ acidity of combustion gases per IEC 60754-2, Low toxicity of comb. gases per EN 50305
- Low smoke density according to IEC 61034-2

Norm references / Approvals

- Based on VDE 0812

Product Make-up

- Fine-wire strand made of bare copper wires
- Core insulation made of special halogen-free compound
- TP structure
- Tinned-copper braiding
- Outer sheath made of special halogen-free compound
- Outer sheath colour: pebble grey (RAL 7032)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100 without colour repetition, refer to Appendix T9
	Mutual capacitance C/C approx. 80 nF/km C/S approx. 120 nF/km
	Coupling At 1 kHz: approx. 300 pF/100 m
	Inductivity approx. 0.65 mH/km
	Conductor stranding Fine copper wire strands
	Minimum bending radius Occasional flexing: 15 x outer diameter Fixed installation: 6 x outer diameter
	Test voltage 1200 V
	Temperature range Occasional flexing: -5 °C to +70 °C Fixed installation: -30 °C to +80 °C

Article number	Number of cores and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® LIHCH (TP)				
0038302	2 x 2 x 0.14	5.5	18.5	39
0038303	3 x 2 x 0.14	6	23	48
0038304	4 x 2 x 0.14	6.4	26.6	54
0038308	8 x 2 x 0.14	8.4	53.7	97
0038312	12 x 2 x 0.14	9.1	66	142
0038316	16 x 2 x 0.14	10.4	79	154
0038325	25 x 2 x 0.14	12.7	113	238
0038402	2 x 2 x 0.25	6.5	28	54
0038403	3 x 2 x 0.25	7.3	39.6	66
0038404	4 x 2 x 0.25	7.8	44.9	81
0038406	6 x 2 x 0.25	8.7	69.5	115
0038408	8 x 2 x 0.25	10.5	76.9	130
0038412	12 x 2 x 0.25	11.5	120	190

Article number	Number of cores and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0038416	16 x 2 x 0.25	12.7	146.5	238
0038602	2 x 2 x 0.5	8.1	48.1	93
0038603	3 x 2 x 0.5	8.9	73.7	129
0038604	4 x 2 x 0.5	9.6	82	146
0038606	6 x 2 x 0.5	11.3	110	198
0038608	8 x 2 x 0.5	13.3	139	259
0038612	12 x 2 x 0.5	15.1	198.3	354
0038616	16 x 2 x 0.5	16.7	240	459
0038702	2 x 2 x 0.75	8.7	58	106
0038704	4 x 2 x 0.75	10.9	108	179
0038708	8 x 2 x 0.75	14.9	180	305
0038802	2 x 2 x 1.0	9.2	84	142
0038803	3 x 2 x 1.0	10.6	96	173
0038804	4 x 2 x 1.0	11.5	121	212

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- Multipurpose shears A and B



UNITRONIC® LiYY A

Data transmission cable with colour code acc. to DIN 47100 - UL/CSA recognized



Info

- A for Advanced here: UL and CSA certifications
- Further dimensions/colours on request

Benefits

- For various applications

Application range

- Wiring of devices, machines and plants intended for export to the North American market or countries where UL-/CSA certified cables are used.
- For the North American market

Product features

- Flame-retardant acc. to IEC 60332-1-2, UL VW-1 & CSA FT 1

Norm references / Approvals

- UL AWM Style 2464
- CSA AWM I/II A
- UL File No. E63634

Product Make-up

- Multi-wire strand made of tinned copper wires
- Core insulation made of PVC
- Outer sheath made of special PVC compound
- Outer sheath colour: Dark grey

Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

DIN 47100 without colour repetition, refer to Appendix T9



Conductor stranding

AWG conductor sizes, 7 or 19 wires



Minimum bending radius

Occasional flexing: 15 x outer diameter
Fixed installation: 4 x Outer diameter



Nominal voltage

UL/CSA: 300 V



Test voltage

1500 V



Temperature range

Occasional flexing: -5°C up to +70°C
(UL: +80 °C)
Fixed installation (IEC): -40°C to +80°C
UL: max. +80°C

Article number	Number of cores and AWG per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® LiYY A				
0022403	3 x AWG26/7	3.8	4.2	18
0022404	4 x AWG26/7	4	5.6	23
0022405	5 x AWG26/7	4.3	7	25
0022408	8 x AWG26/7	5.1	11.2	34
0022412	12 x AWG26/7	5.8	16.8	47
0022416	16 x AWG26/7	6.3	22.4	58
0022421	21 x AWG26/7	7	29.4	63
0022502	2 x AWG24/7	4	4.6	20
0022505	5 x AWG24/7	4.8	11.5	32
0022508	8 x AWG24/7	5.7	18.4	46
0022512	12 x AWG24/7	6.6	27.6	64
0022602	2 x AWG22/7	4.8	6.8	32.8
0022603	3 x AWG22/7	5	10.2	35
0022604	4 x AWG22/7	5.4	13.6	45.9
0022605	5 x AWG22/7	5.9	17	55.8
0022607	7 x AWG22/7	6.4	23.3	68.9
0022608	8 x AWG22/7	6.9	27.2	75.5
0022612	12 x AWG22/7	8.2	40.8	103
0022616	16 x AWG22/7	9.1	54.4	131.2
0022624	24 x AWG22/7	11.6	81.6	190
0022632	2 x AWG20/7	5.3	11.2	40
0022642	2 x AWG19/19	5.6	15	48

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: Coil 152 m; Drum 305 m

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® LiYCY A refer to page 304
- UNITRONIC® 300 / UNITRONIC® 300 S refer to page 306

Accessories

- SKINTOP® CLICK refer to page 682
- KT 11 cable shears
- DATA STRIP stripping tool refer to page 959

**UNITRONIC® LiYCY A**

Screened data transmission cable with colour code acc. to DIN 47100 UL/CSA recognized

**Info**

- A for Advanced here: UL and CSA certifications
- Further dimensions/colours on request

Benefits

- Overall braid minimises electrical interference

Application range

- Wiring of devices, machines and plants intended for export to the North American market or countries where UL-/CSA certified cables are used.
- For the North American market

Product features

- Flame-retardant acc. to IEC 60332-1-2, UL VW-1 & CSA FT 1

Norm references / Approvals

- UL AWM Style 2464
- CSA AWM I/II A
- UL File No. E63634

Product Make-up

- Multi-wire strand made of tinned copper wires
- Core insulation made of PVC
- Tinned-copper braiding
- Outer sheath made of special PVC compound
- Outer sheath colour: Dark grey

Technical data**Classification ETIM 5/6**

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable

**Core identification code**

DIN 47100 without colour repetition,
refer to Appendix T9

**Conductor stranding**

AWG conductor sizes, 7 or 19 wires

**Minimum bending radius**

Occasional flexing: 15 x outer diameter
Fixed installation: 6 x outer diameter

**Nominal voltage**

UL/CSA: 300 V

**Test voltage**

1500 V

**Temperature range**

Occasional flexing: -5 °C up to +70 °C
(UL: +80 °C)
Fixed installation (IEC): -40 °C to +80 °C
UL: max. +80 °C

Article number	Number of cores and AWG per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® LiYCY A				
0044602	2 x AWG26/7	4.3	15.6	25
0044604	4 x AWG26/7	4.7	18	30
0044652	2 x AWG24/7	4.7	17.6	29
0044655	5 x AWG24/7	5.5	28.5	44
0044658	8 x AWG24/7	6.4	31.1	61
0044662	12 x AWG24/7	7.3	51.8	96
0044702	2 x AWG22/7	5.5	17.6	44
0044703	3 x AWG22/7	5.7	21.2	49
0044704	4 x AWG22/7	6.1	27.3	59
0044705	5 x AWG22/7	6.6	30.8	63
0044707	7 x AWG22/7	7.1	46.4	87
0044712	12 x AWG22/7	8.9	66.8	120
0044716	16 x AWG22/7	9.8	83.9	145
0044721	21 x AWG22/7	11.3	109.4	204
0044732	2 x AWG20/7	6	24.4	41
0044733	3 x AWG20/7	6.3	29.9	47
0044735	5 x AWG20/7	7.3	49.2	91
0044738	8 x AWG20/7	9.1	70.8	102
0044746	2 x AWG19/19	6.3	27.9	66
0044850	7 x AWG18/19	8.9	93.2	160.8
0044851	10 x AWG18/19	11.5	130.9	200

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: Coil 152 m; Drum 305 m

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® LiYCY (TP) A refer to page 305

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- KS 15 cable shears
- DATA STRIP stripping tool refer to page 959



UNITRONIC® Li2YCY (TP) A

Screened data transmission cable with colour code acc. to DIN 47100 and twisted pairs - UL/CSA recognized



Info

- A for Advanced here: UL and CSA certifications
- Further dimensions/colours on request



Benefits

- Overall braid minimises electrical interference
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

- For the North American market
- Wiring of devices, machines and plants intended for export to the North American market or countries where UL-/CSA certified cables are used.

Product features

- Flame-retardant acc. to IEC 60332-1-2, UL VW-1 & CSA FT 1

Norm references / Approvals

- UL AWM Style 2464
- CSA AWM I/II A
- UL File No. E63634

Product Make-up

- Multi-wire strand made of tinned copper wires
- Core insulation made of PVC
- TP structure
- Tinned-copper braiding
- Outer sheath made of special PVC compound
- Outer sheath colour: Dark grey

Technical data



Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

DIN 47100 without colour repetition, refer to Appendix T9



Minimum bending radius

Occasional flexing: 15 x outer diameter
Fixed installation: 6 x outer diameter



Nominal voltage

UL/CSA: 300 V



Test voltage

1500 V



Temperature range

Occasional flexing: -5°C up to +70°C
(UL: +80 °C)
Fixed installation (IEC): -40°C to +80°C
UL: max. +80°C

Article number	Number of cores and AWG per conductor	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® Li2YCY (TP) A				
0066202	2 x 2 x AWG26/7	5.5	18	38
0066204	4 x 2 x AWG26/7	6.4	24	58
0066205	5 x 2 x AWG26/7	6.6	30	58
0066208	8 x 2 x AWG26/7	7.9	53	85
0066210	10 x 2 x AWG26/7	8.7	55	106
0066212	12 x 2 x AWG26/7	8.9	64	113
0066216	16 x 2 x AWG26/7	10.2	87	149
0066232	2 x 2 x AWG24/7	6.1	24.5	50
0066233	3 x 2 x AWG24/7	6.7	28.9	62
0066234	4 x 2 x AWG24/7	7.2	33.5	70
0066235	5 x 2 x AWG24/7	7.5	46.3	91
0066238	2 x 2 x AWG22/7	7.4	38	71
0066239	3 x 2 x AWG22/7	8.1	45.1	95
0066240	4 x 2 x AWG22/7	8.8	54.6	102
0066242	2 x 2 x AWG20/7	8.2	49.7	93
0066243	3 x 2 x AWG20/7	9.1	60.1	102
0066244	4 x 2 x AWG20/7	10.2	78.7	120
0066219	5 x 2 x AWG20/7	10.7	88.9	156
0066220	6 x 2 x AWG20/7	11.6	100.6	184
0066262	2 x 2 x AWG19/19	8.7	65.2	140
0066221	3 x 2 x AWG19/19	10	69.2	145

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: Coil 152 m; Drum 305 m

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® FD Li2YCY (TP) A BE refer to page 310
- UNITRONIC® FD Li2YCY (TP) A BA refer to page 311
- UNITRONIC® FD CP (TP) plus refer to page 315

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- DATA STRIP stripping tool refer to page 959



UNITRONIC® 300 / UNITRONIC® 300 S

Control and signal cables with small cross sections - UL/CSA listed



Info

- Designation of shielded version: Formerly "UNITRONIC® 300 CY", now "UNITRONIC® 300 S"
- Other sizes on request
- Especially for 20 AWG and 18 AWG: With standard core color code, up to 60 conductors producible / With non-standard color code, e.g., green-yellow grounding conductor, up to 100 cores

Benefits

- Wide application range due to multiple certifications
- Cost-saving, easy installation due to omission of closed raceways (suitable for open wiring)

Application range

- Control and signal cables for internal and external wiring
- For the North American market
- On the basis of CMG, PLTC or ITC direct laying on cable tray in the USA, in conjunction with -ER (Exposed Run) for unprotected transition sections with a length of not more than 6 ft. each
- Thanks to the DIRECT BURIAL approval, direct burial of versions with the nominal conductor cross sections 18 AWG and 16 AWG is normatively permitted in the USA
- Torsion resistant up to $\pm 150^\circ/\text{m}$ for the drip loop of wind turbine generators

Product features

- Oil-resistant according to UL OIL RES I
- Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

Norm references / Approvals

- USA: (UL) CMG [E 130334], (UL) PLTC-ER (18 AWG + 16 AWG) [E216027], (UL) PLTC (>24 AWG) [E216027], (UL) ITC-ER (18 AWG + 16 AWG) [E196134], UL AWM Style 2464 [E100338], DIR BUR (18 AWG + 16 AWG)
- CAN: c(UL) CMG FT4 [E 130334], CSA AWM I/II A/B FT1

Product Make-up

- Fine-wire strand made of tinned-copper wires
- Core insulation made of PVC compound
- UNITRONIC® 300 S: with overall foil tape wrapping, drain wire, tin-plated copper braiding (75 % coverage)
- Outer jacket: Specially Formulated PVC
- Color of the outer jacket: Dark gray (similar to RAL 7005)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000830 ETIM 5.0/6.0 Class-Description: Data cable
	Core identification code refer to Appendix T9
	Conductor stranding Fine wire
	Torsion movement in WTG TW-0 & TW-2, refer to Appendix T0
	Minimum bending radius During installation: 4 x cable diameter Screened: 6 x outer diameter
	Nominal voltage according to UL: 300 V IEC: not for power transmission
	Test voltage 1500 V
	Temperature range Occasional flexing/ North America: -25°C to +105°C (AWM for USA: +80°C) Fixed installation/ North America: -40°C to +105°C (AWM for USA: +80°C)

Article number	Article designation	Number of cores and AWG size	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® 300					
301602	UNITRONIC® 300	2 x AWG16	6.7	25	83
301802	UNITRONIC® 300	2 x AWG18	6.1	18.3	61
302006	UNITRONIC® 300	6 x AWG20	7.5	29.5	97
302015	UNITRONIC® 300	15 x AWG20	11.5	73.7	178
302020	UNITRONIC® 300	20 x AWG20	12.6	98.1	259
302025	UNITRONIC® 300	25 x AWG20	14.1	122.6	354
302204	UNITRONIC® 300	4 x AWG22	5	13.7	33
302210	UNITRONIC® 300	10 x AWG22	7	34.9	67
302215	UNITRONIC® 300	15 x AWG22	7.9	51.3	91
302220	UNITRONIC® 300	20 x AWG22	9	68.5	116
302225	UNITRONIC® 300	25 x AWG22	10.5	85.6	180
302410	UNITRONIC® 300	10 x AWG24	6.4	21.4	51
UNITRONIC® 300 S					
301602S	UNITRONIC® 300 S	2 x AWG16	7.6	50.6	101
301606S	UNITRONIC® 300 S	6 x AWG16	9.9	105.7	210
301802S	UNITRONIC® 300 S	2 x AWG18	6.8	37.2	75
301803S	UNITRONIC® 300 S	3 x AWG18	7.3	49.1	85
301804S	UNITRONIC® 300 S	4 x AWG18	7.9	59.6	104
301825S	UNITRONIC® 300 S	25 x AWG18	16.8	278.4	448
302002S	UNITRONIC® 300 S	2 x AWG20	6.3	28.3	60
302004S	UNITRONIC® 300 S	4 x AWG20	7.3	40.2	88
302006S	UNITRONIC® 300 S	6 x AWG20	8.4	55.1	119
302206S	UNITRONIC® 300 S	6 x AWG22	6.4	35.7	68

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths / Packaging size: Coil 152 m; Drum 305 m
Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- ÖLFLEX® TRAY II refer to page 60
- ÖLFLEX® TRAY II CY refer to page 61
- ÖLFLEX® POWER MULTI refer to page 62
- UNITRONIC® 300 STP refer to page 307

Accessories

- SKINTOP® ST-M refer to page 680
- SKINTOP® ST-M Small PU
- UNIVERSAL STRIP stripping tool refer to page 963
- STAR STRIP stripping tool refer to page 957



UNITRONIC® 300 STP

Screened control and signal cables with small cross sections and twisted pairs - UL/CSA listed

Info

- Other sizes on request
- Especially for 20 AWG and 18 AWG: With standard core color code, up to 37 pairs producible/ With non-standard color code, e.g., with green-yellow grounding conductor, up to 50 pairs



Benefits

- Wide application range due to multiple certifications
- Cost-saving, easy installation due to omission of closed raceways (suitable for open wiring)
- Overall braid minimises electrical interference
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

- Control and signal cables for internal and external wiring
- For the North American market
- On the basis of CMG, PLTC or ITC direct laying on cable tray in the USA, in conjunction with -ER (Exposed Run) for unprotected transition sections with a length of not more than 6 ft. each
- Thanks to the DIRECT BURIAL approval, direct burial of versions with the nominal conductor cross-section 18 AWG in the USA
- Torsion resistant up to $\pm 150^\circ/\text{m}$ for the drip loop of wind turbine generators

Product features

- Oil-resistant according to UL OIL RES I

Norm references / Approvals

- USA: (UL) CMG [E130334], (UL) PLTC-ER (18 AWG) [E216027], (UL) PLTC (>24 AWG) [E216027], (UL) ITC-ER (18 AWG) [E196134], UL AWM Style 2464 [E100338], DIR BUR (18 AWG)
- CAN: c(UL) CMG FT4 [E130334], CSA AWM I/II A/B FT1

Product Make-up

- Fine-wire strand made of tinned-copper wires
- Core insulation made of PVC
- TP structure
- Overall foil tape wrapping, drain wire, tin-plated copper braiding (75 % coverage)
- Outer jacket: Specially Formulated PVC, dark gray (similar to RAL 7005)

Technical data

Classification ETIM 5/6
ETIM 5.0/6.0 Class-ID: EC000830
ETIM 5.0/6.0 Class-Description: Data cable

Core identification code
Pair 1: black, red
Pair 2: black, white
Pair 3: black, green
Pair 4: black, blue
Pair 5: black, yellow
Pair 6: black, brown
Exception single-paired, 24-22 AWG: black, white

Torsion movement in WTG
TW-0 & TW-2, refer to Appendix T0

Minimum bending radius
Occasional flexing: 15 x outer diameter
Fixed installation: 6 x outer diameter

Nominal voltage
according to UL: 300 V
IEC: not for power transmission

Test voltage
1500 V

Temperature range
Occasional flexing/ North America: -25°C to +105°C (AWM for USA: +80°C)
Fixed installation/ North America: -40°C to +105°C (AWM for USA: +80°C)

Article number	Number of pairs and AWG size	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® 300 STP				
302402STP	2 x 2 x 24 AWG	6.5	25.5	59
302403STP	3 x 2 x 24 AWG	6.8	31.1	65
302406STP	6 x 2 x 24 AWG	8.7	49.7	106
302201STP	1 x 2 x 22 AWG	5.1	19.1	39
302203STP	3 x 2 x 22 AWG	7.7	38.2	71
302206STP	6 x 2 x 22 AWG	9.6	70	125
302002STP	2 x 2 x 20 AWG	9.4	47.7	128
302003STP	3 x 2 x 20 AWG	10.5	68.2	161
302006STP	6 x 2 x 20 AWG	13.3	106.5	321
301801STP	1 x 2 x 18 AWG	6.8	37.8	106
301802STP	2 x 2 x 18 AWG	10.7	66.2	122
301806STP	6 x 2 x 18 AWG	14.6	153.1	324

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths
Packaging size: Coil 152 m; Drum 305 m
Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® FD Li2YCY (TP) A BE refer to page 310
- UNITRONIC® FD Li2YCY (TP) A BA refer to page 311
- UNITRONIC® FD CP (TP) plus refer to page 315

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- DATA STRIP stripping tool refer to page 959

**UNITRONIC® FD**

Highly flexible cable for power chain use

LAPP KABEL STUTTGART UNITRONIC® FD

Benefits

- Well-proven and reliable
- Optimized cable construction for power chain use
- Cost-effective solution

Application range

- Automated production processes require data transmission cables that offer high flexibility and durability
- Suitable for use in measuring, control and regulating circuits
- Assembly lines, production lines, in all kinds of machines

Product features

- Low-adhesive surface
- Flame-retardant according IEC 60332-1-2
- Designed for 2 up to 8 million bending/unbending cycles in power chain applications

Norm references / Approvals

- Based on VDE 0812
- For travel distances up to 10 m
- For use in power chains: Please comply with assembly guideline Appendix T3

Product Make-up

- Extra-fine wire strand made of bare copper wires
 - Core insulation made of PVC
 - Non-woven wrapping
 - Outer sheath made of PVC
- Outer sheath colour: grey (RAL 7001)

Technical data**Classification ETIM 5/6**

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable

**Core identification code**

DIN 47100, refer to Appendix T9

**Mutual capacitance**

C/C: approx. 100 nF/km

**Inductivity**

approx. 0.65 mH/km

**Conductor stranding**

Stranded, extra-fine wire

**Minimum bending radius**

Flexing: 5 x outer diameter
Fixed installation: 3 x outer diameter

**Test voltage**

1500 V

**Temperature range**

Flexing: -5 °C to +70 °C
Fixed installation: -40 °C to +80 °C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® FD				
0027841	3 x 0.14	3.9	4.2	26
0027842	4 x 0.14	4.2	5.6	31
0027843	5 x 0.14	4.5	7	35
0027844	7 x 0.14	5.1	9.8	50
0027845	10 x 0.14	6.1	14	63
0027846	14 x 0.14	6.2	19.6	77
0027847	18 x 0.14	6.8	25.2	91
0027848	25 x 0.14	8.3	35	125
0027855	2 x 0.25	4.3	5	27
0027856	3 x 0.25	4.5	7.5	33
0027857	4 x 0.25	4.9	10	40
0027858	5 x 0.25	5.3	12.5	45
0027859	7 x 0.25	6.1	17.5	59
0027860	10 x 0.25	7.4	25	75
0027861	14 x 0.25	7.5	35	108
0027863	18 x 0.25	8.5	45	130
0027865	25 x 0.25	10.4	62.5	178
0027870	2 x 0.34	4.7	6.8	30
0027871	3 x 0.34	5	10.2	43
0027872	4 x 0.34	5.4	13.6	57
0027873	5 x 0.34	5.9	17	65
0027874	7 x 0.34	6.8	23.8	85
0027875	10 x 0.34	8.5	34	117
0027876	14 x 0.34	8.6	47.6	151
0027877	18 x 0.34	9.7	61.2	182
0027878	25 x 0.34	11.9	85	250

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® FD CY refer to page 309
- UNITRONIC® FD P plus refer to page 313

Accessories

- DATA STRIP stripping tool refer to page 959



UNITRONIC® FD CY

Screened highly flexible data transmission cable with PVC outer sheath for power chain use



Benefits

- Well-proven and reliable
- Optimized cable construction for power chain use
- Cost-effective solution
- Overall braid minimises electrical interference

Application range

- Automated production processes require data transmission cables that offer high flexibility and durability, as well as excellent screening
- Suitable for use in measuring, control and regulating circuits
- Assembly lines, production lines, in all kinds of machines

Product features

- Low-adhesive surface
- Flame-retardant according IEC 60332-1-2
- Designed for 2 up to 8 million bending/unbending cycles in power chain applications

Norm references / Approvals

- Based on VDE 0812
- For travel distances up to 10 m
- For use in power chains: Please comply with assembly guideline Appendix T3

Product Make-up

- Extra-fine wire strand made of bare copper wires
- Core insulation made of PVC
- Non-woven wrapping
- Tinned-copper braiding
- Outer sheath made of PVC
Outer sheath colour: grey (RAL 7001)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100, refer to Appendix T9
	Mutual capacitance C/C approx. 110 nF/km C/S: approx. 110 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, extra-fine wire
	Minimum bending radius Flexing: 7.5 x outer diameter Fixed installation: 4 x Outer diameter
	Test voltage 1500 V
	Temperature range Flexing: -5°C to +70°C Fixed installation: -40°C to +80°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® FD CY				
0027411	3 x 0.14	4.5	14.1	37
0027412	4 x 0.14	4.8	15.5	42
0027413	5 x 0.14	5.1	18.3	47
0027414	7 x 0.14	5.7	27.6	55
0027416	10 x 0.14	6.7	39.3	63
0027418	14 x 0.14	6.8	45.3	96
0027420	18 x 0.14	7.4	54.1	105
0027422	25 x 0.14	8.9	68.4	163
0027425	2 x 0.25	4.9	14.9	39
0027426	3 x 0.25	5.1	18.8	46
0027427	4 x 0.25	5.5	21.3	53
0027428	5 x 0.25	5.9	31	71
0027429	7 x 0.25	6.7	39.6	75
0027431	10 x 0.25	8.2	53.9	100
0027434	14 x 0.25	8.3	64.2	120
0027436	18 x 0.25	9.1	78.4	167
0027438	25 x 0.25	11	101	221
0027440	2 x 0.34	5.3	16.1	47
0027441	3 x 0.34	5.6	28.7	55
0027442	4 x 0.34	6	35.7	76
0027443	5 x 0.34	6.5	39.1	80
0027444	7 x 0.34	7.4	52.7	104
0027446	10 x 0.34	9.1	67.4	115
0027448	14 x 0.34	9.2	85.3	132
0027450	18 x 0.34	10.3	99.7	225
0027452	25 x 0.34	12.5	155	327

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- ÖLFLEX® CLASSIC FD 810 CY refer to page 129
- UNITRONIC® FD CP plus refer to page 314

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- STAR STRIP stripping tool refer to page 957



UNITRONIC® FD Li2YCY (TP) A BE

Shielded, low-capacitance, twisted-pair PE/PVC data cable for power chain/cable carrier, UL AWM for USA+CAN

LAPP KABEL STUTTGART UNITRONIC® FD Li2YCY (TP) A BE



Info

- Better priced than UNITRONIC® FD CP (TP) plus
- Low capacitance, AWM by UL for USA+CAN
- UNITRONIC® FD Li2YCY (TP) A BE: DIN 47100, refer to Appendix T9

Technical data



Core identification code
UNITRONIC® FD Li2YCY (TP) A BE:
DIN 47100, refer to Appendix T9



Mutual capacitance
Up to 0.5 mm²: 60 nF/km
Up to 1.0 mm²: 70 nF/km



Inductivity
approx. 0.65 mH/km



Conductor stranding
Fine wire
From 0.5 mm²: Finest wire/Conductor class 6 acc. to IEC 60228



Minimum bending radius
Flexing: 7.5 x outer diameter
Fixed installation: 4 x outer diameter



Loop resistance
Ohmic (DC) and loop/bidirectional @ 20 °C
0.14 mm² (26 AWG): 276.0 Ω/km;
0.25 mm² (24 AWG): 158.0 Ω/km;
0.34 mm² (22 AWG): 110.8 Ω/km;
0.5 mm² (21 AWG): 78.0 Ω/km;
0.75 mm² (19 AWG): 52.0 Ω/km;
1 mm² (18 AWG): 39.0 Ω/km



Temperature range
Flexing:
VDE: -5 °C to 70 °C
UL AWM: -5 °C to 80 °C
Stationary use:
VDE: -40 °C to 70 °C
UL AWM: -5 °C to 80 °C

Benefits

- Improved transmission characteristics thanks to low-capacitance core insulation and twisted pairs
- Cable specification optimized for use in power chain/cable carrier in the USA, on the basis of NFPA 79, Section 12.9.2

Application range

- Suitable for use in measuring, control and regulating circuits
- Linear robots, automated handling equipment
- Use in drag chain/cable carrier/power track - in case of horizontal installation travel distances up to 50 m
- For use in chain/carrier: Please respect the assembly guidelines listed in Appendix T3

Product features

- Low capacitance
- EMC optimized thanks to overall copper braid shielding
- Flexibility for use inside power chain/cable carrier
- Oil-resistant according to DIN EN 50290-2-22 (TM54)
- Flame-retardant acc. to IEC 60332-1-2, UL VW-1, Cable Flame Test, CSA FT 1

Norm references / Approvals

- Based on VDE 0812
- UL AWM Style 2570 80°C 1000V (external interconnection) for USA (UL File No.: E63634) and in line with NFPA 79, Section 12.9.2
- AWM I/II A/B 80°C 1000V acc. to CSA C22.2 No. 210-15 and certified by UL (cRU) for Canada
- EU conformity and mark with regard to the European RoHS Directive

Product Make-up

- Flexible conductor made of bare copper strands
- Low-capacitance PE core insulation
- Non-woven wrapping
- Tinned-copper braiding
- Outer sheath made of PVC
Outer sheath colour: black (similar to RAL 9005)

Article number	Dimension and cross section in mm ²	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® FD Li2YCY (TP) A BE				
0031377	1 x 2 x 0.14	4.3	11.2	23
0031378	2 x 2 x 0.14	5.9	19.4	42
0031379	3 x 2 x 0.14	6.2	23.4	47
0031380	4 x 2 x 0.14	6.7	27.1	57
0031381	5 x 2 x 0.14	7.3	37.4	68
0031382	6 x 2 x 0.14	7.5	49.4	86
0031383	8 x 2 x 0.14	8.8	54.8	109
0031384	10 x 2 x 0.14	10.1	60.1	120
0031385	12 x 2 x 0.14	9.8	61.6	150
0031386	1 x 2 x 0.25	4.7	14.9	27
0031387	2 x 2 x 0.25	6.6	32	57
0031388	3 x 2 x 0.25	7	38.4	72
0031389	4 x 2 x 0.25	7.6	43.2	85
0031390	5 x 2 x 0.25	8.5	51.5	92
0031391	6 x 2 x 0.25	8.8	71.8	114
0031392	8 x 2 x 0.25	10.3	74.4	145
0031393	10 x 2 x 0.25	11.8	90	182
0031394	14 x 2 x 0.25	12	111.2	213
0031395	25 x 2 x 0.25	16.3	310	310
0031396	1 x 2 x 0.34	5.1	18.1	36
0031397	2 x 2 x 0.34	7.3	41	69
0031398	3 x 2 x 0.34	8	52	93
0031399	4 x 2 x 0.34	8.7	59	106
0031400	5 x 2 x 0.34	9.7	67	136
0031401	6 x 2 x 0.34	10	86.2	165

Article number	Dimension and cross section in mm ²	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
0031402	8 x 2 x 0.34	11.8	107.5	221
0031403	10 x 2 x 0.34	13.7	131.1	274
0031404	1 x 2 x 0.50	5.5	23	47
0031405	2 x 2 x 0.50	8.3	50	99
0031406	3 x 2 x 0.50	8.8	71.8	120
0031407	4 x 2 x 0.50	9.8	74.4	130
0031408	5 x 2 x 0.50	10.7	84.5	164
0031409	6 x 2 x 0.50	11.3	99.6	182
0031410	8 x 2 x 0.50	13.2	144.3	278
0031411	10 x 2 x 0.50	15.2	176	325
0031412	14 x 2 x 0.50	15.5	215.4	401
0031413	1 x 2 x 0.75	5.9	35	61
0031414	2 x 2 x 0.75	9	60	104
0031415	3 x 2 x 0.75	9.8	85.7	148
0031416	4 x 2 x 0.75	10.7	93.6	167
0031417	5 x 2 x 0.75	11.9	115	202
0031418	6 x 2 x 0.75	12.3	130.4	233
0031419	8 x 2 x 0.75	14.7	192.2	330
0031420	10 x 2 x 0.75	16.7	258	390
0031421	14 x 2 x 0.75	17	316.6	515
0031422	1 x 2 x 1.00	6.3	42	71
0031423	2 x 2 x 1.00	9.9	73	126
0031424	3 x 2 x 1.00	10.5	93.6	167
0031425	4 x 2 x 1.00	11.8	117.8	213
0031426	5 x 2 x 1.00	13.1	139	247

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150 / 100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths / Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- STAR STRIP stripping tool refer to page 957



UNITRONIC® FD Li2YCY (TP) A BA

Shielded, low-capacitance, twisted-pair PE/PVC data cable for power chain/cable carrier, UL AWM for USA+CAN



Info

- Better priced than UNITRONIC® FD CP (TP) plus
- Low capacitance, AWM by UL for USA+CAN
- UNITRONIC® FD Li2YCY (TP) A BA: North-American Core Identification Colors

Benefits

- Improved transmission characteristics thanks to low-capacitance core insulation and twisted pairs
- Cable specification optimized for use in power chain/cable carrier in the USA, on the basis of NFPA 79, Section 12.9.2

Application range

- Suitable for use in measuring, control and regulating circuits
- Linear robots, automated handling equipment
- Use in drag chain/cable carrier/power track - in case of horizontal installation travel distances up to 50 m
- For use in chain/carrier: Please respect the assembly guidelines listed in Appendix T3

Product features

- Low capacitance
- EMC optimized thanks to overall copper braid shielding
- Flexibility for use inside power chain/cable carrier
- Oil-resistant according to DIN EN 50290-2-22 (TM54)
- Flame-retardant acc. to IEC 60332-1-2, UL VW-1, Cable Flame Test, CSA FT 1

Norm references / Approvals

- Based on VDE 0812
- UL AWM Style 2570 80°C 1000V (external interconnection) for USA (UL File No.: E63634) and in line with NFPA 79, Section 12.9.2
- AWM I/II A/B 80°C 1000V acc. to CSA C22.2 No. 210-15 and certified by UL (cRU) for Canada
- EU conformity and mark with regard to the European RoHS Directive

Product Make-up

- Flexible conductor made of bare copper strands
- Low-capacitance PE core insulation
- Non-woven wrapping
- Tinned-copper braiding
- Outer sheath made of PVC
Outer sheath colour: black (similar to RAL 9005)

Technical data



Core identification code UNITRONIC® FD Li2YCY (TP) A BA:

- Pair 01: Black, Red;
- Pair 02: Black, White;
- Pair 03: Black, Green;
- Pair 04: Black, Blue;
- Pair 05: Black, Yellow;
- Pair 06: Black, Brown;
- Pair 07: Black, Orange;
- Pair 08: Red, White;
- Pair 09: Red, Green;
- Pair 10: Red, Blue;
- Pair 11: Red, Yellow;
- Pair 12: Red, Brown;
- Pair 13: Red, Orange;
- Pair 14: Green, White;
- Pair 15: Green, Blue;
- Pair 16: Green, Yellow;
- Pair 17: Green, Brown;
- Pair 18: Green, Orange;
- Pair 19: White, Blue;
- Pair 20: White, Yellow;
- Pair 21: White, Brown;
- Pair 22: White, Orange;
- Pair 23: Blue, Yellow;
- Pair 24: Blue, Brown;
- Pair 25: Blue, Orange;
- Exception Single-paired/24 - 22 AWG: Black, White



Mutual capacitance

- Up to 0.5 mm²: 60 nF/km
- Up to 1.0 mm²: 70 nF/km



Inductivity

- approx. 0.65 mH/km



Conductor stranding

- Fine wire
- From 0.5 mm²: Finest wire/Conductor class 6 acc. to IEC 60228



Minimum bending radius

- Flexing: 7.5 x outer diameter
- Fixed installation: 4 x outer diameter



Loop resistance

- Ohmic (DC) and loop/bidirectional @ 20 °C
- 0.14 mm² (26 AWG): 276.0 Ω/km;
- 0.25 mm² (24 AWG): 158.0 Ω/km;
- 0.34 mm² (22 AWG): 110.8 Ω/km;
- 0.5 mm² (21 AWG): 78.0 Ω/km;
- 0.75 mm² (19 AWG): 52.0 Ω/km;
- 1 mm² (18 AWG): 39.0 Ω/km



Temperature range

- Flexing:
- VDE: -5 °C to 70 °C
- UL AWM: -5 °C to 80 °C
- Stationary use:
- VDE: -40 °C to 70 °C
- UL AWM: -5 °C to 80 °C

Article number	Dimension and cross section in mm ²	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
UNITRONIC® FD Li2YCY (TP) A BA				
0031427	1 x 2 x 0.14	4.3	11.2	23
0031428	2 x 2 x 0.14	5.9	19.4	42
0031429	3 x 2 x 0.14	6.2	23.4	47
0031430	4 x 2 x 0.14	6.7	27.1	57
0031431	5 x 2 x 0.14	7.3	37.4	68
0031432	6 x 2 x 0.14	7.5	49.4	86
0031433	8 x 2 x 0.14	8.8	54.8	109
0031434	10 x 2 x 0.14	10.1	60.1	120
0031435	12 x 2 x 0.14	9.8	61.6	150
0031436	1 x 2 x 0.25	4.7	14.9	27
0031437	2 x 2 x 0.25	6.6	32	57
0031438	3 x 2 x 0.25	7	38.4	72
0031439	4 x 2 x 0.25	7.6	43.2	85
0031440	5 x 2 x 0.25	8.5	51.5	92
0031441	6 x 2 x 0.25	8.8	71.8	114
0031442	8 x 2 x 0.25	10.3	74.4	145
0031443	10 x 2 x 0.25	11.8	90	182
0031444	14 x 2 x 0.25	12	111.2	213
0031445	25 x 2 x 0.25	16.3	310	310
0031446	1 x 2 x 0.34	5.1	18.1	36
0031447	2 x 2 x 0.34	7.3	41	69
0031448	3 x 2 x 0.34	8	52	93
0031449	4 x 2 x 0.34	8.7	59	106
0031450	5 x 2 x 0.34	9.7	67	136
0031451	6 x 2 x 0.34	10	86.2	165
0031452	8 x 2 x 0.34	11.8	107.5	221
0031453	10 x 2 x 0.34	13.7	131.1	274
0031454	1 x 2 x 0.50	5.5	23	47
0031455	2 x 2 x 0.50	8.3	50	99
0031456	3 x 2 x 0.50	8.8	71.8	120
0031457	4 x 2 x 0.50	9.8	74.4	130
0031458	5 x 2 x 0.50	10.7	84.5	164
0031459	6 x 2 x 0.50	11.3	99.6	182
0031460	8 x 2 x 0.50	13.2	144.3	278
0031461	10 x 2 x 0.50	15.2	176	325
0031462	14 x 2 x 0.50	15.5	215.4	401
0031463	1 x 2 x 0.75	5.9	35	61
0031464	2 x 2 x 0.75	9	60	104
0031465	3 x 2 x 0.75	9.8	85.7	148
0031466	4 x 2 x 0.75	10.7	93.6	167
0031467	5 x 2 x 0.75	11.9	115	202
0031468	6 x 2 x 0.75	12.3	130.4	233
0031469	8 x 2 x 0.75	14.7	192.2	330
0031470	10 x 2 x 0.75	16.7	258	390
0031471	14 x 2 x 0.75	17	316.6	515
0031472	1 x 2 x 1.00	6.3	42	71
0031473	2 x 2 x 1.00	9.9	73	126
0031474	3 x 2 x 1.00	10.5	93.6	167
0031475	4 x 2 x 1.00	11.8	117.8	213
0031476	5 x 2 x 1.00	13.1	139	247

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- STAR STRIP stripping tool refer to page 957



UNITRONIC® FD P plus

Highly flexible data cable with PUR jacket and AWM certification for US & Canadian use



Info

- Flexible at low temperatures
- Low capacitance
- Halogen-free

Benefits

- Well-proven and reliable
- Wide temperature range for applications in harsh climatic environments
- UL AWM voltage rating 1000V in case of internal wiring allows for internal laying next to power cables with applied UL rating of 1kV
- In the USA inside of industrial machines, per NFPA 79, Section 12.9.2 (condition 3 under 12.9.2: Thru 1 mm² and <16 AWG)

Application range

- Highly flexible data cable with PUR outer sheath, meets the highest service life requirements, even under harsh climatic conditions
- Suitable for use in measuring, control and regulating circuits
- Drag chain use - in case of horizontal installation travel distances up to 100 m
- For use in chain/carrier: Please respect the assembly guidelines listed in Appendix T3

Product features

- PUR outer sheath, tear and notch-resistant, resistant to mineral oils and abrasion when used in power chains
- Flame retardance ratings: IEC 60332-1-2, FT2 (Horizontal flame test)
- Halogen-free, has low capacitance and is flexible down to -40°C
- Oil-resistant
- Low-adhesive surface, resistant to hydrolysis and microbes, oil resistant

Norm references / Approvals

- Based on VDE 0812
- CRUus AWM certified by UL (UL: E63634): UL AWM Style 21576 and AWM A/B I/II

Product Make-up

- Extra-fine wire strand made of bare copper wires
- Core insulation: Based on Polyolefin
- Non-woven wrapping
- Outer sheath made of special PUR compound
- Outer sheath colour: grey (RAL 7001)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000830 ETIM 5.0/6.0 Class-Description: Data cable
	Core identification code DIN 47100, refer to Appendix T9
	Mutual capacitance C/C approx. 60 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, extra-fine wire
	Minimum bending radius Flexing: 5 x outer diameter Fixed installation: 3 x outer diameter
	Test voltage 1500 V
	Temperature range Flexing: -40°C to +80°C Fixed installation: -40°C to +80°C cRUus AWM: max. +80°C

Article number	Number of cores and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® FD P plus				
0028647	2 x 0.14	3.7	2.8	20
0028650	3 x 0.14	3.9	4.1	25
0028651	4 x 0.14	4.2	5.6	30
0028652	5 x 0.14	4.5	7	34
0028677	6 x 0.14	4.8	8.4	42
0028653	7 x 0.14	5.1	9.8	48
0028654	10 x 0.14	6.1	14	60
0028678	12 x 0.14	5.9	16.8	67
0028656	18 x 0.14	6.8	25.2	87
0028657	25 x 0.14	8.3	35	120
0028658	2 x 0.25	4.1	5	27
0028659	3 x 0.25	4.3	7.5	32
0028660	4 x 0.25	4.7	10	35
0028661	5 x 0.25	5	12.5	49
0028679	6 x 0.25	5.4	15	55
0028662	7 x 0.25	5.8	17.5	43
0028663	10 x 0.25	7	25	72
0028680	12 x 0.25	6.7	30	87
0028664	14 x 0.25	7.1	35	73
0028665	18 x 0.25	8	45	104
0028666	25 x 0.25	9.8	62.5	133
0028667	2 x 0.34	4.5	6.8	33
0028668	3 x 0.34	4.8	10.2	39
0028669	4 x 0.34	5.2	13.6	41
0028670	5 x 0.34	5.6	17	44
0028671	7 x 0.34	6.5	23.8	55
0028672	10 x 0.34	8	34	85
0028673	14 x 0.34	8.2	47.6	94
0028674	18 x 0.34	9	61.2	131
0028675	25 x 0.34	11	85	200

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths
Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum
Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).
Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- ÖLFLEX® CLASSIC FD 810 P refer to page 140
- UNITRONIC® FD CP plus refer to page 314

Accessories

- SMART STRIP stripping tool



UNITRONIC® FD CP plus

Screened highly flexible data transmission cable with PUR outer sheath - UL/CSA-listed



Info

- Flexible at low temperatures
- Low capacitance
- Halogen-free

Benefits

- Wide temperature range for applications in harsh climatic environments
- Overall braid minimises electrical interference
- UL AWM voltage rating 1000V in case of internal wiring allows for internal laying next to power cables with applied UL rating of 1kV
- In the USA inside of industrial machines, per NFPA 79, Section 12.9.2 (condition 3 under 12.9.2: Thru 1 mm² and <16 AWG)

Application range

- Suitable for use in measuring, control and regulating circuits
- Drag chain use - in case of horizontal installation travel distances up to 100 m
- For use in chain/carrier: Please respect the assembly guidelines listed in Appendix T3
- Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

Product features

- Halogen-free, has low capacitance and is flexible down to -40°C
- PUR outer sheath, tear and notch-resistant, resistant to mineral oils and abrasion when used in power chains
- Low-adhesive surface, resistant to hydrolysis and microbes, oil resistant
- Flame retardance: IEC 60332-1-2, VW-1, FT2
- Designed for 5 up to 10 million bending/unbending cycles (constant flex) in drag chains

Norm references / Approvals

- CULus CMX certified by UL (UL: E236660)
- CRUus AWM certified by UL (UL: E63634): UL AWM Style 21576 and AWM A/B I/II

Product Make-up

- Extra-fine wire strand made of bare copper wires
- Core insulation: Based on Polyolefin
- Non-woven wrapping
- Tinned-copper braiding
- Outer sheath made of special PUR compound
- Outer sheath colour: grey (RAL 7001)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100, refer to Appendix T9
	Mutual capacitance C/C approx. 60 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, extra-fine wire
	Torsion movement in WTG TW-0 & TW-2, refer to Appendix T0
	Minimum bending radius Flexing: 7.5 x outer diameter Fixed installation: 4 x outer diameter
	Test voltage Core/core: 1500 V rms Core/screen: 500 V
	Temperature range Flexing: -40°C to +80°C Fixed installation: -40°C to +80°C cULus CMX: max. +75°C cRUus AWM: max. +80°C

Article number	Number of cores and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® FD CP plus				
0028880	2 x 0.14	4.3	11.2	33
0028881	3 x 0.14	4.5	14.1	36
0028882	4 x 0.14	4.8	15.5	40
0028883	5 x 0.14	5.1	18.3	45
0028884	7 x 0.14	5.7	27.8	51
0028885	10 x 0.14	6.7	39.3	59
0028886	14 x 0.14	6.8	45.3	62
0028887	18 x 0.14	7.4	54.1	118
0028888	25 x 0.14	8.9	68.4	157
0028889	2 x 0.25	4.7	14.9	38
0028890	3 x 0.25	4.9	18.8	45
0028891	4 x 0.25	5.3	21.3	52
0028892	5 x 0.25	5.6	31	69
0028893	7 x 0.25	6.4	39.6	76
0028894	10 x 0.25	7.6	53.9	98
0028895	14 x 0.25	7.9	64.2	120
0028896	18 x 0.25	8.6	78.4	142
0028897	25 x 0.25	10.4	101	213
0028898	2 x 0.34	5.1	18.1	40
0028899	3 x 0.34	5.4	28.7	50
0028900	4 x 0.34	5.8	35.7	60
0028901	5 x 0.34	6.2	39.1	70
0028902	7 x 0.34	7.1	52.7	109
0028903	10 x 0.34	8.6	67.4	147
0028904	14 x 0.34	8.8	85.8	166
0028905	18 x 0.34	9.8	99.7	190
0028906	25 x 0.34	11.8	155	260

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® FD Li2YCY (TP) A BE refer to page 310
- UNITRONIC® FD Li2YCY (TP) A BA refer to page 311
- UNITRONIC® FD CP (TP) plus refer to page 315

Accessories

- SKINTOP® MS-HF-M SC refer to page 701
- SKINTOP® MS-SC-M refer to page 695
- STAR STRIP stripping tool refer to page 957



UNITRONIC® FD CP (TP) plus

Screened highly flexible data transmission cable with PUR outer sheath and twisted pairs - UL/CSA-listed



Info

- Flexible at low temperatures
- Low capacitance
- Halogen-free



Benefits

- Wide temperature range for applications in harsh climatic environments
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)
- UL AWM voltage rating 1000V in case of internal wiring allows for internal laying next to power cables with applied UL rating of 1kV
- In the USA inside of industrial machines, per NFPA 79, Section 12.9.2 (condition 3 under 12.9.2: Thru 1 mm² and <16 AWG)

Application range

- Suitable for use in measuring, control and regulating circuits
- Linear robots, automated handling equipment
- Drag chain use - in case of horizontal installation travel distances up to 100 m
- For use in chain/carrier: Please respect the assembly guidelines listed in Appendix T3
- Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

Product features

- Halogen-free, has low capacitance and is flexible down to -40°C
- PUR outer sheath, tear and notch-resistant, resistant to mineral oils and abrasion when used in power chains
- Low-adhesive surface, resistant to hydrolysis and microbes, oil resistant
- Flame retardance: IEC 60332-1-2, VW-1, FT2
- Designed for 10 million alternating bending cycles and horizontal travel distances up to 100 meter

Norm references / Approvals

- CULus CMX certified by UL (UL: E236660)
- CRUus AWM certified by UL (UL: E63634): UL AWM Style 21576 and AWM A/B I/II

Product Make-up

- Extra-fine wire strand made of bare copper wires
- Core insulation: Based on Polyolefin TP structure
- Non-woven wrapping
- Tinned-copper braiding
- Outer sheath made of special PUR compound
- Outer sheath colour: grey (RAL 7001)

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control cable
	Core identification code DIN 47100, refer to Appendix T9
	Mutual capacitance Up to 0.5 mm²: 60 nF/km Up to 1.0 mm²: 70 nF/km
	Inductivity approx. 0.65 mH/km
	Conductor stranding Stranded, extra-fine wire From 0.5 mm²: extra-fine wire according to IEC 60228 class 6
	Torsion movement in WTG TW-0 & TW-2, refer to Appendix T0
	Minimum bending radius Flexing: 7.5 x outer diameter Fixed installation: 4 x outer diameter
	Test voltage Core/core: 1500 V rms Core/screen: 500 V
	Temperature range Flexing: -40°C to +80°C Fixed installation: -40°C to +80°C cULus CMX: max. +75°C cRUus AWM: max. +80°C

Article number	Number of pairs and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® FD CP (TP) plus				
0030910	2 x 2 x 0.14	5.9	19.4	42
0030911	3 x 2 x 0.14	6.2	23.4	47
0030912	4 x 2 x 0.14	6.7	27.1	59
0030913	5 x 2 x 0.14	7.3	37.4	68
0030914	6 x 2 x 0.14	7.5	49.4	91
0030915	8 x 2 x 0.14	8.8	54.8	109
0030916	10 x 2 x 0.14	10.1	60.1	120
0030962	1 x 2 x 0.25	4.7	14	27
0030919	2 x 2 x 0.25	6.6	32	60
0030920	3 x 2 x 0.25	7	38.4	72
0030921	4 x 2 x 0.25	7.6	43.2	85
0030922	5 x 2 x 0.25	8.5	51.5	92
0030923	6 x 2 x 0.25	8.8	71.8	114
0030924	8 x 2 x 0.25	10.3	74.4	155
0030925	10 x 2 x 0.25	11.8	90	186
0030926	14 x 2 x 0.25	12	111.2	219
0030963	1 x 2 x 0.34	5.1	20	36
0030928	2 x 2 x 0.34	7.3	41	69
0030929	3 x 2 x 0.34	8	52	101
0030930	4 x 2 x 0.34	8.7	59	106
0030932	6 x 2 x 0.34	10	86.2	165
0030934	10 x 2 x 0.34	13.7	131.1	274

Article number	Number of pairs and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0030964	1 x 2 x 0.5	5.5	22	47
0030937	2 x 2 x 0.5	8.3	50	99
0030938	3 x 2 x 0.5	8.8	71.8	130
0030939	4 x 2 x 0.5	9.8	74.4	148
0030940	5 x 2 x 0.5	10.7	84.5	168
0030941	6 x 2 x 0.5	11.3	99.6	194
0030942	8 x 2 x 0.5	13.2	144.3	284
0030943	10 x 2 x 0.5	15.2	176	343
0030944	14 x 2 x 0.5	15.5	215.4	401
0030965	1 x 2 x 0.75	5.9	34	61
0030946	2 x 2 x 0.75	9	60	112
0030947	3 x 2 x 0.75	9.8	85.7	157
0030948	4 x 2 x 0.75	10.7	93.6	172
0030950	6 x 2 x 0.75	12.3	130.4	231
0030951	8 x 2 x 0.75	14.7	192.2	342
0030952	10 x 2 x 0.75	16.7	258	390
0030953	14 x 2 x 0.75	17	316.6	545
0030955	1 x 2 x 1.0	6.3	42	71
0030956	2 x 2 x 1.0	9.9	73	129
0030957	3 x 2 x 1.0	10.5	93.6	169
0030958	4 x 2 x 1.0	11.8	117.8	204
0030959	5 x 2 x 1.0	13.1	139	237

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- SKINTOP® MS-HF-M SC refer to page 301
- SKINTOP® MS-SC-M refer to page 695
- STAR STRIP stripping tool refer to page 957