


U.I. Lapp GmbH	<b>PRODUCT INFORMATION</b>	
	<b>ÖLFLEX® TRAY II</b>	07.11.2014

Wide application range due to multiple approvals

Cost-saving, easy installation due to omission of closed raceways (suitable for open wiring)



Suitable for outdoor use



Flame-retardant



Cold-resistant



Mechanical resistance



Oil-resistant



Torsion-resistant



UV-resistant

### Info

Torsion resistant for drip loops

Broad application range (NFPA 70/NEC), NFPA 79 compliance, Outdoor use

### Application range

Industrial machinery; plant engineering

TC-ER (Tray Cable Exposed Run) approval for open wiring between cable tray and industrial machines/plants acc. to NEC 336.10(7)

Wind turbines: USA Wind Turbine Tray Cable (WTTC)

Class 1, Div. 2 in accordance with NEC "National Electrical Code" Art. 336, 392, 501

Suitable for outdoor use and direct burial


### Product Make-up

Fine-wire strand made of bare copper wires

Insulation: PVC+nylon sheath (PA skin)

Outer sheath made of special PVC compound, black

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### Norm references / Approvals

Multi-standard cables have conductor strands with nominal sizes in mm<sup>2</sup> or AWG/kcmil. The master size is mentioned in the table below, while the equivalent size of the other system can be found in the Appendix T16 of this catalogue. For this related secondary size the cross-section of the conductor mostly works out to be greater than the specified nominal value.

Approvals: UL MTW (Machine-tool Wire) [E155920]; UL AWM (Appliance Wiring Material-Component) style 20886 (+105 °C) [E100338]; UL Wet Approval 75°C; UL Type TC (Tray Cable) -ER (Exposed Run) [E171371] or DP-1; UL PLTC (Power Limited Tray Cable) -ER (Exposed Run); UL ITC (Instrumentation Tray Cable) -ER (Exposed Run); UL WTTC (FT4) [E323700]; OIL RES. I, OIL RES. II; P-07-KA050016-MSHA (ÖLFLEX® TRAY II CY); c(UL) CIC / TC and FT4; CSA-AWM I (internal wiring)/ II (external wiring) A (dry)/ B (wet); FT4 (highly flame-retardant)

### Product features

Flame-retardant according to CSA FT4

UL Vertical-Tray Flame Test

Oil-resistant according to UL OIL RES I & II

Water-resistant, UL Wet Approval 75 °C

UV-resistant UL SUN RES

Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

### Remark

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](http://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 610 m drum or 8 x 76 m coils).

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

\*OD = Outer diameter

### Technical Data

Core identification code:	Black with white numbers
Classification:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Conductor stranding:	Fine copper wire strands
Torsion movement in WTG:	TW-0 & TW-2, refer to Appendix T0
Minimum bending radius:	Static/Occ. moved: 5/15xOD*
Nominal voltage:	UL/CSA: 600 V (TC, MTW, CIC), WTTC 1000 V UL/CSA: 1000 V (AWM) VDE U0 /U: 600/1000 V
Protective conductor:	G = with GN-YE protective conductor X = without protective conductor
Temperature range:	-40°C (static)/ -25°C (occ. moved) to +90°C (AWM: +105°C)

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## ÖLFLEX® TRAY II

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Part number	Number of cores and mm <sup>2</sup> per conductor	AWG per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® Tray II					
221803	3 G 1,0		7,5	28.8	85
221804	4 G 1,0		8,1	38.4	98
221805	5 G 1,0		8,8	48.0	115
221807	7 G 1,0		9,5	67.0	149
221809	9 G 1,0		10,9	87.0	167
221812	12 G 1,0		12,1	115.0	255
221818	18 G 1,0		14,9	173.0	365
221825	25 G 1,0		16,9	240.0	479
221603	3 G 1,5		8,3	43.0	103
221604	4 G 1,5		8,9	58.0	124
221605	5 G 1,5		9,7	72.0	146
221607	7 G 1,5		10,5	101.0	189
221608	8 G 1,5		11,3	116.0	203
221609	9 G 1,5		12,1	130.0	255
221612	12 G 1,5		14,4	173.0	328
221618	18 G 1,5		16,6	259.0	431
221625	25 G 1,5		18,8	360.0	592
221641	41 G 1,5		25.0	591.0	931
221650	50 G 1,5		26,6	720.0	1132
221403	3 G 2,5		9,2	72.0	130
221404	4 G 2,5		10.0	96.0	159
221405	5 G 2,5		10,8	120.0	191
221407	7 G 2,5		11,8	168.0	252
221409	9 G 2,5		14,5	216.0	335
221412	12 G 2,5		16,2	288.0	459
221418	18 G 2,5		18,7	432.0	654
221425	25 G 2,5		22,5	600.0	874
221204	4 G 4		11,7	153.0	226
221205	5 G 4		12,8	192.0	279
221207	7 G 4		14,8	269.0	384
221004	4 G 6		14,7	231.0	394
221005	5 G 6		16.0	288.0	472
221007	7 G 6		17,4	405.0	661



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Part number	Number of cores and mm <sup>2</sup> per conductor	AWG per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
220804	4 G 10		17,9	384.0	615
220805	5 G 10		19,6	480.0	771
220604	4 G 16		22,8	615.0	864
220605	5 G 16		24,9	768.0	1080
220404	4 G	4	27,8	960.0	1418
220204	4 G	2	32,3	1344.0	2077