


U.I. Lapp GmbH	<b>PRODUCT INFORMATION</b>	
	<b>ÖLFLEX® ROBUST 210</b>	<b>12.09.2012</b>

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



### Info

Excellent weather resistance  
 High chemical resistance  
 Reduced outer diameter

### 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 indoor and outdoor use

### Design

Fine-wire strand made of bare copper wires  
 Core insulation made of modified PP  
 Cores twisted in layers  
 Outer sheath made of special TPE  
 Sheath colour: black (RAL 9005)

### Product features

Halogen-free materials  
 Good chemical resistance to ester-based hydraulic fluids  
 Ozone, UV and weather-resistant according to EN 50396 and HD 605 S2  
 Flexible down to -40°C  
 Number-coded cores

### Remark

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

Copper price basis: EUR 150/100kg. Refer to 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 500 m drum or 5 x 100 m coils).

Single lengths for sizes: ≥ 4G16 max. 600 m; ≥ 4G25 max. 300 m; ≥ 4G50 max. 250 m

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

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### Technical Data

Core identification code:	Black with white numbers acc. to VDE 0293
Based on:	VDE 0250/0281
Conductor stranding:	Fine wire according to VDE 0295, class 5/IEC 60228 class 5
Minimum bending radius:	Occasional flexing: 15 x outer diameter Fixed installation: 4 x outer diameter
Nominal voltage:	U <sub>0</sub> /U: 300/500 V
Test voltage:	4000 V
Protective conductor:	G = with GN-YE protective conductor X = without protective conductor
Temperature range:	Occasional flexing: -40°C to +80°C Fixed installation: -50°C to +80°C

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Part number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® ROBUST 210				
0021880	2 X 0,5	4,9	10.0	27
0021881	3 G 0,5	5,2	15.0	33
0021882	3 X 0,5	5,2	15.0	33
0021883	4 G 0,5	5,8	19.2	41
0021884	4 X 0,5	5,8	19.2	41
0021885	5 G 0,5	6,3	24.0	49
0021886	5 X 0,5	6,3	24.0	49
0021888	7 G 0,5	6,9	33.6	64
0021889	7 X 0,5	6,9	33.6	64
0021890	10 G 0,5	8,8	48.0	92
0021891	12 G 0,5	9,1	58.0	106
0021892	18 G 0,5	10,8	86.4	151
0021893	25 G 0,5	12,7	120.0	210
0021897	2 X 0,75	5,5	14.4	35
0021898	3 G 0,75	5,8	21.6	43
0021899	3 X 0,75	5,8	21.6	43
0021900	4 G 0,75	6,3	28.8	49
0021901	4 X 0,75	6,3	28.8	49
0021902	5 G 0,75	6,9	36.0	66
0021903	5 X 0,75	6,9	36.0	66
0021904	7 G 0,75	7,5	50.0	85
0021905	7 X 0,75	7,5	50.0	85
0021907	12 G 0,75	10,1	86.0	144
0021908	18 G 0,75	12,0	130.0	208
0021909	25 G 0,75	14,1	180.0	288
0021910	34 G 0,75	16,3	245.0	386
0021911	41 G 0,75	17,8	296.0	464
0021912	50 G 0,75	19,6	360.0	560
0021913	2 X 1,0	5,8	19.2	42
0021914	3 G 1,0	6,1	28.8	49
0021915	3 X 1,0	6,1	28.8	49

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0021916	4 G 1,0	6,6	38.4	63
0021917	4 X 1,0	6,6	38.4	63
0021918	5 G 1,0	7,3	48.0	78
0021919	5 X 1,0	7,3	48.0	78
0021920	7 G 1,0	8,1	67.0	107
0021921	10 G 1,0	10,4	96.0	154
0021922	12 G 1,0	10,7	115.0	178
0021923	18 G 1,0	12,9	173.0	262
0021924	25 G 1,0	15.0	240.0	357
0021925	34 G 1,0	17,5	326.0	484
0021926	41 G 1,0	19,2	394.0	582
0021927	50 G 1,0	21.0	480.0	703
0021928	2 X 1,5	6,4	29.0	56
0021929	3 G 1,5	6,8	43.0	72
0021930	3 X 1,5	6,8	43.0	72
0021931	4 G 1,5	7,4	58.0	91
0021932	4 X 1,5	7,4	58.0	91
0021933	5 G 1,5	8,3	72.0	108
0021934	5 X 1,5	8,3	72.0	108
0021936	7 G 1,5	9.0	101.0	149
0021937	7 X 1,5	9.0	101.0	149
0021938	10 G 1,5	11,8	143.0	215
0021940	12 G 1,5	12,2	173.0	234
0021941	18 G 1,5	14,6	259.0	369
0021942	25 G 1,5	17,2	360.0	510
0021943	34 G 1,5	19,8	490.0	683
0021945	50 G 1,5	24.0	720.0	999
0021946	2 X 2,5	7,6	48.0	86
0021947	3 G 2,5	8,3	72.0	115
0021949	4 G 2,5	9.0	96.0	131
0021951	5 G 2,5	10,1	120.0	178
0021953	7 G 2,5	11,2	168.0	241

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Part number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
0021954	12 G 2,5	15,1	288.0	405
0021963	3 G 4	10,1	115.0	180
0021964	4 G 4	11,1	157.0	228
0021965	5 G 4	12,4	192.0	280
0021966	7 G 4	13,6	269.0	377
0021967	4 G 6	13,3	230.0	332
0021968	5 G 6	14,8	288.0	407
0021969	4 G 10	16,5	384.0	541
0021970	5 G 10	18,4	480.0	620
0021971	4 G 16	18,8	614.4	806
0021972	4 G 25	23,5	960.0	1218
0021973	4 G 35	26,4	1344.0	1658