HELUKABEL®

One cable – many applications.





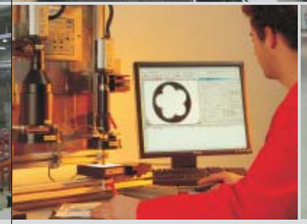


Thanks to its unique combination of properties, this new halogen-free cable type is used as a measuring and control cable in, for example, mechanical engineering and plant construction, in building and air-conditioning technology, warehousing and conveyor systems, shipbuilding and in conjunction with regenerative energies, for example in wind power station systems. Particularly suitable for use in public buildings – such as airports and train stations – where they can help to prevent very high levels of personal injury and subsequent damage in case of a fire.

Stand 02/07

HELUKABEL®

Research & production centre in Windsbach

In our own plant in Windsbach, we produce shielded, unshielded and steel wire-reinforced control cables with a PVC/PUR sheath or thermoplastic elastomers, as well as halogen-free, flame-retardant, heat-resistant, shielded and unshielded cables. Our range is completed by special-purpose cables produced to bespoke requirements.

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India · Singapore · China · Thailand

NEW FOR 2007
Perfect halogen-free product!

HELUKABEL®

MEGAFLEX®500 / 500-C






- Halogen-free
- Flexible
- Oil-resistant
- Flame-retardant
- UV-resistant
- Recyclable

The new generation of control cables. As well as being halogen-free and flame-retardant, now also with greater flexibility and higher oil resistance[1)].

[1)] Successfully tested acc. to DIN VDE 0473 part 811-2-1

www.helukabel.de

MEGAFLEX®500 / 500-C

Halogen-free
Flexible
Oil-resistant
Flame-retardant
UV-resistant
Recyclable

RoHS

Technical data

Based on DIN VDE 0281 part 14

Temperature range
Flexing -30°C to +90°C
Fixed installation -40°C to +90°C

Nominal voltage U_0/U 300/500 V

Test voltage 3000 V

Minimum bending radius
Flexing
Approx. 10 cable diameters
Fixed installation
Approx. 4 cable diameters

Flexible
Alternate bending test according to DIN VDE 0281-2

Note

G= with green-yellow earth core;
X= without earth core (OZ)

Additionally, for MEGAFLEX 500-C

- Coupling resistance: max. 250 Ohm/km

Application

For fixed installation or flexible application, with free movements without forcing which do not constantly recur and without tensile stress, for high mechanical strain.

CE = The product conforms to the EC Low Voltage Directive 73/23/EEC and 93/68/EEC

Construction

- Bare copper, fine wire conductors acc. to DIN VDE 0295 cl. 5, BS 6360 cl. 5, IEC 60228 cl. 5
- Core insulation, halogen-free special polymer
- Black cores with continuous white numbering according to DIN VDE 0293
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal lay-length
- Outer sheath, halogen-free special polymer
- Sheath colour grey (RAL 7001)
- The materials used in manufacture are cadmium-free and contain no silicone and are free from substances harmful to the wetting properties of lacquers

Additionally, for MEGAFLEX 500-C

- Separating foil
- Tinned copper braided screening, coverage approx. 85%

Properties

- Halogen-free
- Highly flame-retardant
- Resistant to oils and greases
- Resistant to UV and weathering
- Flexible, abrasion- and wear-resistant
- Ozone-resistant
- Recyclable

Tests

- Flame test acc. to VDE 0482 part 266-2-4/, BS 4066 part 3/EN 50266-2/IEC 60332-3-24 (previously DIN VDE 0472 part 804, test method C)
- Self-extinguishing and flame-retardant acc. to DIN VDE 0482 -332-1-2, DIN EN/IEC 60332-1 (previously DIN VDE 0472 part 804 test method B)
- Corrosiveness of combustion gases to NF X 10-702 Halogen-free to DIN VDE 0482 part 267/EN 50267-2-1/IEC 60754-1 (corresponds to DIN VDE 0472 part 815)
- Smoke density to DIN VDE 0482 part 1034-1+2, DIN EN 61034- 1+2/IEC 61034-1+2, BS 7622 part 1+2 (previously DIN VDE 0472 part 816)
- Oil-resistant to VDE 0473 part 811-2-1
- Ozone-resistant to DIN EN 60811-2-1 / DIN VDE 281-2

MEGAFLEX®500

Part No.	No. cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg/km	Weight approx. kg/km
13344	2 x 0,5	4,8	9,6	43
13345	3 G 0,5	5,1	14,4	50
13346	3 x 0,5	5,1	14,4	50
13347	4 G 0,5	5,7	19,0	60
13348	4 x 0,5	5,7	19,0	60
13349	5 G 0,5	6,2	24,0	71
13350	5 x 0,5	6,2	24,0	71
13351	7 G 0,5	7,4	33,6	84
13352	8 G 0,5	8,0	38,0	101
13353	10 G 0,5	8,8	48,0	121
13354	12 G 0,5	9,1	58,0	142
13355	16 G 0,5	10,0	76,0	183
13356	18 G 0,5	10,7	86,0	204
13357	20 G 0,5	11,2	96,0	227
13359	25 G 0,5	12,7	120,0	283
13360	30 G 0,5	13,5	144,0	324
13361	34 G 0,5	14,5	163,0	367
13362	37 G 0,5	15,0	178,0	381
13363	41 G 0,5	15,8	197,0	417
13364	42 G 0,5	15,8	202,0	454
13365	50 G 0,5	17,3	240,0	519
13366	61 G 0,5	19,4	293,0	635
13367	65 G 0,5	19,4	312,0	694
13368	2 x 0,75	5,2	14,4	47
13369	3 G 0,75	5,5	21,6	56
13370	3 x 0,75	5,5	21,6	56
13371	4 G 0,75	6,2	29,0	69
13372	4 x 0,75	6,2	29,0	69
13373	5 G 0,75	6,8	36,0	83
13374	5 x 0,75	6,8	36,0	83
13375	7 G 0,75	8,1	50,0	114
13376	7 x 0,75	8,1	50,0	114
13377	8 G 0,75	8,9	58,0	136
13378	10 G 0,75	9,6	72,0	172
13379	12 G 0,75	9,9	86,0	183
13380	16 G 0,75	10,5	115,0	241
13381	18 G 0,75	11,9	130,0	266
13382	20 G 0,75	12,6	144,0	291
13383	25 G 0,75	14,1	180,0	374
13384	30 G 0,75	15,4	216,0	450
13385	34 G 0,75	16,4	245,0	517
13386	37 G 0,75	17,2	260,0	541
13387	41 G 0,75	17,6	296,0	611
13388	42 G 0,75	17,6	302,0	621
13389	50 G 0,75	19,8	360,0	742
13390	61 G 0,75	20,9	439,0	853
13392	65 G 0,75	21,5	468,0	909
13393	2 x 1	5,5	19,2	63
13394	3 G 1	6,0	29,0	74
13395	3 x 1	6,0	29,0	74
13396	4 G 1	6,6	38,4	90
13397	4 x 1	6,6	38,4	90
13398	5 G 1	7,2	48,0	109
13399	7 G 1	8,6	67,0	151
13400	8 G 1	9,4	77,0	184
13401	10 G 1	10,4	96,0	224
13402	12 G 1	10,7	115,0	243
13403	16 G 1	12,0	154,0	314
13404	18 G 1	12,7	173,0	361
13405	20 G 1	13,5	192,0	387
13406	25 G 1	15,2	240,0	496
13407	34 G 1	17,4	326,0	670
13408	37 G 1	18,4	355,0	713
13409	41 G 1	18,9	394,0	784
13410	42 G 1	18,9	403,0	824
13411	50 G 1	21,0	480,0	952
13412	61 G 1	22,2	586,0	1140
13413	65 G 1	22,8	628,0	1201
13414	2 x 1,5	6,3	29,0	70
13415	3 G 1,5	6,7	43,0	94
13416	3 x 1,5	6,7	43,0	94
13417	4 G 1,5	7,3	58,0	112
13418	5 G 1,5	8,2	72,0	141
13419	7 G 1,5	9,8	101,0	191
13420	8 G 1,5	10,6	115,0	224
13421	10 G 1,5	11,7	144,0	282
13422	12 G 1,5	12,1	173,0	311
13423	16 G 1,5	13,6	230,0	392
13425	18 G 1,5	14,5	259,0	450
13426	20 G 1,5	15,2	288,0	497
13427	25 G 1,5	17,8	360,0	571
13428	34 G 1,5	19,8	490,0	842
13429	37 G 1,5	20,2	533,0	897
13430	50 G 1,5	23,7	720,0	1277
13431	61 G 1,5	25,3	878,0	1460
13432	65 G 1,5	26,0	936,0	1612
13433	2 x 2,5	6,7	48,0	118
13434	3 G 2,5	8,3	72,0	151
13435	4 G 2,5	9,1	96,0	181
13436	5 G 2,5	10,2	120,0	224
13437	7 G 2,5	12,1	168,0	316
13438	8 G 2,5	13,2	192,0	370
13439	10 G 2,5	14,7	240,0	451
13440	12 G 2,5	15,2	288,0	499
13441	16 G 2,5	17,5	384,0	720
13442	18 G 2,5	18,1	432,0	769
13443	20 G 2,5	18,7	480,0	911
13444	25 G 2,5	22,2	600,0	1047
13445	30 G 2,5	23,7	720,0	1280
13446	2 x 4	9,2	77,0	199
13447	3 G 4	9,9	115,0	247
13448	4 G 4	11,0	154,0	299
13449	5 G 4	12,1	192,0	369
13450	7 G 4	13,3	269,0	463
13451	8 G 4	15,9	307,0	601
13452	10 G 4	17,3	384,0	698
13453	12 G 4	18,3	461,0	790
13454	16 G 4	20,2	614,0	1130
13455	18 G 4	21,8	691,0	1280
13456	2 x 6	10,8	115,0	266
13457	3 G 6	11,7	173,0	360
13458	4 G 6	13,0	230,0	429
13459	5 G 6	14,5	288,0	529
13460	7 G 6	16,0	403,0	631
13461	2 x 10	14,0	192,0	440
13462	3 G 10	15,0	288,0	550
13463	4 G 10	16,8	384,0	708
13464	5 G 10	18,7	480,0	862
13465	7 G 10	20,6	672,0	1124
13466	2 x 16	16,5	307,0	642
13467	3 G 16	17,6	461,0	830
13468	4 G 16	19,7	641,0	1060
13469	5 G 16	21,9	768,0	1270
13470	7 G 16	24,4	1075,0	1794
13471	3 G 25	22,5	720,0	1190
13472	4 G 25	25,2	960,0	1594
13473	5 G 25	27,9	1200,0	2014
13474	3 G 35	25,2	1008,0	1590
13475	4 G 35	28,0	1344,0	2200
13476	5 G 35	31,0	1680,0	2693
13477	3 G 50	29,5	1440,0	2571
13478	4 G 50	33,4	1920,0	3087
13479	5 G 50	37,2	2400,0	3980
13480	3 G 70	37,0	2016,0	3207
13481	4 G 70	41,2	2688,0	4077
13482	5 G 70	46,0	3360,0	5501
13483	3 G 95	41,0	2736,0	4708
13484	4 G 95	46,0	3648,0	5590
13485	5 G 95	50,5	4560,0	6972
13486	3 G 120	45,7	3456,0	5515
13487	4 G 120	50,3	4608,0	7100
13488	3 G 150	52,2	4320,0	6279
13489	4 G 150	57,0	5760,0	7781

HELUKABEL®

MEGAFLEX®500-C

Part No.	No. cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg/km	Weight approx. kg/km
13500	2 x 0,5	5,7	32,1	46
13501	3 G 0,5	6,0	39,2	56
13502	3 x 0,5	6,0	39,2	56
13503	4 G 0,5	6,5	46,1	62
13504	4 x 0,5	6,5	46,1	62
13505	5 G 0,5	7,0	52,1	75
13506	5 x 0,5	7,0	52,1	75
13507	7 G 0,5	7,9	68,3	98
13508	8 G 0,5	8,5	80,0	116
13509	10 G 0,5	9,3	93,0	135
13510	12 G 0,5	9,6	117,0	158
13511	16 G 0,5	10,7	129,0	210
13512	18 G 0,5	11,2	156,2	216
13514	20 G 0,5	11,9	173,1	240
13515	25 G 0,5	13,4	205,5	315
13516	2 x 0,75	6,1	39,3	60
13517	3 G 0,75	6,4	49,4	68
13518	3 x 0,75	6,4	49,4	68
13519	4 G 0,75	6,9	57,2	78
13520	4 x 0,75	6,9	57,2	78
13521	5 G 0,75	7,4	69,0	95
13522	5 x 0,75	7,4	69,0	95
13523	7 G 0,75	8,6	87,1	130
13524	7 x 0,75	8,6	87,1	130
13525	8 G 0,75	9,4	110,0	145
13526	10 G 0,75	10,0	140,0	180
13527	12 G 0,75	10,4	151,2	203
13528	16 G 0,75	11,6	183,0	275
13529	18 G 0,75	12,4	207,5	290
13530	20 G 0,75	12,9	238,0	320
13531	25 G 0,75	14,8	275,8	413
13532	2 x 1	6,4	46,3	66
13533	3 G 1	6,7	56,4	80
13534	3 x 1	6,7	56,4	80
13535	4 G 1	7,3	69,7	100
13536	4 x 1	7,3	69,7	100
13537	5 G 1	7,8	85,4	130
13538	7 G 1	9,1	107,3	160
13539	8 G 1	9,9	130,0	197
13540	10 G 1	10,8	140,0	232
13541	12 G 1	11,2	187,0	260
13542	16 G 1	12,3	218,0	346
13543	18 G 1	13,2	253,5	382
13544	20 G 1	13,8	267,0	440
13545	25 G 1	15,8	342,6	540
13546	2 x 1,5	6,6	63,3	88
13547	3 G 1,5	6,9	76,2	100
13548	3 x 1,5	6,9	76,2	100
13549	4 G 1,5	7,5	96,2	125
13550	5 G 1,5	8,4	111,5	158
13552	7 G 1,5	10,0	148,0	210
13554	8 G 1,5	11,1	172,0	244
13556	10 G 1,5	12,0	193,0	315
13557	12 G 1,5	12,1	254,5	340
13558	16 G 1,5	14,3	285,1	424
13559	18 G 1,5	14,6	367,7	480
13560	20 G 1,5	15,9	407,1	545
13561	25 G 1,5	17,6	492,4	702
13562	2 x 2,5	8,3	96,4	132
13563	3 G 2,5	9,0	148,5	168
13565	4 G 2,5	9,8	174,2	195
13566	5 G 2,5	10,9	200,8	256
13567	7 G 2,5	12,9	235,6	345
13568	8 G 2,5	13,1	260,0	390
13569	10 G 2,5	15,2	335,1	482
13570	12 G 2,5	15,9	441,0	572
13571	2 x 4	9,8	135,5	220
13572	3 G 4	10,6	178,1	251
13573	4 G 4	11,5	220,3	305
13574	5 G 4	12,7	328,0	388
13575	7 G 4	14,0	355,2	504
13576	2 x 6	11,5	175,3	270
13577	3 G 6	12,4	240,0	351
13578	4 G 6	13,8	305,7	464
13579	5 G 6	15,7	441,8	546
13580	7 G 6	16,6	506,0	670
13581	2 x 10	14,9	265,2	461
13582	3 G 10	15,9	370,5	574
13583	4 G 10	17,8	486,0	785
13584	5 G 10	19,6	611,2	914
13585	7 G 10	21,6	820,5	1308
13586	2 x 16	17,2	331,0	670
13587	3 G 16	19,0	497,0	911
13588	4 G 16	20,8	810,0	1105
13589	5 G 16	22,9	1050,7	1293
13590	7 G 16	25,0	1183,0	2149
13591	4 G 25	26,2	1280,0	1911
13592	4 G 35	30,4	1690,0	2542
13593	4 G 50	34,6	2315,0	3550
13594	4 G 70	41,3	3020,0	4939
13595	4 G 95	46,2	4013,0	6690
13596	4 G 120	51,0	5067,0	8453
13597	4 G 150	59,2	5792,0	9104

EMC-preferred type
EMC = Electromagnetic compatibility
To optimise the EMC characteristics we recommend a large area of contact of the copper braiding around the entire circumference on both ends.