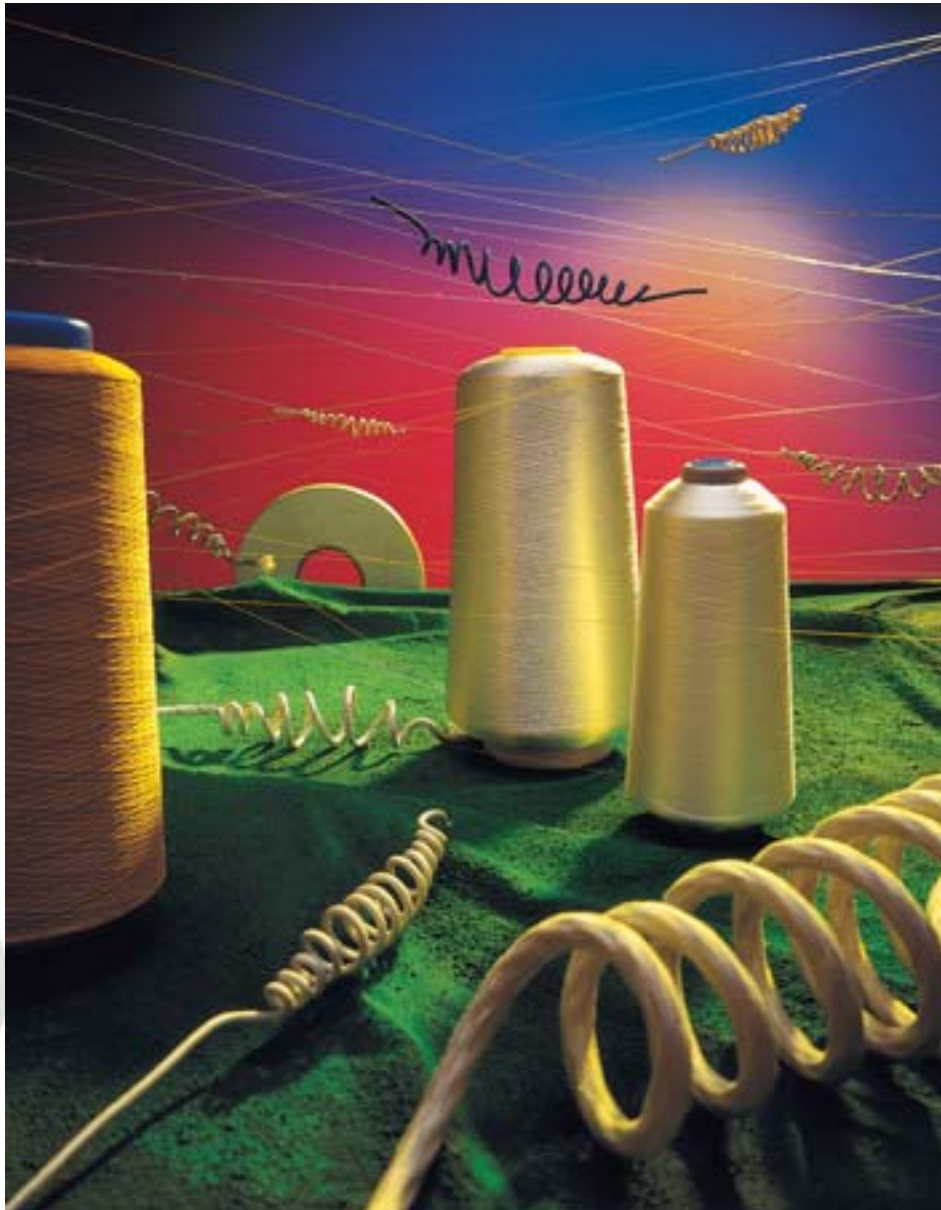


HIGH TEMPERATURE CABLES



HIGH TEMPERATURE CABLES

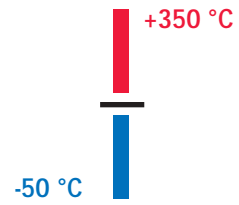
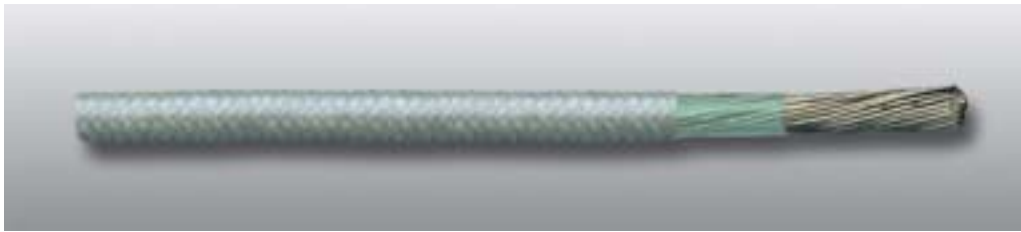
Products

*High temperature
Cables*

C O N T E N T S

C O N T E N T S

	Page
<hr/>	
Glass fibre cables (temperature range up to + 500 °C)	
<hr/>	
Glass fibre single cores	Type GL 115
Kapton®/glass fibre single cores	Type YGL 116
Mica/glass fibre single cores	Type GLIGL 117
PTFE/glass fibre single cores	Type TEGL 119
<hr/>	
Multicore glass fibre cables	Type GLHGL 120
Multicore glass fibre cables with steel wire armouring	Type GLHGLP 121
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Ceramic fibre cables (temperature range up to + 1250 °C)	
<hr/>	
Mica/ceramic fibre single cores	Type GLIGA 122
Multicore Mica/ceramic fibre cables	Type GLIGAHGLIGA 123
Micaflame® cables (short-term + 1550 °C)	125
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Kapton® is a registered trademark of Du Pont	
Micaflame® is a registered trademark of HEW-KABEL/CDT	
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Glass fibre single core GL

Products

Construction

- Conductor: Cu np or pure nickel
 Insulation: - 1 separator foil
 - Glass fibre serving
 - Counterwound glass fibre serving
 - Glass fibre braid with impregnation
 Identification: Optional coloured identification tracers

Application

- For wiring at high ambient temperatures and increased mechanical stress e.g.
 - domestic appliances (stoves, heating plates, ovens)
 - extrusion- and drying installations
 - electric heating systems
 - steel and iron fabrication
 - glass and ceramic fabrication

Technical data

- Temperature range: - 50 °C up to + 350 °C
 Rated voltage: 300 / 300 Volt
 Test voltage: 1,5 kV

Notes

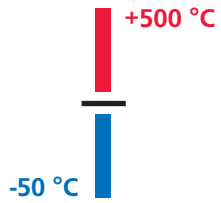
- Glass fibre cores are also available in different cross sections, conductor materials and/or higher nominal voltages.
 → The itemized cores are also available with high temperature resistant glass fibre for applications up to + 550 °C.

High temperature
Cables

cross section [mm²]	strand construction	maximum strandØ [mm]	o.d. [mm] *	copper weight [kg/km]	weight approx. [kg/km]
0,22	7 x 0,20	0,66	1,1	2,2	3,5
0,25	14 x 0,15	0,67	1,9	2,4	5,6
0,34	7 x 0,254	0,82	1,9	3,4	11
0,5	16 x 0,203	0,98	2,1	4,8	13
0,75	24 x 0,203	1,16	2,3	7,5	17
1	32 x 0,203	1,35	2,5	9,8	22
1,5	30 x 0,254	1,61	2,8	14,4	27
2,5**	50 x 0,254	2,11	4,3	24,4	50
4**	56 x 0,3	2,58	5	38	66
6**	84 x 0,3	3,22	5,7	58	81

* On request diameter tolerance according to intended purpose
 ** 380 Volt construction





YGL

Kapton®/glass fibre single core

Construction

Conductor: Cu np or pure nickel
 Insulation: - 1 layer Kapton®-foil
 - Glass fibre braid with impregnation
 Identification: Optional coloured identification tracers

Application

For wiring at high ambient temperatures and increased mechanical stress, e.g.
 - domestic appliances (stoves, heating plates, ovens)
 - extrusion- and drying installations
 - traffic technology

Technical Data

Temperature range: - 50 °C to + 350 °C, short-term + 500 °C
 Rated voltage: 300 / 300 Volt
 Test voltage: 2 kV

Notes

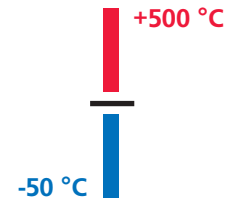
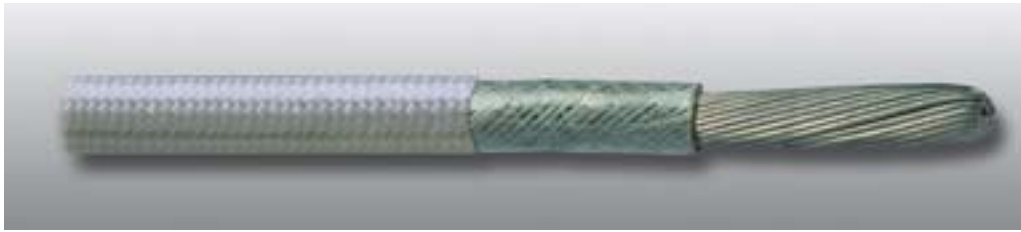
→ Kapton®/glass fibre cores are also available in different cross sections, conductor materials and/or higher nominal voltages.
 → Kapton®/glass fibre cores offer a very good dielectric strength in humid areas.

cross section [mm ²]	strand construction	maximum strandØ [mm]	o.d. [mm] *	copper weight [kg/km]	weight approx. [kg/km]
0,22	7 x 0,20	0,66	1,2	2,2	7
0,25	14 x 0,15	0,67	1,3	2,3	4,5
0,34	7 x 0,254	0,82	1,4	3,4	7,5
0,5	16 x 0,203	0,98	1,7	4,8	8
0,75	24 x 0,203	1,16	1,9	7,5	11
1	32 x 0,203	1,35	2	9,8	13
1,5	30 x 0,254	1,61	2,5	14,4	18
2,5	50 x 0,254	2,11	2,8	24,4	30
4	56 x 0,3	2,58	3,5	38	50
6	84 x 0,3	3,22	4,1	58	65

* On request diameter tolerance according to intended purpose.

Kapton® is a registered trademark of Du Pont





Mica/glass fibre single core **GLIGL**

Products

*High temperature
Cables*

Construction

Conductor: Cu np or pure nickel
 Insulation: - Mica wrapping
 - Glass fibre braid with impregnation
 Identification: Optional coloured identification tracers

Application

For wiring at high ambient temperatures and increased operating voltage, e.g.
 - industrial furnaces
 - extrusion- and drying installations
 - electric heating systems

Technical Data

Temperature range: - 50 °C to + 350 °C,
 short-term + 500 °C
 Rated voltage: 300 / 500 Volt
 Test voltage: 2 kV

Note

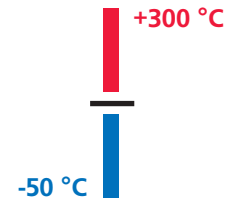
→ Mica/glass fibre cores are also available in different cross sections, conductor materials and/or higher nominal voltages.

cross section [mm ²]	strand construction	maximum strandØ [mm]	o.d. [mm] *	copper weight [kg/km]	weight ca. [kg/km]
0,5	16 x 0,203	0,98	2,4	4,8	13
0,75	24 x 0,203	1,16	2,6	7,5	18
1	32 x 0,203	1,35	3,1	9,8	22
1,5	30 x 0,254	1,61	3,4	14,4	30
2,5	50 x 0,254	2,11	3,9	24,4	39
4	56 x 0,3	2,58	4,7	38	59
6	84 x 0,3	3,22	5,4	58	81

*On request diameter tolerance according to intended purpose



Lined writing area with horizontal blue lines and decorative gray shapes (circles and trapezoids) on the left side.



PTFE/glass fibre single core **TEGL**

Products

Construction

Conductor: Cu np or pure nickel
 Insulation: - PTFE 5Y to VDE 0207 part 6
 - glass fibre braid with impregnation
 Identification: Optional coloured identification tracers

Application

For wiring at high ambient temperatures and increased mechanical stress, e.g.

- domestic appliances (stoves, heating plates, ovens)
- extrusion and drying installations
- electric heating systems
- aerospace
- traffic technology

Technical Data

Temperature range: - 50 °C to + 260 °C, short-term + 300 °C
 Rated voltage: 600 Volt
 Test voltage: 3,4 kV

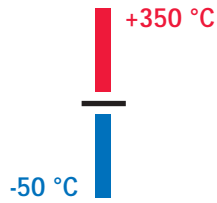
Notes

→ PTFE/glass fibre cores are also available in different cross sections, conductor materials and/or higher nominal voltages.
 → PTFE/glass fibre cores offer a very good dielectric strength in humid areas.
 → PTFE/glass fibre cores acc. to MIL-W-22759 see page 21.

High temperature Cables

cross section [mm²]	strand construction	maximum strandØ [mm]	o.d. [mm] ± 5 %	copper weight [kg/km]	weight approx. [kg/km]
0,5	16 x 0,203	0,98	2	4,8	10
0,75	24 x 0,203	1,16	2,2	7,5	14
1	32 x 0,203	1,35	2,4	9,8	16
1,5	30 x 0,254	1,61	2,7	14,4	22
2,5	50 x 0,254	2,11	3,3	24,4	36
4	56 x 0,3	2,58	3,8	38	52
6	84 x 0,3	3,22	4,5	58	71





GLHGL Glass fibre cable

Construction

Conductor: Cu np or pure nickel
 Insulation: - 1 separator foil
 - glass fibre serving
 - glass fibre braid with impregnation
 Identification: Coloured identification tracers
 Twisting: In layers with glass fibre filler
 Sheath: Glass fibre braid with impregnation

Application

For wiring at high ambient temperatures and increased mechanical stress, e.g.
 - extrusion and drying installations
 - electric heatings
 - steel and iron fabrication
 - glass- and ceramic fabrication

Technical Data

Temperature range: - 50 °C to + 350 °C
 Rated voltage: 300 / 300 Volt
 Test voltage: Core/core 1,5 kV

Notes

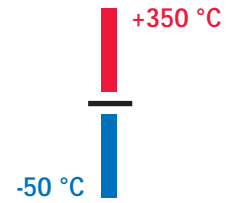
→ Glass fibre cables are also available in different cross sections, conductor materials and/or higher nominal voltages.
 → On request, we also deliver 2-core constructions as flat cables.
 → The itemized cables are also available with high temperature resistant glass fibre for applications up to + 530 °C.

cross section [mm ²]	strand construction	maximum strandØ [mm]	coreØ [mm] *	o.d. [mm] *	copper weight [kg/km]	weight approx. [kg/km]
2 x 0,22	7 x 0,20	0,66	1,1	2,5	4,4	13
3 x 0,22	7 x 0,20	0,66	1,1	2,7	6,6	15
4 x 0,22	7 x 0,20	0,66	1,1	2,9	8,8	17
2 x 0,34	7 x 0,254	0,82	1,2	3	6,9	19
3 x 0,34	7 x 0,254	0,82	1,2	3,3	11	15
4 x 0,34	7 x 0,254	0,82	1,2	3,5	13,8	33
2 x 0,5	16 x 0,203	0,98	1,5	3,5	9,7	26
3 x 0,5	16 x 0,203	0,98	1,5	3,7	15	36
4 x 0,5	16 x 0,203	0,98	1,5	4	20	45
2 x 0,75	24 x 0,203	1,16	2,3	5,1	15	44
3 x 0,75	24 x 0,203	1,16	2,3	5,6	23	56
4 x 0,75	24 x 0,203	1,16	2,3	6,1	30	83
2 x 1	32 x 0,203	1,35	2,5	5,6	20	63
3 x 1	32 x 0,203	1,35	2,5	6	30	88
4 x 1	32 x 0,203	1,35	2,5	6,5	40	113
2 x 1,5	30 x 0,254	1,61	2,8	6,4	30	74
3 x 1,5	30 x 0,254	1,61	2,8	6,8	45	103
4 x 1,5	30 x 0,254	1,61	2,8	7,4	60	133
2 x 2,5**	50 x 0,254	2,11	4,3	8,3	48	142
3 x 2,5**	50 x 0,254	2,11	4,3	10,2	74	172
4 x 2,5**	50 x 0,254	2,11	4,3	11,3	99	225
2 x 4**	56 x 0,3	2,58	5	11,1	77	184
3 x 4**	56 x 0,3	2,58	5	11,9	115	225
4 x 4**	56 x 0,3	2,58	5	13,2	154	310

* On request diameter tolerance according to intended purpose.

** 300 / 500 Volt construction





Glass fibre cable with steel wire armouring

GLHGLP

Products

Construction

Conductor: Cu np or pure nickel
 Insulation: - 1 separator foil
 - Glass fibre serving
 - Glass fibre braid with impregnation
 Identification: Coloured identification tracers
 Twisting: In layers with glass fibre filler
 Sheath: Glass fibre braid with impregnation
 Armouring: Galvanized steel wire or stainless steel braid

Technical Data

Temperature range: - 50 °C to + 350 °C
 Rated voltage: 300 / 300 Volt
 Test voltage: Core / core 1,5 kV

Application

For wiring at high ambient temperatures and increased mechanical stress, e.g.
 - extrusion and drying installations
 - electric heating systems
 - steel and iron fabrication
 - glass- and ceramic fabrication

Notes

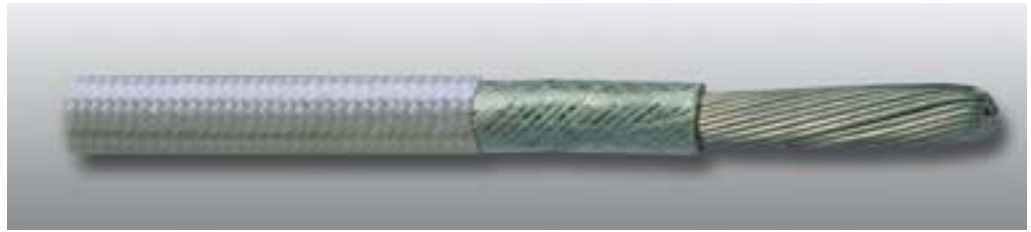
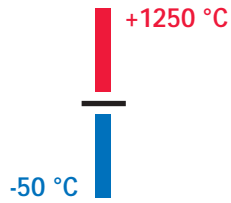
→ Glass fibre cables are also available in different cross sections, conductor materials and/or higher nominal voltages.
 → The itemized cables are also available with high temperature resistant glass fibre for applications up to + 530 °C.

High temperature
Cables

cross section [mm ²]	strand construction	maximum strandØ [mm]	coreØ [mm] *	o.d. [mm] *	copper weight [kg/km]	weight approx. [kg/km]
2 x 0,22	7 x 0,20	0,66	1,1	3,3	4,4	25
3 x 0,22	7 x 0,20	0,66	1,1	3,5	6,4	30
4 x 0,22	7 x 0,20	0,66	1,1	3,8	8,8	33
2 x 0,34	7 x 0,254	0,82	1,2	3,7	7	32
3 x 0,34	7 x 0,254	0,82	1,2	3,9	10,4	38
4 x 0,34	7 x 0,254	0,82	1,2	4,2	13,8	49
2 x 0,5	16 x 0,203	0,98	1,5	4,2	10	42
3 x 0,5	16 x 0,203	0,98	1,5	4,4	15	52
4 x 0,5	16 x 0,203	0,98	1,5	4,8	20	62
2 x 0,75	24 x 0,203	1,16	2,3	5,8	15	68
3 x 0,75	24 x 0,203	1,16	2,3	6,3	23	88
4 x 0,75	24 x 0,203	1,16	2,3	6,8	30	106
2 x 1	32 x 0,203	1,35	2,5	6,3	20	86
3 x 1	32 x 0,203	1,35	2,5	6,7	30	111
4 x 1	32 x 0,203	1,35	2,5	7,2	40,5	142
2 x 1,5	30 x 0,254	1,61	2,8	7,1	30	97
3 x 1,5	30 x 0,254	1,61	2,8	7,5	44,5	133
4 x 1,5	30 x 0,254	1,61	2,8	8,1	59	163
2 x 2,5**	50 x 0,254	2,11	4,3	8,8	48	175
3 x 2,5**	50 x 0,254	2,11	4,3	10,9	74	213
4 x 2,5**	50 x 0,254	2,11	4,3	12,3	98	297
2 x 4**	56 x 0,3	2,58	5	12,1	77	253
3 x 4**	56 x 0,3	2,58	5	12,9	115	295
4 x 4**	56 x 0,3	2,58	5	14,2	154	394

* On request diameter tolerance according to intended purpose
 ** 300 / 500 Volt construction





GLIGA Mica/Ceramic fibre single core

Construction

Conductor: Cu np, pure nickel or special alloys
 Insulation: - Mica wrapping
 - braid of impregnated ceramic fibre
 Identification: Optional coloured identification tracers

Application

For wiring at high ambient temperatures and increased mechanical stress, e.g.
 - glass-, steel and iron fabrication
 - industrial furnaces
 - electric heating systems

Technical Data

Temperature range: - 50 °C to + 1250 °C
 Rated voltage: 300/500 Volt
 Test voltage: 2 kV

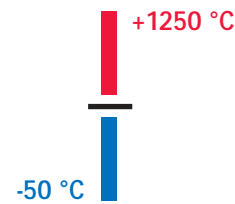
Note

→ Mica/ceramic fibre cores are also available in different cross sections and/or higher nominal voltages.

cross section [mm ²]	strand construction	maximum strandØ [mm]	o.d. [mm] *	copper weight [kg/km]	weight approx. [kg/km]
0,5	16 x 0,203	0,98	2,4	4,8	11
0,75	24 x 0,203	1,16	2,5	7,5	18
1	32 x 0,203	1,35	3,2	9,8	23
1,5	30 x 0,254	1,61	3,6	14,4	28
2,5	50 x 0,254	2,11	3,9	24,4	46
4	56 x 0,30	2,58	5,2	38	70
6	84 x 0,30	3,22	6,0	58	104
10	80 x 0,4	4,78	7,4	100	147

* On request diameter tolerance according to intended purpose.





Multicore mica/Ceramic fibre cable

GLIGAHGLIGA(P)

Products

Construction

Conductor: Cu np, pure nickel or special alloys
 Insulation: - Mica wrapping
 - Braid of impregnated ceramic fibre
 Identification: Coloured identification tracers
 Twisting: In layers with filler
 Wrapping: Mica tape
 Sheath: Braid of impregnated ceramic fibre
 Armouring: Galvanized steel wire or stainless steel braid (optional)

Application

For wiring at high ambient temperatures and increased mechanical stress, e.g.
 - glass- and ceramic fabrication
 - industrial furnaces
 - electric heating systems

Technical Data

Temperature range: - 50 °C to + 1250 °C
 Rated voltage: 380 Volt
 Test voltage: Core/core 2 kV

Notes

→ Mica/ceramic fibre cables are also available in different cross sections, conductor materials and/or higher nominal voltages.
 → The cables are also available with armourings.
 → For increased operation security in case of fire use our Micaflame®-cables (page 125).

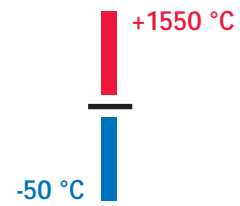
High temperature
Cables

cross section [mm²]	strand construction	maximum strandØ [mm]	CoreØ [mm] *	o.d. [mm] *	copper weight [kg/km]	weight approx. [kg/km]
2 x 1	32 x 0,203	1,35	3,4	8,2	20	77
3 x 1	32 x 0,203	1,35	3,4	8,7	30	100
4 x 1	32 x 0,203	1,35	3,4	9,7	40	125
5 x 1	32 x 0,203	1,35	3,4	10,6	50	157
2 x 1,5	30 x 0,254	1,61	3,7	8,8	29	92
3 x 1,5	30 x 0,254	1,61	3,7	9,4	44	120
4 x 1,5	30 x 0,254	1,61	3,7	10,4	58	151
5 x 1,5	30 x 0,254	1,61	3,7	11,3	73	190
2 x 2,5	50 x 0,254	2,11	4,0	9,5	49	124
3 x 2,5	50 x 0,254	2,11	4,0	10,1	74	158
4 x 2,5	50 x 0,254	2,11	4,0	11,1	99	200
5 x 2,5	50 x 0,254	2,11	4,0	12,3	124	245
2 x 4	56 x 0,3	2,58	4,8	11,1	77	172
3 x 4	56 x 0,3	2,58	4,8	11,9	116	238
4 x 4	56 x 0,3	2,58	4,8	13,1	154	306
5 x 4	56 x 0,3	2,58	4,8	14,5	193	404
2 x 6	84 x 0,3	3,22	5,4	12,3	118	234
3 x 6	84 x 0,3	3,22	5,4	13,2	176	324
4 x 6	84 x 0,3	3,22	5,4	14,5	235	417
5 x 6	84 x 0,3	3,22	5,4	16,1	295	529

* On request diameter tolerance according to intended purpose.



Lined writing area with horizontal blue lines and decorative gray shapes (circles and trapezoids) on the left side.



Micaflame®-cable

Micaflame

Products

Construction

Conductor: Cu np
 Insulation: - Mica wrapping
 - Glass fibre braid with impregnation
 Identification: Coloured identification tracers
 Twisting: In layers with filler
 Sheath: Glass fibre braid with impregnation
 Sheath: High temperature resistant silicone (optional)

Application

For wiring at high ambient temperatures and increased mechanical stress.
 These cables are fire resistant and offer at least 15 minutes insulation integrity in liquid steel or aluminium.

- Glass- and ceramic fabrications
- Industrial furnaces
- Electric heating systems

Technical Data

Temperature range: - 50 °C - + 1550 °C short term
 - 50 °C - + 400 °C temperature
 Rated voltage: 300/500 Volt
 Test voltage: Core/core 2 kV

Notes

→ Micaflame®-cables are also available in different cross sections, conductor materials and/or higher nominal voltages.
 → To guarantee a good dielectric strength in humid or wet areas, the cables are also available with a special high temperature resistant silicone sheath.

High temperature Cables

cross section [mm ²]	strand construction	maximum strandØ [mm]	CoreØ [mm] *	o.d. [mm] *	copper weight [kg/km]	weight approx. [kg/km]
2 x 1	32 x 0,203	1,35	4,4	10,2	20	106
3 x 1	32 x 0,203	1,35	4,4	11,0	30	143
4 x 1	32 x 0,203	1,35	4,4	12,1	40	181
5 x 1	32 x 0,203	1,35	4,4	13,3	50	230
2 x 1,5	30 x 0,254	1,61	4,7	10,7	29	121
3 x 1,5	30 x 0,254	1,61	4,7	11,5	44	164
4 x 1,5	30 x 0,254	1,61	4,7	12,6	58	208
5 x 1,5	30 x 0,254	1,61	4,7	14,0	73	266
2 x 2,5	50 x 0,254	2,11	5,2	11,8	49	150
3 x 2,5	50 x 0,254	2,11	5,2	12,5	74	206
4 x 2,5	50 x 0,254	2,11	5,2	13,8	99	265
5 x 2,5	50 x 0,254	2,11	5,2	15,4	124	332
2 x 4	56 x 0,3	2,58	5,6	12,7	77	188
3 x 4	56 x 0,3	2,58	5,6	13,6	116	262
4 x 4	56 x 0,3	2,58	5,6	15,0	154	337
5 x 4	56 x 0,3	2,58	5,6	16,6	193	415
2 x 6	84 x 0,3	3,22	6,3	14,1	118	238
3 x 6	84 x 0,3	3,22	6,3	15,1	176	336
4 x 6	84 x 0,3	3,22	6,3	16,5	235	448
5 x 6	84 x 0,3	3,22	6,3	18,5	295	565

*On request diameter tolerance according to intended purpose .



Special Cables

Temperature range -190°C up to + 1550°C

- Applications
- Traffic technologies
- Lighting
- Data transmission
- Control engineering
- Medical equipment
- Chemical industry

Apart from production of cables according to national and international standards we have an excellent experience in developing and manufacturing products to our customers' specifications.

In-house wire drawing, galvanizing, stranding, SiR-compounding as well as patented production procedures (PTFE-taping, Micaflame®-technology, HEW-Therm® heating cable technology) enables us not only to answer your questions but also to solve your technical problems.