

HELUTHERM® 600 / 600-ES

halogen-free / high-grade steel braiding



Technical data

- Special core insulation for high temperatures
- **Temperature range**
-60°C to +600°C
- **Permissible temperature**
+400°C to +600°C
(up to +700°C for short time)
- **Nominal voltage**
500 V
- **Test voltage**
2500 V
- **Minimum bending radius**
15x outer Ø

Cable structure

HELUTHERM® 600

- Stranded nickel conductor
- Double-insulated glass-fibre braiding, impregnated with silicone
- Braiding of special mineral fibres and additional impregnation with silicone

HELUTHERM® 600-ES

- As per above
- Additional braided high-grade steel, coverage approx. 80%

Properties

- Asbestos and cadmium-free

Note

- AWG sizes are approximate equivalent values. The actual cross section is in mm².
- At temperatures above 200°C during the first commissioning, the impregnating varnish may degrade and leave only pure glass fibers remaining as insulation. This can be observed as evaporation.

Application

HELUTHERM® 600

Cables are used in applications where extremely high connecting and ambient temperatures occur, e. g. in iron and steel works, rolling mills, foundries, glass and ceramic plants, in power construction as well as for wiring resistances in electrical heating equipment, furnaces and in thermoplastic forming. Good characteristics in the presence of moisture and chemical effects.

HELUTHERM® 600-ES

The robust braiding of high-grade steel protects the cable from aggressive atmospheres and mechanical stresses. The high-grade braiding also gives this cable an attractive appearance. The braided screen can also be used for earthing purposes.

CE = Product conforms with Low-Voltage Directive 2014/35/EU.

HELUTHERM® 600

Part no.	No. cores x cross-sec. mm ²	Conductor construction	Outer Ø app. mm	Conductor resistance at 20°C Ohm / km	Max. perm. current carrying capacity at +400°C (A)	Nickel weight kg / km	Weight app. kg / km	AWG-No.
51703	1 x 0,25	4 x 0,3	2,0	346	1,5	2,4	9,5	24
51704	1 x 0,5	7 x 0,3	2,3	175	2,5	4,8	11,5	20
51705	1 x 0,75	11 x 0,3	2,6	115	4,5	7,2	15,0	18
51706	1 x 1	14 x 0,3	2,8	88	5,5	9,6	17,8	17
51707	1 x 1,5	21 x 0,3	3,2	59	7	14,4	24,0	16
51708	1 x 2,5	35 x 0,3	3,7	35	10	24,0	36,0	14
51709	1 x 4	56 x 0,3	4,5	22	13,5	38,0	54,5	12
51710	1 x 6	84 x 0,3	6,0	14,6	16	58,0	77,0	10
51711	1 x 10	140 x 0,3	8,0	8,8	21	96,0	150,0	8
51712	1 x 16	228 x 0,3	9,1	5,5	28	154,0	225,0	6
51713	1 x 25	354 x 0,3	10,8	3,5	36	240,0	340,0	4
51714	1 x 35	495 x 0,3	13,0	2,5	58	336,0	440,0	2
51715	1 x 50	707 x 0,3	13,5	1,5	70	480,0	600,0	1

HELUTHERM® 600-ES

Part no.	No. cores x cross-sec. mm ²	Conductor construction	Outer Ø app. mm	Conductor resistance at 20°C Ohm / km	Max. perm. current carrying capacity at +400°C (A)	Nickel weight kg / km	Weight app. kg / km	AWG-No.
50475	1 x 0,5	7 x 0,3	3,2	175	2,5	4,8	21,0	20
50476	1 x 0,75	11 x 0,3	3,5	115	4,5	7,2	29,0	18
50477	1 x 1	14 x 0,3	3,7	88	5,5	9,6	38,0	17
50478	1 x 1,5	21 x 0,3	4,1	59	7	14,4	44,0	16
50479	1 x 2,5	35 x 0,3	4,6	35	10	24,0	56,0	14
50480	1 x 4	56 x 0,3	5,4	22	13,5	38,0	78,0	12
50481	1 x 6	84 x 0,3	6,9	14,6	16	58,0	112,0	10
50482	1 x 10	140 x 0,3	8,9	8,8	21	96,0	198,0	8
50483	1 x 16	228 x 0,3	10,0	5,5	28	154,0	281,0	6
50484	1 x 25	354 x 0,3	11,7	3,5	36	240,0	410,0	4
50485	1 x 35	495 x 0,3	15,1	2,5	58	336,0	536,0	2
50486	1 x 50	707 x 0,3	15,6	1,5	70	480,0	697,0	1

Dimensions and specifications may be changed without prior notice. (RK01)