

MULTITHERM® 400 -ES halogen-free, high-grade steel braiding



Technical data

- Special core insulation for high temperatures
- **Temperature range**
-60°C to +400°C
- **Permissible temperature**
+200°C to +400°C
(up to +500°C for short time)
- **Nominal voltage** 500 V
- **Test voltage** 2500 V
- **Minimum bending radius**
approx. 5x cable Ø

Cable construction

- Cu wires, finely stranded, nickel plated (ASTM B 355)
- Core insulation of braided glass-fibre impregnated with silicone
- Second core insulation of glass-fibre braiding impregnated with silicone
- Overall lay up of cores
- Core identification according to colour coding listed below
- Common outer sheath of glass-fibre braiding impregnated with silicone
- Sheath colour grey
- Overall screen of braided high-grade steel, coverage approx. 80%

Properties

- **Asbestos and cadmium-free**

Colour code

- No. of cores **with** protective earth conductor
 - 3 = gn-ye/bl/bn
 - 4 = gn-ye/bk/bl/bn
 - 5 = gn-ye/bk/bl/bn/wh
 - 6 = gn-ye/bk/bl/bn/wh/rd
 - 7 = gn-ye/bk/bl/bn/wh/rd/gy
- No. of cores **without** protective earth conductor
 - 2 = bk/bn
 - 3 = bk/bl/bn
 - 4 = bk/bl/bn/wh
 - 5 = bk/bl/bn/wh/rd
 - 6 = bk/bl/bn/wh/rd/gy
 - 7 = bk/bl/bn/wh/rd/gy/gn

Note

- Please enquire for further configurations and core cross sections for your requirements.

Application

Where extremely high connecting and ambient temperatures occur, e.g. in iron and steel works, rolling mills, foundries, glass and ceramic plants, in power plant construction, in the chemical industry, nuclear technology, crude oil engineering, in technical applications in medicine, as well as for wiring resistances in electrical heating equipment, furnaces and machinery in thermoplastic forming. Due to the special construction of the cable, a maximum temperature of approx. 220°C is recommended for use in damp environments. Applications at temperatures above this should be used in dry environments only. The robust braiding of high-grade steel protects the cable from aggressive atmospheres and mechanical stresses. The braided screen can also be used for earthing purposes.

CE – The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

Part No.	No. cores x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Maximum permissible current carrying capacity at +340°C (A)	Weight ca. kg / km	AWG-No.
52018	2 x 0,5	7,1	10,0	3,3	84,0	20
52019	3 x 0,5	7,3	15,0	3,1	89,0	20
52020	4 x 0,5	8,4	19,0	3,0	111,0	20
52021	5 x 0,5	8,9	25,0	2,9	126,0	20
52022	6 x 0,5	9,5	30,0	2,8	146,0	20
52023	7 x 0,5	9,6	34,0	2,7	158,0	20
52024	2 x 0,75	7,6	14,4	5,1	95,0	18
52025	3 x 0,75	7,9	21,6	5,1	109,0	18
52026	4 x 0,75	8,9	29,0	4,9	131,0	18
52027	5 x 0,75	9,7	36,0	4,7	157,0	18
52028	6 x 0,75	10,4	43,0	4,5	177,0	18
52029	7 x 0,75	10,6	50,0	4,4	190,0	18
52030	2 x 1	7,8	19,0	7,0	105,0	17
52031	3 x 1	8,7	29,0	6,7	126,0	17
52032	4 x 1	9,2	38,0	6,4	148,0	17
52033	5 x 1	10,0	48,0	6,2	174,0	17
52034	6 x 1	10,7	58,0	6,0	198,0	17
52035	7 x 1	10,9	67,0	5,8	212,0	17
52036	2 x 1,5	8,9	29,0	9,4	132,0	16
52037	3 x 1,5	9,2	43,0	9,0	153,0	16
52038	4 x 1,5	10,0	58,0	8,6	183,0	16
52039	5 x 1,5	10,9	72,0	8,3	212,0	16
52040	6 x 1,5	11,6	88,0	8,0	241,0	16
52041	7 x 1,5	11,9	101,0	7,8	259,0	16

Part No.	No. cores x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Maximum permissible current carrying capacity at +340°C (A)	Weight ca. kg / km	AWG-No.
52042	2 x 2,5	10,1	48,0	12,2	191,0	14
52043	3 x 2,5	10,6	72,0	11,6	213,0	14
52044	4 x 2,5	11,5	96,0	11,2	256,0	14
52045	5 x 2,5	12,7	120,0	10,8	307,0	14
52046	6 x 2,5	14,9	144,0	10,4	359,0	14
52047	7 x 2,5	15,1	168,0	10,1	388,0	14
52048	2 x 4	11,9	77,0	16,0	260,0	12
52049	3 x 4	12,3	115,0	15,3	303,0	12
52050	4 x 4	15,1	154,0	14,6	378,0	12
52051	5 x 4	15,6	192,0	14,1	458,0	12
52052	7 x 4	16,6	270,0	13,3	593,0	12
52053	3 x 6	16,3	173,0	20,0	442,0	10
52054	4 x 6	18,3	230,0	19,0	567,0	10
52055	5 x 6	19,8	288,0	18,0	671,0	10
52056	4 x 10	22,1	384,0	26,0	866,0	8
52057	4 x 16	26,6	615,0	34,0	1203,0	6

Dimensions and specifications may be changed without prior notice.