

# 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 structure

- 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.
- **unscreened analogue type:**  
**MULTITHERM® 400**  
see page E 13

## 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 2006/95/EG.

Part no.	No. cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Max. perm. current carrying capacity at +340°C (A)	Weight approx. 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	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	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	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	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	241,0	16
52041	7 x 1,5	11,9	101,0	7,8	259,0	16
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

Part no.	No. cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Max. perm. current carrying capacity at +340°C (A)	Weight approx. kg / km	AWG-No.
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	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	442,0	10
52054	4 x 6	18,3	230,0	19	567,0	10
52055	5 x 6	19,8	288,0	18	671,0	10
52056	4 x 10	22,1	384,0	26	866,0	8
52057	4 x 16	26,6	615,0	34	1203,0	6

Dimensions and specifications may be changed without prior notice. (RE01)