

SIMH-FR FE 180
HIGH TEMPERATURE, RESISTANT TO FIRE SILICONE CABLES



APPLICATION: These cables fields of use as a control and power supply cable they are fire proof and halogen free cables which, on the basis of a fixed operating mode, can continue with the supply of a power for a period of 180 minutes under the existing fire conditions (at a temperature of 750°C and under the flames). Also these cables shall satisfy EN50200 test which is a fire resistant with mechanical shock test (under the conditions at 842°C and mechanical shock) by the classes PH15-PH30-PH60-PH90, if it has requested, Because of their unique features, they can be used; on the fire alarm systems, on the equipment and devices which are connected to the fire alarm devices, in the environments which have no corrosive gases are emitted in the event of fire. These cables are used at schools, airports, hospitals, etc.

CABLE DESIGN

Conductor : Flexible copper wires, plain;
IEC 60228 Class 5, TS/DIN EN 60228 Class 5

Insulation : Speacial silicone rubber compound

Core identification : According to TS HD 308 S2 & VDE 0293-308
: Acc. to TS/DIN EN 50334 black cores with
white numerals with green/yellow after 5 cores

Lay-up : Cores laid up in layers of optimum pitch

Outer sheath : Speacial silicone rubber compound

Sheath colour : RAL 2009, Orange

TECHNICAL DATA

Standard : VDE 0250, DIN VDE 0282-15 and
TS HD 22.15 S1
(Designed according to)

Insulation resistance : Min. 20 MΩ.km

Temp. at conductor : + 180 °C

Short circuit tempetarure : +200°C

Rated voltage U_0/U : 300 / 500V ; 450/750 V $\geq 4,0$ mm²

Test voltage (AC 50 Hz) : 2000 V ; 2500 V $\geq 4,0$ mm²

Temperature range : Fixed : - 60 °C ~ + 180 °C
: Mobile : - 25 °C ~ + 180 °C

Min. bending radius : Fixed : 4 x D
: Mobile : 7,5 x D

Flame retardance test : IEC 60332-1 & EN 50265-2-1
IEC 60332-3 & EN 50266-2-4

Insulation integrity : IEC 60331 , VDE 0472-814

*Fire resistant with mechanical shock : DIN EN 50200 ; PH 15 (15 minutes)
: PH 30 (30 minutes)
: PH 60 (60 minutes)
: PH 90 (90 minutes)

*Upon request

Cross Sections

Part-number	No. of cores x Cross section (mm ²)	Approx. Outer Diameter (mm)	Copper Weight (Kg/km)	Approx. Cable Weight (Kg/km)
1711 05 002	2x0.50	5,7	9	45
1711 05 003	3x0.50	6,0	14	55
1711 05 004	4x0.50	6,7	19	70
1711 05 005	5x0.50	7,3	24	80
1711 05 006	6x0,50	8,1	29	85
1711 05 007	7x0.50	8,1	33	90

Part-number	No. of cores x Cross section (mm ²)	Approx. Outer Diameter (mm)	Copper Weight (Kg/km)	Approx. Cable Weight (Kg/km)
1711 06 002	2x0.75	6,3	14	55
1711 06 003	3x0.75	6,8	22	70
1711 06 004	4x0.75	7,5	29	90
1711 06 005	5x0.75	8,3	36	110
1711 06 006	6x0.75	9,0	43	115
1711 06 007	7x0.75	9,0	50	130

Cross Sections

Part-number	No. of cores x Cross section (mm ²)	Approx. Outer Diameter (mm)	Copper Weight (Kg/km)	Approx. Cable Weight (Kg/km)
1711 07 002	2x1.0	6,7	19	70
1711 07 003	3x1.0	7,1	29	85
1711 07 004	4x1.0	7,7	38	100
1711 07 005	5x1.0	8,6	48	125
1711 07 006	6x1.0	9,5	58	150
1711 07 007	7x1.0	9,5	67	160

Part-number	No. of cores x Cross section (mm ²)	Approx. Outer Diameter (mm)	Copper Weight (Kg/km)	Approx. Cable Weight (Kg/km)
1711 09 002	2x2.5	8,9	48	130
1711 09 003	3x2.5	9,4	72	160
1711 09 004	4x2.5	10,5	96	200
1711 09 005	5x2.5	11,6	120	250
1711 09 006	6x2.5	12,6	144	300
1711 09 007	7x2.5	12,6	168	320
1711 09 012	12x2.5	17,0	288	580
1711 10 002	2x4	10,6	77	190
1711 10 003	3x4	11,2	115	240
1711 10 004	4x4	12,5	154	280
1711 10 005	5x4	13,9	192	355
1711 10 006	6x4	15,4	230	450
1711 10 007	7x4	15,4	269	460
1711 11 002	2x6	12,6	116	270
1711 11 003	3x6	13,6	173	340
1711 11 004	4x6	15,1	230	415
1711 11 005	5x6	16,6	288	520
1711 11 007	7x6	18,0	403	680
1711 12 002	2x10	16,2	192	380
1711 12 003	3x10	17,6	288	600
1711 12 004	4x10	19,6	384	700
1711 12 005	5x10	22,0	480	910

Part-number	No. of cores x Cross section (mm ²)	Approx. Outer Diameter (mm)	Copper Weight (Kg/km)	Approx. Cable Weight (Kg/km)
1711 08 002	2x1.5	7,5	29	90
1711 08 003	3x1.5	7,9	43	110
1711 08 004	4x1.5	8,8	58	145
1711 08 005	5x1.5	9,6	72	170
1711 08 006	6x1.5	10,4	86	200
1711 08 007	7x1.5	10,4	101	210
1711 08 008	8x1.5	11,5	116	260
1711 08 010	10x1.5	12,6	144	310
1711 08 012	12x1.5	14,1	173	350
1711 08 014	14x1.5	15,0	202	405
1711 08 016	16x1.5	15,8	231	485
1711 08 018	18x1.5	16,8	260	565
1711 08 020	20x1.5	17,7	288	610
1711 08 024	24x1.5	19,9	346	770

Part-number	No. of cores x Cross section (mm ²)	Approx. Outer Diameter (mm)	Copper Weight (Kg/km)	Approx. Cable Weight (Kg/km)
1711 13 002	2x16	19,2	308	390
1711 13 003	3x16	20,4	462	510
1711 13 004	4x16	22,5	616	730
1711 13 005	5x16	25,4	770	960
1711 14 002	2x25	23,4	480	710
1711 14 003	3x25	25,6	720	1100
1711 14 004	4x25	28,0	960	1580
1711 14 005	5x25	31,5	1200	1710
1711 15 002	2x35	26,5	672	1130
1711 15 003	3x35	28,2	1008	1500
1711 15 004	4x35	31,8	1344	2170
1711 16 004	4x50	38,0	1920	2570
1711 17 004	4x70	40,5	2508	3450
1711 18 004	4x95	49,2	3648	4925