

**SIMH-FR/PF FE 180**  
**HIGH TEMPERATURE, TWISTED PAIR RESISTANT TO FIRE**  
**SILICONE CABLES**



**APPLICATION:** These twisted pairs (pair form) 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, lighting 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 metro, 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 Uo/U : 300 / 500V ;

Test voltage (AC 50 Hz) : 2000 V ;

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 <sup>2</sup> )	Approx. Outer Diameter (mm)	Copper Weight (Kg/km)	Approx. Cable Weight (Kg/km)
1712 05 002	2x2x0.50	9,1	19	105
1712 05 004	4x2x0.50	11,2	38	155
1712 05 006	6x2x0.50	13,4	57	175
1712 05 010	10x2x0.50	14,0	95	250
1712 05 012	12x2x0,50	15,5	115	305
1712 05 016	16x2x0.50	18,4	153	400
1712 05 020	20x2x0,50	20,1	192	455