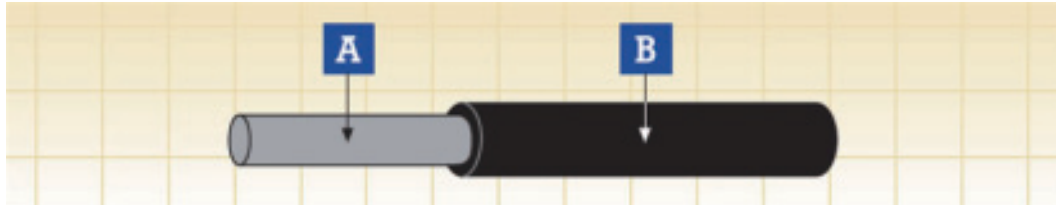


## FIREROL High Temperature Single Core Cables with Reinforced Insulation 3.6/6 kV EN 50382-2 (FRL-HT-6SURI)



A. Conductor B. Insulation

### Construction

#### Conductor

Extra flexible tinned annealed copper wires (red copper only for 150 °C core temperature) class 6 according to HD 383

#### Insulation

Silicon rubber according to EN 50382-1 (EI 112)

### Electrical & Mechanical Properties

Nominal Voltage

3.6/6 kV

Max. Conductor Temperature

120 °C / 150 °C (fixed installation)

Min. Permissible Ambient Temperature

-25 °C / -40 °C (fixed installation)

Bending Radius

3 x Overall Diameter (D < 12mm);  
4 x Overall Diameter (D > 12mm)

### Chemical & Environmental Properties

EN 60684-2

No fluorine

EN 50305; EN 60811-2-1

Resistance to mineral oil & fuel oil, acid & alkali

EN 50305

Resistance to ozone

### Fire Performance for Rolling Stock Application

EN 50306-2

Hazard levels HL1, HL2/HL3, HL4

DIN 5510-2

Protection level 1/2/3/4

BS 6853

Interior use 1a, 1b, II; Exterior use 1a, 1b, II

NF F 16-101

F0

### Fire Performance in General

EN 50265-2-1; IEC 60332-1-2; NF C 32-070 2.1 (C2)

Vertical flame propagation for a single insulated wire or cable

EN 50266-2-4 + EN 50305; IEC 60332-3-24;

Vertical flame spread of vertically mounted bunched wires or cables

NF C 32-070 2.2 (C1); VDE 0472 Teil 804

EN 50268-2; IEC 61034-2; NF C 32-073 ;

Low Smoke Emission

NF C 20-902; NF F 16 101; VDE 0472 Teil 816

Halogen Free

EN 50267-2-1; IEC 60754-1; NF C 32-074;

NF C 20-454; VDE 0472 Teil 815

Low Corrosivity (Acidity & Conductivity)

EN 50267-2-2/3; IEC 60754-2; NF C 32-074;

NF C 20-453; VDE 0472 Teil 813

Low Toxicity

EN 50305; NF X 70-100; NF F 63 808; TM1-04; BS6853

Smoke Index

NF F 63 808; BS6853; NF F 16 101

# EN 50382 High Temperature Rolling Stock Cables

FRL-HT-6SURI 3.6/6 kV

Nominal Cross-Sectional Area	Conductor Diameter (a)	Min. Mean Thickness of Insulation	Overall Diameter		Weight	Max. Conductor Resistance		Min. Insulation Resistance	
			Min.	Max.		Tinned Conductor	Plain Conductor	Min. Insulation Resistance	
						20 °C	20 °C	20 °C	150 °C
mm <sup>2</sup>	mm	mm	mm	mm	kg/km	Ω/km	Ω/km	MΩ x km	MΩ x km
50	9.2	3.0	15.2	17.8	560	0.393	0.386	340	0.70
70	11.0	3.0	16.9	19.8	770	0.277	0.272	300	0.60
95	12.5	3.0	18.3	21.4	970	0.210	0.206	270	0.55
120	14.2	3.1	20.1	23.5	1200	0.164	0.161	250	0.50
150	15.8	3.1	21.6	25.3	1480	0.132	0.129	220	0.45
185	17.5	3.2	23.4	27.4	1800	0.108	0.106	210	0.40

(a)= For information, indicative only

