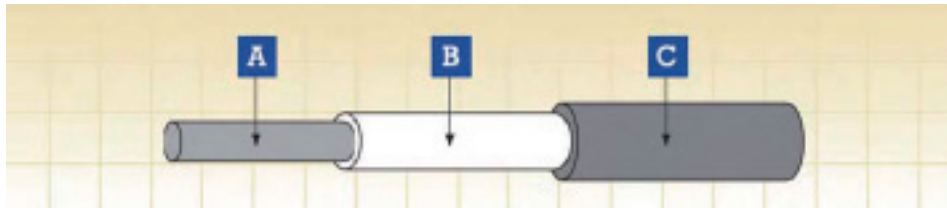


## FIREROL Standard Wall Single Core Sheathed Cables

### 1500 V, 3000 V

### NF F 63-826 (FRF-SW-1.5S/FRF-SW-3S)



A. Conductor B. Insulation C. Sheath

### Application

These cables are used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor, suitable for use in control, auxiliary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

### Construction

#### Conductor

Stranded tinned copper wires to IEC 60228 Class 5

#### Insulation

Halogen free compound

#### Sheath

Halogen free compound

### Electrical & Mechanical Properties

Nominal Voltage	1500 V, 3000 V
Max. Conductor Temperature	90 °C/105 °C
Temperature Range	-25 °C~90 °C
Bending Radius	4 × Overall Diameter

### Standards

NF F 63-826  
NF F 16-101  
BS 6853

### 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; NF C 32-070 2.2 (C1); VDE 0472 Teil 804	Vertical flame spread of vertically mounted bunched wires or cables
EN 50268-2; IEC 61034-2; NF C 32-073 ; NF C 20-902; NF F 16 101; VDE 0472 Teil 816	Low Smoke Emission
EN 50267-2-1; IEC 60754-1; NF C 32-074; NF C 20-454; VDE 0472 Teil 815	Halogen Free
EN 50267-2-2/3; IEC 60754-2; NF C 32-074; NF C 20-453; VDE 0472 Teil 813	Low Corrosivity (Acidity & Conductivity)
EN 50305; NF X 70-100; NF F 63 808; TM1-04; BS6853 NF F 63 808; BS6853; NF F 16 101	Low Toxicity Smoke Index

# NF F 63-826 Rolling Stock Cables



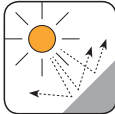
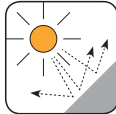











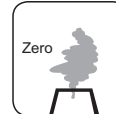
## FRF-SW-1.5S 1500 V

Nominal Cross-Sectional Area	Number & Nominal Diameter of Strands	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter		Weight
				Min.	Max.	
mm <sup>2</sup>	No/mm	mm	mm	mm	mm	kg/km
1.5	30/0.25	2.3	1.5	8.9	9.9	130
2.5	50/0.25	2.3	1.5	9.3	10.3	145
10.0	80/0.40	2.3	1.8	11.9	13.3	290
50.0	396/0.40	2.5	2.2	18.3	20.3	850
120.0	608/0.50	2.8	2.6	25.0	27.5	1770
150.0	756/0.50	2.8	2.6	26.7	29.3	2150
185.0	925/0.50	2.9	2.8	29.0	31.8	2530

## FRF-SW-3S 3000V

Nominal Cross-Sectional Area	Number & Nominal Diameter of Strands	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter		Weight
				Min.	Max.	
mm <sup>2</sup>	No/mm	mm	mm	mm	mm	kg/km
150.0	756/0.50	3.6	2.6	28.2	30.9	2270
185.0	925/0.50	3.7	2.8	30.5	33.4	2660



 Impact Resistant	 Highly Flexible	 UV Resistant	 Ozone Resistant	 Abrasion Retardant	 Cold Resistant	 Resistance To Soldering Heat	 Acid & Alkaline Resistant
 IRM 903 Fuel Oil Resistant	 IRM 902 Mineral Oil Resistant	 Fire Retardant NF C32-070-2.2(C1) IEC60332-3-24/EN50266-2-4	 Flame Retardant NF C32-070-2.1(C2) IEC60332-1-2/EN50266-2-1	 Low Toxicity EN 50305; NF X70-100/NF F63 808/TM1-04/BS 6853	 Low Corrosivity IEC60754-2/EN50267-2-2/3 NF C32-074/NF C20-453	 Low Smoke Emission IEC 61034-2 / EN 50268-2 NF C32-073/NF C 20-902	 Zero Zero Halogen IEC 60754-1/EN 50267-2-1 NF C20-454