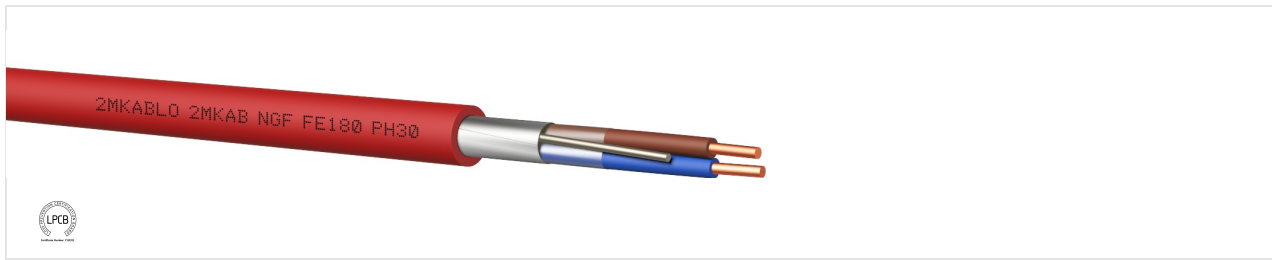# 2MKAB NGF FE180 PH30

Areas of Use

Fire-resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. Fire-resistant products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Insulation	Fire Resistant Silicon Rubber (BS 7655 EI2)
Conductor	Annealed Solid Copper (IEC/EN 60228 Class 1)
Lay-up	Cores are stranded in layers
Separator	PET Foil
Drain Wire	0.80 mm Solid Tinned Copper
Screen	Al-PET Foil
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR / LSZH / LSOH / FRNC, BS 7655-6 LTS3), RAL 3000 - Red or RAL 9003 - White
Core Colors	BS 7671 / HD308 S2

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Insulation Resistance	>200 M.Ωxkm
Temperature Range	Fixed: -30 °C........+90 °C, Flexible: -5 °C ....+60 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, BS 6387 C,W,Z, EN 50200 PH30
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter
Conductor Resistance	1.50 mm² - ≤12 Ω/km; 2.50 mm² - ≤7.4 Ω/km
Smoke Density	IEC 61034-1/2

Cross Section

Configuration / Cross-Section (mm/mm²)	Cable Diameter (mm) (± 5%)	Copper Weight (kg / km)	~ Cable Weight (kg / km)
2x1.50	6.7	31	67
3x1.50	7.1	43	85
4x1.50	7.9	56	109
2x2.50	7.9	49	96

3x2.50	8.5	70	128
4x2.50	9.2	93	160