



Low smoke & fume cables

with reduced fire propagation properties



Rubber and Plastic Compounds



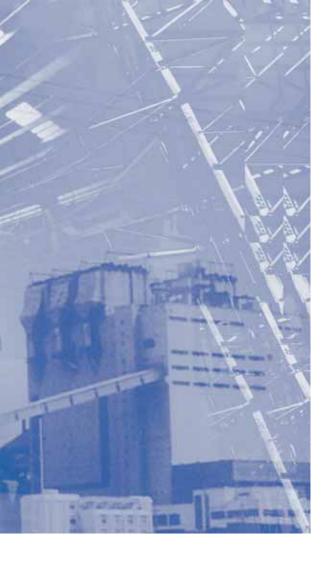
Enamelled Wires



HELLENIC CABLES S.A. is a leading manufacturer of cables for over fifty five years, and is the sole producer of enamelled copper wire in Greece. The company's wide product range, which is sold internationally under the CABLEL® trademark, extends to PVC, EPR and XLPE insulated power cables, rated up to 400 kV, low smoke halogen free cables, telecommunication, signal and data cables with copper conductors or optical fibres and includes fire retardant halogen free plastic and elastomer compounds. Wires and cables can be supplied to a variety of international standards, such as: VDE, CEI, NF, SEN, BS, UL, NEMA, JIS, ASTM, DIN and ELOT. Many of the company's products are certified from ELOT, BASEC, VDE, IMQ, NF-USE, RAILTRACK, KEMA and DNV.

All CABLEL® enamelled wires are manufactured and tested to IEC 60317-0-1; customers may also request any other recognised international standard. Technical know-how from world leaders such as FURUKAWA ELECTRIC, combines with continuous investment in state-of-the-art machinery, to ensure levels of efficiency and quality which meet the strictest standards.

The company's Quality Management System is certified to ISO 9001:2008 and its Environmental Management System to ISO 14001:2004. Our commitment to quality and sustainable development principles has been a key factor in enabling **HELLENIC CABLES S.A.** to establish a strong market position internationally. The company's highly experienced technical and managerial staff, have a strong commitment to technological excellence and outstanding quality, which ensures that the user of **CABLEL®** products has made a **reliable choice**.



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Our range of low smoke fire retardant cables includes cables for marine applications and other low and medium voltage cable types such as XLPE/LSF/SWA/LSF, XLPE/CWS/LSF etc.

XLPE INSULATED HALOGEN-FREE FLAME RETARDANT POWER CABLES



- 1. Solid or stranded copper conductor 2. XLPE insulation
- 3. Thermoplastic LSF outersheath

CABLE TYPE: NHXMH NOMINAL VOLTAGE: 300/500 V SPECIFICATION: VDE 0250-214

In case of fire, cables exhibit low toxic fume and halogen gas emissions (HCL<0,5%) and low smoke density. Cables are flame retardant to VDE 0472-804/C and IEC 60332-3 Cat "C".

Outersheath colour: Grey

Maximum conductor continuous operating temperature: 70 °C.

Safety cables suitable for indoor and outdoor applications requiring enhanced protection for people and equipment in case of fire. Suitable for indoor applications in or under plaster or in concrete (with exception of concrete applied with compression or vibration) and masonry, in dry, damp or wet conditions.

No OF CORES x CROSS-SECTION RANGE

1 core 1,5 mm² to 16 mm² 2-5 core 1,5 mm² to 35 mm² 7 core 1,5 mm² & 2,5 mm²



XLPE INSULATED HALOGEN-FREE FLAME RETARDANT AND FIRE RESISTANT POWER CABLES



- 1. Solid or stranded copper conductor
- 2. Mica tape
- 3. XLPE insulation
- 4. Inner covering
- 5. Thermoplastic LSF outersheath

CABLE TYPE: NOMINAL VOLTAGE:

300/500 V **SPECIFICATION:** VDE 0250-214, DIN 4102-12

(N)HXMH FE 180 E30

Cables meet DIN 4102 Part 12 requirements for E30 circuit integrity.

In case of fire, cables exhibit low toxic fume and halogen gas emissions (HCL<0.5%) and low smoke density. Cables have insulation integrity acc. to VDE 0472-814 (FE 180) and IEC 60331 and are flame retardant to VDE 0472-804/C and IEC 60332-3 Cat "C".

Outersheath colour: Orange

Maximum conductor continuous operating temperature: 70 °C.

Applications

Safety cables suitable for indoor and outdoor applications requiring enhanced protection for people and equipment in case of fire. Suitable for indoor applications in or under plaster or in concrete (with exception of concrete applied with compression or vibration) and masonry, in dry, damp or wet conditions.

No OF CORES x CROSS-SECTION RANGE

1 core 1,5 mm² to 16 mm² 2-5 core 1,5 mm2 to 35 mm2 7 core 1,5 mm² & 2,5 mm²

EPR INSULATED HALOGEN-FREE FLAME RETARDANT AND **FIRE RESISTANT POWER AND CONTROL CABLES**



- 1. Solid or stranded copper conductor
- 2. Mica tape
- 3. Elastomer insulation
- 4. Inner covering5. Elastomer LSF outersheath

CABLE TYPE: NHXHX FE 180 E30 NOMINAL VOLTAGE:

600/1000 V **SPECIFICATION:** VDE 0266, DIN 4102-12

Cables meet DIN 4102 Part 12 requirements for E30 circuit integrity.

In case of fire, cables exhibit low toxic fume and halogen gas emissions (HCL<0.5%) and low smoke density. Cables have insulation integrity acc. to VDE 0472-814 (FE 180) and IEC 60331 and are flame retardant to VDE 0472-804/C and IEC 60332-3 Cat "C".

Outersheath colour: Orange

Maximum conductor continuous operating temperature: 90 °C.

Applications

Safety cables suitable for indoor and outdoor applications requiring enhanced protection for people and equipment in case of fire. For outdoor installations the cables should be protected against direct sunlight and direct contact with earth or water. Protective ducts may be used but not in waterlogged conditions.

No OF CORES x CROSS-SECTION RANGE

1 core 1,5 mm² to 500 mm² 2-4 core 1,5 mm² to 500 mm² 5 core 1,5 mm² to 16 mm² ≥7 to 19 core1,5 mm² to 4 mm² ≥19 to 40 core1,5 mm² & 2,5 mm²

EPR INSULATED HALOGEN-FREE FLAME RETARDANT AND **FIRE RESISTANT POWER AND CONTROL CABLES**



- 1. Solid or stranded copper conductor
- 2. Mica tape
- 3. Elastomer insulation
- 4. Inner covering5. Thermoplastic LSF outersheath

CABLE TYPE: NOMINAL VOLTAGE: SPECIFICATION:

NHXH FE 180 E30 600/1000 V VDE 0266, DIN 4102-12

Cables meet DIN 4102 Part 12 requirements for E30 circuit integrity.

In case of fire, cables exhibit low toxic fume and halogen gas emissions (HCL<0.5%) and low smoke density. Cables have insulation integrity acc. to VDE 0472-814 (FE 180) and IEC 60331 and are flame retardant to VDE 0472-804/C and IEC 60332-3 Cat "C".

Outersheath colour: Orange

Maximum conductor continuous operating temperature: 90 °C.

Applications

Safety cables suitable for indoor and outdoor applications requiring enhanced protection for people and equipment in case of fire. For outdoor installations the cables should be protected against direct sunlight and direct contact with earth or water. Protective ducts may be used but not in waterlogged conditions.

No OF CORES x CROSS-SECTION RANGE

1 core 1,5 mm² to 500 mm² 2-4 core 1,5 mm² to 500 mm² 5 core 1.5 mm² to 16 mm² ≥ 7 to 19 core1.5 mm² to 4 mm² ≥ 19 to 40 core1,5 mm² & 2,5 mm²

EPR INSULATED HALOGEN-FREE FLAME RETARDANT AND **FIRE RESISTANT POWER AND CONTROL CABLES**



- 1, Solid or stranded copper conductor
- 2. Elastomer insulation
- 3. Inner covering4. Thermoplastic LSF outersheath

CABLE TYPE: NOMINAL VOLTAGE:

600/1000 V VDE 0266, DIN 4102-12 SPECIFICATION:

(N)HXH FE 180 E90

Cables meet DIN 4102 Part 12 requirements for E90 circuit integrity.

In case of fire, cables exhibit low toxic fume and halogen gas emissions (HCL<0.5%) and low smoke density. Cables have insulation integrity acc. to VDE 0472-814 (FE 180) and IEC 60331 and are flame retardant to VDE 0472-804/C and IEC 60332-3 Cat "C".

Outersheath colour: Orange

Maximum conductor continuous operating temperature: 90 °C.

Applications

Safety cables suitable for indoor and outdoor applications requiring enhanced protection for people and equipment in case of fire. For outdoor installations the cables should be protected against direct sunlight and direct contact with earth or water. Protective ducts may be used but not in waterlogged conditions.

No OF CORES x CROSS-SECTION RANGE

1 core 1,5 mm² to 500 mm² 2-4 core 1,5 mm² to 500 mm² 5 core 1,5 mm² to 16 mm² ≥7 to 19 core 1,5 mm² to 4 mm² ≥19 to 40 core 1,5 mm² & 2,5 mm²

XLPE INSULATED HALOGEN-FREE FLAME RETARDANT POWER AND CONTROL CABLES



- 1. Solid or stranded copper conductor
- 2. XLPE insulation
- 3. Inner covering
- 4. Thermoplastic LSF outersheath

CABLE TYPE: N2XH / N2XCH NOMINAL VOLTAGE: 600/1000 V

SPECIFICATION: VDE 0276 Part 604

In case of fire, cables exhibit low toxic fume and halogen gas emissions (HCL<0,5%) and low smoke density. Cables are flame retardant to VDE 0472-804/C and IEC 60332-3 Cat "C". N2XCH is halogen-free cable with concentric conductor.

Outersheath colour: Black

Maximum conductor continuous operating temperature: 90 °C.

Applications

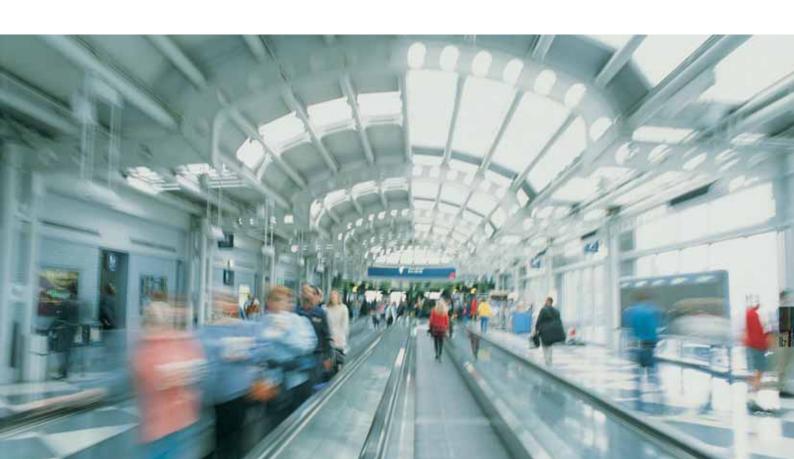
Safety cables suitable for indoor and outdoor applications requiring enhanced protection for people and equipment in case of fire. For outdoor installations the cables should be protected against direct sunlight and direct contact with earth or water. Protective ducts may be used but not in waterlogged conditions.

N2XH - No OF CORES x CROSS-SECTION RANGE

1 core 1,5 mm² to 500 mm² 2-4 core 1,5 mm² to 500 mm² 5 core 1,5 mm² to 16 mm² ≥ 7 to 19 core 1,5 mm² to 4 mm² ≥ 19 to 40 core 1,5 mm² & 2,5 mm²

N2XCH - No OF CORES x CROSS-SECTION RANGE

2-4 core 1,5 mm 2 to 500 mm 2 5 core 1,5 mm 2 to 16 mm 2 \geq 7 to 19 core 1,5 mm 2 to 4 mm 2 \geq 19 to 40 core 1,5 mm 2 & 2,5 mm 2



XLPE INSULATED HALOGEN-FREE FLAME RETARDANT AND **FIRE RESISTANT POWER AND CONTROL CABLES**



- 1. Solid or stranded copper conductor
- 2. Mica tape
- 3 XLPE insulation
- 4. Inner covering5. Thermoplastic LSF outersheath

CABLE TYPE: NOMINAL VOLTAGE:

N2XH FE 180 E30 600/1000 V SPECIFICATION: VDE 0266, DIN 4102-12

Cables meet DIN 4102 Part 12 requirements for E30 circuit integrity.

In case of fire, cables exhibit low toxic fume and halogen gas emissions (HCL<0,5%) and low smoke density. Cables have insulation integrity acc. to VDE 0472-814 (FE 180) and IEC 60331 and are flame retardant to VDE 0472-804/C and IEC 60332-3 Cat "C".

Outersheath colour: Orange

Maximum conductor continuous operating temperature: 90 °C.

Applications

Safety cables suitable for indoor and outdoor applications requiring enhanced protection for people and equipment in case of fire. For outdoor installations the cables should be protected against direct sunlight and direct contact with earth or water. Protective ducts may be used but not in waterlogged conditions.

No OF CORES x CROSS-SECTION RANGE

1 core 1.5 mm2 to 500 mm2 2-4 core 1,5 mm² to 500 mm² 5 core 1,5 mm² to 16 mm² \geq 7 to 19 core 1,5 mm² to 4 mm² ≥19 to 40 core 1,5 mm² & 2,5 mm²

Low smoke and fume cables with reduced fire propagation properties

XLPE INSULATED HALOGEN-FREE FLAME RETARDANT AND **FIRE RESISTANT POWER AND CONTROL CABLES**



- 1. Solid or stranded copper conductor 2. Mica tape
- 3. XLPE insulation
- 4. Inner covering5. Concentric conductor
- 6. Thermoplastic LSF outersheath

CABLE TYPE: N2XCH FE 180 600/1000 V **NOMINAL VOLTAGE: SPECIFICATION: VDE 0266**

In case of fire, cables exhibit low toxic fume and halogen gas emissions (HCL<0.5%) and low smoke density. Cables have insulation integrity acc. to VDE 0472-814 (FE 180) and IEC 60331 and are flame retardant to VDE 0472-804/C and IEC 60332-3 Cat "C".

Outersheath colour: Orange

Maximum conductor continuous operating temperature: 90 °C.

Applications

Safety cables suitable for indoor and outdoor applications requiring enhanced protection for people and equipment in case of fire. For outdoor installations the cables should be protected against direct sunlight and direct contact with earth or water. Protective ducts may be used but not in waterlogged conditions.

No OF CORES x CROSS-SECTION RANGE

2-4 core 1,5 mm² to 500 mm² 5 core 1,5 mm² to 16 mm² \geq 7 to 19 core1,5 mm² to 4 mm² ≥ 19 to 40 core1,5 mm² & 2.5 mm²



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