EN 60332-3-24 NHXCH FE180-E90 0.6/1kV Cable - 1.5mm² to 240mm²



Description

EN 60332-3-24 NHXCH is a low-voltage, low-smoke zero-halogen fire-safety power cable featuring a concentric copper wire screen, engineered to maintain electrical functionality during a fire to protect human life and essential infrastructure. The cable features a class one solid or class two stranded bare annealed copper core insulated with a cross-linked halogen-free polymer, which is protected by a high-performance, flame-resistant glass-mica tape or a specialised ceramic compound layer extruded directly over the conductors. Multi-core variants are bound symmetrically with a flame-retardant, halogen-free filler layer, wrapped in a concentric screen of copper wires and counter-helix copper tape in a heavy-duty, thermoplastic polyolefin outer sheath.

Manufactured in accordance with EN 60332-3-24 standard for category C bunched flame-spread resistance. It features an insulation integrity rating of FE180, guaranteeing that the core insulation will remain intact for at least one hundred and eighty minutes of direct fire exposure under standard testing conditions, and can achieve functional system integrity ratings ofE90 when paired with approved technical supporting frameworks.

Installers must maintain standard minimum bending radii, requiring a limit of at least twelve times the overall cable diameter for multi-core configurations and fifteen times the overall diameter for single-core layouts during standard routing and active pulling to prevent internal compression of the conductors. Fire resistant to FE 180 and Circuit Integrity to E 90.

Key Features

Voltage Rating
600/1000 Volts

Minimum Bending Radius
12 x Overall Diameter

Flame Retardancy
BS EN/IEC 60332-3-24 (Cat C)

Temperature Limits
Fixed: -5°C to +90°C

Core Colours

2 cores: Brown, Blue

3 cores: Brown, Black, Grey

4 cores: Brown, Black, Grey, Blue

5 cores: Brown, Black, Grey, Blue, Black

7 core and above: Black with White numbers

Standards

- DIN VDE 0472-814
- DIN VDE 0266
- DIN VDE 0276-604
- BS EN/IEC 60331
- BS EN/IEC 60228
- BS EN/IEC 60332-3-24 (cat C)

Construction

- **Conductor**: Class 1 or 2 Copper
- **Insulation**: Low Smoke Zero Halogen (LSZH)
- **Bedding**: Low Smoke Zero Halogen (LSZH)
- **Concentric Conductor**: Copper wires with helical equalising copper tape
- **Outer Sheath**: Low Smoke Zero Halogen (LSZH)
- **Sheath Colour**: Black
- **Sheath Colour**: Orange

Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

Cleveland Cable Test & Training Lab
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing.

ISO/IEC 17025 Accredited Testing Laboratory
UKAS TESTING 31196

CPR
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

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Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

ecovadis

EN 60332-3-24 NHXCH FE180-E90 0.6/1kV Cable - 1.5mm² to 240mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
FE180E90NHXCH2X1/5	1.5	2	16.00	300
FE180E90NHXCH3X1/5	1.5	3	16.70	360
FE180E90NHXCH4X1/5	1.5	4	18.00	450
FE180E90NHXCH7X1/5	1.5	7	20.80	585
FE180E90NHXCH12X1/5	1.5	12	36.00	615
FE180E90NHXCH24X1/5	1.5	24	37.40	1980
FE180E90NHXCH2X2/5	2.5	2	17.00	350
FE180E90NHXCH3X2/5	2.5	3	17.80	435
FE180E90NHXCH4X2/5	2.5	4	19.00	505
FE180E90NHXCH7X2/5	2.5	7	22.10	705
FE180E90NHXCH12X2/5	2.5	12	28.00	1170
FE180E90NHXCH24X2/5	2.5	24	41.30	2465
FE180E90NHXCH3X4	4	3	19.00	545
FE180E90NHXCH4X4	4	4	20.10	600
FE180E90NHXCH3X6	6	3	19.90	690
FE180E90NHXCH4X6	6	4	22.60	775
FE180E90NHXCH3X10	10	3	24.20	950
FE180E90NHXCH4X10	10	4	26.20	1155
FE180E90NHXCH3X16	16	3	27.10	1350
FE180E90NHXCH4X16	16	4	29.30	1580
FE180E90NHXCH3X25	25	3	30.60	1765
FE180E90NHXCH4X25	25	4	33.10	2125
FE180E90NHXCH3X35	35	3	33.20	2175
FE180E90NHXCH4X35	35	4	36.00	2645
FE180E90NHXCH3X50	50	3	37.20	2850
FE180E90NHXCH4X50	50	4	41.00	3530
FE180E90NHXCH3X70	70	3	42.50	3840
FE180E90NHXCH4X70	70	4	46.20	4700
FE180E90NHXCH3X95	95	3	47.80	5085
FE180E90NHXCH4X95	95	4	52.00	6245
FE180E90NHXCH3X120	120	3	51.40	6200
FE180E90NHXCH4X120	120	4	55.70	7625
FE180E90NHXCH3X150	150	3	55.40	7350
FE180E90NHXCH4X150	150	4	61.00	9100
FE180E90NHXCH3X185	185	3	61.90	9145
FE180E90NHXCH4X185	185	4	67.40	11305
FE180E90NHXCH3X240	240	3	68.00	11600
FE180E90NHXCH4X240	240	4	74.50	14360

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