EN 60332-3-24 NHXCH FE180-E30 0.6/1kV Cable - 1.5mm² to 300mm²

Description

The 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 in a heavy-duty, thermoplastic polyolefin outer sheath.

Manufactured in strict accordance with international and European safety standards, this cable complies with design specifications set out in the 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 of E30 or E90 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 30.

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
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.

CLEVELAND CABLE COMPANY

ecovadis
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-E30 0.6/1kV Cable - 1.5mm² to 300mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
FE180E30NHXCH2X1/5	1.5	2	10.80	135
FE180E30NHXCH3X1/5	1.5	3	11.30	170
FE180E30NHXCH4X1/5	1.5	4	12.00	190
FE180E30NHXCH7X1/5	1.5	7	14.00	275
FE180E30NHXCH12X1/5	1.5	12	17.20	405
FE180E30NHXCH24X1/5	1.5	24	23.60	740
FE180E30NHXCH30X1/5	1.5	30	24.90	880
FE180E30NHXCH2X2/5	2.5	2	12.00	175
FE180E30NHXCH3X2/5	2.5	3	12.50	225
FE180E30NHXCH4X2/5	2.5	4	13.20	250
FE180E30NHXCH5X2/5	2.5	5	14.10	280
FE180E30NHXCH7X2/5	2.5	7	15.40	345
FE180E30NHXCH12X2/5	2.5	12	19.30	560
FE180E30NHXCH24X2/5	2.5	24	26.00	1025
FE180E30NHXCH30X2/5	2.5	30	27.20	1205
FE180E30NHXCH3X4	4	3	13.40	285
FE180E30NHXCH4X4	4	4	14.30	340
FE180E30NHXCH3X6	6	3	15.20	405
FE180E30NHXCH4X6	6	4	16.20	475
FE180E30NHXCH5X6	6	5	17.30	530
FE180E30NHXCH3X10	10	3	17.00	575
FE180E30NHXCH4X10	10	4	18.30	675
FE180E30NHXCH3X16	16	3	19.50	860
FE180E30NHXCH4X16	16	4	21.10	1.40
FE180E30NHXCH3X25	25	3	23.00	1190
FE180E30NHXCH4X25	25	4	25.00	1465
FE180E30NHXCH3X35	35	3	25.60	1520
FE180E30NHXCH4X35	35	4	27.60	1895
FE180E30NHXCH3X50	50	3	28.60	2035
FE180E30NHXCH4X50	50	4	31.40	2545
FE180E30NHXCH3X70	70	3	33.50	2850
FE180E30NHXCH4X70	70	4	37.00	3550
FE180E30NHXCH3X95	95	3	38.00	380
FE180E30NHXCH4X95	95	4	41.90	4820
FE180E30NHXCH3X120	120	3	42.10	4870
FE180E30NHXCH4X120	120	4	46.00	6095
FE180E30NHXCH3X150	150	3	46.40	5845
FE180E30NHXCH4X150	150	4	51.10	7325

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
FE180E30NHXCH3X185	185	3	52.30	7390
FE180E30NHXCH4X185	185	4	57.50	9290
FE180E30NHXCH3X240	240	3	59.80	9670
FE180E30NHXCH4X240	240	4	65.60	12160

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.