EN 60332-3-24 NHXH FE180-E90 0.6/1kV Cable - 1.5mm² to 300mm²



Description

EN 60332-3-24 NHXH FE180 is a low-voltage, low-smoke zero-halogen fire-safety and circuit-integrity power cable 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 in a heavy-duty, thermoplastic polyolefin outer sheath.

This cable complies with EN 60332-3-24 standard for category C bunched flame-spread resistance. It features an insulation integrity rating of FE180, guaranteeing that the cable core insulation will remain intact for at least 3 hours of direct fire exposure under testing standard conditions. It is a low-voltage rated cable of 0.6/1 kV.

Installers must maintain standard minimum bending radius 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. The cable is designed strictly for indoor or above-ground external usage. Fire resistant to FE 180 and Circuit Integrity to E90.

Key Features

Voltage Rating
600/1000 Volts

Minimum Bending Radius
Single Core 15 x Overall Diameter
Multicore 12 x Overall Diameter

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

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

Core Colours

3 cores: Green Yellow | Brown | Blue

4 cores: Green Yellow | Brown | Black | Grey

5 cores: Green Yellow | Brown | Black | Grey | Blue

7 core and above: Black with White numbers

Standards

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

Construction

- **Conductor**: Class 1 or 2 Copper
- **Insulation**: Low Smoke Zero Halogen (LSZH)
- **Bedding**: Low Smoke Zero Halogen (LSZH)
- **Outer Sheath**: Low Smoke Zero Halogen (LSZH)
- **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 NHXH FE180-E90 0.6/1kV Cable - 1.5mm² to 300mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
FE180E90NHXH2X1/5	1.5	2	14.20	275
FE180E90NHXH3X1/5	1.5	3	15.00	320
FE180E90NHXH4X1/5	1.5	4	16.20	360
FE180E90NHXH5X1/5	1.5	5	17.30	435
FE180E90NHXH7X1/5	1.5	7	18.50	505
FE180E90NHXH12X1/5	1.5	12	23.30	745
FE180E90NHXH2X2/5	2.5	2	14.90	320
FE180E90NHXH3X2/5	2.5	3	15.80	370
FE180E90NHXH4X2/5	2.5	4	17.00	440
FE180E90NHXH5X2/5	2.5	5	18.40	505
FE180E90NHXH7X2/5	2.5	7	19.90	605
FE180E90NHXH12X2/5	2.5	12	25.00	910
FE180E90NHXH3X4	4	3	16.70	440
FE180E90NHXH4X4	4	4	18.00	515
FE180E90NHXH5X4	4	5	19.50	615
FE180E90NHXH3X6	6	3	17.90	525
FE180E90NHXH4X6	6	4	19.30	630
FE180E90NHXH5X6	6	5	20.90	750
FE180E90NHXH3X10	10	3	19.60	690
FE180E90NHXH4X10	10	4	21.00	840
FE180E90NHXH5X10	10	5	23.00	1000
FE180E90NHXH1X16	16	1	10.50	245
FE180E90NHXH3X16	16	3	22.40	980
FE180E90NHXH4X16	16	4	24.20	1210
FE180E90NHXH5X16	16	5	26.70	1470
FE180E90NHXH1X25	25	1	12.40	350
FE180E90NHXH3X25	25	3	25.80	1405
FE180E90NHXH4X25	25	4	28.00	1715
FE180E90NHXH5X25	25	5	31.00	2100
FE180E90NHXH1X35	35	1	13.50	455
FE180E90NHXH3X35	35	3	28.50	1780
FE180E90NHXH4X35	35	4	31.00	2215
FE180E90NHXH5X35	35	5	35.70	2500
FE180E90NHXH1X50	50	1	15.00	595
FE180E90NHXH4X50	50	4	35.20	2915
FE180E90NHXH1X70	70	1	16.30	825
FE180E90NHXH4X70	70	4	10.00	3980
FE180E90NHXH1X95	95	1	19.00	1100

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
FE180E90NHXH4X95	95	4	45.20	5320
FE180E90NHXH1X120	120	1	20.50	1355
FE180E90NHXH4X120	120	4	49.10	6485
FE180E90NHXH1X150	150	1	22.50	1660
FE180E90NHXH4X150	150	4	53.00	7735
FE180E90NHXH1X185	185	1	24.80	2045
FE180E90NHXH1X240	240	1	27.90	2635
FE180E90NHXH1X300	300	1	30.70	3280
FE180E90NHXH3X35/16	35/16	3	29.40	1970
FE180E90NHXH3X50/25	50/25	3	33.30	2630
FE180E90NHXH3X70/35	70/35	3	38.00	3570
FE180E90NHXH3X95/50	95/50	3	43.40	4760
FE180E90NHXH3X120/70	120/70	3	46.60	5860

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