

FG16(O)R16 Electric Vehicle DC Cable 1.5mm² to 630mm²



Description

FG16(O)R16 cable is a versatile low-voltage power solution engineered for fixed indoor and outdoor energy distribution across industrial plants, civil infrastructure, and construction sites. Due to its robust construction and high insulation resistance, it is increasingly utilised in EV charging networks as a high-power distribution feed for DC rapid chargers, safely supporting voltages up to 1800V DC. It can be installed in free air, attached to metal walls, channeled through conduits, or buried directly or indirectly underground in wet or dry environments.

The cable is built with Class 5 flexible stranded copper conductors insulated with high-quality G16 hard-grade Ethylene Propylene Rubber (HEPR). The inner cores are bedded with an interstitial thermoplastic filler layer that enhances structural integrity and moisture resistance. This core assembly is enclosed within a durable, grey, anti-abrasive R16 quality PVC outer sheath that offers flame retardancy and reduces corrosive gas emissions during a fire.

To ensure safety and reliability, the cable adheres to strict European manufacturing and fire safety guidelines. Its primary design and dimensional benchmarks are set by CEI 20-13, IEC 60502-1, and CEI UNEL 35318/35322, while its flexible conductors meet EN 60228. For fire performance, it complies with EN 60332-1-2 in line with CPR 2017

FG16(O)R16 cable must be installed in accordance with CEI 20-67 guidelines and national wiring regulations. For fixed indoor or outdoor routing, it can be laid out in the open air, attached directly to walls, or placed on cable trays, baskets, and inside conduit pipes. It is fully suitable for both direct and indirect underground burial, provided it is protected from heavy mechanical stress or crushing using appropriate conduit or cable ducting.

Key Features

Core Colours

Single core: Black

2 core: Blue, Brown

3 core: Brown, Black, Grey (or Blue, Brown, Green Yellow)

4 cores: Blue, Brown, Black, Grey (or Brown, Black, Grey, Green Yellow)

5 cores: Blue, Brown, Black, Grey, Black (or Blue, Brown, Black, Grey, Green Yellow)

7+ cores: Black numbered

Standards

Construction

QA Lab

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. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



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.



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



FG16(O)R16 Electric Vehicle DC Cable 1.5mm² to 630mm² - Dimensions

Reference	Conductor Size (mm ²)	No Of Cores	Insulation Thickness (mm)	Overall Diameter(Upper)	Weight(Kg/Km)
CONNECTEVDC2X1/5	1.5	2	0.7	12.0	125
CONNECTEVDC3X1/5	1.5	3	0.7	12.5	139
CONNECTEVDC4X1/5	1.5	4	0.7	13.4	171
CONNECTEVDC5X1/5	1.5	5	0.7	14.4	204
CONNECTEVDC7X1/5	1.5	7	0.7	15.4	247
CONNECTEVDC10X1/5	1.5	10	0.7	18.7	353
CONNECTEVDC12X1/5	1.5	12	0.7	20.6	380
CONNECTEVDC16X1/5	1.5	16	0.7	21.1	549
CONNECTEVDC19X1/5	1.5	19	0.7	22.1	612
CONNECTEVDC24X1/5	1.5	24	0.7	25.4	733
CONNECTEVDC2X2/5	2.5	2	0.7	13.0	151
CONNECTEVDC3X2/5	2.5	3	0.7	13.6	185
CONNECTEVDC4X2/5	2.5	4	0.7	14.6	222
CONNECTEVDC5X2/5	2.5	5	0.7	15.6	266
CONNECTEVDC7X2/5	2.5	7	0.7	16.8	343
CONNECTEVDC10X2/5	2.5	10	0.7	20.6	492
CONNECTEVDC12X2/5	2.5	12	0.7	19.3	537
CONNECTEVDC16X2/5	2.5	16	0.7	23.3	848
CONNECTEVDC19X2/5	2.5	19	0.7	24.5	1049
CONNECTEVDC24X2/5	2.5	24	0.7	28.3	1140
CONNECTEVDC1X4	4	1	0.7	9.3	82
CONNECTEVDC2X4	4	2	0.7	14.2	207
CONNECTEVDC3X4	4	3	0.7	14.9	246
CONNECTEVDC4X4	4	4	0.7	16.0	297
CONNECTEVDC5X4	4	5	0.7	17.3	361
CONNECTEVDC1X6	6	1	0.7	9.9	101
CONNECTEVDC2X6	6	2	0.7	15.4	256
CONNECTEVDC3X6	6	3	0.7	16.2	313
CONNECTEVDC4X6	6	4	0.7	17.5	392
CONNECTEVDC5X6	6	5	0.7	18.9	471
CONNECTEVDC1X10	10	1	0.7	10.9	152
CONNECTEVDC2X10	10	2	0.7	17.3	395
CONNECTEVDC3X10	10	3	0.7	18.2	503
CONNECTEVDC4X10	10	4	0.7	19.8	611
CONNECTEVDC5X10	10	5	0.7	21.5	756
CONNECTEVDC1X16	16	1	0.7	11.4	211
CONNECTEVDC2X16	16	2	0.7	19.4	576
CONNECTEVDC3X16	16	3	0.7	20.6	609

Reference	Conductor Size (mm ²)	No Of Cores	Insulation Thickness (mm)	Overall Diameter(Upper)	Weight(Kg/Km)
CONNECTEVDC4X16	16	4	0.7	22.4	886
CONNECTEVDC5X16	16	5	0.7	24.4	1119
CONNECTEVDC1X25	25	1	0.9	13.2	301
CONNECTEVDC2X25	25	2	0.9	23.0	806
CONNECTEVDC3X25	25	3	0.9	24.5	991
CONNECTEVDC4X25	25	4	0.9	26.8	1255
CONNECTEVDC5X25	25	5	0.9	29.3	1597
CONNECTEVDC1X35	35	1	0.9	14.6	396
CONNECTEVDC2X35	35	2	0.9	25.7	1052
CONNECTEVDC3X35	35	3	0.9	27.3	1370
CONNECTEVDC4X35	35	4	0.9	30.5	1826
CONNECTEVDC5X35	35	5	0.9	32.8	2140
CONNECTEVDC1X50	50	1	1.0	16.4	556
CONNECTEVDC2X50	50	2	1.0	29.3	1465
CONNECTEVDC3X50	50	3	1.0	31.2	1941
CONNECTEVDC4X50	50	4	1.0	33.5	2588
CONNECTEVDC5X50	50	5	1.0	38.6	3004
CONNECTEVDC1X70	70	1	1.1	17.3	761
CONNECTEVDC2X70	70	2	1.1	33.1	2044
CONNECTEVDC3X70	70	3	1.1	35.6	2680
CONNECTEVDC4X70	70	4	1.1	38.5	3573
CONNECTEVDC5X70	70	5	1.1	44.6	4466
CONNECTEVDC1X95	95	1	1.1	20.4	991
CONNECTEVDC2X95	95	2	1.1	37.4	2917
CONNECTEVDC3X95	95	3	1.1	40.0	3847
CONNECTEVDC4X95	95	4	1.1	43.5	4649
CONNECTEVDC5X95	95	5	1.1	49.3	5811
CONNECTEVDC1X120	120	1	1.2	22.4	1219
CONNECTEVDC2X120	120	2	1.2	41.5	3678
CONNECTEVDC3X120	120	3	1.2	44.4	4406
CONNECTEVDC4X120	120	4	1.2	48.3	5875
CONNECTEVDC5X120	120	5	1.2	55.0	7343
CONNECTEVDC1X150	150	1	1.4	24.8	1517
CONNECTEVDC2X150	150	2	1.4	46.1	4028
CONNECTEVDC3X150	150	3	1.5	49.5	5440
CONNECONNECTEVDC2X 1/5CTEVDC4X150	150	4	1.4	54.0	7255
CONNECTEVDC1X185	185	1	1.6	27.2	1821
CONNECTEVDC2X185	185	2	1.6	48.8	4500
CONNECTEVDC3X185	185	3	1.6	55.2	6750

Reference	Conductor Size (mm2)	No Of Cores	Insulation Thickness (mm)	Overall Diameter(Upper)	Weight(Kg/Km)
CONNECTEVDC4X185	185	4	1.6	58.8	9000
CONNECTEVDC1X240	240	1	1.7	30.4	2366
CONNECTEVDC2X240	240	2	1.7	57.7	5852
CONNECTEVDC3X240	240	3	1.7	61.9	8778
CONNECTEVDC4X240	240	4	1.7	67.0	11700
CONNECTEVDC1X300	300	1	1.8	33.0	2947
CONNECTEVDC3X300	300	3	1.8	68.0	11000
CONNECTEVDC1X400	400	1	2.0	37.7	3870
CONNECTEVDC1X500	500	1	2.1	45.0	4790
CONNECTEVDC1X630	630	1	2.3	51.1	6470

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