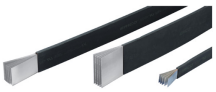
nVent ERIFLEX Flexibar Advanced, Tinned Copper – FADV2MTC5X50X1 (534039)





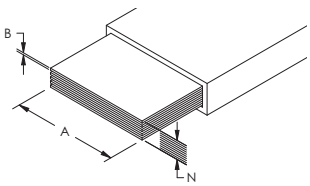


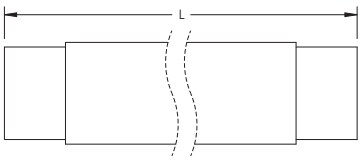




After extensive research, nVent ERIFLEX is proud to establish a new gold standard in terms of insulation for flexible busbar called nVent ERIFLEX Flexibar Advanced. The new product is low smoke, halogen-free and flame retardant all while maintaining the level of flexibility and reliability that our partners have come to expect from nVent ERIFLEX Flexibar. Compared to standard PVC insulation, nVent ERIFLEX Flexibar Advanced does not generate corrosive gases and produces a relatively low smoke opacity in accordance with ISO 5659-2. The low smoke characteristic improves the visibility conditions for people to be able to easily locate the emergency exit and also allows rescue workers to assess an emergency situation more clearly. nVent ERIFLEX Flexibar Advanced means greater safety for individuals, less damage for your electrical equipment and less environmental impact. The halogen–free feature enables a reduction in the quantity of toxic smoke. nVent ERIFLEX Flexibar Advanced does not contain any halogens, according to IEC 60754-1, minimizing toxicity and making it the ideal product for use in enclosed spaces such as data centers, rail and other spaces where people are welcome such as hospitals and schools. This also facilitates the use of nVent ERIFLEX Flexibar Advanced in specific applications such as submarines, switchboards and other enclosed environments that require a low emissions solution. In addition to being halogen-free, nVent ERIFLEX Flexibar Advanced is also compliant with the UL 94-V0 testing standard. The flame retardant portion of the test illustrates the self-extinguish feature. This superior feature of nVent ERIFLEX Flexibar Advanced is also shown by the Limiting Oxygen Index (LOI) at 30%. In case of fire, ERIFLEX Flexibar Advanced generates a limited quantity of smoke that is less damaging to your electrical equipment.

- Thin layers of tinned electrolytic copper formed into a stack
- Full range from 19.5 mm² up to 1200 mm² and 125 A to 2800 A
- Insulated by high-resistance, halogen free, flame retardant and low smoke material with less than 20% contact with conductor for high flexibility
- Easily bent, folded, and twisted, improving assembly flexibility, shortening connections, and decreasing footprint
- Dramatically smaller and more flexible than comparable cable based on ampacity
- Better power density than cable with lower skin effect ratio
- Connections made by punching and bolting directly through the copper laminates or clamping onto the end of the nVent ERIFLEX Flexibar
- No lugs needed, reducing installation time and improving resistance to vibration
- Weight savings and material savings compared to wire alternatives
- Reduces total installation cost
- Traceability codes and designation part numbers printed on insulation
- Conforms to NF EN 45545 obtaining an HL2 classification for chapters R22 and R23
- 100% production dielectric tested
- RoHS compliant
- Tinned copper allows for copper or aluminum conductor connections
- On request, can be manufactured with other colors (typically with Orange sleeve for battery connection)
- Compliant to ISO 6469-1 (Electrically propelled road vehicles - Part 1: Rechargeable energy storage system) - Section 6.2.2 Vibrations





Part Number	FADV2MTC5X50X1
Article Number	534039
Typical Application Current Rating	800 A
Length (L)	2 000 mm
Finish	Tinned
Material	Copper Thermoplastic Elastomer
Dielectric Strength	20 kV/mm
Flammability Rating	UL® 94V-0
Halogen Free Rating	UL® 2885 IEC® 60754-1 IEC® 62821-1
Low Smoke Rating	IEC® 61034-2 ISO 5659-2 UL® 2885
Smoke, Toxicity and Acidity Rating	IEC® 60754-2
UV Resistance Rating	UL® 854 UL® 2556
Insulation Elongation	500 %
Insulation Thickness	1,8 mm
Max Working Voltage, EN 50264-3-1	6 000 VAC/DC
Max Working Voltage, UL/CSA/IEC	1 000 VAC 1 500 VDC
Working Temperature	-50 to 115 °C
Certification Details	UL® 67 UL® 758
Complies With	IEC® 60695-2-11 (Glow Wire Test 960 °C) IEC® 61439.1 IEC® 61439.1 Class II
ΔT 40 K	830 A
ΔT 50 K	930 A
ΔT 60 K	1 016 A
Conducting Layers (N)	5
A	50 mm
B	1 mm
Cross Section	250 mm²
2 Bar Current Coefficient	1,72
3 Bar Current Coefficient	2,25
Unit Weight	5,17 kg
Certifications	ABS FLEXIBAR Bureau Veritas 02859 BV CE, ERIFLEX FLEXADV CSA 70173298 CSA 90005 cURus EAC 0254922 (Russian Federation) EN 45545-2 IBS/IBSB Advanced IEC 60695-2-12 CC11418_FADV IEC 61439-1 Class II FLEXIBAR_ADV IEC 61439-1 FLEXIBAR_ADV ISO 5659-2 CC11518_FADV RoHS UL UL (IEC) AVLV2.E316390

Part Number	FADV2MTC5X50X1
Standard Packaging Quantity	1 pc
UPC	78285693771
EAN-13	0782856937715

ADMISSIBLE CURRENTS: This table indicates the temperature rise produced by chosen current in the given section. This calculation does not take into account the heat dissipation from the switch gear.

ΔT = Temperature of conductors – Internal temperature of panel.

Refer to technical documentation for additional ampacity ratings.

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WARNING
nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at www.erico.com and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent 's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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