

# Twinflex Highly Flexible Automotive Battery Cables

## Applications

For indoors and outdoors, in dry as well as wet location on motorised vehicles, or battery powered equipment such as forklifts and field conveyors.

## Characteristics

**Voltage Rating:** Uo/U 450/750V

**Temperature Rating Flexed:** -20°C to +70°C

**Minimum Bending Radius Flexed:** 6 x overall diameter



## The Cable Lab® -AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime. S



## Sustainability commitment

We are on a journey to Net Zero. We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals. Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: [www.elandcables.com/company/about-us/esg-sustainability](http://www.elandcables.com/company/about-us/esg-sustainability)



## Regulatory Compliance

This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.



## Construction

**Conductor:** Class 6 extra flexible copper conductor

**Insulation:** TPE (Thermoplastic Elastomer)

**Sheath:** PVC (Polyvinyl Chloride)

**Core Identification:** Red and Black

**Sheath Colour:** Transparent

## Standards

VDE 0250

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## Conductors :

Class 6 Flexible Copper	Conductors for Single Core and	Multi-Core Cables
NOMINAL CROSS SECTIONAL AREA mm	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
2.5	0.16	7.89
4	0.16	4.95
6	0.21	3.3
10	0.21	1.91
16	0.21	1.21
25	0.21	0.78
35	0.21	0.554
50	0.31	0.386
70	0.31	0.272
95	0.31	0.206

## Dimensions:

mm	no. of cores	Nominal cross sectional area	Nominal thickness of insulation	Nominal thickness of sheath	Nominal overall diameter	Nominal weight
2.5mm <sup>2</sup>	2	2.5	1	1	4.4 x 10.8	90
4mm <sup>2</sup>	2	4	1	1	6.5 x 14.5	10
6mm <sup>2</sup>	2	6	1	1	7.1 x 15.5	190
6mm <sup>2</sup>	2	5	1	1.2	7.9 x 17.6	294
10mm <sup>2</sup>	2	16	1	1.2	10 x 21.5	420
25mm <sup>2</sup>	2	25	1.1	1.3	11.2 x 24.3	672
35mm <sup>2</sup>	2	35	1.1	1.3	12.4 x 25.9	824
50mm <sup>2</sup>	2	50	1.2	1.4	14.5 x 30.5	1132
70mm <sup>2</sup>	2	75	1.6	1.6	17.2 x 36.5	1600
95mm <sup>2</sup>	2	95	1.6	1	18.4 x 38.6	2080

## Electrical Characteristics

No. Of cores	Nominal Cross sectional Area	Current Rating at 60°C
2	2.5	32
2	4	42
2	6	54
2	10	73
2	16	98
2	25	129
2	35	158
2	50	198
2	70	245
2	95	292

## De-Rating Factors

Ambient Temperature	25°C	30°C	35°C	40°C	45°C	
De-rating factor		1	0.96	0.9	0.88	0.83