

Automotive products

RADOX® cables and system solutions

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HUBER+SUHNER

RADOX® battery cables – thin-wall, flexible



Power cables for road vehicles, class D according to ISO 6722, operating temperature -40 to +150 °C

RADOX battery cables are high temperature resistant products with a reduced outer diameter.

The cable is highly resistant to temperature, ozone, weathering, hydrolysis and has excellent resistance to battery acid and cooling agents. It is also resistant against oils, fuels and other fluids used inside and outside of the motor compartment.

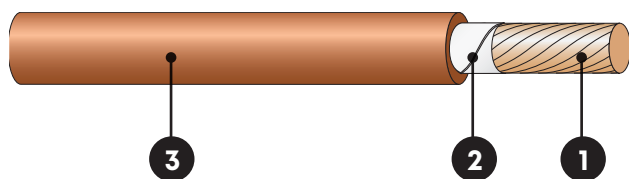
Thanks to its electron beam cross-linked RADOX insulation, the cable has, despite the reduced outer diameter, excellent resistance to heat pressure and abrasion. In addition, the RADOX battery cable has outstanding dielectric properties. The flame retardant insulation does not melt or flow at high temperatures and is easy to strip.

General features

- Operating temperature -70 to +150 °C
- Outstanding flexibility
- Reduced outer diameter
- Resistant to motor oils, battery acid and fuels
- High resistance to heat pressure
- Excellent abrasion resistance

RADOX 155 battery cable	20
RADOX Elastomer S (REMS) battery cable	24
RADOX screened battery cable	30
RADOX screened multi core cable	32

RADOX® 155 battery cable, flexible (FLR4G and FHLR4G)



Number of conductors	1
Cross section	10 to 150 mm ²
Voltage rating	1000 V AC/1500 V DC
Temperature range	-55 to +150 °C (3000 h)
Min. bending radius	3 × cable dia.

Composition of cable

1. Conductor stranded bare copper
2. Plastic tape optional
3. Insulation RADOX 155, extruded irradiation cross-linked polyolefin, various colours

Characteristics and specialities

- Excellent high and low temperature resistance
- Ozone, weathering and hydrolysis resistance
- Outstanding resistance against battery acids, humidity, petrol, brake fluids, engine coolant, window washer, fluids, diesel and various oils
- Flame retardant
- Easy to strip and process

Application

ADR approved battery or power cable for use in road vehicle applications.

Standards

Conductor	General
ISO 6722-1	ISO 6722, ISO 19642-5, class D, thin-wall
DIN EN 13602, Cu-ETPI-A (CW003A)	ADR approved

Customer approvals

- GMW 15626
- VW 60306-1
- Ford ES-AU5T-1A348-AA
- BMW GS 95007
- FCA MS.90034
- JLR TPJLR.18.007
- Scania TB1914
- Volvo STD 525-001
- Bosch N34A AE011D S007
- VW 75210-1

For further technical details please refer to our data sheet STD 718404.

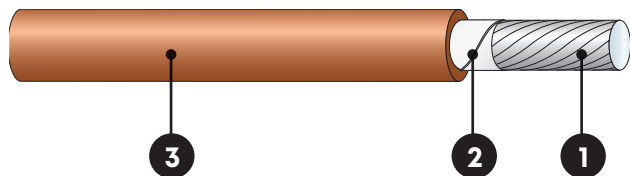
RADOX[®] 155 battery cable, flexible (FLR4G and FHLR4G)

Extract from our delivery programme

Cross section	Conductor				Core		
	Nominal mm ²	Number of individual wires guide value	Diameter of individual wires max. mm	Diameter max. mm	Resistance at 20 °C max. Ω/km	Wall thickness min. mm	Weight nom. kg/100 m
8	60	0.41	3.8	2.38	0.40	8.0	5.05 ± 0.15
10	78	0.41	4.3	1.82	0.50	10.5	5.75 ± 0.20
12	92	0.41	4.7	1.52	0.50	12.0	6.10 ± 0.20
16	126	0.41	5.4	1.16	0.52	16.5	6.90 ± 0.20
20	154	0.41	6.2	0.955	0.52	20.0	7.60 ± 0.20
25	189	0.41	6.7	0.743	0.55	24.2	8.20 ± 0.20
30	224	0.41	7.4	0.647	0.64	29.0	9.10 ± 0.25
35	273	0.41	7.9	0.527	0.65	35.0	9.70 ± 0.25
40	301	0.41	8.5	0.473	0.73	38.7	10.40 ± 0.25
50	385	0.41	9.4	0.368	0.80	49.2	11.50 ± 0.25
60	294	0.51	10.6	0.315	0.80	57.8	12.60 ± 0.25
70	360	0.51	11.6	0.259	0.80	69.7	13.70 ± 0.25
95	480	0.51	13.5	0.196	0.90	93.8	16.20 ± 0.30
120	589	0.51	15.1	0.153	0.90	114.7	18.00 ± 0.30
150	741	0.51	17.0	0.122	1.00	143.4	20.00 ± 0.30

Datasheet STD 718404

RADOX® 155 battery cable, aluminium (FLR4G or FHLR4G)



Number of conductors	1
Cross section	10 to 120 mm ²
Voltage rating	1000 V AC/1500 V DC
Temperature range	-55 to +150 °C (3000 h)
Min. bending radius	3 × cable dia.

Composition of cable

- | | |
|-----------------|--|
| 1. Conductor | stranded aluminium |
| 2. Plastic tape | optional |
| 3. Insulation | RADOX 155, extruded irradiation cross-linked polyolefin, various colours |

Characteristics and specialities

- Excellent high and low temperature resistance
- Ozone, weathering and hydrolysis resistance
- Outstanding resistance against battery acids, humidity, petrol, brake fluids, engine coolant, window washer, fluids, diesel and various oils
- Flame retardant
- Easy to strip and process

Application

ADR approved battery or power cable for use in road vehicle applications.

Standards

Conductor	General
ISO 6722-2	ISO 6722-2, ISO 19642-6, class D, thin-wall
ISO 6892-1	
ASTM B231	
EN 573-1	

For further technical details please refer to our data sheet STD 776028.

RADOX[®] 155 battery cable, aluminium (FLR4G or FHLR4G)

Extract from our delivery programme

Cross section	Conductor				Core		
	Nominal mm ²	Number of individual wires guide value	Diameter of individual wires max. mm	Diameter max. mm	Resistance at 20 °C max. Ω/km	Wall thickness min. mm	Weight nom. kg/100 m
16	80	0.52	5.40	1.93	0.52	8.7	6.75 ± 0.20
25	122	0.52	6.70	1.24	0.52	12.8	8.40 ± 0.20
35	172	0.52	7.90	0.878	0.64	18.3	10.05 ± 0.25
50	247	0.52	9.40	0.368	0.72	21.3	11.50 ± 0.25
60	289	0.52	10.50	0.613	0.80	28.1	12.85 ± 0.25
70	351	0.52	10.60	0.432	0.80	34.1	13.85 ± 0.25
95	472	0.52	13.50	0.327	1.09	49.2	16.20 ± 0.30
120	305	0.72	15.10	0.255	1.28	68.0	18.00 ± 0.30

Datasheet STD 776028