

Automotive products

RADOX® cables and system solutions

Edition 2020/09



RADOX® automotive single core cables



Low voltage cable for road vehicles, class D and F according to ISO 6722 and ISO 19642, temperature rating -40 to +150 °C/200 °C

A growing demand of sensors, higher operating temperatures and restricted space are typical in today's motor compartments. These cables have been developed with these specific requirements in mind.

These cables are class D temperature range cables with reduced outer diameter. They have superb resistance to motor oils, fluids and hydrolysis. Thanks to their electron beam cross-linked RADOX insulation, these cables have excellent resistance to extremes of temperature and abrasion even with reduced outer diameter. Furthermore these RADOX cables have outstanding electrical characteristics.

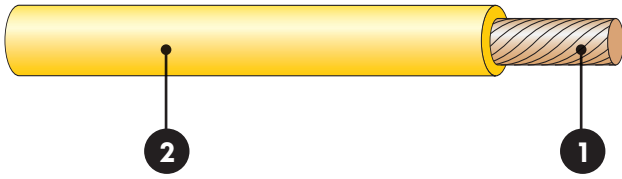
The characteristics of these RADOX cables make them ideal for use in a wide range of applications, where space is at a premium and where cables are subjected to high temperatures. Even high humidity levels and motor vehicle fluids do not negatively affect the lifetime of the cables.

General features

- Operating temperature range -55 to +200 °C
- Reduced outer diameter
- Resistant to motor fluids, fuels
- Hydrolysis resistant
- Resistant to pressure at high temperatures
- High abrasion resistance
- Excellent electrical characteristics

RADOX 155S FLR	8
RADOX 155S RW	10
ETFE	12
RADOX anticapillary	14

ETFE (FLR7Y and FLU7Y)



Number of conductors	1
Cross section	0.14 to 6 mm ²
Voltage rating	60/600 V DC
Temperature range	-55 to +200 °C (3000 h)
Min. bending radius	3 × cable dia.

Composition of cable

1. Conductor stranded bare copper
2. Insulation ETFE, extruded fluoropolymer, various colours

Characteristics and specialities

- High and low temperature resistance
- Ozone and weathering resistance
- Resistant to pressure at high temperature
- Resistant to hot motor oils, fuels and hydrolysis
- Flame retardant
- High abrasion resistance
- Easy to strip and process

Application

Low voltage cable for use in road vehicle applications, where constant hot oil immersion is required.

Standards

Conductor	General
ISO 6722, ISO 19642-3 and -5	ISO 6722, ISO 19642-3 and -5, class D, thin-wall and ultra thin-wall
DIN EN 13602, Cu-ETPI-A (CW003A)	

For further technical details please refer to our data sheets STD 378562 (FLR7Y) and STD 585353 (FLU7Y).

ETFE (FLR7Y and FLU7Y)

Extract from our delivery programme

Dimensions according to ISO 6722-1/ISO 19642

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
tinned					bare			
0.35	7	0.26	0.8	–	52.0	0.20	0.4	1.25 ± 0.05
1.00	19	0.26	1.35	–	18.5	0.24	1.2	2.00 ± 0.10

Datasheet STD 378562 (FLR7Y)

Dimensions according to ISO 6722-1/ISO 19642

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
tinned					bare			
0.25	19	0.13	0.61	86.0	–	0.19	0.33	1.10 ± 0.05
0.35	7	0.26	0.79	–	50.2	0.16	0.45	1.20 ± 0.05
0.50	19	0.19	0.90	–	36.4	0.16	0.58	1.30 ± 0.05
0.75	19	0.23	1.12	–	24.5	0.16	0.84	1.50 ± 0.05
1.0	19	0.26	1.26	–	18.3	0.16	1.06	1.65 ± 0.07
1.5	19	0.32	1.52	–	12.6	0.16	1.55	2.00 ± 0.10
2.5	50	0.26	2.00	–	7.52	0.20	2.59	2.55 ± 0.10
4	56	0.31	2.50	–	4.66	0.24	3.98	3.15 ± 0.10
6	84	0.31	2.98	–	3.11	0.24	5.92	3.65 ± 0.10
10	78	0.41	4.30	–	1.82	0.24	9.89	5.00 ± 0.15

Datasheet STD 585353 (FLU7Y)