

Automotive products

RADOX® cables and system solutions

Edition 2020/09

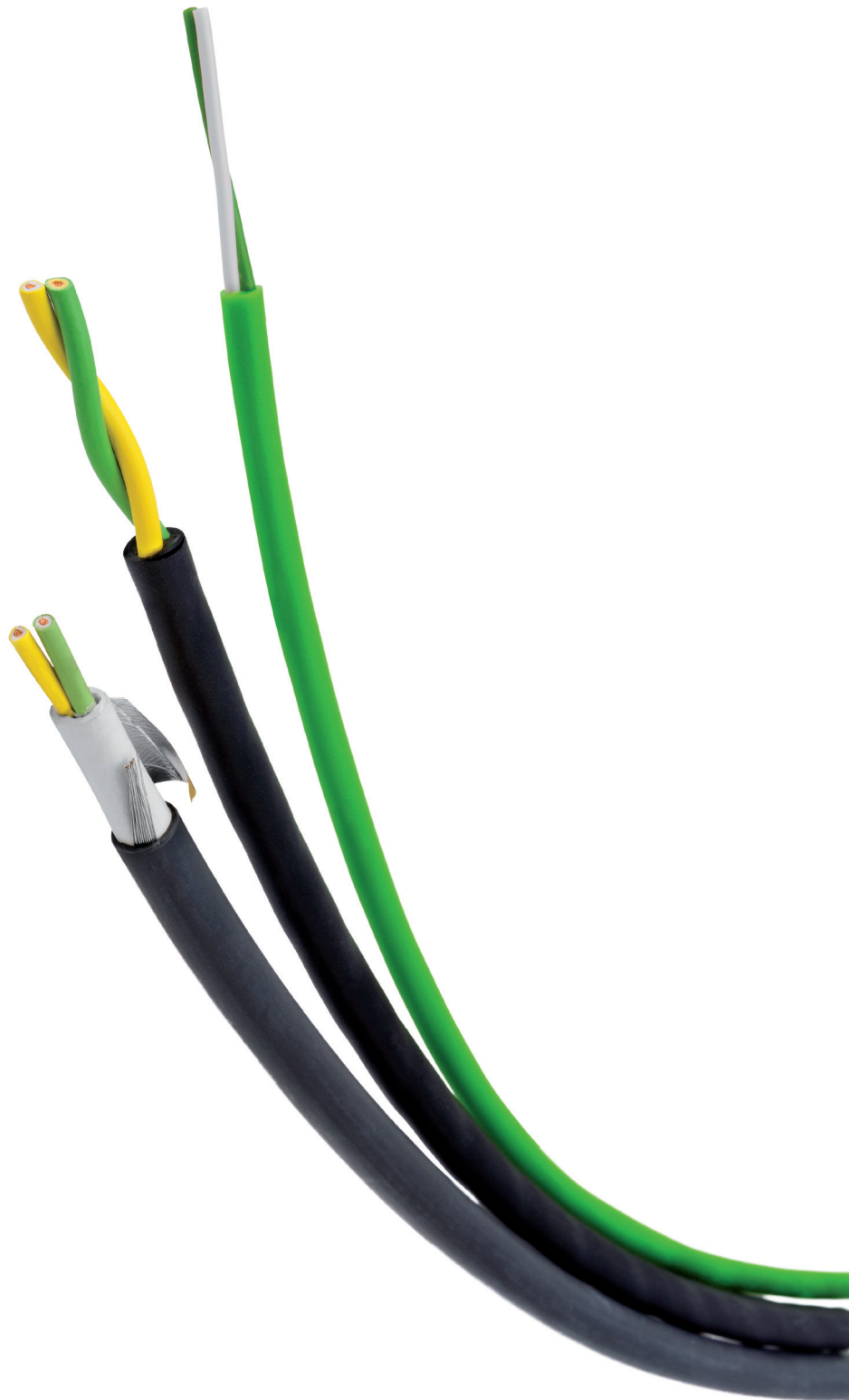


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HUBER+SUHNER

RADOX® databus cables



Optimum protection of sensitive data with RADOX

The continuous growth in the application of electronic systems in road vehicles requires reliable databus cables for transmitting information at high frequencies. CAN, LIN, MOST, FlexRay and Ethernet applications have become part of the modern on-board network structures inside vehicles.

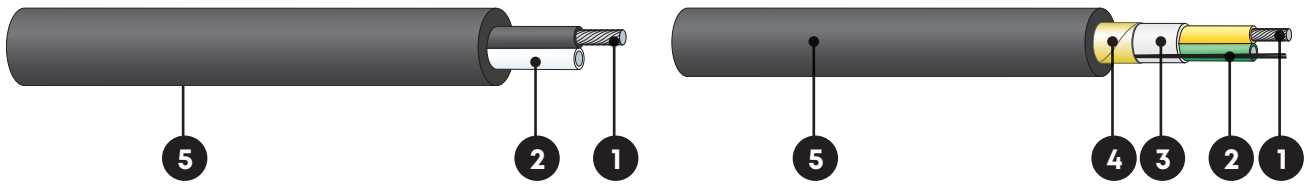
HUBER+SUHNER combines its know-how in data communications with electron beam cross-linked materials technology to offer cables meeting specifications such as SAE J1939-11, -15 or ISO 11898-2 (CAN).

Using their electron beam cross-linked RADOX insulation, the cables offer high thermal pressure resistance, resistance to fluids and good abrasion resistance, and they can be applied across a wide temperature range.

General features

- Excellent dielectric performance
- Flame retardant insulation, neither melting nor flowing when exposed to high temperatures
- Operating temperature -55 to +150 °C
- Outstanding data transmission performance
- Optimal protection using RADOX insulation
- Application is possible in engine compartments

RADOX[®] databus cables



Number of conductors	2 to 4
Cross section	0.35 to 0.75 mm ²
Voltage rating	60 V DC
Temperature range	(-55) -40 to +125 °C/+150 °C(3000 h)
Min. bending radius	4 × cable dia.

Composition of cable

1. Conductor	stranded tinned or bare copper
2. Insulation	various RADOX insulation materials or PE-X
3. Sheath	various RADOX jacket materials
4. Screen	plastic laminated aluminium tape and drain wire
5. Sheath	various RADOX jacket materials or TPU

Characteristics and specialities

- Excellent dielectric performance
- Outstanding data transmission performance
- Possible application in engine compartments
- High and low temperature resistance
- Flame retardant

Application

Databus cable for transmitting information at high frequencies in road vehicles.

Standards

Conductor	General
ISO 6722	ISO 6722, ISO 14642 class C and D
DIN EN 13602, Cu-ETP1-A (CW003A)	SAE J1939-11/-15

For further technical details please refer to our data sheet.

RADOX® databus cables

Extract from our delivery programme

Cable types

Cross section	Conductor			Core		Screen	Outside diameter
	mm ²	Construction* n × mm	Diameter. max. mm	Resistance at 20 °C max. Ω/km	Wall thickness min. mm	Diameter mm	Aluminium tape
2 × 0.35	7 × 0.26	0.77	52.0	0.66	2.1	no	5.6
2 × 0.50	19 × 0.18	0.89	37.1	0.80	2.5	no	6.2
2 × 0.75	19 × 0.22	1.10	24.7	0.95	3.0	no	7.2
2 × 0.35	7 × 0.26	0.77	52.0	0.66	2.1	yes	8.0
2 × 0.50	19 × 0.18	0.89	37.1	0.80	2.5	yes	8.3
2 × 0.75	19 × 0.22	1.10	24.7	0.95	3.0	yes	10.7

Jacket materials

Jacket material	Temperature range	Electron beam cross-linked	Flexibility	Media resistance
	3000 h			
RADOX Elastomer S	-70 to +150 °C	yes	excellent	excellent
RADOX 155	-55 to +150 °C	yes	good	good
TPU	-40 to +125 °C	no	excellent	good