



# Traction cable

## RADOX DATABUS 90 OHM 4C XM S USB

### Product description:

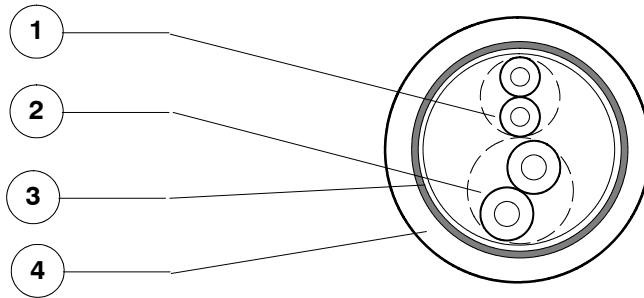
RADOX DATABUS USB 2.0 Cable with overall screen  
 Impedance: 90 Ohm  
 Hazard level: M (extra low temperature resistant, extra oil and fuel resistant)

### General features:

Halogen-free, electron-beam cross-linked cable with improved behaviour in case of fire, easy to strip, soldering resistant and flexible.

### Application:

The cable is intended for fixed installation inside railway vehicles.  
 Guidelines for selection and installation are described in standard EN 50355 and EN 50343.



1.	1 pair 2X 28 AWG	Conductor : flexible tin plated copper Insulation : RADOX COM Colours : white, green	D : 0.8 mm
2.	1 pair 2X 24 AWG	Conductor : flexible tin plated copper Insulation : RADOX COM Colours : black, red	D : 1.1 mm
3.	EMC - Screen	Al - Tape with synthetic coating Tin plated copper braid	D <sub>nom</sub> : 3.0 mm
4.	Sheath	RADOX EM 104, colour : black	D : 4.7±0.3 mm

### Marking:

HUBER+SUHNER RADOX DATABUS 90 OHM 4C XM S USB 85019834- [prod.- no.] [date of manufacture] [prod.- place]

### Designation legend

X : Core insulation material is not defined in EN 50264- 1  
 M : Sheet material EM 104 according to EN 50264- 1  
 S : Overall screen  
 USB: Universal Serial Bus

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The product fulfils the test and specification requirements described in this document for the stated areas of application and operating conditions. HUBER+SUHNER AG does not expressly or implicitly guarantee performance under additional or changed conditions. Deviations are to be agreed upon in writing.

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## RADOX DATABUS 90 OHM 4C XM S USB

### Technical data:

Conductor resistance at 20°C	24 AWG	≤ 88.5	Ω / km
	28 AWG	≤ 232	Ω / km
Screen cross section		approx. 0.8	mm <sup>2</sup>
Voltage rating		30	V AC
Test voltage		500	V AC
Temperature range	fixed installation	- 40 ... + 70	°C
Min. bending radius	fixed installation	4 x D	
Cable weight		approx. 3.6	kg / 100m

### The cable is in conformity with:

#### Fire protection on railway vehicles, level of protection . 1 - 4 ..... DIN 5510

Vertical flame spread	50 < L ≤ 540 mm	EN 60332-1-2
Vertical flame spread, bunched, D ≤ 6 mm	L ≤ 1.5 m	EN 50305, 9.1.2
Smoke density	T ≥ 60 %	EN 61034-2
Corrosivity of combustion gases	pH ≥ 4.3, C ≤ 10 μS/mm	EN 50267-2-2
Amount of halogen acid gas	HCl + HBr ≤ 0.5 %	EN 50267-2-1
Content of fluorine	HF ≤ 0.1 %	EN 60684-2, 45.2
Toxicity	ITC ≤ 3	EN 50305, 9.2

#### Fire protection on railway vehicles, hazard level ..... HL1 - HL3 ..... EN 45545

Vertical flame spread	50 < L ≤ 540 mm	EN 60332-1-2
Vertical flame spread, bunched, D ≤ 6 mm	L ≤ 1.5 m	EN 50305, 9.1.2
Vertical flame spread, Smoke density	T ≥ 70 %	EN 61034-2
Toxicity	ITC ≤ 6	EN 50305, 9.2

#### Fire protection on railway vehicles, hazard level ..... LR1 - LR4 ..... UNI CEI 11170

Vertical flame spread	50 < L ≤ 540 mm	EN 60332-1-2
Vertical flame spread, bunched, D ≤ 6 mm	L ≤ 1.5 m	EN 50305, 9.1.2
Smoke density	T ≥ 70 %	EN 61034-2
Corrosivity of combustion gases	pH ≥ 4.3, C ≤ 10 μS/mm	EN 50267-2-2
Amount of halogen acid gas	HCl + HBr ≤ 0.5 %	EN 50267-2-1
Toxicity	ITC ≤ 3	EN 50305, 9.2

#### Requirements of hazard level code M:

	(according to EN 50264-1 or EN 50306-1)
Extra low temperature	-40°C
Extra oil resistant	IRM 902, 72h, 100°C
Extra fuel resistant	IRM 903, 168h, 70°C