

# RADOX® RAILCAT CAT7

## Railway traction cable



### Features

- Developed and tested for the railway market
- Reliable transmission at high data rates, Cat. 7
- Meet the electrical requirements of EN 50288-4-2 and IEC 61156-6 Cat. 7
- RADOX® EM 104 sheath material, according to EN 50264-1
- Flame-retardant, halogen-free, low-smoke
- Easy to strip
- Easily recognised thanks to blue cable jacket

### Application

- Suitable for Gigabit Ethernet in rolling stock
- For transmission of digital data for applications up to 10 Gigabit according to IEEE 802.3an
- Intended for fixed installation in rail vehicles
- Infotainment, multimedia, passenger information systems, Internet on board, CCTV, etc.

# RADOX® RAILCAT CAT7

**Conductor**                      stranded tin plated copper  
**Number of pairs**              4  
**Cross Section**                24 AWG

**Voltage rating**                300/500 V AC  
**Temperature range**        -40 °C to +70 °C  
**Impedance**                    100 Ω at 100 MHz



## RADOX RAILCAT CAT7 4x(2x24AWG) XM S

### Composition of cable

1. 4 pairs, 2x24AWG	conductor: insulation: two cores twisted colours: aluminium tape, plastic laminated	stranded tin plated copper polyethylene (PE)  white-orange, white-green, white-brown, white-blue
2. EMC screen	tin plated copper braid	
3. Sheath	RADOX EM 104, colour: blue	

### Technical data

Frequency [Mhz]	Attenuation max. [dB/100m]	NEXT min. [dB]	PS NEXT min. [dB]	ELFEXT min. [dB]	PS ELFEXT min. [dB]	RL min. [dB]
1	2.9	80.0	77.0	80.0	97.0	28.1
4	5.5	80.0	77.0	80.0	100.8	35.4
10	8.5	80.0	77.0	74.0	103.7	33.7
16	10.8	80.0	77.0	69.9	100.1	37.1
31.25	15.2	80.0	77.0	64.1	96.3	37.6
62.50	21.7	75.1	72.5	58.1	94.6	32.5
100	27.8	72.4	69.4	54.0	98.0	35.0
300	50.0	65.3	62.3	44.5	101.0	23.8
600	73.3	60.8	57.8	38.4	89.6	21.0

The sheath material fulfills the requirements of code M according to EN 50264-1.

In addition the cable meets the fire protection requirements for railway rolling stock:

- EN 45545-2
- DIN 5510-2
- NF F 16-101
- UNI CEI 11170-3

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HUBER+SUHNER is certified according to ISO 9001, ISO 14001, ISO/TS 16949 and IRIS.

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