

# RADOX® RAILDAT 120 OHM XM S MVB

symmetrical 120 Ohm data cables with very good transmission properties at high frequencies



RADOX® RAILDAT 120 OHM XM S MVB 2x0,5 mm<sup>2</sup>

## Technical data

- compliant with the requirements acc. to IEC 61375-3-1
- Temperature range**  
fixed -50°C to +90°C
- Nominal voltage**  
U<sub>0</sub>/U 300 V
- Test voltage**  
2000 V
- DC resistance** @ +20°C  
0.5 mm<sup>2</sup> < 40,1 Ω/km
- Impedance**  
f = 0.75...3 MHz 120 Ω ± 12
- Mutual capacitance**  
core/core ≤ 46 pF/m
- Capacity unbalance to the screen**  
f = 1.5 MHz ≤ 1.5 pF/m
- Wave attenuation nom.**  
f = 1.5 MHz 15 dB/km
- Minimum bending radius**  
flexible 5x Outer-Ø  
fixed 3x Outer-Ø

## Cable structure

- Copper wire tinned, acc. to EN 60228 cl.5
- Cross section: 0.5 mm<sup>2</sup>
- Core insulation: RADOX® FOAM
- Additional core: 0.5 mm<sup>2</sup>
- Core insulation: RADOX® EI 303
- Cores twisted in pairs
- EMC-Screen: plastic-coated aluminium foil (over the pairs)
- EMC-Screen: braided screen of tinned copper wires (overall)
- Outer sheath: RADOX® EM 104
- Outer sheath colour: turquoise

## Properties

- halogen-free and flame-retardant
- very good resistance to: oil, fuel, ozone and weather influences
- cold flexible
- heat resistant
- electron beam cross-linked RADOX® insulation does not melt or flow
- compliant with the essential fire protection standards

## Tests

- EN 45545-2 HL1 - HL3
- NFPA 130
- GOST 31565

## Note

- please find further technical information in the H&S product data sheet
- other dimensions and colours on request

## Application

- The cables are intended for fixed installation in rail vehicles or for installation where limited alternating bending stress occurs during operation.
- Specifications concerning the selection and installation of cables are described in standard EN 50343.

Part no.	Part no. H&S	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Weight app. kg / km	Copper weight kg / km
11022950	85114509	2 x 0,5	7,4	72	27,1
11022951	85114508	2 x 0,5 + 0,5	7,4	76	31,9
11022952	85141959	2 x 2 x 0,5	11,4	158	48,3

Part no.	Part no. H&S	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Weight app. kg / km	Copper weight kg / km
11022953	85141960	2 x 2 x 0,5 + 2 x 0,5	11,4	169	57,9
11022955	85109096	4 x 0,5	8,4	98	36,8
11022956	85140715	4 x 0,5 + 4 x 0,25	8,4	103	46,6

Dimensions and specifications may be changed without prior notice.