HULK

PRODUCT DATA SHEET H10001

Halogen-Free Single Conductor Wiring Cable 300/500 V - FRNC

FRNC insulation | Class 5 stranded copper | 300/500 V

Designed for internal wiring in control cabinets, industrial equipment, electrical appliances and rail vehicles. The halogen-free FRNC insulation combines low-smoke and flame-retardant performance with good flexibility and an extended operating temperature range.



APPLICATION

- Control cabinets, switchboards and panels
- Appliances and electrical equipment
- Industrial machinery and production lines
- Communication and electronic devices
- Generators and transformers
- Bus/rail wiring, harnesses and assemblies

CONSTRUCTION

Conductor	Bare copper strands, Class 5, to IEC 60228 and VDE 0295.
Insulation	Special halogen-free, flame-retardant and non-corrosive FRNC compound.
Colors	Black, blue, brown, grey, yellow, green, purple, white, gentian blue or green/yellow.
Options	Tinned copper; other conductor sizes, colors and dimensions on request.

DIMENSIONS

Cross-section (mm2)	Largest single wire dia. (mm)	Approx. outer dia. (mm)	Copper wt. (kg/km)	Approx. cable wt. (kg/km)
0.50	0.21	2.1 +/- 10%	4.8	9
0.75	0.21	2.4 +/- 10%	7.2	12
1.00	0.21	2.5 +/- 10%	9.6	14

Approximate values; outer diameter tolerance +/- 10%.

AT A GLANCE

HALOGEN-FREE FRNC | LOW SMOKE | RAIL FIRE PERFORMANCE

300/500 V | PFAS-FREE | RoHS COMPLIANT

TECHNICAL DATA

Voltage / test	Nominal voltage: 300/500 V. Testing voltage: 2,000 V.
Minimum bend radius	7.5 x d; 5 x d for one single bend.
Temperature	Fixed installation: -40 °C to +90 °C. Flexible application: -30 °C to +90 °C.
Halogen-free / HCl	IEC 60754-1 and VDE 0482-754-1. HCl development: <0.5% (IEC 60754-1).
pH / conductivity	pH >4.3; conductivity <10.0 µS/mm, according to IEC 60754-2.
Fluorine content	<0.1% according to IEC 60684-2.
Flame propagation	No flame propagation according to IEC 60332-3-24, IEC 60332-3-25 and EN 50305, Section 9.1.2.
Flame retardancy	According to ISO 6722 and UN/ECE R118.
Fire performance	Flame-retardant and self-extinguishing according to IEC 60332-1-2 and VDE 0482-332-1-2.
Corrosive gases	No corrosive combustion gas development according to IEC 60754-2 and VDE 0482-754-2.
Smoke density	Low smoke density according to IEC 61034 and VDE 0482-1034.
Railway fire safety	EN 45545-2: R15 (EL1A), hazard levels HL1-HL3.
Flexibility / substances	Good flexibility. RoHS compliant and PFAS-free.

KEY PERFORMANCE 300/500 V | -40 °C fixed installation | Low smoke | Non-corrosive gases | EN 45545-2 R15 (EL1A)

MOTION NOTE For fixed wiring and general flexible routing. Not specified for continuous-flex drag chain movement unless separately qualified.

HULK COMPANY CREDENTIALS

Quality & compliance marks

Company-level credentials shown for reference. Product approvals and scope depend on the exact model and supporting documentation.