HULK

PRODUCT DATA SHEET H10004

Halogen-Free Single Conductor Wiring Cable 1000 V UL – FRNC

FRNC insulation | Tinned Class 5 copper | 1000 V UL

This UL-recognized 1000 V halogen-free single conductor wiring cable is engineered for internal power and equipment wiring in control cabinets, industrial machinery, generators and transformers. Available in sizes from 1.5 to 300 mm², it combines a tinned Class 5 copper conductor with low-smoke, flame-retardant FRNC insulation for demanding industrial installations.



APPLICATION

- Control cabinets, switchboards and panels
- Industrial machinery and automation
- Generators and transformers
- Communications and electronic equipment
- Electrical appliances and cable harnesses
- Internal wiring of buses and rail vehicles

CONSTRUCTION

Conductor	Tinned copper strands according to IEC 60228 and VDE 0295, Class 5
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	Additional conductor sizes, insulation colors and dimensional configurations available on request.

DIMENSIONS

Cross-section (mm²)	AWG / MCM and strand construction	Largest single wire Ø (mm)	Approx. outer Ø (mm), ±10%	Copper wt. (kg/km)	Approx. cable wt. (kg/km)
1.5	16 AWG (27/30)	0.26	3.2	14.4	22
2.5	14 AWG (46/30)	0.26	3.6	24.0	32
4	12 AWG (52/28)	0.31	4.3	38.4	46
6	10 AWG*	0.31	5.5	57.6	75
10	8 AWG (77/26)	0.41	6.7	96.0	117
16	6 AWG (119/26)	0.41	8.8	153.6	192
25	4 AWG (196/26)	0.41	10.2	240	282
35	2 AWG (280/26)	0.41	12.7	336	414
50	1 AWG (400/26)	0.41	13.9	480	573
70	2/0 AWG (554/26)	0.41	16.3	672	775
95	3/0 AWG (484/24)	0.51	18.4	912	1,009
120	4/0 AWG (589/24)	0.51	20.9	1,152	1,248
150	250 MCM (740/24)	0.51	22.4	1,440	1,532
185	350 MCM (899/24)	0.51	25.0	1,776	1,889
240	450 MCM (1220/24)	0.51	28.3	2,304	2,474
300	—	0.51	31.0	2,880	3,063

* 6 mm² strand construction pending confirmation.

TECHNICAL DATA

Voltage / test	Nominal: 1.5–300 mm²: U_0/U 450/750 V. Test: 2500 V.
UL voltage rating	16 AWG–550 MCM: 1000 V.
UL designation	UL AWM Style 10528.
Minimum bend radius	7.5 x d; 5 x d for one single bend.
Temperature	Fixed: -40°C to +90°C according to DIN VDE. Flexible: -30°C to +90°C according to DIN VDE.
UL temperature rating	Up to +75°C.
Halogen-free	According to IEC 60754-1 and VDE 0482-754-1.
Flame propagation	No flame propagation according to IEC 60332-3-24 and IEC 60332-3-25, Category C or D.
Fire performance	Flame-retardant and self-extinguishing according to IEC 60332-1-2 and VDE 0482-332-1-2.
Corrosive gases	No development of corrosive combustion gases according to IEC 60754-2 and VDE 0482-754-2.
Smoke density	Low smoke density according to IEC 61034 and VDE 0482-1034.
Flexibility / substances	Good flexibility. RoHS compliant and PFAS-free.

KEY PERFORMANCE 1000 V UL (16 AWG–550 MCM) | U_0/U 450/750 V (1.5–300 mm²) | UL rating up to +75°C

MOTION NOTE For fixed wiring and general flexible routing. Continuous flexing in drag chains requires separate qualification.

AT A GLANCE

HALOGEN-FREE FRNC | LOW SMOKE | UL AWM STYLE 10528

1.5–300 mm² | PFAS-FREE | RoHS COMPLIANT

HULK COMPANY CREDENTIALS

Quality & compliance marks

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