Shielded Halogen-Free Numbered Core Control Cable 450/750V – C1 LSZH EMC Cable

450/750 V | Tinned copper braid | NF C32-070 C1 option subject to configuration confirmation

This shielded halogen-free numbered core control cable is designed for reliable signal and control transmission in electrically demanding industrial environments. With an overall tinned copper braid, foil wrapping, low-smoke LSZH sheath and 450/750V rating, it helps reduce electromagnetic interference while providing flame-retardant, self-extinguishing characteristics for automation, machinery and rail-related applications.



Product illustration

APPLICATION

- Industrial automation
- Control cabinets and switchgear
- Machine construction
- Automotive manufacturing
- Railway and transportation equipment
- EMC-sensitive control circuits

CONSTRUCTION

Conductor	Fine-stranded bare copper conductor in accordance with IEC 60228 / VDE 0295, Class 5
Insulation	Halogen-free insulation compound
Core ID	Black cores with consecutive white numbering in accordance with EN 50334 / VDE 0293-334. Green/yellow protective earth conductor from 3 cores, where applicable
Core assembly	Cores stranded in layers for a compact and flexible multi-core construction
Screen	Foil wrapping applied over the stranded core assembly. Tinned copper braid for EMC protection and interference reduction
Outer sheath	Halogen-free, low-smoke, flame-retardant outer sheath compound. Black outer sheath, similar to RAL 9005
Options	Core count, conductor size, screen design, sheath colour, cable marking, packaging and project-specific construction available upon request

SELECTED DIMENSIONS

Cores × section (mm²)	Strand Ø (mm)	Approx. OD (mm)	Copper wt. (kg/km)	Cable wt. (kg/km)
2 × 0.50	0.21	6.5	27.2	56
18 × 1.00	0.21	16.6	270.9	450
4 × 4.00	0.31	12.9	213.1	297
5 × 35.00	0.41	34.9	1,901.3	2,449

Full dimensions and weights for 33 configurations on page 2.

TECHNICAL DATA

Nominal voltage	U_0/U 450/750 V
Test voltage	Core to core: 2500 V; core to screen: 2500 V
Installation	Fixed installation and flexible application
Min. bend radius	Fixed installation: 5 × cable diameter; flexible application: 10 × cable diameter
Temperature	Fixed: -30°C to +90°C. Flexible: -20°C to +90°C.
EMC	Screened construction for improved electromagnetic compatibility in interference-sensitive control applications
Radiation resistance	Up to 100 kGy, subject to confirmation for the final product specification
Halogen-free	In accordance with IEC 60754-1 / VDE 0482-754-1
Flame propagation	No flame propagation in accordance with IEC 60332-3-24 / VDE 0482-332-3-24 and IEC 60332-3-25 / VDE 0482-332-3-25, Category C/D
Fire performance	Flame-retardant and self-extinguishing in accordance with IEC 60332-1-2 / VDE 0482-332-1-2; C1 performance to NF C32-070 available subject to confirmed product configuration
Combustion gases	Low-corrosivity combustion gas performance in accordance with IEC 60754-2 / VDE 0482-754-2
Smoke density	Low-smoke performance in accordance with IEC 61034 / VDE 0482-1034
Environmental	RoHS-compliant material options available; confirm project-specific material and compliance requirements before ordering

HULK COMPANY CREDENTIALS

Quality & compliance marks

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

Dimensions

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Dimensions, copper figures and cable weights are approximate reference values. Actual values may vary within applicable manufacturing tolerances. Other core counts, cross-sections, sheath colours, screening options and custom cable constructions are available upon request.

Cores × section (mm²)	Largest strand Ø (mm)	Approx. outer Ø (mm)	Approx. copper wt. (kg/km)	Approx. cable wt. (kg/km)
2 × 0.50	0.21	6.5	27.2	56
3 × 0.75	0.21	7.7	42.9	86
4 × 0.75	0.21	8.3	52.5	102
5 × 0.75	0.21	9.2	62.2	126
7 × 0.75	0.21	9.9	79.4	154
12 × 0.75	0.21	13.5	146.1	272
18 × 0.75	0.21	15.9	227.2	396
3 × 1.00	0.21	7.9	50.2	93
4 × 1.00	0.21	8.5	62.2	112
5 × 1.00	0.21	9.5	74.3	139
16 × 1.00	0.21	15.7	251.0	406
18 × 1.00	0.21	16.6	270.9	450
3 × 1.50	0.26	8.5	67.0	113
4 × 1.50	0.26	9.4	83.9	142
5 × 1.50	0.26	10.3	101.2	170
7 × 1.50	0.26	11.5	154.7	234
12 × 1.50	0.26	15.5	270.0	403

Cores × section (mm²)	Largest strand Ø (mm)	Approx. outer Ø (mm)	Approx. copper wt. (kg/km)	Approx. cable wt. (kg/km)
18 × 1.50	0.26	18.3	370.1	567
3 × 2.50	0.26	10.0	101.1	160
4 × 2.50	0.26	11.3	143.8	236
5 × 2.50	0.26	12.5	174.4	265
3 × 4.00	0.31	11.7	169.2	236
4 × 4.00	0.31	12.9	213.1	297
5 × 4.00	0.31	14.5	277.7	380
4 × 6.00	0.31	15.2	327.3	442
5 × 6.00	0.31	16.8	386.4	522
7 × 6.00	0.31	18.4	514.3	677
4 × 10.00	0.41	18.9	495.7	682
5 × 10.00	0.41	21.2	605.9	847
3 × 16.00	0.41	20.7	585.9	787
5 × 16.00	0.41	25.6	936.8	1,246
5 × 25.00	0.41	31.3	1,594.7	1,938
5 × 35.00	0.41	34.9	1,901.3	2,449

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