



Halogen-Free Armoured Signalling & Fire Detection Cables

A-HHBH

Halogen-Free Steel-Tape Armoured Signalling Cable

300/500 V halogen-free double steel-tape armoured outdoor & tunnel signalling cable



300/500 V

Double Steel Tape (B)

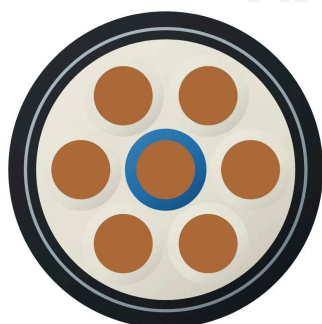
Halogen-Free A-HHBH

Application

A-HHBH is a rodent-proof, crush-resistant halogen-free (LSZH) outdoor and tunnel signalling cable constructed with solid bare copper conductors, halogen-free 'H' core insulation, a halogen-free extruded inner bedding 'H', double helical galvanized steel tape a

Typical uses: Rail & metro trackside troughing, Road & utility tunnels, Refinery & plant fire alarm trunks, Power substations & switchyards, Airport field lighting control

Construction



Cross-section, not to scale

1	Solid bare copper conductor	IEC 60228
2	Halogen-free core insulation (H)	DIN VDE 0816
3	Halogen-free inner sheath (H)	DIN VDE 0816
4	Double steel tape armour (B)	DIN VDE 0816
5	Outer LSZH sheath (H)	DIN VDE 0816

Technical data

Typical values

Rated voltage	300/500 V	Routine AC test voltage	2000 V rms (50 Hz, 1 min)
Insulation resistance @ 20 °C	≥1000 MΩ·km	Operating temperature range	-30 °C to +70 °C (up to +90 °C on cross-linked H grades)
Min. installation temperature	-5 °C	Minimum bend radius	12 × overall cable diameter
Impact & rodent resistance	Double helical galvanized steel tape armour	Flame propagation	IEC 60332-3-24 Cat. C & EN 60332-1-2
Halogen acidity & smoke	IEC 60754-1/2 (pH ≥4.3, ≤10 µS/mm) & IEC 61034-2 (≥60 % light transmittance)	UV & outdoor weathering	Carbon-black UV-stabilised HM4 outer sheath
Standards	DIN VDE 0816 / DIN VDE 0815 / EN 50288-7		

Sizes

14 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Designation	Configuration	Cond. size	Outer Ø ≈ mm	Copper kg/km	Total weight ≈ kg/km	Min. bend R fixed mm
A-HHBH standard series 14 sizes						
☐ A-HHBH 2×2×0.8	2×2×0.8 mm	0.50 mm ²	11.2	19	195	134
☐ A-HHBH 4×2×0.8	4×2×0.8 mm	0.50 mm ²	12.6	39	250	151
☐ A-HHBH 6×2×0.8	6×2×0.8 mm	0.50 mm ²	14.2	58	310	170
☐ A-HHBH 10×2×0.8	10×2×0.8 mm	0.50 mm ²	16.2	96	410	194
☐ A-HHBH 20×2×0.8	20×2×0.8 mm	0.50 mm ²	19.8	193	625	238
☐ A-HHBH 2×2×1.4	2×2×1.4 mm	1.54 mm ²	13.8	59	295	166
☐ A-HHBH 4×2×1.4	4×2×1.4 mm	1.54 mm ²	16.0	118	405	192
☐ A-HHBH 4×1.5 RE	4×1.5 mm ²	1.50 mm ²	13.0	58	265	156
☐ A-HHBH 7×1.5 RE	7×1.5 mm ²	1.50 mm ²	14.8	101	345	178
☐ A-HHBH 12×1.5 RE	12×1.5 mm ²	1.50 mm ²	18.0	173	505	216
☐ A-HHBH 19×1.5 RE	19×1.5 mm ²	1.50 mm ²	20.6	274	690	247
☐ A-HHBH 24×1.5 RE	24×1.5 mm ²	1.50 mm ²	23.2	346	845	278
☐ A-HHBH 4×2.5 RE	4×2.5 mm ²	2.50 mm ²	14.2	96	330	170
☐ A-HHBH 7×2.5 RE	7×2.5 mm ²	2.50 mm ²	16.4	168	445	197

– Nominal outer diameters and weights are subject to manufacturing tolerances per DIN VDE 0816 / DIN VDE 0276.

Electrical data

14 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
2×2×0.8 mm	36.600	6	5
4×2×0.8 mm	36.600	6	5
6×2×0.8 mm	36.600	6	5
10×2×0.8 mm	36.600	6	5
20×2×0.8 mm	36.600	6	5
2×2×1.4 mm	11.900	14	12
4×2×1.4 mm	11.900	14	12
4×1.5 mm ²	12.100	18	15
7×1.5 mm ²	12.100	14	12
12×1.5 mm ²	12.100	11	9
19×1.5 mm ²	12.100	9	8

Configuration	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
24×1.5 mm ²	12.100	8	7
4×2.5 mm ²	7.410	25	22
7×2.5 mm ²	7.410	20	17

– Current ratings apply at +30 °C ambient in free air and +25 °C in enclosed tray/conduit.

Standards and approvals

- ✓ DIN VDE 0816 / 0815
- ✓ IEC 60332-3-24 Cat. C
- ✓ IEC 60754-1/2 & IEC 61034-2
- ✓ RoHS 3 & CE Compliant

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/a-hhbh-halogen-free-steel-tape-armoured-signalling-cable



Typical values for this cable type, based on DIN VDE 0816 / DIN VDE 0276. Values for your order are confirmed in the quotation. Subject to change without notice.
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