



Halogen-Free Armoured Signalling & Fire Detection Cables

A-H(L)HBH

LSZH Armoured Outdoor Signalling Cable

300/500 V longitudinally water-blocked, steel-tape armoured LSZH outdoor signalling cable



300/500 V

Water-Blocked (L) + STA (B)

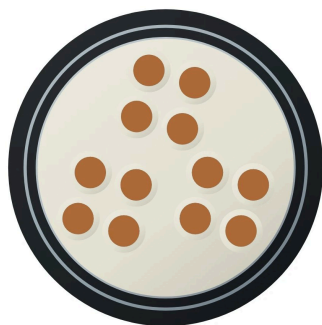
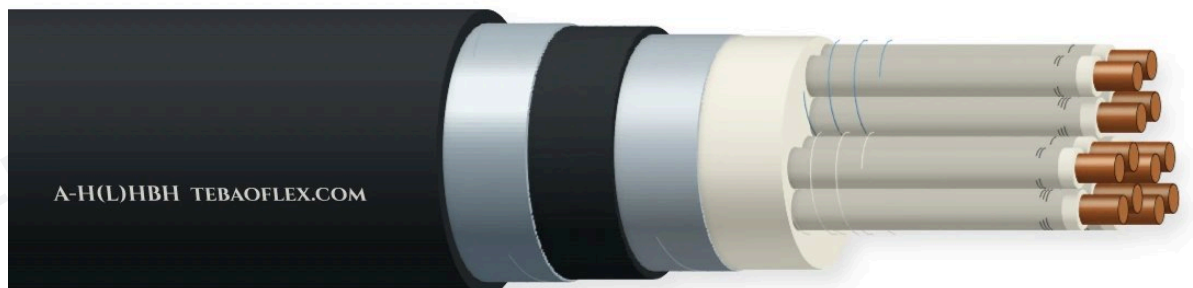
LSZH Outdoor Signalling

Application

A-H(L)HBH is a halogen-free outdoor signalling, fire-alarm network and railway/tunnel telecommunication cable built with solid bare copper conductors in star-quad or paired stranding, halogen-free H-compound insulation, an Al-polymer laminated longitudinal wat

Typical uses: Railway & metro tunnel signalling, Campus & refinery fire alarm loops, Airport & utility perimeters, Highway & road tunnel SCADA, Power substation interconnect

Construction



Cross-section, not to scale

1	Solid bare copper conductor	IEC 60228
2	Halogen-free polymer insulation (H)	DIN VDE 0816
3	Water-swellable core wrapping	DIN VDE 0816
4	Laminated Al-copolymer barrier (L)	DIN VDE 0816
5	Double steel tape armour (B)	DIN VDE 0816
6	Outer LSZH sheath (H)	DIN VDE 0816

Technical data

Typical values

Peak operating voltage	300/500 V (telecom & signalling)	Test voltage (core/core & core/screen)	2000 V AC rms (50 Hz, 1 min)
Mutual capacitance @ 800 Hz	≤52 nF/km (0.8 mm star-quad)	Insulation resistance	≥5000 MΩ·km
Operating temperature (fixed)	-30 °C to +70 °C	Installation temperature	-5 °C to +50 °C
Minimum bend radius	12 × cable outer diameter	Crush & rodent resistance	Double helical galvanized steel tape (2 × 0.15–0.20 mm)
Bunched flame propagation	IEC 60332-3-24 Cat. C & IEC 60332-1-2	Halogen-free & low smoke	IEC 60754-1/2 (pH ≥4.3) & IEC 61034-2 (≥60 % light transmission)
Radial & longitudinal water block	Laminated sheath (L) per IEC 60794-1-22 Method F5	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	Pairs × Ø / mm ²	Cond. size	Outer Ø ≈ mm	Copper kg/km	Total weight ≈ kg/km	Min. bend R fixed mm
A-H(L)HBH standard series 14 sizes						
☐ A-H(L)HBH 2×2×0.8	2×2×0.8 mm	0.50 mm ²	11.8	19	210	142
☐ A-H(L)HBH 4×2×0.8	4×2×0.8 mm	0.50 mm ²	13.2	39	265	158
☐ A-H(L)HBH 6×2×0.8	6×2×0.8 mm	0.50 mm ²	14.8	58	330	178
☐ A-H(L)HBH 10×2×0.8	10×2×0.8 mm	0.50 mm ²	16.9	96	435	203
☐ A-H(L)HBH 20×2×0.8	20×2×0.8 mm	0.50 mm ²	20.5	193	660	246
☐ A-H(L)HBH 30×2×0.8	30×2×0.8 mm	0.50 mm ²	23.8	289	890	286
☐ A-H(L)HBH 2×2×1.4	2×2×1.4 mm	1.54 mm ²	14.5	59	315	174
☐ A-H(L)HBH 4×2×1.4	4×2×1.4 mm	1.54 mm ²	16.8	118	430	202
☐ A-H(L)HBH 6×2×1.4	6×2×1.4 mm	1.54 mm ²	19.2	177	565	230
☐ A-H(L)HBH 10×2×1.4	10×2×1.4 mm	1.54 mm ²	22.4	296	810	269
☐ A-H(L)HBH 4×1.5 RE	4×1.5 mm ²	1.50 mm ²	13.6	58	285	163
☐ A-H(L)HBH 7×1.5 RE	7×1.5 mm ²	1.50 mm ²	15.4	101	365	185
☐ A-H(L)HBH 12×1.5 RE	12×1.5 mm ²	1.50 mm ²	18.8	173	530	226
☐ A-H(L)HBH 4×2.5 RE	4×2.5 mm ²	2.50 mm ²	14.9	96	350	179

– Nominal outer diameters and weights are subject to manufacturing tolerances per DIN VDE 0816 / EN 50288-7.

Electrical data

14 sizes

Pairs × Ø / mm ²	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
30×2×0.8 mm	36.600	6	5
2×2×1.4 mm	11.900	14	12
4×2×1.4 mm	11.900	14	12
6×2×1.4 mm	11.900	14	12
10×2×1.4 mm	11.900	14	12

Pairs × Ø / mm ²	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
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
4×2.5 mm ²	7.410	25	22

– 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-h-l-hbh-lszh-armoured-outdoor-signalling-cable



Typical values for this cable type, based on DIN VDE 0816 / EN 50288-7. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.