



EN 50525-3-21 Halogen-Free Cross-Linked Elastomer Flexible Cables

S07HXCHX-F

Screened Halogen-Free Cross-Linked Elastomer Flexible

450/750 V (0.6/1 kV fixed) copper-braid screened halogen-free cross-linked elastomer flex



450/750 V (0.6/1 kV)

EN 50525-3-21

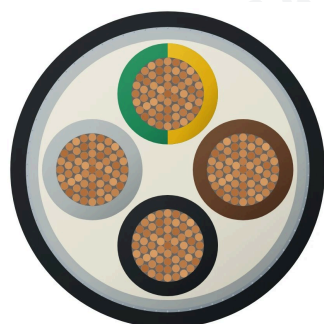
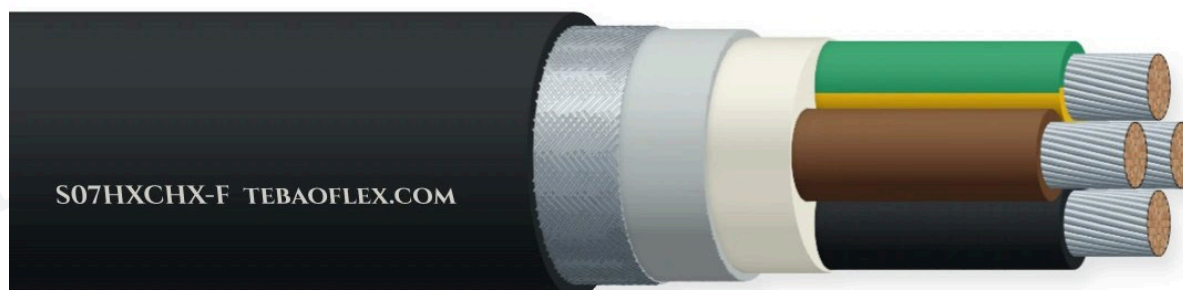
Cu-Braid Screened LSZH

Application

S07HXCHX-F is a heavy-duty EMC-screened halogen-free flexible power and control cable based on EN 50525-3-21 (H07ZZ-F / HD 22.13). It combines Class 5 fine-stranded copper conductors, cross-linked halogen-free elastomer insulation (EI8 / HX), a halogen-free in

Typical uses: Metro & road tunnel ventilation, Airports, arenas & exhibition halls, Marine & offshore machinery, Hospitals & clean manufacturing, Railway rolling-stock depots

Construction



Cross-section, not to scale

1	Class 5 flexible copper	IEC 60228
2	Cross-linked LSZH elastomer (HX)	EN 50363-5
3	Halogen-free inner sheath	EN 50525-3-21
4	Tinned copper wire braid (C)	EN 50525-3-21
5	Cross-linked LSZH outer sheath (HX)	EN 50363-6

Technical data

Typical values

Nominal voltage U0/U	450/750 V (0.6/1 kV in fixed protected installations)	Routine AC test voltage	2.5 kV rms (50 Hz, 5 min)
Surface transfer impedance @ 30 MHz	≤250 mΩ/m	Max. continuous conductor temp.	+90 °C
Max. short-circuit temp.	+250 °C (5 s)	Operating temperature range	-40 °C to +90 °C (fixed) · -25 °C to +90 °C (flexing)
Min. bend radius (fixed / flexing)	6 × cable OD (fixed) · 10 × cable OD (flexible)	Max. tensile load	15 N/mm ² of copper cross-section during flexing
Flame propagation	IEC 60332-3-24 Cat. C & EN 60332-1-2	Halogen acidity & smoke density	IEC 60754-2 (pH ≥4.3, ≤10 μS/mm) & IEC 61034-2 (≥60 % transmittance)
Oil & ozone resistance	EN 60811-404 mineral oil & EN 60811-403 ozone resistant (EM8)	Standards	EN 50525-3-21 (H07ZZ-F screened derivative)

Sizes

15 standard constructions

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

Designation	Cores × mm ²	Cross-section	Outer Ø ≈ mm	Copper kg/km	Total weight ≈ kg/km	Min. bend R fixed mm
S07HXCHX-F standard series 15 sizes						
☐ S07HXCHX-F 3G1.5	3G1.5	1.5 mm ²	11.4	68	185	68
☐ S07HXCHX-F 4G1.5	4G1.5	1.5 mm ²	12.4	85	220	74
☐ S07HXCHX-F 5G1.5	5G1.5	1.5 mm ²	13.5	104	260	81
☐ S07HXCHX-F 7G1.5	7G1.5	1.5 mm ²	15.6	138	340	94
☐ S07HXCHX-F 12G1.5	12G1.5	1.5 mm ²	19.8	226	530	119
☐ S07HXCHX-F 3G2.5	3G2.5	2.5 mm ²	13.0	102	245	78
☐ S07HXCHX-F 4G2.5	4G2.5	2.5 mm ²	14.2	132	295	85
☐ S07HXCHX-F 5G2.5	5G2.5	2.5 mm ²	15.5	162	355	93
☐ S07HXCHX-F 7G2.5	7G2.5	2.5 mm ²	17.8	218	465	107
☐ S07HXCHX-F 4G4	4G4	4.0 mm ²	16.0	202	405	96
☐ S07HXCHX-F 4G6	4G6	6.0 mm ²	17.8	292	535	107
☐ S07HXCHX-F 4G10	4G10	10 mm ²	22.0	475	840	132
☐ S07HXCHX-F 4G16	4G16	16 mm ²	25.0	740	1,180	150
☐ S07HXCHX-F 4G25	4G25	25 mm ²	29.8	1,135	1,740	179
☐ S07HXCHX-F 4G35	4G35	35 mm ²	33.2	1,560	2,280	199

– Nominal outer diameters and weights are subject to manufacturing tolerances per EN 50525-3-21 / HD 22.13.

Electrical data

15 sizes

Cores × mm ²	Max. DCR @ 20 °C Ω/km	Current in air A	Current in duct/tray A
3G1.5	13.300	23	20
4G1.5	13.300	20	17
5G1.5	13.300	20	17
7G1.5	13.300	15	13
12G1.5	13.300	12	10
3G2.5	7.980	30	26
4G2.5	7.980	27	23
5G2.5	7.980	27	23
7G2.5	7.980	20	17

Cores × mm ²	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
4G4	4.950	36	31
4G6	3.300	46	40
4G10	1.910	65	56
4G16	1.210	87	75
4G25	0.780	115	99
4G35	0.554	143	123

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

Standards and approvals

- ✓ EN 50525-3-21 / H07ZZ-F Base
- ✓ IEC 60332-3-24 Cat. C
- ✓ IEC 60754-1/2 & IEC 61034-2
- ✓ EN 50363-5 EI8 & EN 50363-6 EM8

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/s07hxchx-f-screened-halogen-free-cross-linked-elastomer-flexible-cable



Typical values for this cable type, based on EN 50525-3-21 / HD 22.13. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.