



IEEE 1580 LSX & BS 6883 Offshore / Shipboard Power Cables

LSX Armoured and Sheathed LSZH Shipboard Power Cable

IEEE 1580 / UL 1309 0.6/1 kV & 2 kV Type LSX-BS wire-braid armoured & LSZH-sheathed



IEEE 1580 Type LSX-BS / UL 1309

0.6/1 kV & 2 kV · 1C to 4C

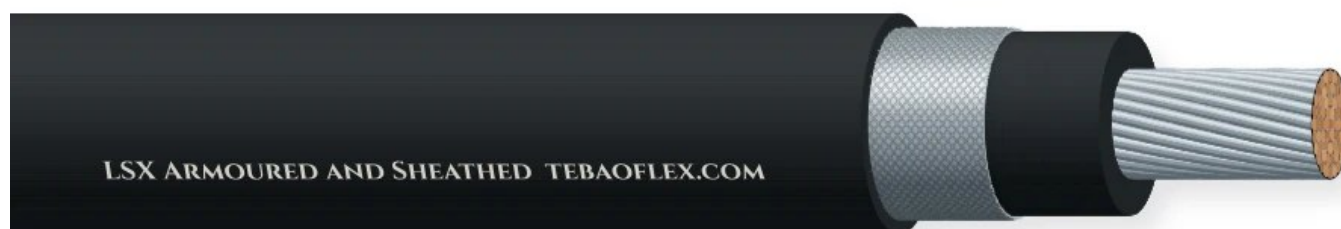
Bronze / Tinned-Cu Braid + LSZH

Application

LSX Armoured and Sheathed LSZH Shipboard Power Cable (IEEE 1580 Type LSX-BS / LSX-TS / LSX-AS, UL 1309) combines flexible Class 5 tinned copper conductors and 100/110 °C Type LSX cross-linked polyolefin insulation with a ≥ 88 % bronze, tinned-copper, or

Typical uses: Offshore platforms, FPSOs & MODUs, Commercial & naval ship propulsion, Exposed weather-deck & bulkhead feeders, VFD thruster & mud-pump power circuits

Construction



Cross-section, not to scale

1	Flexible stranded tinned copper	IEEE 1580 / UL 1309
2	Type LSX cross-linked polyolefin	IEEE 1580 Type LSX
3	Inner jacket / bedding (LSZH)	IEEE 1580
4	Basket-weave wire braid armour	IEEE 1580 Clause 4.9
5	Outer protective sheath (LSZH)	IEEE 1580 / IEC 60092-360 SHF1/SHF2

Technical data

Typical values

Rated voltage	600/1000 V (0.6/1 kV) & 2000 V (2.0 kV) per	AC dielectric test voltage	3.5 kV AC (0.6/1 kV) · 6.5 kV AC (2.0 kV)
Max. conductor operating temp.	+100 °C / +110 °C continuous · +250 °C	Single-core armour magnetism	Non-magnetic Bronze, Tinned Cu, or Aluminum
Operating temperature range	-40 °C to +90 °C ambient	Cold bend & cold impact	-40 °C cold bend / -35 °C cold impact (CSA)
Min. bending radius	6 × D (single-core) · 8 × D (multi-core)	Braid armour optical coverage	≥ 88 % basket-weave wire braid per IEEE 1580
Bunched vertical flame test	IEEE 1202 / FT4 & IEC 60332-3-22 Category A	Halogen-free, low smoke & oil	IEC 60754-1/2 (< 0.5 % HCl) · IEC 61034-2
Standards	IEEE 1580 (Type LSX-BS / LSX-TS / LSX-AS)		

Sizes

6 standard constructions

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

Order designation	Cores × Size	Main cross-section	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard LSX Armoured and Sheathed configurations 6 sizes						
☐ LSX-BS 1C × 50 mm ² (1/0 AWG) Armoured 0.6/1 kV	1 × 50 mm ² (1/0 AWG)	50.0 mm ²	19.2	560	820	154
☐ LSX-BS 1C × 120 mm ² (4/0 AWG) Armoured 0.6/1 kV	1 × 120 mm ² (4/0 AWG)	120.0 mm ²	25.0	1,240	1,650	200
☐ LSX-BS 1C × 240 mm ² (535 kcmil) Armoured 2.0 kV	1 × 240 mm ² (535 kcmil 2kV)	240.0 mm ²	33.4	2,410	3,080	267
☐ LSX-BS 3C × 16 mm ² (6 AWG) Armoured 0.6/1 kV	3 × 16 mm ² (6 AWG)	16.0 mm ²	23.8	590	1,020	190
☐ LSX-BS 3C × 50 mm ² (1/0 AWG) Armoured 0.6/1 kV	3 × 50 mm ² (1/0 AWG)	50.0 mm ²	34.6	1,680	2,490	277
☐ LSX-BS 3C × 95 mm ² (4/0 AWG) Armoured 0.6/1 kV	3 × 95 mm ² (4/0 AWG)	95.0 mm ²	44.2	3,090	4,380	354

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per IEEE 1580 / IEEE 45 / UL 1309 (Type LSX-BS / LSX-AS Armoured).

Electrical & ampacity

6 sizes

Configuration	Max. DC R @ 20 °C Ω/km	I _z free air A	I _z tray / duct A	I _{sc} (1 s) kA	Voltage drop mV/A/m	Dielectric test V
1 × 50 mm ² (1/0 AWG)	0.39	255	225	7.15	0.78	3,500
1 × 120 mm ² (4/0 AWG)	0.16	445	395	17.16	0.35	3,500
1 × 240 mm ² (535 kcmil 2kV)	0.08	695	620	34.32	0.21	6,500
3 × 16 mm ² (6 AWG)	1.24	102	91	2.29	2.30	3,500
3 × 50 mm ² (1/0 AWG)	0.39	205	182	7.15	0.78	3,500
3 × 95 mm ² (4/0 AWG)	0.21	310	276	13.59	0.43	3,500

– Conductor DC resistance at +20 °C per IEC 60228 and reference current ratings at 30 °C ambient per IEEE 1580 / IEEE 45 / UL 1309 (Type LSX-BS / LSX-AS Armoured).

Standards and approvals

- ✓ IEEE 1580 Type LSX-BS
- ✓ UL 1309 / IEEE 45
- ✓ ABS / DNV / LR / USCG

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

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Web

tebaoflex.com/cables/lx-armoured-and-sheathed-lszh-shipboard-power-cable



Typical values for this cable type, based on IEEE 1580 / IEEE 45 / UL 1309 (Type LSX-BS / LSX-AS Armoured). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.