Energy storage battery cable for containerised BESS

HIGH-FLEX · LSZH

Fine-strand, low-smoke battery cable for cell, rack and PCS connections in containerised energy storage systems.

SYSTEM VOLTAGE	CONDUCTOR	SHEATH	TEMPERATURE
1500 V DC	Class 6 tinned copper	LSZH	105 °C

TYPICAL APPLICATIONS

- Cell-to-cell and cell-to-rack links
- Rack to PCS and DC bus
- BMS and auxiliary power feed
- Container HVAC and fire system supply

CONSTRUCTION

- Tinned copper conductor, Class 6
- Cross-linked XLPO insulation
- LSZH sheath, low smoke and halogen free
- Flexible for rack dressing
- Optional screened construction for BMS

TECHNICAL DATA

Rated voltage	0.6/1 kV AC · 1.5 kV DC	**Temperature**	−40 °C to +105 °C, 125 °C short term
Conductor	Tinned copper, Class 6	**Flame**	IEC 60332-1-2, IEC 60332-3-24
Insulation	XLPO	**Smoke / halogen**	IEC 61034-2, IEC 60754-1/-2
Sheath	LSZH	**Standard**	EN 50618, IEC 62930, IEC 60228
Cross-section	16 / 25 / 35 / 50 / 70 / 95 / 120 / 150 / 185 / 240 / 300 / 400 mm²	**Packing**	Drums and cut lengths to rack schedule

Typical values. The final construction is confirmed on the order datasheet and the released drawing.

STANDARDS, TESTING AND DOCUMENTS

Routine tests	Conductor resistance, voltage test and insulation resistance on every length
Type tests	Type-test reports for each construction, witnessed by a third party on request
Documents with the drum	Packing list, drum list, routine test certificate, datasheet, CO / FORM A
Traceability	Drum number marked and recorded against the routine test certificate

OTHER CONSTRUCTIONS FROM THE SAME RANGE

Energy Storage Monitoring Cable	www.zmsenergycable.com/products/special-energy-cables/energy-storage-monitoring-cable/
PV1-F Solar DC Cable	www.zmsenergycable.com/products/solar-pv-cables/pv1-f-solar-dc-cable/

PACKING AND DELIVERY

Drum	Wooden or steel-framed export drum, 250–500 m per drum by cross-section
Packing	Sealed ends, protected lugs, desiccant, UV-resistant wrap
Marking	Drum no., designation, voltage, cross-section, length, gross weight
Lead time	15–25 working days for standard builds
Terms	FOB Qingdao, Tianjin or Shanghai. CIF, CFR and DAP on request

HOW TO ORDER

To quote, send the voltage class (U0/U), conductor material and cross-section, screen or armour, sheath, drum length, delivery port and the standard the project specifies. We return a released drawing, the test programme and a drum plan with the quotation.

SELECTION NOTES

How is the cable sized for a battery rack?
Size on continuous current with the enclosure ambient and the grouping factor, then check voltage drop over the run. Paralleled cables must be the same length and construction. We can review the rack schedule and confirm the section.

Is a screened version available?
Yes. A screened construction is available where BMS or communication pairs share the same route as the DC cables.

What terminations are used?
Cable is normally supplied as cut lengths; pre-assembled lugs and heat-shrink can be quoted where the rack layout is fixed.

Certification. Environmental management to ISO 14001:2015 and occupational health and safety to ISO 45001:2018, with CE marking under the EU low-voltage and EMC directives. Independent inspection and type testing are carried out through ISO/IEC 17020 and 17025 accredited laboratories. Certificate numbers and validity dates are published at www.zmsenergycable.com/certificates/.

Request a quotation for this cable

Send the specification sheet or the cable schedule and we return a released drawing, the test programme and a drum plan with the price.

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