

बिड दस्तावेज़ / Bid Document

बिड विवरण/Bid Details	
बिड बंद होने की तारीख/समय /Bid End Date/Time	16-03-2026 17:00:00
बिड खुलने की तारीख/समय /Bid Opening Date/Time	16-03-2026 17:30:00
बिड पेशकश वैधता (बंद होने की तारीख से)/Bid Offer Validity (From End Date)	180 (Days)
मंत्रालय/राज्य का नाम/Ministry/State Name	Uttar Pradesh
विभाग का नाम/Department Name	Energy Department Uttar Pradesh
संगठन का नाम/Organisation Name	N/a
कार्यालय का नाम/Office Name	Kesco
कुल मात्रा/Total Quantity	36000
वस्तु श्रेणी /Item Category	XLPE Cable for Working Voltages up to and Including 1.1 7098 (Part 1) (Q2)
बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का) /Minimum Average Annual Turnover of the bidder (For 3 Years)	98 Lakh (s)
मूल उपकरण निर्माता का औसत टर्नओवर (गत 3 वर्षों का)/OEM Average Turnover (Last 3 Years)	98 Lakh (s)
उन्हीं/समान सेवा के लिए अपेक्षित विगत अनुभव के वर्ष/Years of Past Experience Required for same/similar service	3 Year (s)
एमएसएमई के लिए अनुभव के वर्षों और टर्नओवर से छूट प्रदान की गई है/MSE Relaxation for Years of Experience and Turnover	No
स्टार्टअप के लिए अनुभव के वर्षों और टर्नओवर से छूट प्रदान की गई है /Startup Relaxation for Years of Experience and Turnover	No
विक्रेता से मांगे गए दस्तावेज़/Document required from seller	Experience Criteria,Past Performance,Bidder Turnover,Ce (Requested in ATC),OEM Authorization Certificate,OEM A Turnover,Additional Doc 1 (Requested in ATC),Additional (Requested in ATC),Additional Doc 3 (Requested in ATC), of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience Criteria, the supporting documents to prove his eligibility exemption must be uploaded for evaluation by the buyer
क्या आप निविदाकारों द्वारा अपलोड किए गए दस्तावेज़ों को निविदा में भाग लेने वाले सभी निविदाकारों को दिखाना चाहते हैं? संदर्भ मेन् है/Do you want to show documents uploaded by bidders to all bidders participated in bid?	Yes (Documents submitted as part of a clarification or re during the tender/bid process will also be displayed to ot participated bidders after log in)

बिड विवरण/Bid Details	
बिड लगाने की समय सीमा स्वतः नहीं बढ़ाने के लिए आवश्यक बिड की संख्या। / Minimum number of bids required to disable automatic bid extension	3
दिनों की संख्या, जिनके लिए बिड लगाने की समय-सीमा बढ़ाई जाएगी। / Number of days for which Bid would be auto-extended	5
ऑटो एक्सटेंशन अधिकतम कितनी बार किया जाना है। / Number of Auto Extension count	3
विगत प्रदर्शन / Past Performance	80 %
बिड से रिवर्स नीलामी सक्रिय किया/ Bid to RA enabled	Yes
रिवर्स नीलामी योग्यता नियम/ RA Qualification Rule	H1-Highest Priced Bid Elimination
बिड का प्रकार/ Type of Bid	Two Packet Bid
प्राथमिक उत्पाद श्रेणी/ Primary product category	XLPE Cable for Working Voltages up to and Including 1.1 7098 (Part 1)
तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय / Time allowed for Technical Clarifications during technical evaluation	2 Days
निरीक्षण आवश्यक (सूचीबद्ध निरीक्षण प्राधिकरण /जेम के साथ पूर्व पंजीकृत एजेंसियों द्वारा)/ Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
अनुमानित बिड मूल्य / Estimated Bid Value	19560000
मूल्यांकन पद्धति/ Evaluation Method	Item wise evaluation
मध्यस्थता खंड/ Arbitration Clause	No
सुलह खंड/ Mediation Clause	No

ईएमडी विवरण/EMD Detail

एडवाइजरी बैंक/Advisory Bank	IDBI Bank
Schedule 1 ईएमडी राशि/EMD Amount (In INR)	36000
Schedule 2 ईएमडी राशि/EMD Amount (In INR)	159600

ईपीबीजी विवरण /ePBG Detail

एडवाइजरी बैंक/Advisory Bank	IDBI Bank
ईपीबीजी प्रतिशत (%) /ePBG Percentage(%)	5.00
ईपीबीजी की आवश्यक अवधि (माह) /Duration of ePBG required (Months).	36

(a). जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित केटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज़ प्रस्तुत करने है। एमएसई केटेगरी केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।/EMC The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per Ge the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemp EMD. Traders are excluded from the purview of this Policy.

(b). The EMD Amount will be applicable for each schedule/group selected during Bid creation.

(c). ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए। / EMD & Performance security should be in f: Beneficiary, wherever it is applicable.

लाभार्थी /Beneficiary :

EE PP
KESCO, Energy Department Uttar Pradesh, N/A,
(Kesco Kanpur)

बोली विभाजन लागू नहीं किया गया/ Bid splitting not applied.

एमआईआई खरीद वरीयता/MII Purchase Preference

एमआईआई खरीद वरीयता/MII Purchase Preference	No
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एमएसई खरीद वरीयता/MSE Purchase Preference

एमएसई खरीद वरीयता/MSE Purchase Preference	Yes
सूक्ष्म और लघु उद्यम मूल उपकरण निर्माताओं को खरीद में प्राथमिकता, यदि उनका मूल्य L1+X% तक की सीमा में हो / Purchase Preference to MSE OEMs available upto price within L1+X%	15
सूक्ष्म और लघु उद्यम को खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Maximum Percentage of Bid quantity for MSE purchase preference	25

1. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Aud Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover c relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less th the average turnover in respect of the completed financial years after the date of constitution shall be taken into acc criteria.

2. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM of the product offe {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Pro Central / State Govt Organization / PSU for number of Financial years as indicated above in the bid document before opening date. Copies of relevant contracts and delivery acceptance certificates like CRAC to be submitted along with support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of pr having highest value should meet this criterion.

3. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentar: the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cos indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years aft

constitution shall be taken into account for this criteria.

4. Purchase preference to Micro and Small Enterprises (MSEs) from the State of Bid Inviting Authority : Purchase preference will be given to MSEs as Micro and Small Enterprises from the State of Bid Inviting Authority. If the bidder wants to avail purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are not within the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 10% of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price. A contract will be awarded for percentage of 25 % of total quantity as defined/ decided in relevant policy.

5. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on assessment of reasonableness and based on competitive prices received in Bid / RA process.

6. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Products for 80% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Govt Organization / PSU. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the contract to primary product having highest bid value should meet this criterion.

7. Reverse Auction would be conducted amongst all the technically qualified bidders except the Highest quoting bidder. A technically qualified Highest Quoting bidder will not be allowed to participate in RA. However, H-1 will also be allowed to participate in RA in following cases:

- If number of technically qualified bidders are only 2 or 3.
- If Buyer has chosen to split the bid amongst N sellers, and H1 bid is coming within N.
- In case Primary product of only one OEM is left in contention for participation in RA on elimination of H-1.
- If L-1 is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE L-1.
- If L-1 is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII L-1.

एक्सेल में अपलोड किए जाने की आवश्यकता /Excel Upload Required :

1.1 KV I CORE UN ARMORED FRLS LT XLPE CABLE - [1772276271.xlsx](#)

मूल्यांकन विधि(मदवार मूल्यांकन विधि) / Evaluation Method (Item Wise Evaluation Method)

Contract will be awarded schedulewise and the determination of L1 will be done separately for each schedule. The different consignee combination covered under each schedule are as under:

मूल्यांकन अनुसूचियां / Evaluation Schedules	अनुमानित मूल्य / Estimated Value	वस्तु/श्रेणी / Item/Category
Schedule 1	3600000	Xlpe Cable For Working Voltages Up To And Including 1.1 Kv As Per Is 7098 (part 1)
Schedule 2	15960000	Xlpe Cable For Working Voltages Up To And Including 1.1 Kv As Per Is 7098 (part 1)

XLPE Cable For Working Voltages Up To And Including 1.1 KV As Per IS 7098 (Part 1) (80 %)

Bis Required	Yes
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तकनीकी विशिष्टियाँ /Technical Specifications

[* जेम केटेगरी विशिष्टि के अनुसार / As per GeM Category Specification](#)

विवरण/Specification	विशिष्टि का नाम /Specification Name	बिड के लिए आवश्यक अनुमत मूल्य /Bid Requirement Values)
STANDARDS	Conformity of the specification for XLPE cable	as per IS:7098 (Part 1): 1988 latest
	Cables suitable for use in mines	Yes, No
	Cables suitable for use in low temperature applications	Yes, No
GENERIC	Classification of cables for improved fire performance category	C2 - FR-LSH
	Nominal Area of Conductor (in Sq mm)	300
	Number of core (in Nos)	1
CONSTRUCTION	Material of conductor	Aluminium
	Type of inner sheath	Vulcanized rubber, Un-vulcanized rubber, Thermo
ARMOURING	Type of cable	Armoured cable
	Material of armouring	Galvanized steel formed wire
	Type of armouring	Single wire, Double wire, Single strip, Double strip applicable for Un-armoured cable
CERTIFICATION	Availability of Optional Test Reports	Cold bend test for outer sheath, Cold impact test f sheath, Resistance test for Armour, Not applicable

Additional Specification Parameters - XLPE Cable For Working Voltages Up To And Including 1.1 KV As F (Part 1) (8000 meter)

Specification Parameter Name	Bid Requirement (Allowed Values)
ALL TECHNICAL SPECIFICATION	PLEASE REFER TENDER DOCUMENT FOR ALL TECHNICAL AND FINANCIAL PARAMETERS. ONLY TENDER TECHNICAL PARAMETERS ARE ALLOWED NOT C PARAMETER.

* Bidders offering must also comply with the additional specification parameters mentioned above.

परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Del
1	Shrikant Singh Rangila	208001,14/71 CIVIL LINE KESCO KANPUR	8000	90

XLPE Cable For Working Voltages Up To And Including 1.1 KV As Per IS 7098 (Part 1) (28 meter)

तकनीकी विशिष्टियाँ /Technical Specifications

* जेम केटेगरी विशिष्टि के अनुसार / As per GeM Category Specification

विवरण/Specification	विशिष्टि का नाम /Specification Name	बिड के लिए आवश्यक अनुमत मूल्य /Bid Requirement Values)
STANDARDS	Conformity of the specification for XLPE cable	as per IS:7098 (Part 1): 1988 latest
	Cables suitable for use in mines	Yes, No
	Cables suitable for use in low temperature applications	Yes, No
GENERIC	Classification of cables for improved fire performance category	01, C1 - FR, C2 - FR-LSH
	Nominal Area of Conductor (in Sq mm)	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70, 95, 120, 150, 300, 400, 500, 630, 800, 1000
	Number of core (in Nos)	1, 2, 3, 3.5, 4, 5, 6, 7, 8, 9, 10, 11, 12, 18, 24
CONSTRUCTION	Material of conductor	Plain Copper, Aluminium
	Type of inner sheath	Vulcanized rubber, Un-vulcanized rubber, Thermo
ARMOURING	Type of cable	Armoured cable, Un-armoured cable
	Material of armouring	Galvanized round steel wire, Galvanized steel for Aluminium round wire, Aluminium flat strip, Not applicable for Un-armoured cable
	Type of armouring	Single wire, Double wire, Single strip, Double strip applicable for Un-armoured cable
CERTIFICATION	Availability of Optional Test Reports	Cold bend test for outer sheath, Cold impact test for sheath, Resistance test for Armour, Not applicable

Additional Specification Parameters - XLPE Cable For Working Voltages Up To And Including 1.1 KV As per (Part 1) (28000 meter)

Specification Parameter Name	Bid Requirement (Allowed Values)
ALL TECHNICAL SPECIFICATIONS	PLEASE REFER TENDER DOCUMENT FOR ALL TECHNICAL AND FINANCIAL PARAMETERS. ONLY TENDER TECHNICAL PARAMETERS ARE ALLOWED NOT OTHER PARAMETERS.

* Bidders offering must also comply with the additional specification parameters mentioned above.

परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Del
1	Shrikant Singh Rangila	208001,14/71 CIVIL LINE KESCO KANPUR	28000	15

क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें/**Buyer Added Bid Specific Terms and Conditions**

1. **Generic**

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25% bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the order up to 25% of the contracted quantity during the currency of the contract at the contracted rates. The delivery quantity shall commence from the last date of original delivery order and in cases where option clause is exercised the extended delivery period the additional time shall commence from the last date of extended delivery period. Additional delivery time shall be $(\text{Increased quantity} \div \text{Original quantity}) \times \text{Original delivery period (in days)}$, minimum of 30 days. If the original delivery period is less than 30 days, the additional time equals the original period. The Purchaser may extend this calculated delivery duration up to the original delivery period while exercising option clause. Bidders must comply with these terms.

2. **Scope of Supply**

Scope of supply (Bid price to include all cost components) : Only supply of Goods

3. **Turnover**

Bidder Turn Over Criteria: The minimum average annual financial turnover of the bidder during the last three years ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the bidder's constitution / incorporation of the bidder is less than 3 year old, the average turnover in respect of the complete years after the date of constitution shall be taken into account for this criteria.

4. **Certificates**

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid Document, ATC and Corrigendum if any.

5. **Certificates**

The bidder is required to upload, along with the bid, all relevant certificates such as BIS licence, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.

6. **Past Project Experience**

Proof for Past Experience and Project Experience clause: For fulfilling the experience criteria any one of the following documents may be considered as valid proof for meeting the experience criteria: a. Contract copy and Invoice(s) with self-certification by the bidder that service/supplies against the invoices have been executed. b. Certificate by client with contract value. c. Any other document in support of contract execution like Third Party release note, etc. **Proof for Past Experience and Project Experience clause:** For fulfilling the experience criteria any one of the following documents may be considered as valid proof for meeting the experience criteria: a. Contract copy and Invoice(s) with self-certification by the bidder that service/supplies against the invoices have been executed. b. Certificate by client with contract value. c. Any other document in support of contract execution like Third Party release note, etc.

7. **Forms of EMD and PBG**

Bidders can also submit the EMD with Payment online through RTGS / internet banking in Beneficiary name

KESCO
Account No.
7723508014
IFSC Code
IDIB000K587
Bank Name
INDIAN BANK
Branch address

PPN MARKET 96/12 MALL RD KANPUR 208001

Bidder to indicate bid number and name of bidding entity in the transaction details field at the time of on-line Bidder has to upload scanned copy / proof of the Online Payment Transfer along with bid.

8. Financial Criteria

NET WORTH: Net Worth of the OEM should be positive as per the last audited financial statement.

9. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

Eligibility Criteria/Pre-Qualifying Requirements

1. The tenderers shall themselves be **manufacturers of the equipment offered.**
2. **Experience:**
 - i) The manufacturer must have manufactured at **least 100% of** the specified quantities of electrical or similar equipment. (Purchase order along with completion certificate mentioning supply must be attached)
3. **Testing Facilities:** The tenderer must have all necessary facilities at their works for carrying out standard acceptance tests as prescribed in the relevant ISS and any other routine and acceptance test as per specification. Documentary evidence of existence of such facilities will be filed along with the tender.
4. **Type Test/Test Report/Similar Test Report:** The offered equipment must have Type Test/Test Report as per relevant IS within the last 5-year period to be reckoned from the date of opening of copy of such Type Test/Test Report/Similar Test Report/certificates from CPRI/ERDA/NTH/NSIC must be submitted along with tender bid. In case type test report not is available, bidder should submit undertaking for type test report before supply.
5. **Financial Requirement: -**
 - a. **The Minimum Average Annual Turnover (MAAT)** for the best Three years out of the last Five years MAAT should not be less than **Rs. 195.60 Lakh** Document w.r.t MAAT signed by Chartered Accountant must have UDIN. Turnover exclusive GST will be considered for this purpose. CA certificate should be submitted along with it.
 - b. **Net worth** of the bidder should be positive.
 - c. **Solvency:** - the bidder should have a Minimum Solvency of **Rs. 48.90 Lakh** (25% of the Estimated cost) or credit facility for the same from Nationalized/scheduled bank.
6. **Blacklisted/debarred:** - The bidder should not be blacklisted/debarred from business in any Govt./Semi Govt./PSU/Local Bodies etc. at the time of bid opening. They have to submit an undertaking regarding this a bid.
7. **Note:-** During evaluation of bids the annual turnover of the bidder shall be considered exclusive of GST the estimated cost is inclusive of all taxes. **No JV will be allowed.**

Technical Specification for

1100 V Grade Single Core 1x300 & 1x400 SQMM Un-armored FRLS LT XLPE Cable

1. **Scope:**

This specification covers design, engineering, manufacture, stage testing, inspection and testing supply and delivery of 1x300 & 1x400 Sqmm LT XLPE, FRLS, insulated, PVC sheathed unarmored cable with effectively earthed distribution system.

2. **Applicable Standards:**

Except where modified by this specification the component parts of the equipment shall comply following IS available (the latest versions).

IS 7098 (Part - 1): 1988	:	Specification for cross Linked Polyethylene Insulated PVC Sheathed Cables for working Voltages and including 1100V (International Recognized Standard: IEC 5983))
IS 5831: 1984	:	PVC insulation and sheath of electric cables
IS 8130: 1984	:	Conductors for insulated electric cables and Flexible cords (International Recognized Standard: IEC 2474))
IS 10418: 1982	:	Specification for cable drum IS 10810: 1984
4	:	Methods of test for Cables.

Material conforming to other internationally accepted standards, which ensure equal or higher quality than the standards mentioned above, would also be acceptable. In case the Bidders who wish to offer material conforming to the other standards, salient points of difference between the standards adopted and the applicable standards shall be clearly brought out in relevant schedule. Four copies of such standards with authentic English Translations shall be furnished along with the offer. In case of conflict the order of precedence shall be (i) IS, (ii) IEC, (iii) Other standards. In case of any difference between provisions of these standards and the provisions of this specification, the provisions contained in this specification shall prevail.

3. **Service Conditions:**

Max. Altitude above Mean Sea Level	:	400 Mtr.	Max. Ambient Average Temperature	:	50 ⁰ C
				:	45 ⁰ C
Min. Ambient Air Temperature	:	- 5 ⁰ C	Relative Humidity	:	10-100%
Max. Annual Rainfall	:	1875 mm			
Max. Wind Pressure	:	150 Kg/mm ²			
Isoceraunic Level	:	50 (Days/Year)			
Climate	:	Moderately Hot, Humid, Tropical, Conduc			

Design, Construction & Technical Parameters:

1.1. Conductor

The conductor of the cable shall be made from high conductivity, Electrolytic, H4 Grade, stranded aluminium compacted and circular /shaped conductor having resistance within limits as specified in IS 8130/ 1984 amendments. The aluminium conductor shall be of class-2 as per IS 8130.

1.2. Insulation

Insulation shall be suitable for LT system voltage and the insulating material shall be cross linked Polyethylene (XLPE), and applied by extrusion process as per IS 7098 (Part - 1) and its latest amendments. The insulation shall have excellent electrical properties with regard to resistivity, dielectric constant and loss factor and shall have excellent mechanical properties with regard to tensile strength and resistance to abrasion. This shall not deteriorate at elevated temperatures or when in contact with water. The insulation shall be preferably fire resistant and resistant to chemicals like acids, alkalis, oils and solvents. Insulation properties shall be stable under thermal conditions arising out of continuous operation at conductor temperature of 90⁰ C rising momentarily to 250⁰ C under short circuit conditions. It shall be free from any foreign matter or discoloration visible to the unaided eye. The insulation shall be so applied that it fits closely on the conductor, and shall be possible to remove it without damaging the conductor. The average thickness of insulation shall not be less than the nominal value as specified in IS 7098 (Part - 1) with latest amendments. Tolerance on insulation thickness shall be as per IS 7098 (Part - 1). The insulation shall withstand mechanical and thermal stress under both steady state and transient operating conditions.

The following properties of insulation shall be strictly adhered to:

Sl. No.	Properties	Requirements
1	Tensile Strength (Min.)	12.5 N/mm ²
2	Elongation to break (Min.)	200%
3	Aging in air oven:	
3.1	Treatment Temperature Duration	135 ± 3 ⁰ C 7 Days
3.2	Tensile Strength Variation	± 25% (Max)
3.3	Elongation Variation	± 25% (Max)
4	Hot Set:	
4.1	Treatment Temperature: Time Under Load Mechanical Stress	200 ± 3 ⁰ C 15 Min. 20 N/Cm ²
4.2	Elongation under load	175% (Max)
4.3	Permanent Elongation (set) after cooling	15% (Max)
5	Shrinkage:	

5.1	Treatment Temperature Duration	130 ± 3 ⁰ C 1 Hour
5.2	Shrinkage	4% (Max)
6	Water Absorption (Gravimetric):	
6.1	Treatment Temperature Duration	85 ± 2 ⁰ C 14 Days
6.2	Water Absorbed	1 mg/cm ² (Max)
7	Volume Resistivity:	
7.1	At 27 ⁰ C	1x10 ¹⁴ Ω-Cm (min.)
7.2	At 70 ⁰ C	1x10 ¹³ Ω-Cm (min.)
8	Thermal Resistivity	350 ⁰ C-Cm/W
9	Power Factor at maximum conductor temperature	0.008
10	Dielectric Strength	22 kV/mm

- The XLPE insulation shall be suitable for specified 1100 V system voltage.
- The manufacturing process shall ensure that insulations shall be free from voids.
- The insulation shall withstand mechanical and thermal stresses under steady state and transient conditions.

1.3. Outer Sheath:

The outer sheath shall consist of extruded tough outer sheath of PVC compound insulation over the extruded PVC ST2, outer sheath as per IS: 5831/1984, IS: 7098 Part - 1, IEC: 60502 Part - 1, BS: 6622, LSOH shall be applied over armoring with suitable additives to prevent attack by rodents and termites. Outer sheath shall be designed to offer high degree of mechanical protection and shall also be heat, oils, chemicals, abrasion resistant. Common acids, alkalis, saline solutions etc., shall not have adverse effects on the PVC sheath material used. The colour of the outer sheath shall be black. The cable must meet all the requirements of (Part 1) amended up to date and shall bear ISI mark. Suitable additives shall be added to give anti-termit

2. General:

All materials used in manufacturing of cable shall be new, unused and of finest quality. All materials shall meet the requirements / tests as per applicable IS / IEC specification, Indian Electricity Rules and any other provision of rules & regulations. The purchaser reserves the right to ask for documentary evidence of the previous materials, (to be used for the manufacture of cable) as a part of quality control. Quality Assurance plan shall be submitted. Each of cable type and size shall be ISI certified. The manufacturer shall submit self-certified X

alid ISI license with the offer.

3. Operation:

- Cable shall be suitable for operation under voltage and frequency variation as per Latest Indian E
- Cable shall be suitable for laying in air, in duct or buried underground directly or through trench
- Cable shall have heat & moisture resistance properties. These shall be of type & design with prov distribution network service.

4. Tests:

a) Type Tests:

All the cable types and sizes i.e. items offered shall have been fully type tested as per IS 7098 (Part- dments up to date at CPRI/ERDA. The bidder shall upload one set of the original authenticated copy of ty s along with the offer. These type tests must have been conducted within last five years prior to date of E he purchaser however reserves the right to demand repetition of type tests without any extra cost. For e size, the type test must be carried out independently.

The purchaser also reserves the right to have tests carried out at manufacturer's /supplier m an independent agency, whenever there is a dispute regarding the quality of the supplied

The type test conformance reports/certificates of all the type tests as per IS 7098 (Part - uploaded invariably with the offer and shall not be more than five years old from the date of of Bid.

- i. Tests on conductor:
 - Tensile test
 - Wrapping test
 - Resistance test
- ii. Tests for thickness of insulation (eccentricity) and sheath.
- iii. Physical tests for insulation:
 - Tensile strength and elongation at break.
 - Ageing in air oven
 - Hot set
 - Shrinkage test
 - Water absorption test (gravimetric)
- iv. Physical tests for outer sheath:
 - Tensile strength and elongation at break.
 - Ageing in air oven
 - Shrinkage test
 - Hot deformation
 - Loss of mass in air oven
 - Heat shock
 - Thermal stability
 - Carbon black content of polythene sheath.
- v. Insulation resistance test (volume resistivity)

- vi. High voltage test
- vii. Flammability test
- viii. FRLS Tests- The following FRLS tests are to be conducted as per the referred standard
 - HCL gas evolution test (IEC - 754.1)
 - Oxygen Index (ASTM-D-2863)
 - Temperature Index (ASTM-D-2863)
 - Smoke density test (ASTM-D-2863)
 - Flammability test (IEC-332.1)
 - Swedish Chimney test (SS-424 14 75)
 - Ladder Test (IEEE-383)

XLPE cables shall be tested as per IS 7098 / IEC. The LT XLPE cables shall be routine tested as per re

b) Acceptance Test:

The selection of sample pieces for acceptance test shall be as per Appendix A of IS 7098 (Part - 1), ordered for inspection or part thereof. The minimum shall be one drum.

The following shall constitute the acceptance test:

- Tensile test for Aluminium.
- Wrapping test for Aluminium.
- Conductor resistance test.
- Test for thickness of insulation.
- Test for thickness of outer sheath.
- Hot-set test for insulation.
- Tensile strength and elongation at break test for insulation and outer sheath.
- High voltage test.
- Insulation resistance (volume resistivity) test.

All the acceptance tests shall be carried out by the firm, in the presence of purchaser's

representative at their works. The firm shall give at least 15 days advance notice to the purchaser to appoint a representative to deputise the engineer for witnessing the tests. The test certificates for acceptance tests witnessed by inspector/ engineer shall be submitted for approval before dispatch of material.

c) Routine Tests:

The following shall constitute the routine tests. The Inspector will inspect the routine tests at the time of inspection.

- (a) Conductor resistance test
- (b) High-voltage test for 5 minutes [as per Clause 16.2 of IS: 7098 (Part-I)]

5. Identification Mark:

The outer sheath of the cable shall bear following identification parameters embossed at intervals of 1 meter of cable, throughout the cable: -

- Name of Manufacturer
- Year of Manufacture

- Voltage Grade
- Size of Cable
- Cable Code
- ISI Certification Mark
- Applicable IS
- Successive Length
- Marking of FRLS Cable
- Property of «KESCO»

6. Packing & Forwarding

The cable as per specified delivery lengths, shall be securely wound/packed on non-returnable wood per IS: 10418 - 1972 and packed in drums suitable for vertical / horizontal transport, as the case may be suitable to withstand rough handling during transport and outer storage. The outer surface of the drum shall be painted with white Aluminium paint. Similarly, the inside surface of drum shall have the protective layer of varnish.

The wooden drums shall be reinforced with steel bands and strips for better protection. The cable shall be wound in standard drum length.

The ends of the cable shall be sealed by means of non- hygroscopic heat shrinkable sealing material. The following information be stenciled on the drum with either waterproof ink or oil paint:

- Reference of IS / IEC standard.
- Manufacturer’s name or trademark.
- Size of cable (Cross Section) and voltage grade.
- No. of cores.
- Nominal cross-sectional area of conductor
- Cable code.
- Length of cable on the drum
- Gross and Net weight
- Direction of rotation of drum (by means of an arrow)
- Position of outer end of cable
- Year of manufacture
- Reference of Tender No. / P.O. No. date
- Property of “KESCO”.
- Name of consignee and the destination.
- ISI Certification Mark.

GUARENTEED TECHNICAL PARTICULARS FOR UN-ARMoured XLPE CABLE

SI. No.	Particulars	Required	Bidde

				1CX400
		<u>(Single Core X 400 Sq. mm.)</u>	<u>(Single Core X 300 Sq.mm.)</u>	
1	NAME OF THE MANUFACTURER			
2	Type and Make of Cable			
3	Location of Factory			
4	Standard Specification to which cable shall conform.	IS 7098: (PT-1) : 1988 with latest amendments		
5	Standard Specification to which conductor shall conform	IS 8130: 1984 with latest amendments		
6	Voltage Rating	1100 Volt		
7	Permissible variation in voltage, frequency & combined voltage & frequency.	433 V + 10% -15% & 50 Hz +5%		
8	Standard specification to which drum shall refer.	IS 10418:1982		
9	CONDUCTOR:			
9.1	Material and its composition.	H2/H4 GRADE ALUMINIUM		
9.2	Shape of conductor.	Strade Compacted Circular Conductor		
9.3	No. of Cores.	1		
9.4	(a) Total area of each core before stranding & shaping (in Sq. mm)	MAIN MORE THAN 400 sq mm)	MAIN MORE THAN 300 sq mm)	
	(b) Total area of each core after stranding & shaping (in Sq. mm.)	400 sq mm	300 sq mm	
	(c) Minimum guaranteed weight of Aluminium per Km (KG/KM)	1083.6	811	
9.5	STRANDING DETAILS			
	(i) No. of strand in each core.	Minimum - 61 Nos.		

	(ii) Dia of each strand in each core (before stranding & shaping (in mm.))	AS PER DESIGN CONFIRMING TO IS 8130	
9.6	Maximum D.C. Resistance/ core at 20° C (in Ohms/Km.)	0.0778 Ohm/Km	
10	INSULATION:		
10.1	Type of Insulation	Extruded XLPE Compound, Black	
10.2	Composition of Insulation	Cross linked polyethylene	
10.3	Nominal thickness of Insulation (in mm.)	2.00 mm	
10.4	Tolerance on thickness of insulation. (0.1 +0.1T1)mm		
10.5	Dia of core over insulation.	26.70 mm	23.55 mm
10.6	Minimum volume resistivity at 27° C.	1x10 ¹⁴ ohm-cm	
10.7	Minimum volume resistivity at 70° C.	1x10 ¹² ohm-cm	
10.7	Minimum tensile strength of Insulation Material.	12.5 N/mm ²	
10.8	Minimum Elongation to break percentage.	200%	
10.9	Average dielectric strength.	As per relevant IS	
10.1	Suitability with regard to Moisture, Ozone, Acid, Oil and Alkaline surrounding.	Yes	
11	SHEATHING DETAILS		
11.1	OUTER SHEATH		
	(i) Material & composition.	Extruded FRLS PVC, Blue	
	(ii) Type of sheathing by extrusion ST-2 (iii)	Type ST-2	
	(iii) Thickness of sheathing (in mm.)	Nom. - 2.20 mm	Nom. - 2.0 mm
	(vi) Calculated diameter under the sheath (in mm)	Min. - 1.56 mm	Min. - 1.40 mm
	(vii) Nominal diameter of cable over outer sheath (in mm)	31.10 mm	27.55 mm

	(viii) Whether anti-termite treatment has been given in the outer sheath.	YES		
12	ELECTRICAL PROPERTIES ASSUMED CONDITIONS FOR CURRENT RATING OF CABLES			
12.1	Maximum permissible conductor temp.			
	(i) Under continuous full load (In Oc)	90degree C		
	(ii) Under transient conditions (in Oc)	250 degree C		
12.2	Thermal Resistivity of coil.	150° C CM/WATT		
12.3	Thermal Resistivity of PVC	350° C CM/WATT XLPE 650° C CM/WATT PVC		
12.4	Depth of laying (To the highest point of cable laid direct in the ground or to the top surface of ducts.	750mm (measured to the cable axis)		
12.5	AC CURRENT RATINGS OF THE CABLE UNDER BASIC ASSUMPTIONS for two single core cable IS 3961 part6			
	(i) Laid in ground (at ground temp.30 ° C)	518	376	
	(ii) Laid in duct (Duct temp. 30° C)	466	339	
	(iii) Laid in air (Air temp. 40 ° C)	560	409	
12.6	Rating factors under various conditions of installation.	As per relevant IS		
12.7	Capacitive reactance per Km. of cable at 50 C/S (Ohm/Km.)			
12.8	Inductive reactance per Km. of cable at 50 C/S. (Ohm/Km.)			
13	MECHANICAL DATA			
13.1	Appx. overall dia of cable.	31.10 mm	27.55 mm	
13.2	Minimum Bending radius of cable	15 x OD of Cable		
13.3	Minimum guaranteed weight of cable in (Kg./Km.) without any minus tolerance. Single given as per below:-			

	a) Minimum weight of Aluminium (Kg/Km)	1083.6	811	
	(b) Minimum weight of PVC (Kg/Km)	AS PER IS		
	(c) Minimum weight of Single core cable (Kg/Km)	AS PER IS		
13.4	Standard drum length of cable (in meters)	1000 mtr		
13.5	Tolerance of drum length.	±5%		-
13.6	Appx. Total weight of cable drum with cable.	AS PER IS		
13.7	Max. safe pulling force: (Kg/Sq.mm)	AS PER IS		
13.8	Appx. Flange dia. including battons (Cm)	AS PER IS		
13.9	Appx. Barel dia (Cm)	AS PER IS		
13.10	Appx. Traverse width.	AS PER IS		
14.1	GENERAL:			
	Whether identification marking i.e	YES / AS APPLICABLE		
	(i) Property of KESCo			
	(ii) Name of Manufacturer			
	(iii) Voltage grade & size.			
	(iv) Year of manufacturer is being provided at the regular intervals of			
	(v) Whether length of cable at every interval of one meter shall be printed over outer most sheath.			
15	Name of manufacturers of bought out raw materials			
	(i) Aluminium.	NALCO, BALCO, HINDALCO and reputed supplier		
	(i) PVC	KL Polymers, D dev Industris (Kalpena)BLS, Polymers, UPIPL & Other Reputed supplier		
	(iii) Galvanised Steel Strip/Wire for armoring.	N/A		

	(iv) Any other.(XLPE)	D dev Industris (Kalpena) KLJ Polymers, BLS polymers UPIPL & other reputed supplier	
15.1	(a) Whether similar cable has been type tested.		
	(b) If yes, when and where was it tested.		
	(C)It is expected that you will enclose an electrostatic copy of type test report of similar cable. Please inform whether not you have entered the same.		
	(d)if yes, how many sheets does it contain .		
	(e) Only a design better than or equal to what type tested and proven shall be accepted please inform whether you will abide by this condition.	Equivalent size	
16.1	Whether wood preservative shall be applied to whole drum?		
16.2	Whether all ferrous parts shall be treated with rust preventive finish or costing.		
16.3	Whether waterproof paper layer shall be applied to the surface or drum & over the outer cable layer.		
16.4	Reference of license in use-ISI certification mark, if any.		
16.5	Do you agree to all the provisions of Technical Specification. In case of any deviation, state clearly.		

nadequate packing.

Wherever necessary, proper arrangement for lifting, such as lifting hooks, shall be provided. **The supplied quantity drum can vary within ±5% of the ordered quantity.**

7. Guarantee:

The supplier shall give Guarantee for the satisfactory functioning of the material / equipment as per specification, for **24 months from date of commissioning or 30 months from the last date of receipt of material in good condition store for each consignment whichever is earlier.** The bidder shall be liable to undertake the replacement at his own cost within mutually agreed timeframe.

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Sample Testing and max. damage/failure rate:

- The Kesco will reserve the right of inspection of supplied material (randomly selected samples) by any third party (Like CPRI, ERDA etc.). Discom will also issue notices to the material manufacturer to depute their nominated person at the time of sealing of the selected sample, failing which the sample will be selected & sealed in presence of the Kesco team, only. The sample of distribution transformer will be picked from the site/Store center/Works where other material like HT & LT AB Cable & fittings, HT & LT Cable, Insulators, PCC Poles and other items are erected either from store or from erected at site.
- The Kesco team will seal the sample. Concerned store center will be nodal agency for get the sample tested at approved testing lab (CPRI/ERDA).
- If sample of Material fails/not found as per specification in the testing as above, the Kesco will be free to terminate the contract with the firm as per rules/ guidelines issued by the UPPCL.

Action on under guarantee failure: -

- On the basis of records keeping by Kesco regarding failure of materials erected at site, the maximum percentage of failures under guarantee is as under, against the material/equipment supplied against each lot/order (irrespective of quantity completed): -

Name of Material/Equipment	Maximum permissible failure in a supplied lot/ordered quantity (in case the supply is completed) within Guarantee Period	Probable action for failure more than the permissible limit
LT XLPE Cable (1x300Sqmm) (1x400Sqmm)	5%	Up to 10%- debarring from participation in next three tenders or 3 years (whichever is later) of DPC C category with Vehicle in all UP D Discom. More than 10% Debarring/ Blacklisting for three years.

10. Buyer Added Bid Specific ATC

Buyer uploaded ATC document [Click here to view the file.](#)

अस्वीकरण/Disclaimer

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process.

outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to the due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / a incorporated by the Buyer regarding following, the bid and resultant contracts shall be treated as null and void and : may be cancelled by GeM at any stage of bidding process without any notice:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category being bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for [attached](#) trials are allowed as per approved procurement policy of the buyer nodal Ministries)
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.
15. Buyer added ATC Clauses which are in contravention of clauses defined by buyer in system generated bid terms indicated above in the Bid Details section, EMD Detail, ePBG Detail and MII and MSE Purchase Preference section bid, unless otherwise allowed by GeM GTC.
16. In a category based bid, adding additional items, through buyer added additional scope of work/ additional terms and conditions/or any other document. If buyer needs more items along with the main item, the same must be added by bunching category based items or by bunching custom catalogs or bunching a BoQ with the main category by the same must not be done through ATC or Scope of Work.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they must raise their representation against the same by using the Representation window provided in the bid details field in Seller's dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

All GeM Sellers/Service Providers shall ensure full compliance with all applicable labour laws, including provisions, rules, schemes and guidelines under the four Labour Codes i.e. the Code on Wages, 2019; the Industrial Relations Code, 2020; the Occupational Safety, Health and Working Conditions Code, 2020; and the Code on Social Security, 2020 as and when notified and brought into force by the Government of India.

For all provisions of the Labour Codes that are pending operationalisation through rules, schemes or notifications, the corresponding provisions of the pre-existing labour enactments (such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Gratuity Act, 1972, etc. and relevant State Rules) shall continue to remain applicable.

The Seller/ Service Providers shall, therefore, be responsible for ensuring compliance under:

- All notified and enforceable provisions of the new Labour Codes as mentioned hereinabove; and
- All operative provisions of the erstwhile Labour Laws until their complete substitution.

All obligations relating to wages, social security, safety, working conditions, industrial relations etc. and statutory requirements shall be strictly met by the Seller/ Service Provider. Any non-compliance shall constitute a breach of the contract and shall entitle the Buyer to take appropriate action in accordance with the contract and applicable law.

[यह बिड सामान्य शर्तों के अंतर्गत भी शासित है /This Bid is also governed by the General Terms and Conditions](#)

जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भा
सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास
में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध व
करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा |/In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidde
shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the C
While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination
further legal action in accordance with the laws.

---धन्यवाद/Thank You---