



**Government of India**  
BHABHA ATOMIC RESEARCH CENTRE  
**Accelerator and Pulse Power Division**  
Mumbai-400085- INDIA



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**Ref.: BARC/APPD/SK/2018/81**

**Date: 30.07.2018**

Subject: Inviting quotations for “**Minor Fabrication of Cable strands with EMI/EMC glands and Accessories for 40 kJ EMM Bank**”, Quantity-as mentioned in Annexure-I.

You are requested to quote for the “**Minor Fabrication of Cable strands with EMI/EMC glands and Accessories for 40 kJ EMM Bank as per Annexure-I.**”

- 1) For any clarifications the supplier can contact **Sh. Satendra Kumar, SO/F, APPD** on any working day (Monday to Friday) on **telephone Nos. 255954437** or **email: [satendra@barc.gov.in](mailto:satendra@barc.gov.in)**.
- 2) The fabrication work should be delivered at Room No-17, OTS, South Site, BARC, Mumbai, India. Supplier need to visit site for installation/fitting of components.
- 3) Payment for the above fabrication will be made after completion of all jobs as mentioned in Annexure-1 and attached drawings and on production of bill & advanced stamped receipt, within one month. No advance payment will be made for this work since ours is a Government organization. Income-tax @2% & surcharge on Income-tax @15% will be deducted from the bill and a TDS (tax deducted at source) certificate will be issued as per Income-tax rules.

Information to be supplied along with the offer:

Suppliers should submit their offers along with the following information.  
period of validity, terms & conditions of the offer, (b) Approximate period of completion of the task and (c) copy of the registration and income-tax clearance certificate (d) GST certificate.

Additional Information:

Your sealed quotation (in your letter head) including all details, like taxes to be paid, transport charges etc., duly indicating our reference number mentioned above, due date & time of opening of quotations on the envelop, may be sent to “**Head, APPD, Engg. Hall No.4, Trombay, MUMBAI-400085**”, by **1400 hrs on or before, 9<sup>th</sup>, August 2018**. It is requested that the tender may be sent by Speed-post, so that it can reach us in time. The quotations will be opened at 1030 am on next day. The quotations received after the due date & by FAX/email will not be considered.

Yours Faithfully

**(R. K. Rajawat)**  
**Associate Director, BTDG & Head, APPD**

## Annexure-I

### Specifications of Cable Strand:-

<b>Working Voltage:</b>	50	kVDC
		kVAC
<b>Test Voltage:</b>	60	kVDC
<b>Dielectric:</b>	LDHMW polyethylene	
<b>Jacket Material:</b>	black thermoplastic rubber	
<b>Characteristic Impedance:</b>	21	ohm
<b>Capacitance:</b>	89	pF/Ft.
<b>Impedance of cable</b>	21	ohms
<b>Capacitance of the cable</b>	89	pF/ft
<b>Inductance of the Cable</b>	0.04	micro-henries/ft
<b>Minimum Bend Radius:</b>	6	inches
<b>Maximum Conductor Temp:</b>	140	°F 60 °C
<b>Maximum Relative Humidity:</b>	100	%
<b>Weight:</b>	0.30	lb/ft.

### Conductors

Main H.V.	#6 AWG (133x #27 AWG TC) (13.6 mm <sup>2</sup> ) DC Resistance – 0.43 milliohms/ft
Shield	2 x #30 AWG TC shield 7 ends, 24 carrier 95% coverage DC Resistance – 0.41 milliohms/ft

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#### Additional Information

**Maximum Pulse Current Rating – 40 kA** for (10-100) microsecond pulse at a rate of 10 pulses per hour.

### Note:-

1. 8 Strands of 7.0 meters need to be fabricated.
2. All strands should be peeled for 500 mm both sides for Ground sheath and semiconductor tape.
3. HV sheath should be covered with heat shrinkable sleeve along with HV kepton tape insulation.
4. Electrical grade Delrin sleeves of 8.0 mm thick, 100 mm length and ID tightly fitted with cable OD need to be inserted at Cable end before peeling.
5. 8 sets of EMI/EMC connector should be procured whose ID is fully compatible with OD of delrin sleeve. These connectors should be installed at both ends of cables.
6. HV insulation (central part) should be peeled for 30 mm and it should be fully soldered with copper piece (15mm x 25mm x 3mm –thorough Nickel plated).
7. Work should be completed within one month from firm work order.
8. Party should offer a warranty of 12 months for manufacturing and material defects.
9. All parts should be inspected before delivery.
10. Payment will be cleared after successful delivery of all materials