

Company Name		PSH TECHNO ENGG. PVT. LTD.	
Registered Address		F-13, 1st Floor, Plot No. BC-2 & BC-3, Parashar Trade Tower, Shatabdinagar, Meerut-250103, Uttar Pradesh	
Project Name		Construction of New 4-Lane Bridge (Parallel to the Existing MG Setu) With the approaches from Km 0/000 to Km 14/500 across River on NH-19 at Patna in the state of Bihar by MORT&H (BSPTCL)	
<b>SCHEDULE OF GUARANTEED TECHNICAL PARTICULARS OF LONG ROD INSULATOR</b>			
NAME & ADDRESS OF THE BIDDER		DECCAN ENTERPRISES PRIVATE LIMITED Plot No: G1 to G7, General Industrial Park, Sultanpur, Sangareddy, HYDERABAD-502319, Telangana, INDIA	
Sl. No.	Description	Guaranteed Parameters	
1)	Type:	132KV-120KN	
2)	Material:	Resin Bonded Fiber Glass Rod ( Grade ECR)	
	i) Core:	HTV Silicone Rubber with min 30% by weight of silicone content	
	ii) Housing:	Forged Steel HDG	
	iii) End fitting:		
3)	Dimension of Insulator		
	i) Sectional length:	1450mm	
	ii) Arcing Distance:	1240mm	
	iii) Creepage Distance:	4495mm	
4)	Colour:		
5)	Electrical Characteristics:		
	i) Nominal System Voltage:	132KV	
	ii) Highest System Voltage:	145KV	
	iii) System Frequency:	50Hz	
	iv) Wet One Minute Power frequency with stand Voltage	275KVrms	
	v) Lightning impulse withstand voltage, 1.2/50pos (dry)	650KVpeak	
	vi) Weight of the insulator	5.6Kgs (approx.)	
6)	E.M. Strength:	120KN	
7)	Standard to which Insulator shall conform.	IEC61109	
8)	Weight of Ball & Socket Parts	1.4kgs (approx.)	

DECCAN ENTERPRISES PVT. LTD.,  
(FORMERLY KNOWN AS DECCAN ENTERPRISES LIMITED)  
Plot No.G1 to G7, TSIC General Park, Sultanpur,  
Sangareddy, Hyderabad-502319, Telangana  
CIN - U52609TG1966PTC001109  
☎ : +91 40 23870111  
✉ : info@deccan.in P: www.deccan.in

Subject to the condition that you are not absolved of the responsibility for correctness of the materials supplied as per specification

Electrical Superintending Engineer  
(Planning and Engineering)

Bihar State Power Transmission Company Limited

Vidyut Bhawan, Patna-800021  
28/04/2022



Adopted for NET 28/PR/BSPTCL/2021  
11/28/9/m

9)	Minimum thickness of sheath covering over core	3mm
10)	Average Coating of Zinc	610 gm/sq-m
11)	Number of dips which the end fittings can withstand in the standard preece test	6 dips
12)	Purity of zinc used for galvanising end fittings	99.95%
13)	Number of Grading Rings	NIL
14)	Core Diameter	20mm
15)	Power Frequency flashover voltage	335/320KV rms
16)	Lightning Impulse flashover voltage	710/710KV peak
17)	Marking Details	One 10mm thick ring or 20mm thick spot of suitable quality of paint shall be used as identification mark with following colour 120KN-Yellow
18)	The track resistance of having & shed material shall be class:	1A4.5 according to IEC 60587
19)	General Tolerance	Hardware not in our scope of supply
20)	Tolerance on total length of hardware	Hardware not in our scope of supply

For and on behalf of the Manufacturer



Yogendra Singh  
Sr. Manager - Sales

*Adopted for NTP 38/PR / BSPT  
2014  
22/10/21*

**APPROVED**

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## TECHNICAL PARTICULARS

### ELECTRICAL CHARACTERISTICS

Highest System Voltage, Um	145 kV
One minute Power frequency withstand voltage, 50Hz Wet	275 kV(rms)
Lightning impulse withstand voltage, 1.2/50 pos. (dry)	650 kVp

### MECHANICAL CHARACTERISTICS

Creepage Distance	4495 mm(min)
Dry arcing distance	1240 mm
Housing Diameter (ØD1)	28 mm

### MECHANICAL CHARACTERISTICS

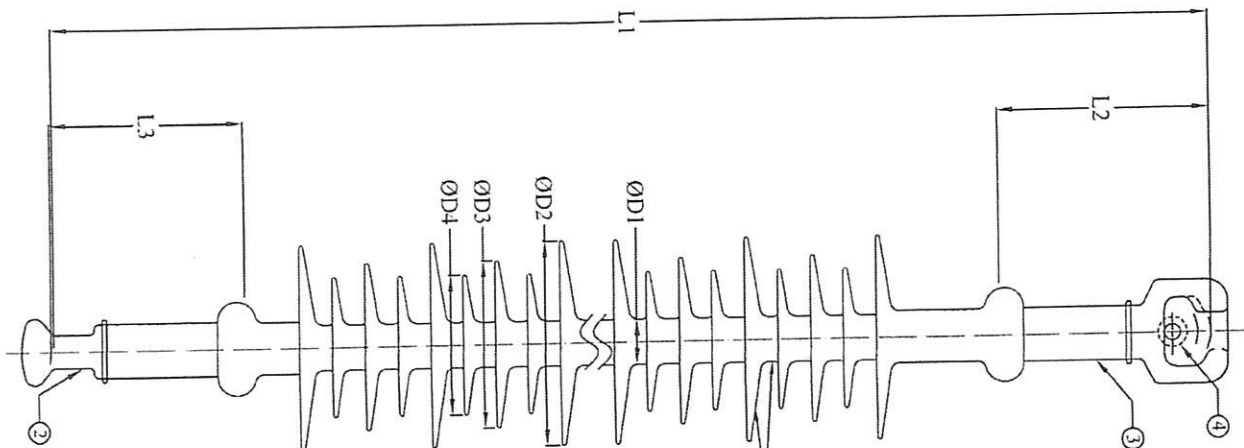
Specified Mechanical Load (SML)	1450 mm
End fittings - Ball and Socket	120 kN
	20 mm
	5.6 kg(approx)

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#### NOTE:

- All the parameters characterizing the Insulator profile as per IEC : 60815.
- Unless other wise specified
- Tolerance on  
1. (0.04 x d + 1.5) When d ≤ 300 mm.  
± (0.025 x d + 6) When d > 300 mm.
- Reference Standards : IEC 61109.



A2: 17.12.20 to S&C profile side  
A1: 15.09.17 Grading Ring location proposed

REVISED DATE

DESCRIPTION

APPROVED ISSUED BY

Old drawing No. NA  
Product D  
Version & Date 01 & 17.12.2020  
Revision No & Date  
Issued to

UNIT: mm  
PROJ: NIS  
SCALE: 17.12.20  
DATE: 17.12.20  
REV NO: A2  
SERIAL NO: 15

DRG NO : 1051

#### TITLE:

132kV-120kN LONG ROD SILICONE  
COMPOSITE INSULATOR

DRAWN BY: RAMU  
CHECKED BY: V. Sreenivasulu  
APPROVED BY: V. Sreenivasulu

DECCAN ENTERPRISES LIMITED

DECCAN

INDIA

Customer Details  
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