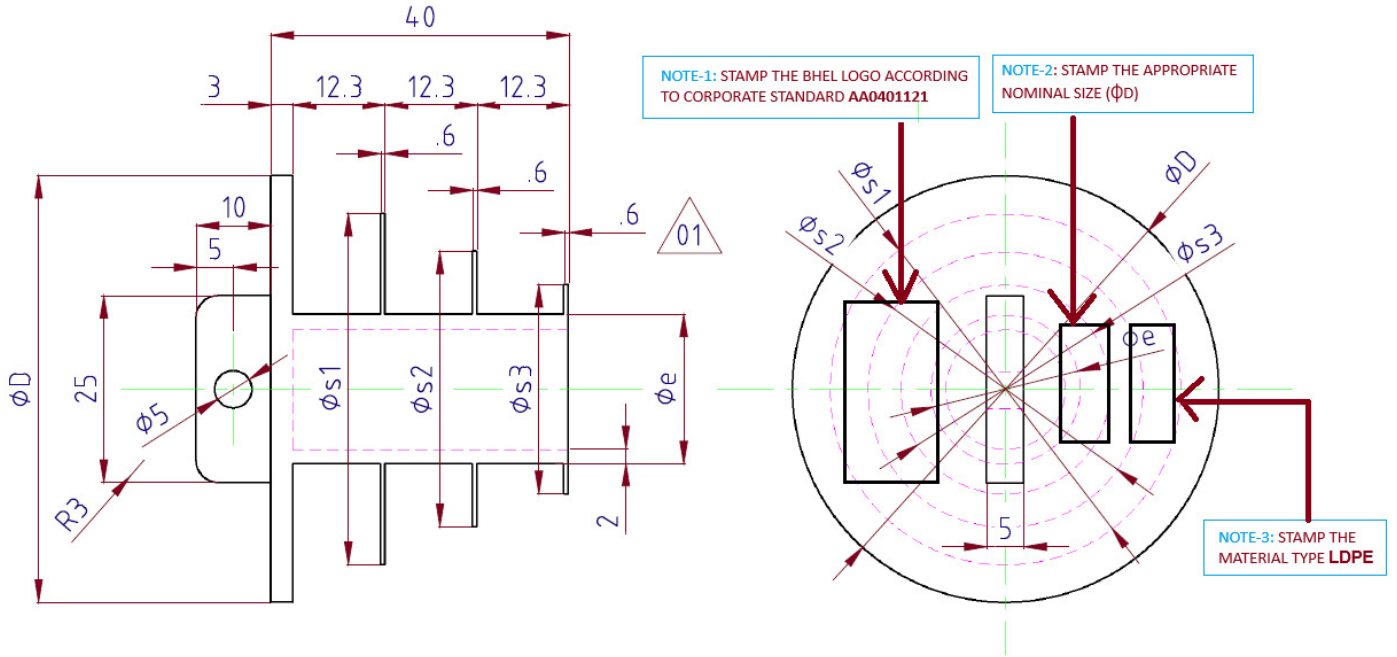
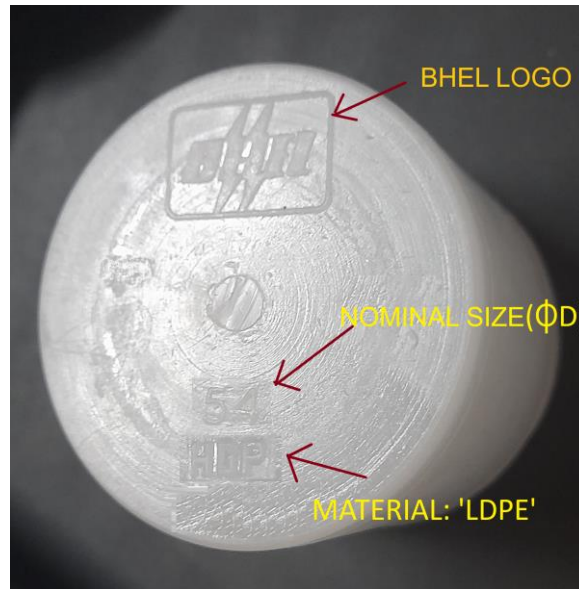


Specifications

RIBBED TUBE END COVER



Refer drawing: 3-11-000-17454 -01



(Sample Tube End Cap Image)

NOTE:

1. STAMP THE **BHEL LOGO** ACCORDING TO **AA0401121** IN THE DIRECTION 'X' (REFER ATTACHED CORPORATE STANDARD AA0401121 - COMPANY'S MONOGRAM)
2. STAMP THE APPROPRIATE NOMINAL SIZE (**ϕD**) IN THE DIRECTION OF 'X'
3. STAMP MATERIAL TYPE: **LDPE**
4. COLOR: THE END COVERS SHALL BE OF WHITE IN COLOR AND MAY OR MAY NOT BE OF VIRGIN QUALITY MATERIAL.

SAJAN
PARAKKANDY

Digitally signed by
SAJAN PARAKKANDY
Date: 2025.03.24
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	CORPORATE STANDARD	AA0401121
		Rev No.03
		PAGE 1 of 7

COMPANY'S MONOGRAM (Without Border)

1.0 SCOPE

- 1.1** This Standard stipulates the design, dimensions and sizes of the Company's Monogram, (without border) applicable to entire BHEL Corporation, to be affixed on all Company products.
- 1.2** For use on black or blue background, Company's monogram as per AA0401120 shall be used.
- 1.3** The CMYK percentages of the blue colour monogram are C 100% M 90% Y 30% K 0%.

2.0 DESIGNATION

- 2.1** The Monogram shall be designated by the dimension 'A' in Table-1.
- 2.2** A Monogram of size A=100 shall be designated as:
MONOGRAM: 100 - AA0401121

3.0 DIMENSIONS:

- 3.1** The dimensions of the Monogram shall be as per Table-1 & Table-2.
- 3.1.1** The dimensions of English letters 'BHEL' shall be as per Table-1.
- 3.1.2** The dimensions of Hindi letters बी.एच.ई.एल shall be as per Table-2.

4.0 FINISH:

4.1 For general application:

- 4.1.1** The English letters 'BHEL' shall generally be white against black or blue background as shown in figure 1.
- 4.1.2** The Hindi letters बी.एच.ई.एल shall be black or blue against generally white background as shown in figure 2.

4.2 For application on anodized rating plate, name plates, etc.

Revisions: In clauses 1.2, 4.1.1, 4.1.2, 4.2.1, 4.2.2, 4.3.2, 4.3.3 blue colour added. New sizes 750, 1000, 1250, 1500 mm added. Clause 1.3 added.			APPROVED: INTERPLANT MATERIAL RATIONALISATION COMMITTEE – MRC(SMC+RP)		
Rev No.03	Amd No.	Reaffirmed	Prepared Corp. R&D	Issued Corp.R&D	Dt. of 1 st Issue 02-02-1976
Dt:01-09-2017	Dt:	Year:			

CORPORATE STANDARD

4.2.1 The English letters 'BHEL' shall have a satin silver finish against a black or blue background.

4.2.2 The Hindi letters बी.एच.ई.एल shall be black or blue against satin silver background.

4.3 For Press Printing:

4.3.1 The English letters 'BHEL' and background of Hindi letters shall have the same colour as the colour of material on which it is printed.

4.3.2 The background of English letters 'BHEL' and Hindi letters बी.एच.ई.एल shall generally be black or blue.

4.3.3 The boundary line of the monogram in the region of Hindi letters shall generally be black or blue and this line and the background of the 'BHEL' shall have the same colour.

4.3.4 Reversing of the Emblem viz. The BHEL letters in dark colour with the background in white or with background colour being the colour on which the Emblem is printed is strictly forbidden

Note:

- 1) Samples of monogram are shown on Page-6.
- 2) For Neon Signs the Emblem shall have the Hindi Letters बी.एच.ई.एल and background of English Letters 'BHEL' the same colour and English Letters 'BHEL' and background of Hindi Letters बी.एच.ई.एल the same colour.

5.0 REFERRED STANDARDS (Latest Publications including Amendments):

Nil

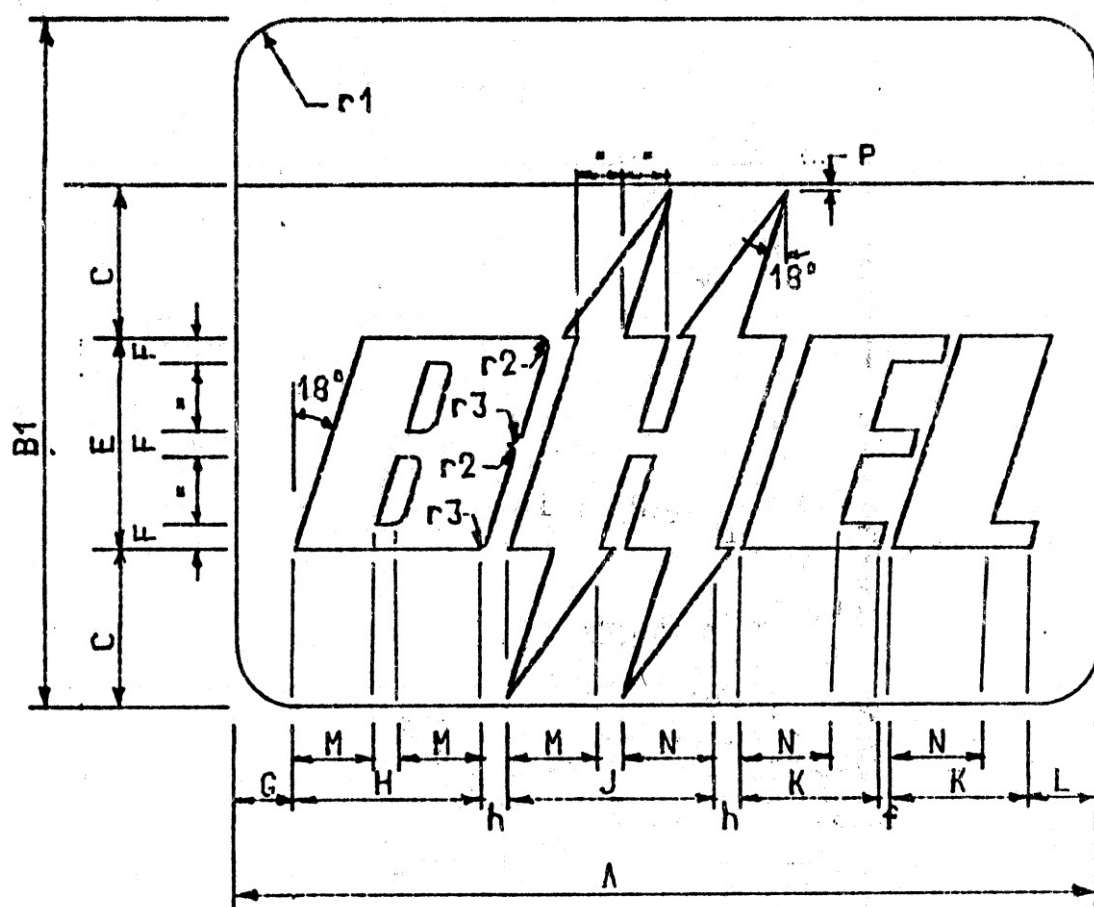


FIG. 1

CORPORATE STANDARD



TABLE-1

Monogram Size	DIMENSIONS in mm																
	B1	C	E	F	G	H	J	K	L	M	N	P	f	h	r1	r2	r3
	0.81 A	.183 A	.25 A	.032 A	.067 A	.22 A	.24 A	.16 A	.078 A	.095 A	.105 A	.01 A	.015 A	.03 A	.07 A	.02 A	.025 A
A																	
10	8	1.8	2.5	0.32	0.67	2.2	2.4	1.6	0.78	0.95	1.05	0.1	0.15	0.3	0.7	0.2	0.25
15	12	2.7	3.7	0.48	1	3.3	3.5	2.4	1.2	1.4	1.5	0.15	0.2	0.5	1	0.3	0.4
25	21	4.6	6.3	0.8	1.6	5.4	6	4	2	2.3	2.6	0.25	0.4	0.8	1.8	0.5	0.6
40	33	7.3	10	1.3	2.8	9	9.6	6.45	3.1	4	4.2	0.4	0.6	1	3	0.8	1
60	49	11	15	2	4	13	14.4	9.5	4.6	5.5	6.3	0.6	1	2	4	1.2	1.5
100	81	18	25	3	6.7	22	24	16	7.8	9.5	10.5	1	1.5	3	7	2	2.5
125	102	23	31	4	8.6	27.5	30	20	9.7	12	13	1.25	1.8	3.7	9	2.5	3
160	131	29	40	5	11	35	38.4	25.6	12.4	15	16.8	1.5	2.4	4.8	11	3	4
200	163	36.6	50	6	13.4	44	48	32	15.6	19	21	2	3	6	14	4	5
250	204	46	62.5	8	16.7	56	60	40	19.5	24.5	26.5	2.5	3.8	7	17.5	5	6
320	260	59	80	10	21	70	77	51	25	30	33.5	3	5	10	23	6.5	8
400	326	73	100	13	27	88	96	64	31	38	42	4	6	12	28	8	10
600	489	110	150	19	40	132	144	96	47	57	63	6	9	18	42	12	15
750	608	137	188	24	50	165	180	120	59	71	79	8	11	23	53	15	19
1000	810	183	250	32	67	220	240	160	78	95	105	10	15	30	70	20	25
1250	1013	229	313	40	84	275	300	200	98	119	131	13	19	38	88	25	31
1500	1215	275	375	48	101	330	360	240	117	143	158	15	23	45	105	30	38

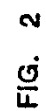


TABLE-2

Monogram Size A	DIMENSIONS in mm																
	C	D	E	F	H	J	K	L	M	N	O	P	T	W	X	r ₅	r ₆
10	1.84	0.06	0.78	0.18	0.15	1.84	2.18	1.62	0.5	0.09	0.12	0.21	0.25	0.56	0.59	0.06	0.12
15	2.75	0.08	1.17	0.28	0.23	2.76	3.28	2.43	0.75	0.14	0.18	0.32	0.37	0.84	0.89	0.09	0.18
25	4.6	0.14	1.96	0.46	0.39	4.6	5.46	4.06	1.25	0.23	0.31	0.54	0.62	1.4	1.48	0.15	0.31
40	7.37	0.24	3.13	0.75	0.62	7.37	8.75	6.5	2	0.37	0.5	0.87	1	2.25	2.37	0.25	0.5
60	11.05	0.36	4.69	1.12	0.93	11	13.12	9.75	3	0.56	0.75	1.31	1.5	3.37	3.56	0.37	0.75
100	18.43	0.62	7.81	1.87	1.56	18.43	21.87	16.25	5	0.93	1.25	2.18	2.5	5.62	5.93	0.62	1.25
125	23.04	0.78	9.76	2.34	1.95	23	27.34	20.31	6.25	1.17	1.56	2.73	3.12	7.03	7.42	0.78	1.56
160	29.5	1	12.5	3	2.5	29.5	35	26	8	1.5	2	3.5	4	9	9.5	1	2
200	36.87	1.24	15.63	3.75	3.12	36.87	43.75	32.5	10	1.87	2.5	4.37	5	11.25	11.8	1.25	2.5
250	46.08	1.56	19.53	4.68	3.9	46.09	54.68	40.62	12.5	2.34	3.12	5.46	6.25	14.06	14.84	1.56	3.12
320	59	2	25	6	5	59	70	52	16	3	4	7	8	18	19	2	4
400	73.75	2.5	31.25	7.5	6.25	73.75	87.5	65	20	3.75	5	8.75	10	22.5	23.75	2.5	5
600	110.62	3.74	46.88	11.25	9.37	110.62	131.25	97.5	30	5.62	7.5	13.12	15	33.75	35.62	3.75	7.5
750	138.28	4.68	58.6	14.06	11.71	138.28	164.06	121.88	37.5	7.03	9.38	16.4	18.75	42.19	44.53	4.69	9.38
1000	184.37	6.23	78.13	18.75	15.62	184.37	218.75	162.5	50	9.37	12.5	21.87	25	56.25	59.37	6.25	12.5
1250	230.46	7.79	97.67	23.44	19.52	230.46	273.44	203.13	62.5	11.71	15.63	27.33	31.25	70.31	74.21	7.81	15.63
1500	276.55	9.35	117.2	28.13	23.43	276.55	328.13	243.75	75	14.05	18.75	32.8	37.5	84.38	89.05	9.38	18.75

NOTE:

- 1) In Table-2. the base value has been taken as A = 320. The dimensions corresponding to A=320 have been rounded off. All other dimensions given have been calculated. It is feasible to obtain these values by photographic reduction/enlargement from the base size A=320.
- 2) In case smaller size emblems are to be drawn, rounding off can be carrier out of dimensions to facilitate drawings.
- 3) Usage of Monogram Size 10 should be avoided as far as possible



SIZE 15 mm



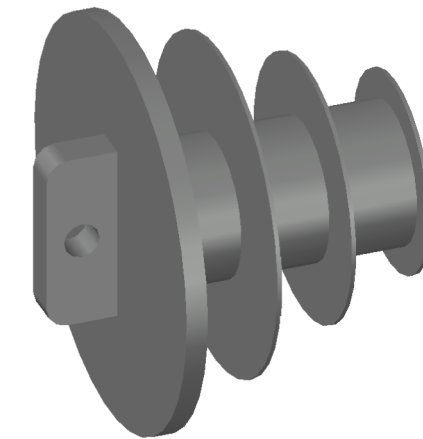
SIZE 25 mm



SIZE 40 mm



SIZE 60 mm



3D SNAPSHOT

DIMENSIONAL DETAILS OF END CAP						
VAR NO.	ØD	Øs1	Øs2	Øs3	Øe	ID RANGE
01	33.4	28	22.5	17	10	17 – 27
02	38.1	32	26	19	10	19 – 31
03	41.3	34	27	20	14	20 – 33
04	44.5	36	27	19	15	19 – 35
05	50.8	44	35	26	20	26 – 43
06	57.2	48	37	28	20	28 – 47
07	63.5	58	48	35	30	35 – 57
08	69.85	65	59	54	40	54 – 64
09	76.2	71	65	60	50	60 – 70

END CAP MATERIAL SHALL BE LOW DENSITY POLYETHYLENE (LDPE)

REV 01	DATE 10.03.2025	ALTERED : SAIKUMAR CHD & APPD: NIRMAL RAJ
ZONE	THICKNESS UPDATED FOR INCREASED FLEXIBILITY. MATERIAL UPDATED.	

CAUTION: The information on this document is the property of BHARAT HEAVY ELECTRICALS LTD. It must not be used directly or indirectly in any way detrimental to the interest of the company.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT				STANDARD			
 355-055		Bharat Heavy Electricals Ltd UNIT: HIGH PRESSURE BOILER PLANT TIRUCHIRAPALLI – 620014		DRN	NAME SAIKUMAR	SIGNATURE	DATE 07.01.2025
				CHD	NIRMAL RAJ		08.01.2025
				APPD	NIRMAL RAJ		08.01.2025
DEPT PP	ALL DIMENSIONS ARE IN MM		SCALE N.T.S	WEIGHT (Kg) ---	REF TO ASSY / OLD DWG		
CODE 121							
TITLE END CAPS FOR TUBES					DRAWING NO : 3-11-000-17454		REV 01

Pre- qualification criteria

Sl. No.	Description	Vendor to confirm	Vendor's Reply (To be filled)
1	Vendor shall confirm for supplying the Tube End Cover as per the Dimensions mentioned in the drawing indicated against each item.	<i>Attached / Not Attached</i>	
2	Suppliers shall have supplied similar items / Internal Tube end caps of LDPE, HDPE etc. Past PO Copies (PO Date on or after 01.01.2018) to be attached.	<i>Attached / Not Attached</i>	
3	Vendor has to supply 3 Nos. of samples of each variant prior to the bulk supply after placing PO. Vendor must supply the PO quantity once BHEL has approved the submitted samples.	<i>Accepted /Not Accepted</i>	
4	Delivery period Sample of 3 Nos. of each variant to be supplied within 45 days from date of PO. BHEL will give the acceptance after testing within 5 days. If Sample is not accepted, Supplier has to submit the revised sample within 15 days. Total delivery period (Including Sample acceptance) - 75 days	<i>Accepted /Not Accepted</i>	
Note: The Bidder should submit the above documents along with the offer. Offer without the above documents will be rejected.			

SAJAN
PARAKKANDY

Digitally signed by SAJAN
PARAKKANDY
Date: 2025.03.28 15:34:48
+05'30'

Vendor's Sign & Seal

Annexure - 1 BOQ				
Sl. No.	Item Description	Material Code	Qty.	UoM
1	TUBE END COVER RIBBED D 33.4 (ID:17-27)	220740490000	40736	Nos.
2	TUBE END COVER RIBBED D 38.1 (ID:19-31)	220740500000	91880	Nos.
3	TUBE END COVER RIBBED D 41.3 (ID:20-33)	220740510000	36986	Nos.
4	TUBE END COVER RIBBED D 44.5 (ID:19-35)	220740520000	103060	Nos.
5	TUBE END COVER RIBBED D 50.8 (ID:26-43)	220740530000	44760	Nos.
6	TUBE END COVER RIBBED D 57.2 (ID:28-47)	220740540000	26230	Nos.
7	TUBE END COVER RIBBED D 63.5 (ID:35-57)	220740550000	48758	Nos.
8	TUBE END COVER RIBBED D 69.85 (ID:54-64)	220740560000	37506	Nos.
9	TUBE END COVER RIBBED D 76.2 (ID:60-70)	220740570000	2500	Nos.