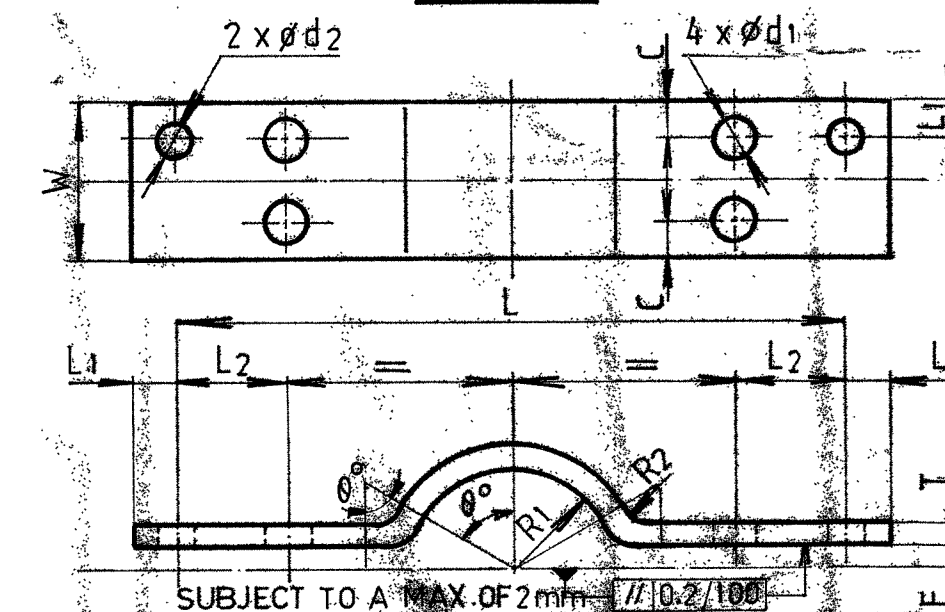
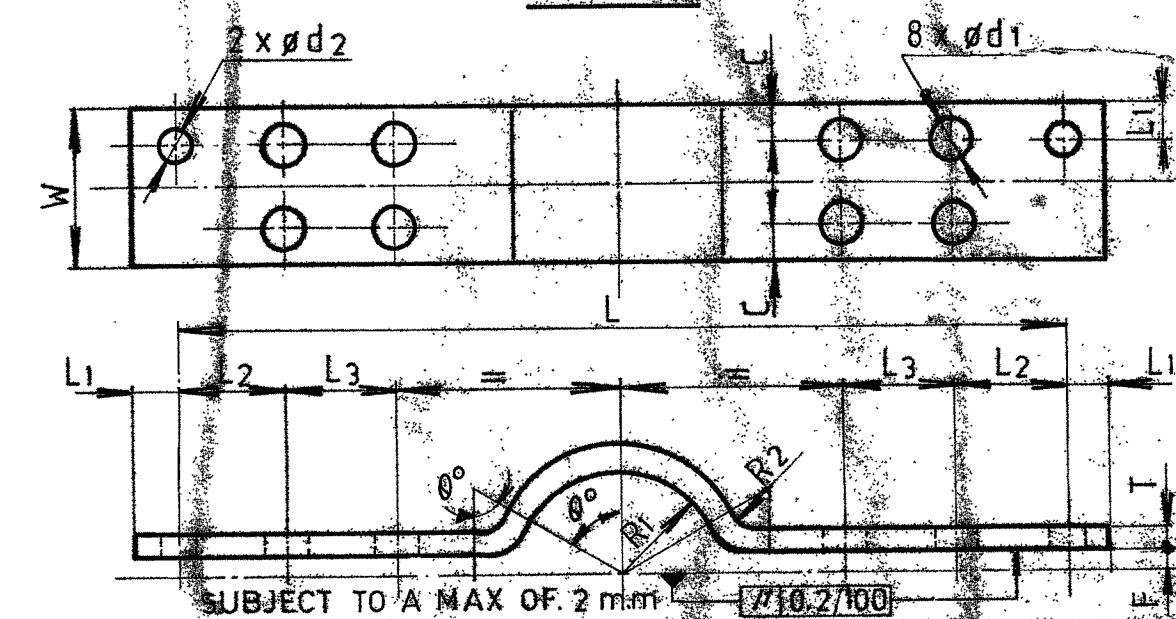


VAR. NO	TYPE	PIPE SIZE DIA m.m.	L		L ₁	L ₂		L ₃	C	ød ₁	ød ₂	F	R ₁	R ₂	θ°	T x W	DEV. LENGTH		MATL. CODE	WEIGHT		REMARKS	VAR NO
			MIN	MAX		MIN	MAX										MIN	MAX		MIN	INCREMENT (IN Kg/100mm)		
01.	A	73.0	400	650	25	125	250	—	30	15	18	10	38.2	24	52	12 x 110	467	717	15.942.110	4.84	1.036		01
02.	A	73.0	400	650	37	120	245	—	30	15	26	10	38.2	32	48	16 x 140	490	740	15.942.112	8.62	1.758		02
03.	A	88.9	400	650	25	115	240	—	30	15	18	10	46.2	24	56	12 x 110	474	724	15.942.110	4.91	1.036		03
04.	A	88.9	400	650	37	109	234	—	30	15	26	10	46.2	32	52	16 x 135	497	747	15.942.112	8.43	1.696		04
05.	A	114.3	400	800	25	100	300	—	30	15	18	10	59.2	24	61	12 x 120	486	886	15.942.110	5.50	1.130		05
06.	A	114.3	400	800	37	87	287	—	30	15	26	10	59.2	40	54	20 x 110	506	906	15.942.113	8.74	1.727		06
07.	A	168.3	550	900	25	145	320	—	30	15	18	10	86.7	24	68	12 x 135	664	1014	15.942.110	8.44	1.272		07
08.	B	168.3	550	900	37	84	259	46	30	15	26	10	86.7	40	62	20 x 115	681	1031	15.942.113	12.30	1.806		08
09.	B	168.3	550	900	43	75	250	46	30	15	30	10	86.7	50	58	25 x 120	690	1040	15.942.114	16.25	2.355		09
10.	A	219.1	650	1000	25	167	342	—	30	15	18	10	112.5	24	72	12 x 145	791	1141	15.942.110	10.80	1.366		10
11.	A	219.1	650	1000	37	151	326	—	30	15	26	10	112.5	40	66	20 x 130	807	1157	15.942.113	16.47	2.041		11
12.	B	219.1	650	1000	43	95	270	46	30	15	30	10	112.5	50	63	25 x 130	815	1165	15.942.114	20.79	2.551		12
13.	A	273.0	750	1100	25	180	355	—	30	15	18	10	140.0	32	72	16 x 110	915	1265	15.942.112	12.64	1.382		13
14.	A	273.0	750	1100	37	171	346	—	30	15	26	10	140.0	40	70	20 x 140	935	1285	15.942.113	20.55	2.198		14
15.	B	273.0	750	1100	43	105	280	46	30	15	30	10	140.0	60	64	30 x 110	938	1288	15.942.199	24.30	2.591		15
16.	B	273.0	750	1100	52	81	256	52	35	19	36	15	140.0	80	59	40 x 135	943	1293	15.942.117	39.97	4.239		16
17.	A	323.9	900	1200	25	228	378	—	30	15	18	10	165.8	32	74	16 x 110	1093	1393	15.942.112	15.10	1.382		17
18.	B	323.9	900	1200	37	162	312	46	30	15	26	10	165.8	50	69	25 x 110	1106	1406	15.942.114	23.88	2.159		18
19.	B	323.9	900	1200	43	152	302	46	30	15	30	10	165.8	60	67	30 x 110	1114	1414	15.942.199	28.86	2.591		19
20.	B	323.9	900	1200	52	116	266	58	40	23	36	13	165.8	80	62	40 x 145	1120	1420	15.942.117	50.99	4.553		20
21.	A	355.6	900	1250	25	211	386	—	30	15	18	10	182.0	32	75	16 x 110	1110	1460	15.942.112	15.34	1.382		21
22.	B	355.6	900	1250	37	145	320	46	30	15	26	10	182.0	50	71	25 x 110	1123	1473	15.942.114	24.24	2.159		22
23.	B	355.6	900	1250	43	135	310	46	30	15	30	10	182.0	60	68	30 x 115	1130	1480	15.942.199	30.60	2.708		23
24.	B	355.6	900	1250	52	98	273	58	40	23	36	13	182.0	80	64	40 x 150	1135	1485	15.942.117	53.46	4.710		24
25.	A	406.4	950	1400	25	209	434	—	30	15	18	10	207.8	32	77	16 x 110	1189	1639	15.942.112	16.43	1.382		25
26.	B	406.4	950	1400	37	143	368	46	30	15	26	10	207.8	50	73	25 x 115	1201	1651	15.942.114	27.11	2.257		26
27.	B	406.4	950	1400	43	132	357	46	30	15	30	10	207.8	60	70	30 x 120	1207	1657	15.942.199	34.11	2.826		27
28.	B	406.4	950	1400	52	95	320	58	40	23	36	13	207.8	80	66	40 x 165	1211	1661	15.942.117	62.74	5.181		28
29.	A	457.0	1000	1500	25	209	459	—	30	15	18	13	233.6	32	78	16 x 115	1262	1762	15.942.112	18.23	1.444		29
30.	B	457.0	1000	1500	37	142	392	46	30	15	26	13	233.6	50	73	25 x 120	1274	1774	15.942.114	30.00	2.355		30
31.	B	457.0	1000	1500	43	122	372	52	35	19	30	15	233.6	60	71	30 x 130	1277	1777	15.942.199	39.10	3.062		31
32.	B	457.0	1000	1500	52	92	342	58	40	23	36	13	233.6	80	68	40 x 175	1287	1787	15.942.117	70.72	5.495		32
33.	A	508.0	1050	1500	25	207	432	—	30	15	18	13	259.5	32	79	16 x 110	1341	1791	15.942.112	18.53	1.382		33
34.	B	508.0	1050	1500	37	140	365	46	30	15	26	13	259.5	50	75	25 x 115	1352	1802	15.942.114	30.51	2.257		34
35.	B	508.0	1050	1500	43	120	345	52	35	19	30	15	259.5	60	73	30 x 125	1354	1804	15.942.199	39.86	2.944		35
36.	B	508.0	1050	1500	52	89	314	58	40	23	36	13	259.5	80	70	40 x 165	1364	1814	15.942.117	70.67	5.181		36
37.	A	559.0	1150	1550	25	231	431	—	30	15	18	13	285.5	32	80	16 x 110	1470	1870	15.942.112	20.31	1.382		37
38.	B	559.0	1150	1550	37	163	363	46	30	15	26	13	285.5	50	76	25 x 115	1480	1880	15.942.114	33.40	2.257		38
39.	B	559.0	1150	1550	43	143	343	52	35	19	30	15	285.5	60	74	30 x 125	1482	1882	15.942.199	43.63	2.944		39
40.	B	559.0	1150	1550	52	102	302	65	50	27	36	15	285.5	80	71	40 x 170	1488	1888	15.942.117	79.43	5.338		40
41.	A	610.0	1200	1600	25	229	429	—	30	15	18	13	311.4	32	80	16 x 110	1548	1948	15.942.112	21.39	1.382		41
42.	B	610.0	1200	1600	37	161	361	46	30	15	26	13	311.4	50	77	25 x 115	1558	1958	15.942.114	35.16	2.257		42
43.	B	610.0	1200	1600	43	141	341	52	35	19	30	15	311.4	60	75	30 x 125	1560	1960	15.942.199	45.92	2.944		43
44.	B	610.0	1200	1600	52	99	299	65	50	27	36	15	311.4	80	72	40 x 170	1566	1966	15.942.117	83.59	5.338		44

TYPE A



TYPE B



NOTES:

- FOR ACTUAL 'L' DIMENSION REFER GMS.
- 'L' VALUE SELECTED SHALL BE BETWEEN 'L' MIN. AND 'L' MAX.
- SUBSTITUTION OF PLATE MATERIAL IS: 2002 CLASS 3 IN PLACE OF SA-515 GR 70(C) IS ACCEPTABLE.
- MANUFACTURE AND INSPECTION SHALL BE AS PER QCP NO. 06 OF PIPING CENTRE.
- ALL HOLES SHALL BE MATCH DRILLED BY ASSEMBLING THE HALF CLAMPS.
- REFER DRAWING NO: 2.80.999.99258 FOR B.O.M. DETAILS & DRAWING NO: 2.80.999.99259 FOR CLAMP SELECTION.
- ACTUAL WEIGHT SHALL BE CALCULATED FROM 'L' ACTUAL (FROM GMS).
- ACTUAL WEIGHT = WEIGHT FOR 'L' MIN + $\frac{('L' \text{ ACTUAL} - 'L' \text{ MIN})}{100} \times \text{INCREMENT WT. PER 100MM}$
- ACTUAL DEVELOPED LENGTH = DL FOR 'L' MIN + $\frac{('L' \text{ ACTUAL} - 'L' \text{ MIN})}{2}$
- CLAMPS SHALL BE SUPPLIED IN ASSEMBLED CONDITION ALONG WITH FASTENERS ETC AS SHOWN IN DRAWING NO 2.80.999.99258.
- ACTUAL 'L2' = $'L2' \text{ MIN} + \frac{('L' \text{ ACTUAL} - 'L' \text{ MIN})}{2}$

TYPE OF PRODUCT
OR NAME OF
CUSTOMER / PROJECT

STANDARD

MATERIAL: SA-515 GR 70(C)

BHARAT HEAVY ELECTRICALS LTD.,
PIPING CENTRE, MADRAS

DRN	NAME	SIGN	DATE	No. OF VAR
R	R. SHRINIVASAN			
CHD	R. ANANTH			
APPD	S. JAYAKUMAR		3/1/84	

DEPT.

GRADE OR
UN TOL DIM
C/M/FSCALE
NTS

WEIGHT (KG)

REF TO ASSY/ OLD DRG

CODE

TITLE

CARD
CODE

DRAWING No.

2.80.999.99257

REV
02

RISER CLAMP (CS)

REV DATE 02/20/10
ALTERNATIVE 1/2/10
REV DATE 02/20/10
APPROVED: [Signature]
NOTE: NO ADDED.
QCP NO. ALTERED
IN NOTE 4.