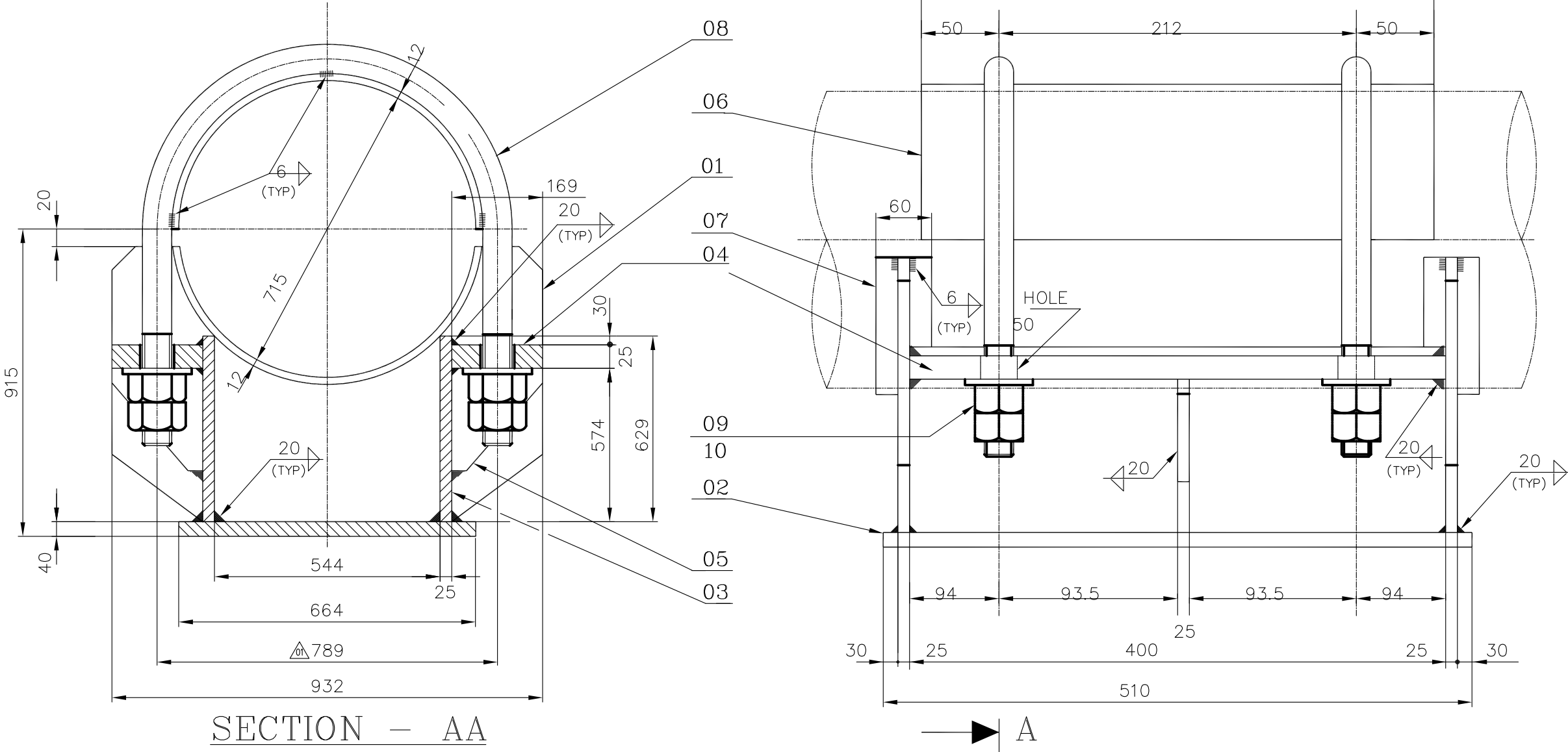


DRAWING No. 2-80-830-11021

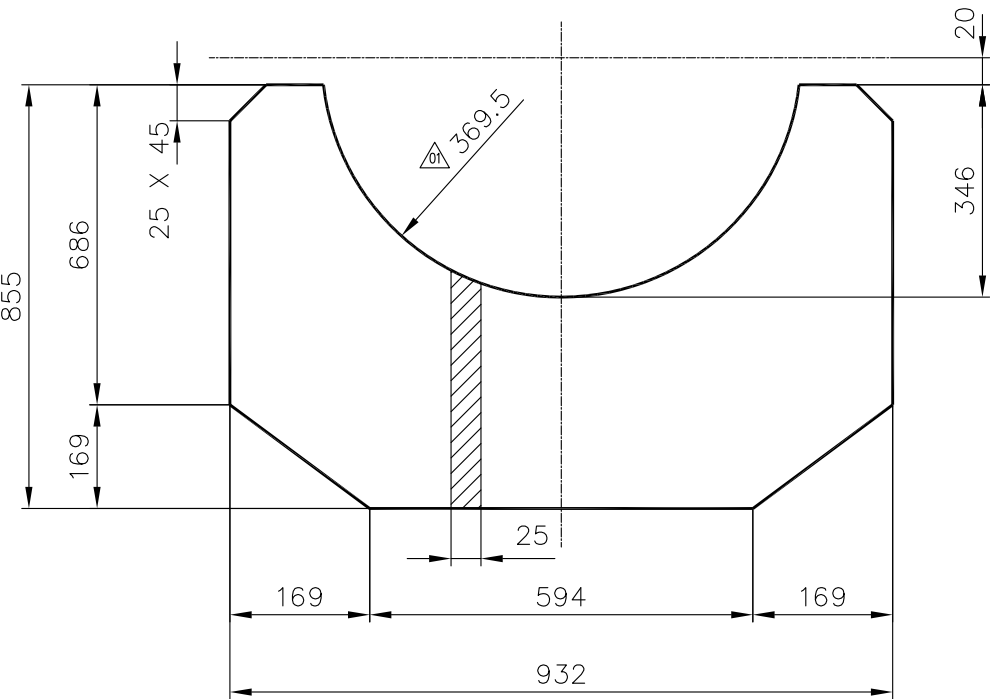
ALL DIMENSIONS ARE IN MILLIMETRES



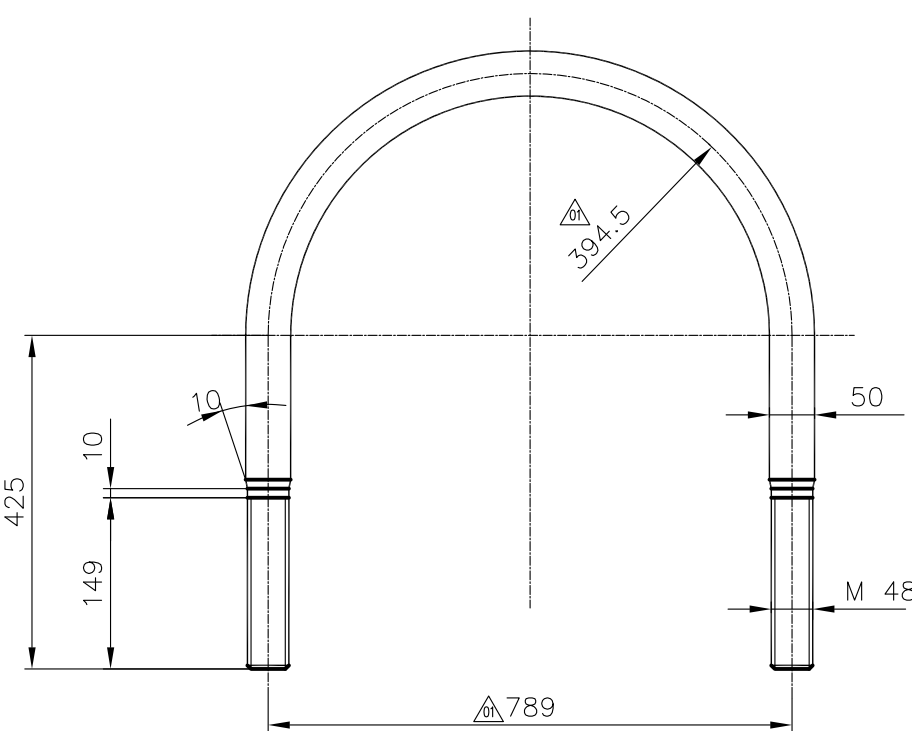
NOTES: -

1.0 FOR NOTES REFER DRAWING No. 4-80-800-34106

DESIGN LOAD : 10000KG
DESIGN TEMP. : 596 °C



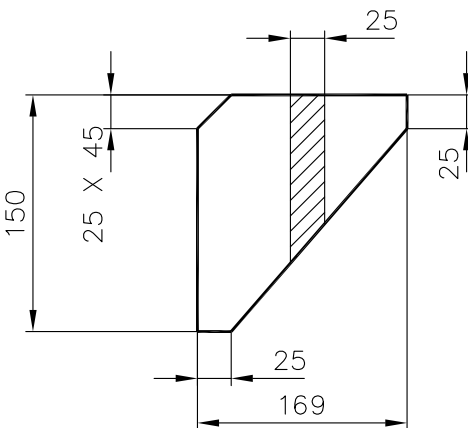
ITEM No.01



ITEM No.08

NOTES: -

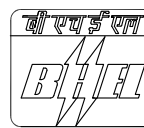
01. METRIC SCREW THREADS AS PER IS: 4218.



ITEM No.05

10	PUNCHED WASHER A48	41408 48000	-	414080004800 SA387Gr22CL2		0.284
09	NUT M48 X5	4-80-999-99290	03	413195004800 SA194Gr7	C	1.240
08	'U' ROD M48 ROD DIA50 ; L=2077	2-80-830-11021		153394040000 SA182F91	C	32.011
07	PAD PLATE-2 PL 12THKX60X1090	2-80-830-11021		159421550000 SA387Gr91CL2	C	6.123
06	PAD PLATE-1 PL 12THKX312X1130	2-80-830-11021		159421550000 SA387Gr91CL2	C	33.253
05	STIFFNER PLATE PL 25THKX169X150	2-80-830-11021		159421560000 SA387Gr91CL2	C	3.147
04	FIXING PLATE PL 25THKX169X400	2-80-830-11021		159421560000 SA387Gr91CL2	C	12.496
03	VERTICAL PLATE PL 25THKX629X400	2-80-830-11021		159421560000 SA387Gr91CL2	C	49.376
02	BOTTOM PLATE PL 40THKX664X510	2-80-830-11021		159422720000 SA387GR22CL2	C	106.333
01	SIDE PLATE PL 25THKX855X932	2-80-830-11021		159421560000 SA387Gr91CL2	C	112.343
ITEM NO.	DESCRIPTION	DRAWING NO.	NO. VAR NO.	MATL CODE MATL SPECN	A C	UNIT WT. QTY.

TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT



BHARAT HEAVY ELECTRICALS LTD.,
PIPING CENTRE, MADRAS

DRN	NAME LALIT	SIGN -Sd-	DATE 22.09.2011	NO OF ITEMS
CHD	SARAVANAN.C	-Sd-	22.09.2011	
APPD	SARAVANAN.C	-Sd-	22.09.2011	

DEPT.	GRADE OF UN TOL DIM C/M/F	SCALE NTS	WEIGHT (Kg).	NAME OF ORIGINAL ORGANISATION	ITEM No.
CODE					
TITLE	SHOCK ABSORBER CLAMP FOR PIPE OD711 P91 90KN			DRAWING No. 2-80-830-11021	REV 02
			CARD CODE U 01		

05-228/C

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.

FIRST ANGLE PROJECTION (ALL DIMENSIONS IN MILLIMETRES)

2-80-921-12737

DRAWING No.

7

6

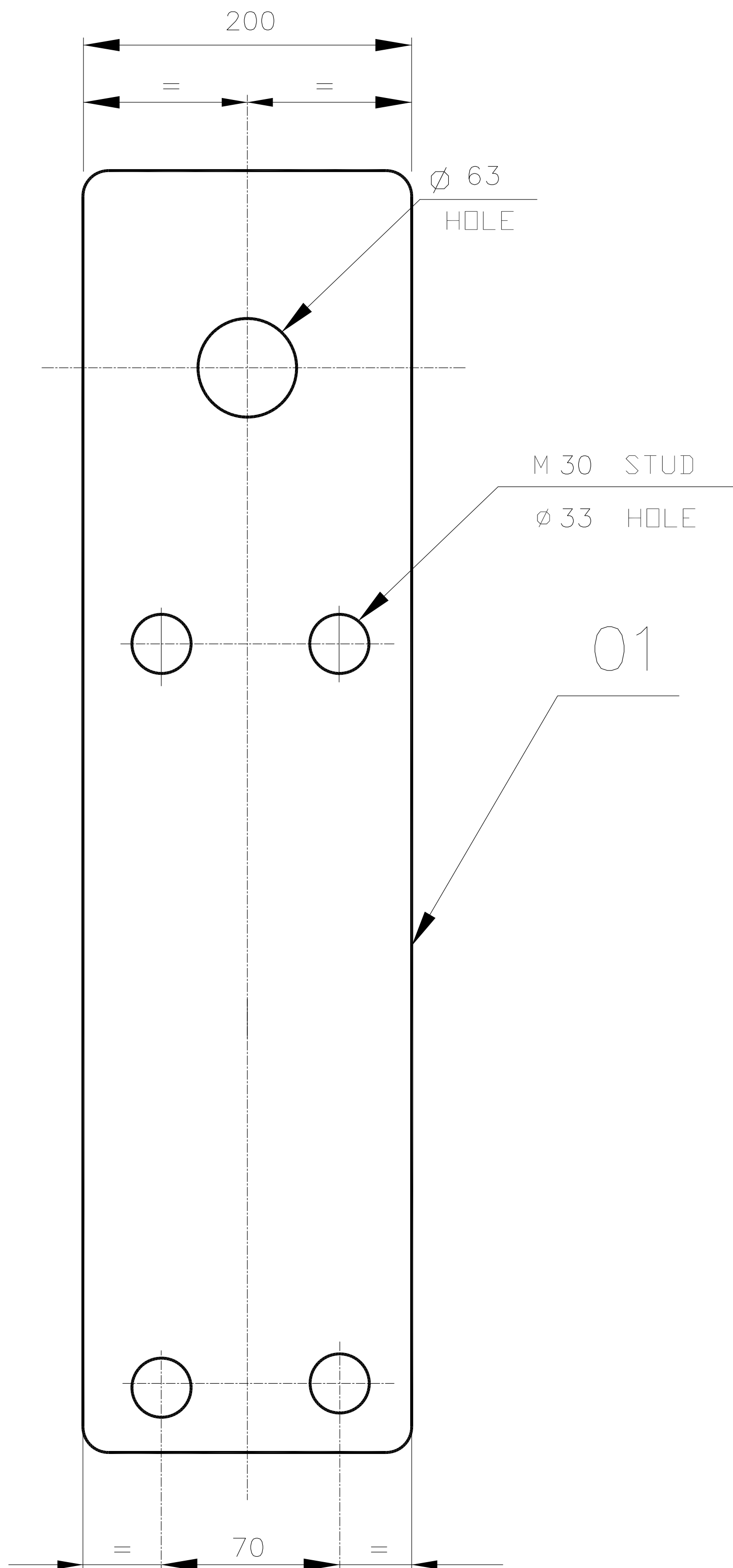
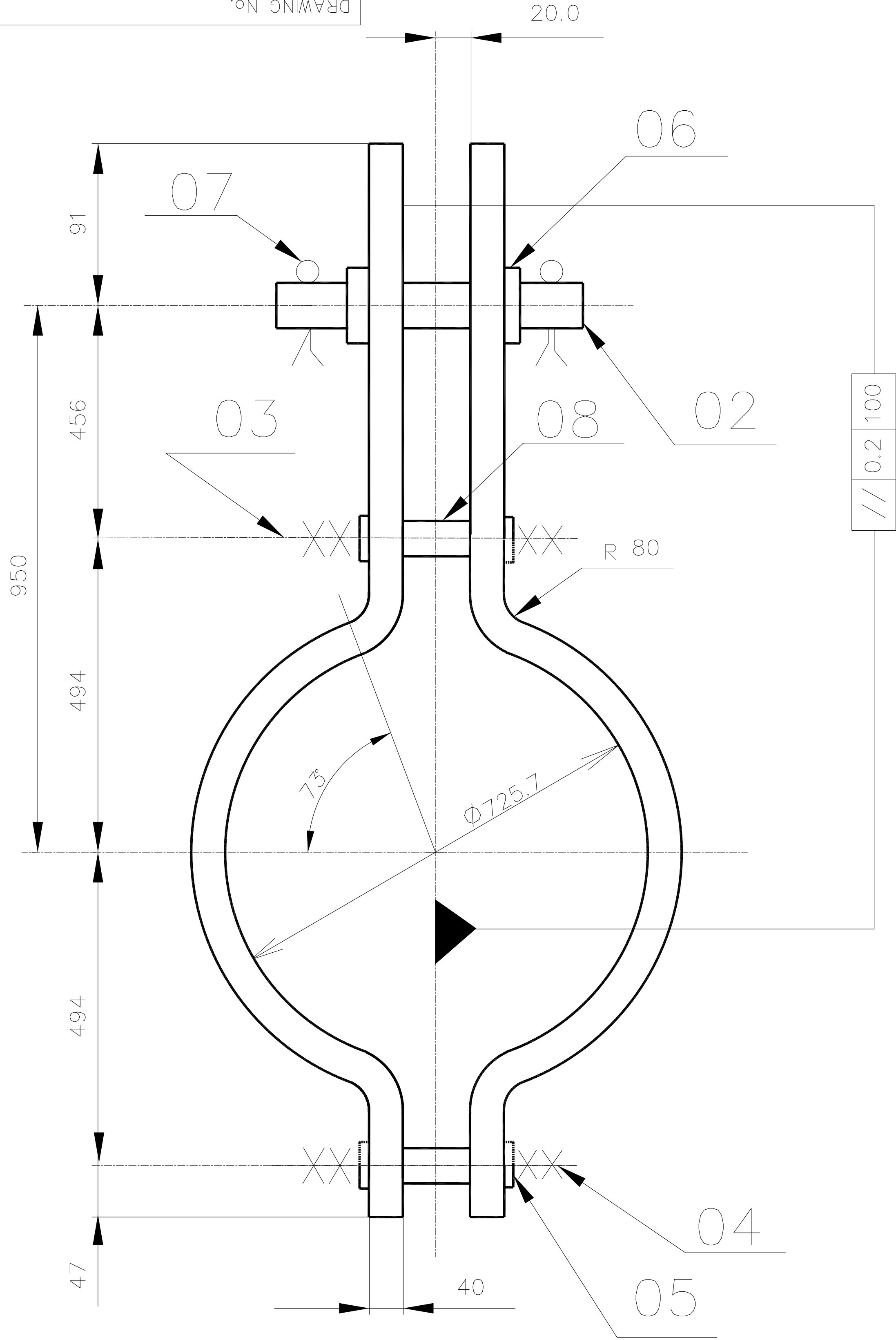
5

4

3

2

1



NOTES:

1.0 FOR NOTES REFER DRAWING No. 4-80-800-34106

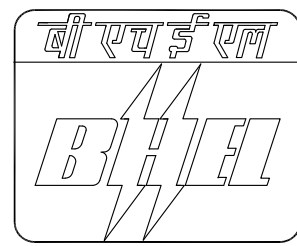
DESIGN PARAMETERS

LOAD : 8600 KG

TEMPERATURE : 596 °C

	08	SPACER RING	4-80-921-77475	05	159393080000	C		0.360		
	07	SPLIT PIN	4170410080		SA182F22CL3			2		
	06	LOAD PIN WASHER	4140872000		417041008000			0.047		
	05	STUD WASHER	4-80-999-99026		414080007200			2		
	04	NUT M30	4132430000		159422650000			0.543		
	03	STUD M30x260	48099999320	2	SA387Gr22			8		
	02	LOAD PIN DIA 61-190	4-80-921-77494	02	413240003000			0.063		
	01	CLAMP PL.40x200x1890	2-80-921-12737		948223026600			0.225		
					SA193B16	P		16		
					153391430000			1.248		
					SA105			4		
					159421570000			4.350		
					SA387GR91	C		1		
								118.704		
								2		
VAR NO.	ITEM NO.	DESCRIPTION	CUS	DRAWING NO.	ITEM NO.	MATL CODE	A	UNIT	UNIT WT.	G.S.
					VAR NO.	MATL SPECN	C	DI	QTY.	ZONE

TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT



BHARAT HEAVY ELECTRICALS LTD.,
PIPING CENTRE, CHENNAI

DRN	NAME A YOGESH	SIGN	DATE 21.11.13	NO OF ITEMS
CHD	C DEEPAK		21.11.13	
APPD	M MANO		21.11.13	

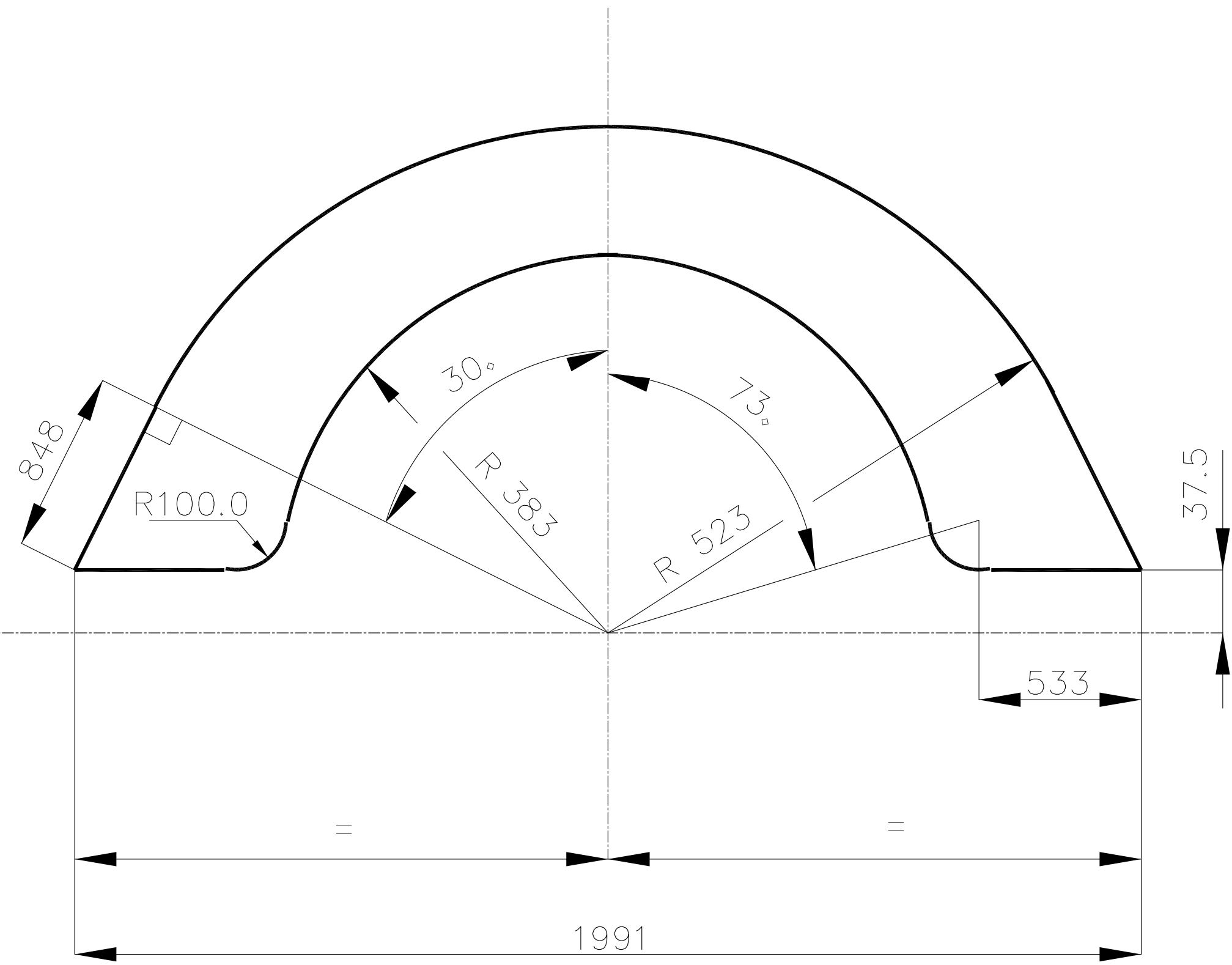
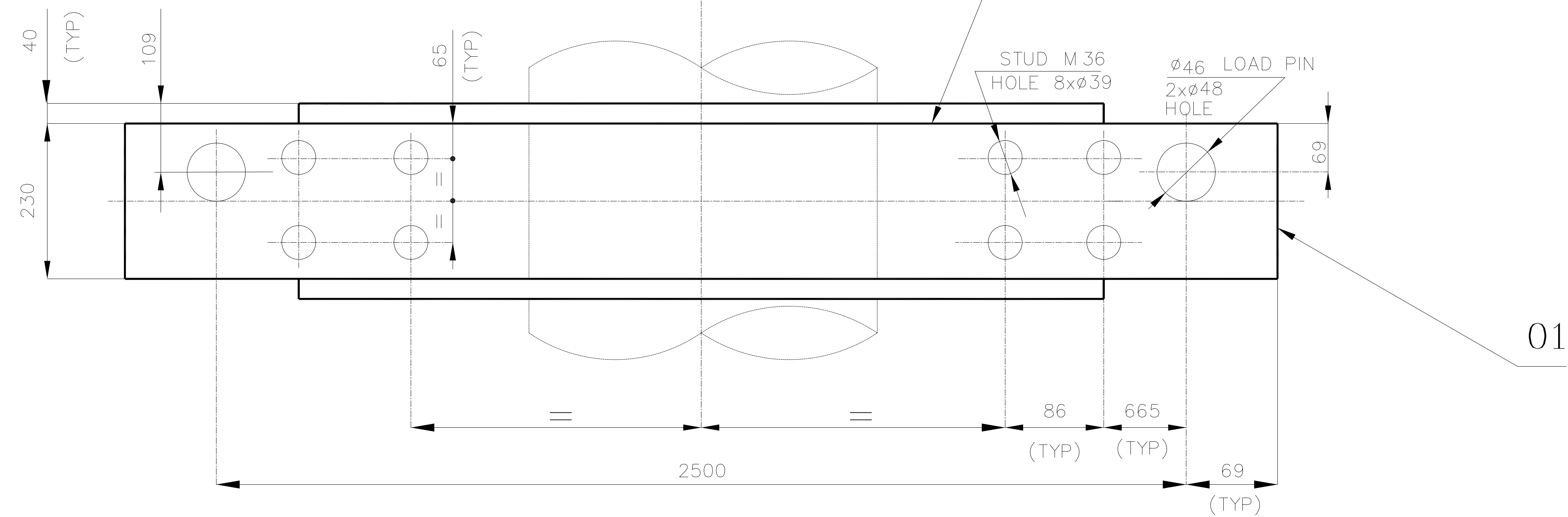
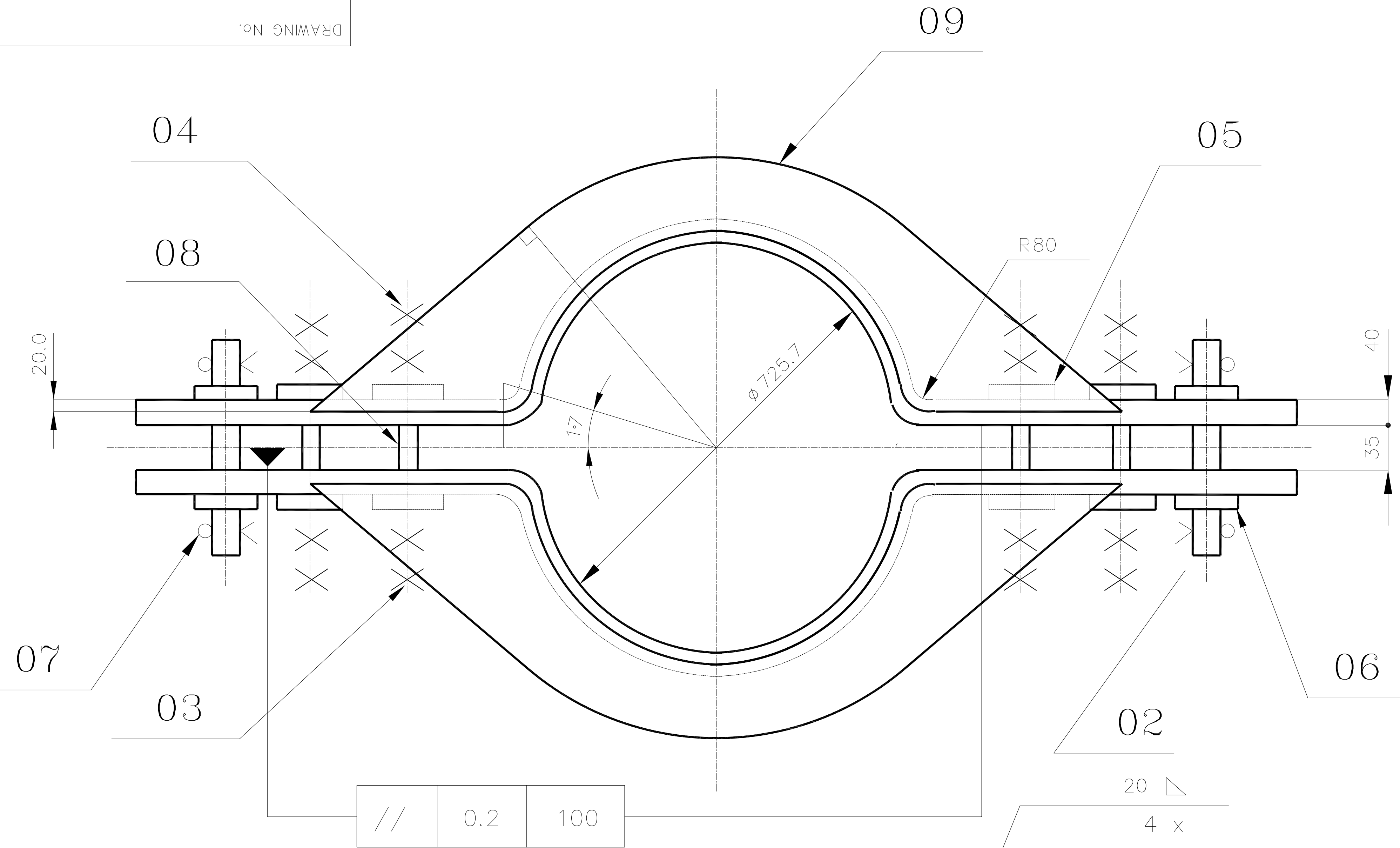
01	ALTERED
ZONE	CHECKED

DEPT.	GRADE OF UN TOL. DIM C/M/F	SCALE NTS	WEIGHT (Kg). 2520.754	REF TO ASSY / OLD DRG.	ITEM No.
TITLE FOR PIPE OD 711X950	CARD CODE U 01	DRAWING No. 2-80-921-12737	REV 00		

SIZE A2

2-80-921-12740

DRAWING No.



ITEM NO 09

DESIGN PARAMETERS

LOAD : 10200 KG

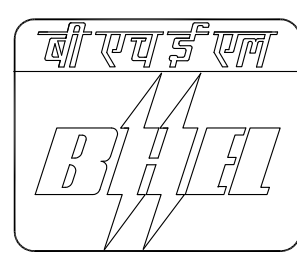
TEMPERATURE : 596 °C

NOTES: -

FOR NOTES REFER DRG. No. 4-80-800-34106

09	RIB PL.40x486x1992	2-80-921-12740		159421570000	C	107.678		
				SA387GR91		4		
08	SPACER RING	4-80-921-77475	04	159393080000	C	0.230		
				SA182F22CL3		8		
07	SPLIT PIN	4170410063		417041006300		0.037		C
						4		
06	LOAD PIN WASHER	4140845000		414080004500		0.243		
						4		
05	STUD WASHER	4-80-999-99026	05	159422650000		0.088		
				SA387Gr22		16		
04	NUT M36	4-80-999-99045	5	413244003600		0.43		
						32		
03	STUD M36x290	48099999320	3	948223629600	P	2.001		
				SA193B16		8		
02	LOAD PIN DIA 46x186	48099937401	6	153391420000	C	2.42		B
				SA105		2		
01	CLAMP PL.40x230x2951	2-80-921-12740		159421570000	C	213.116		
				SA387GR91		2		
VAR NO.	ITEM NO.	DESCRIPTION	QTY	DRAWING NO.	ITEM NO.	MATL CODE	UNIT	UNIT WT.
								QTY.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT



BHARAT HEAVY ELECTRICALS LTD.,
PIPING CENTRE, CHENNAI

DRN	NAME A YOGESH	SIGN	DATE 21.11.13	NO OF ITEMS
CHD	C DEEPAK		21.11.13	
APPD	M MANO		21.11.13	

REV 01	DATE	ALTERED CHECKED	DEPT.	GRADE OF UN TOL. DIM C/M/F	SCALE NTS	WEIGHT (Kg). 895.92	REF TO ASSY / OLD DRG.	ITEM No.
ZONE								
TITLE						CARD CODE	DRAWING No.	REV
RISER CLAMP FOR PIPE OD 711X2500 (P91)						U 01	2-80-921-12740	00

DRAWING No.

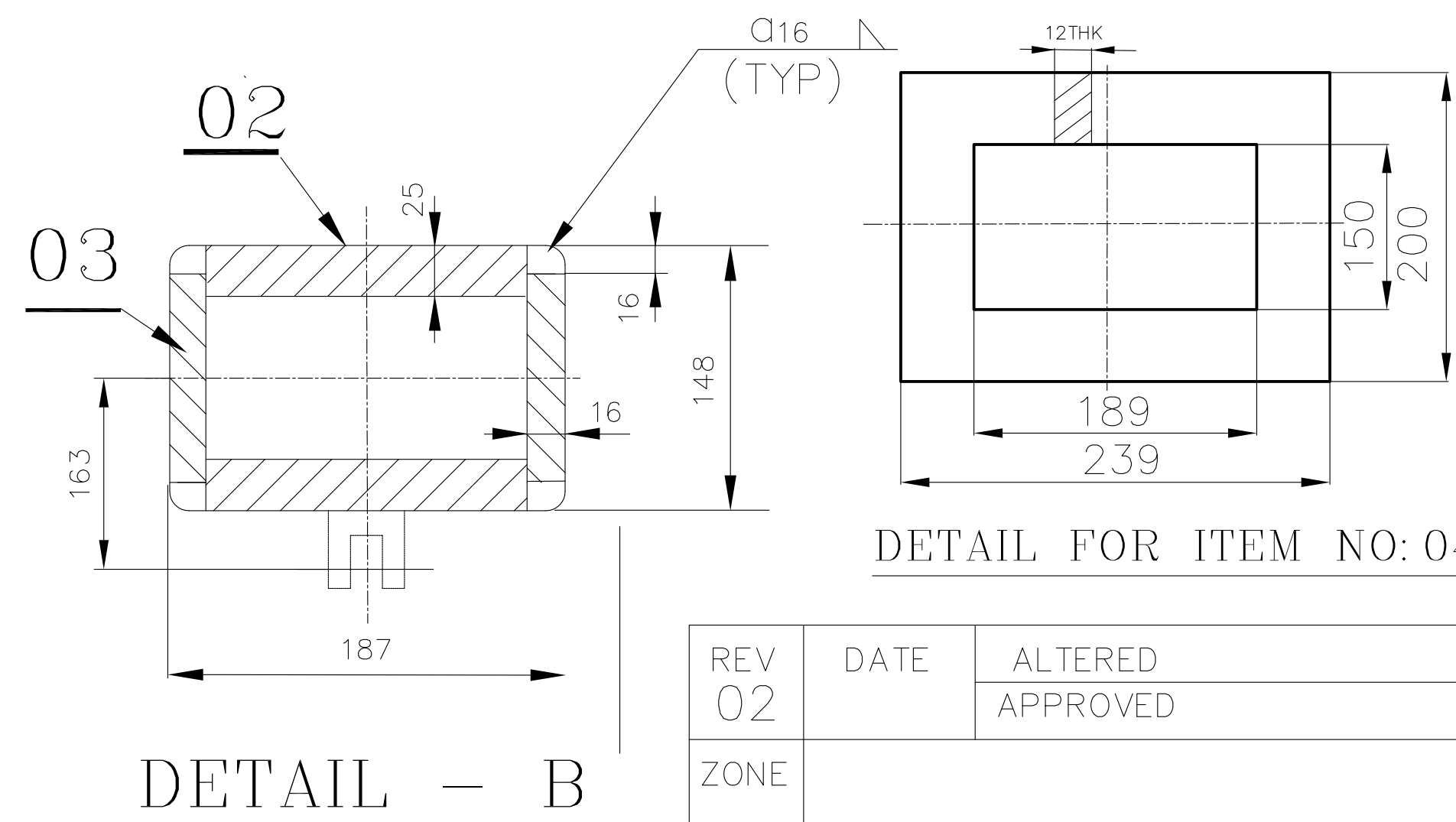
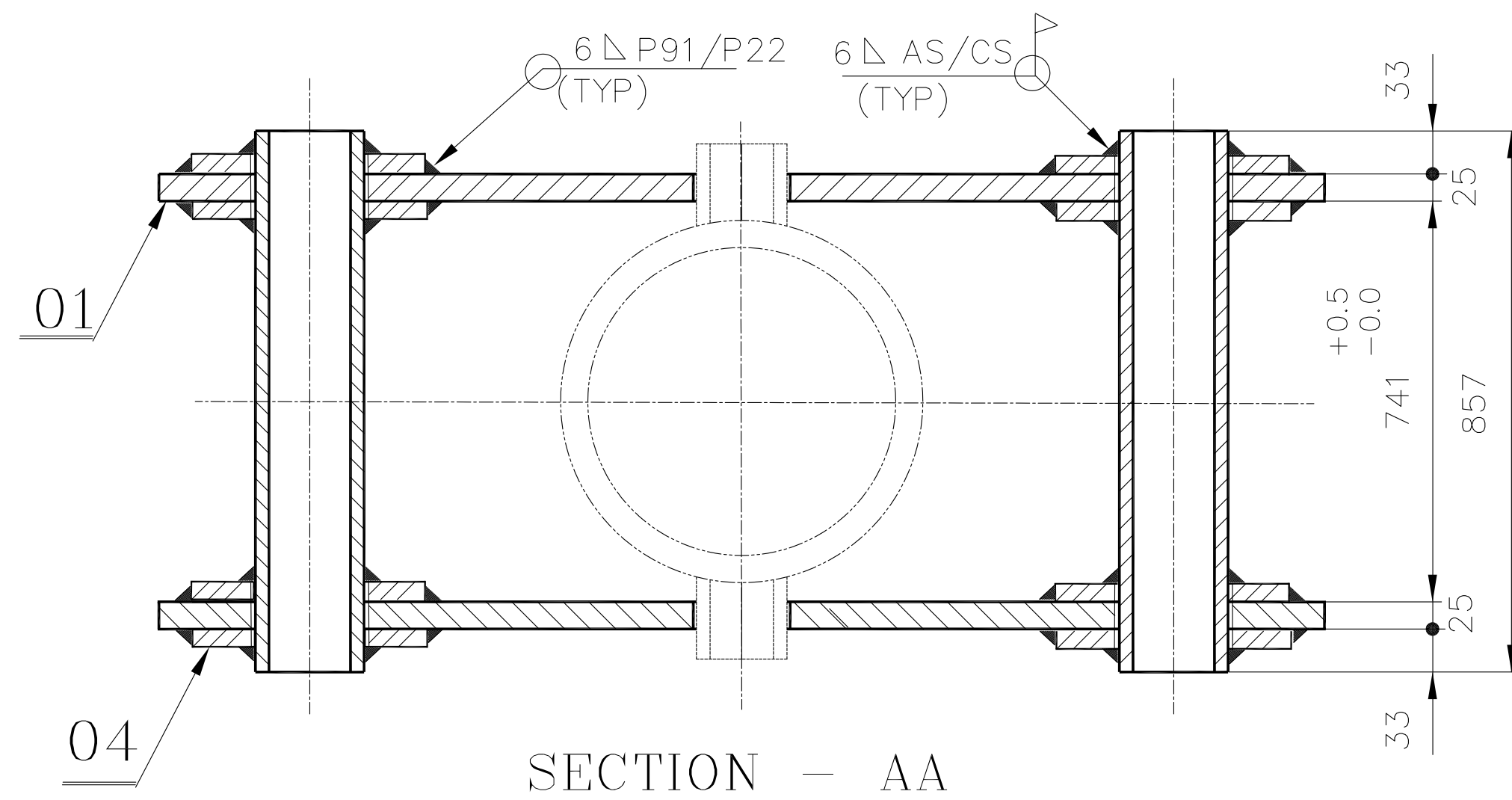


TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT



SIZE A3

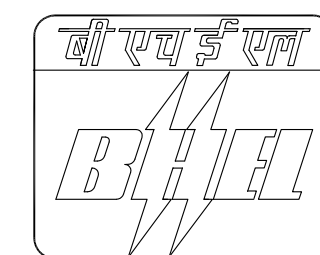
DRAWING NO.



REV 02	DATE	ALTERED
		APPROVED
ZONE		

REV 01	DATE 07.06.13	ALTERED LALIT APPROVED C.S
ZONE	LENGTH OF CLAMP PLATE REVISED APPLICABLE FOR DU356,7004,80830	
	REVISION IS INDICATED AS 	

TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT



DRN	NAME DINESH	SIGN —sd—	DATE 22.09.11	NO OF ITEMS
CHD	LALIT	—sd—	22.09.11	
APPD	C.SARAVANAN	—sd—	22.09.11	

DEPT.	GRADE OF UN TOL. DIM		SCALE	WEIGHT (Kg).	REF TO ASSY / OLD DRG	ITEM No.
CODE	C/M/F			573.45		
TITLE				CARD CODE	DRAWING No.	REV
TRUNNION CLAMP (PIPE OD 711 P91 120KN)				U 01	3-80-830-28789	01

FIGURE-1

1, BEFORE TACK WELDING OF PLATE WITH BOX, THE FOLLOWING ARE TO BE ENSURED

a, UNIFORM GAP BETWEEN PLATE HOLE AND TRUNNION ALONG THE CIRCUMFERENCE AS SHOWN IN FIGURE -1, THIS COULD BE ENSURED BY INSERTING THIN SHEETS OF SUITABLE THICKNESS OR WIRES OF SUITABLE DIAMETER AT 3 PLACES 120° APART.

b, PARALLELITY OF THE TWO PLATES BY MEASURING THE INNER SURFACE TO INNER SURFACE DIMENSION AT THE FOUR CORNER POINTS (①-④) OF THE PLATES MARKED IN THE DRG. ALL THE FOUR MEASUREMENT SHALL BE TO THE DIMENSIONS GIVEN IN THE DRAWING TAKING IN TO CONSIDERATION THE TOLERANCE.

2, BEFORE FINAL WELDING OF BOXES TO PLATE, ROTATION OF CLAMP ABOUT TRUNNIONS IS TO BE ENSURED.

3, LOCATION OF WELD ON BRACKET SHALL BE AS INDICATED IN THIS DRAWING. ORIENTATION OF WELD ON BRACKET SHALL BE AS PER THE GUIDELINES GIVEN IN THE ERECTION NOTES FOR PIPING HANGERS AND SUPPORTS (DRG.NO. 4-80-999-99321)

4, CORRECT ELECTRODE TO BE USED FOR WELDING STOPPER PLATE(AS) WITH BOX(CS).

*5, THE INDICATED CLAMP LENGTH IS APPLICABLE FOR DU356 7004 80830 ONLY.

	04	STOPPER PLATE 12 THK X 200 X 239	3-80-830-28789		150422690000 SA387GR22CL2	C	4.502 8
	03	BOX PLATE 2 16 x 116 x 857	3-80-830-28789		159421120000 SA 515 Gr70	C	12.136 4
	02	BOX PLATE 1 25 x 155 x 857	3-80-830-28789		159421140000 SA 515 Gr70	C	25.339 4
	01	CLAMP PLATE 25 x 576 x 2489	3-80-830-28789		159421560000 SA387GR91CL2	C	193.773 2
VAR NO.	ITEM NO.	DESCRIPTION	DRAWING NO.	ITEM NO.	MATERIAL CODE	A	UNIT WT.
				VAR NO.	MATERIAL SPEC.	C	QTY.