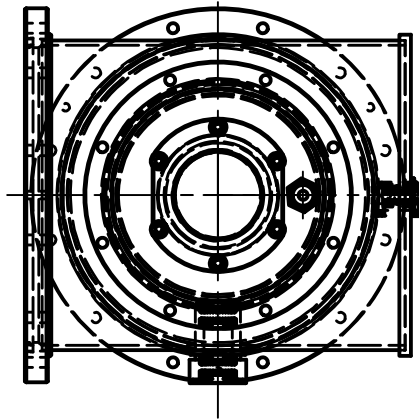
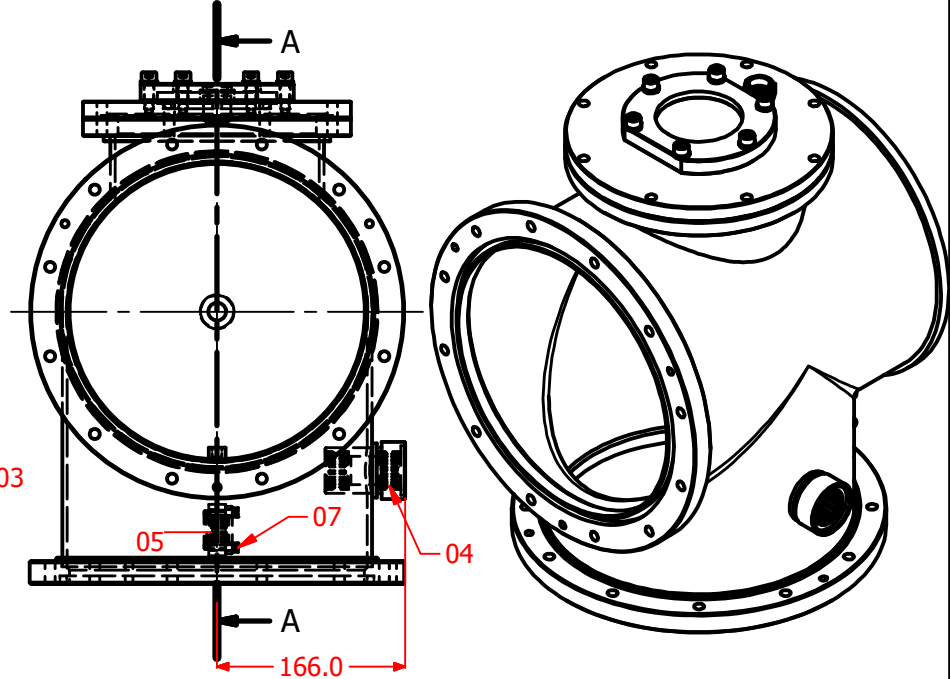
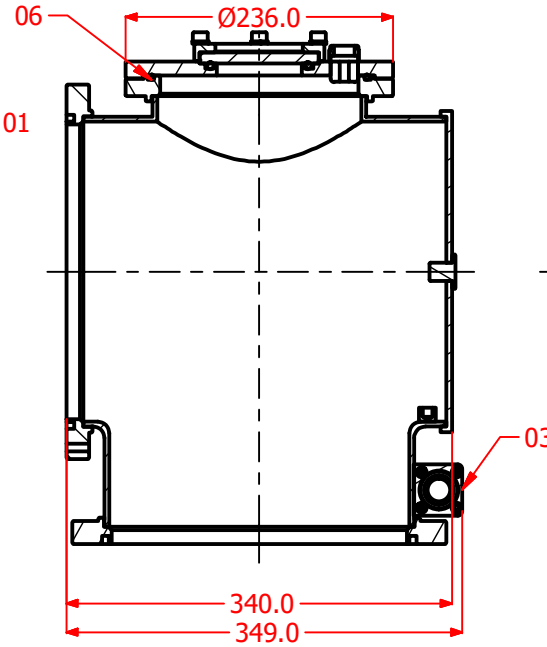
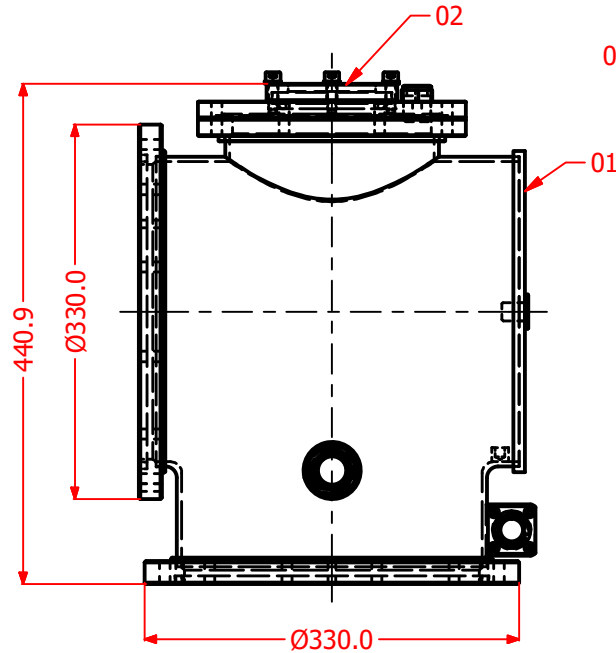


DRAWING NO. BD2016DG050_1101

A-A (0.15 : 1)

(~3.2)



07	HARDWARE	M5X20 ALLEN HEAD BOLTS	S.S	0.005	04
06	O-RING 185	WIRE DIA 5.0 ID 185.0 MM	NEOPRENE	0.01	01
05	NEEDLE ROLLER BEARING -2	SKF MAKE HK 2012	S.S	0.01	01
04	NEEDLE ROLLER BEARING -1	SKF MAKE HK 2520	S.S	0.025	02
03	BEARING HOLDER	BD2016DG050_1101	S.S	0.1	01
02	TOP COVER ASSY	BD2016DG050_1120	S.S	5.05	01
01	BI-ENCLOSURE-L	BD2016DG050_1110	S.S	25.38	01

REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	DRAWING NO.	IT. NO.	MATL. CODE	A	UNIT	UNIT WT.	CS	ZONE
VAR.						MATL. SPCN.			QTY.		

ADDITIONAL INFORMATION

STATUS OF DRAWING

DISTRIBUTION OF PRINTS

R&D	SWE	QCK
1	1	1

REV.	DATE	ALTERED
CHECKED		
APPROVED		

REV.	DATE	ALTERED
CHECKED		
APPROVED		

REV.	DATE	ALTERED
CHECKED		
APPROVED		

TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT

DRN.	SNK	SIGN	DATE	NO. OF VAR
CKD.	MMR		07-Oct-16	
APPD	NB		20-Jul-17	

DEPT	UNTL. DIMS. GR.	SCALE	WEIGHT (KG.)	REF. TO. ASSY. DRG.	ITEM NO.	NO. OF ITEM
GSG		1 : 1	N/A	BD2016DG050_1000		

DRAWING NO.	REV
BD2016DG050_1100	

SHEET NO.	NO. OF SHEETS

BI-ENCLOSURE ASSY-L

36KV BUS-SECTIONALIZER FOR GIS

BHARAT HEAVY ELECTRICALS LTD. BHOPAL

DEPT GSG

UNTL. DIMS. GR.

SCALE 1 : 1

WEIGHT (KG.) N/A

REF. TO. ASSY. DRG.

ITEM NO.

NO. OF ITEM

DRAWING NO.

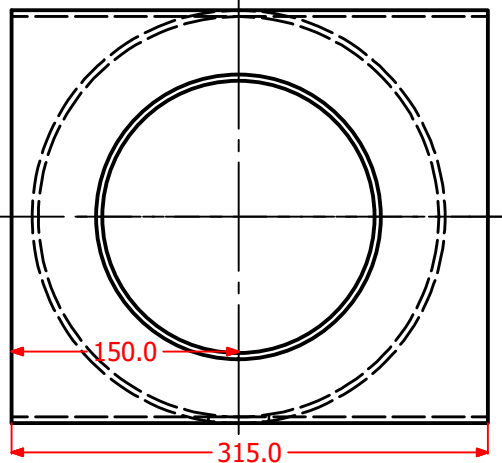
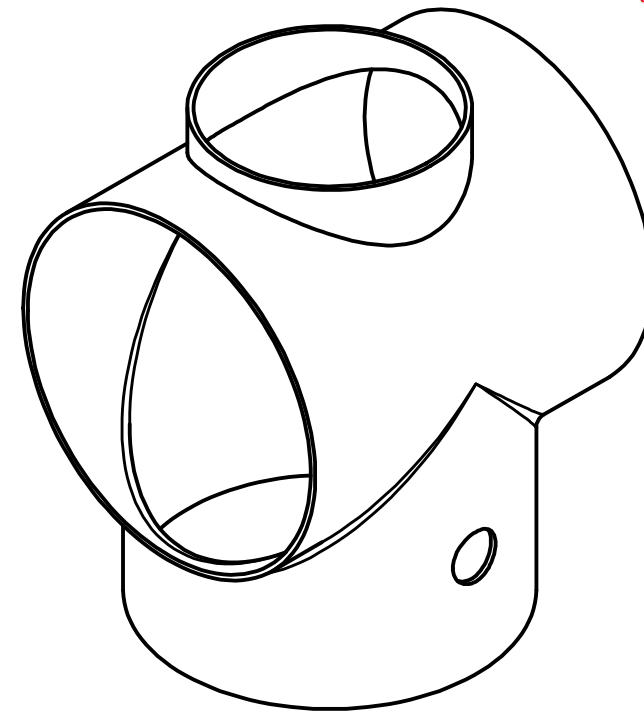
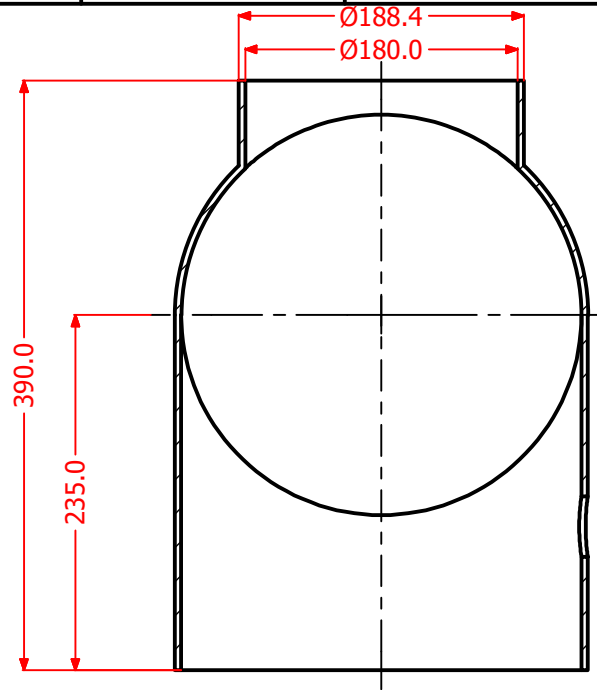
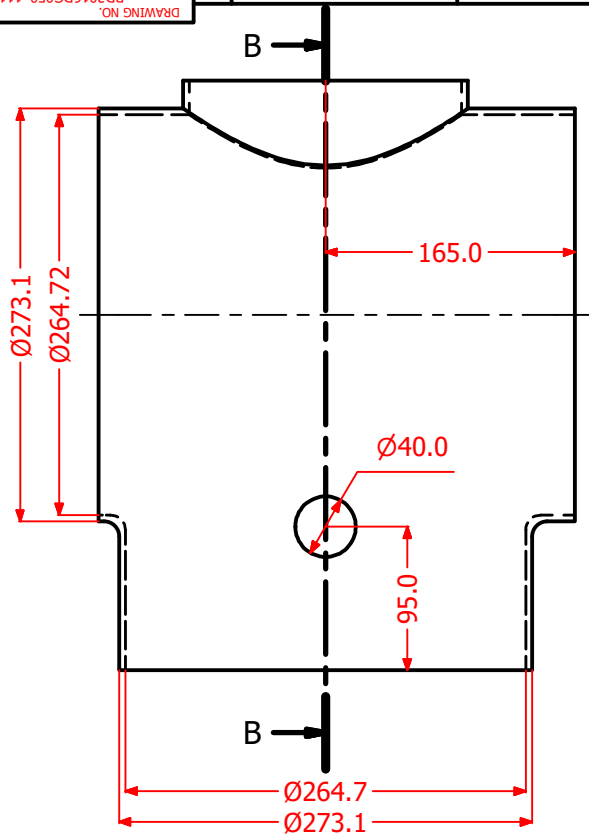
REV

SHEET NO.

NO. OF SHEETS

	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED
			CHECKED			CHECKED			CHECKED			CHECKED
			APPROVED			APPROVED			APPROVED			APPROVED
ZONE				ZONE			ZONE			ZONE		

DRAWING NO.
BD2016DG050_1111



REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	DIA 273.1X315X390MM	01	TUBE	Stainless Steel, Austenitic	10.505 kg	UNIT WT.	CS	ZONE
									QTY.		

ADDITIONAL INFORMATION

STATUS OF DRAWING

DISTRIBUTION OF PRINTS

R&D	SWE	QCX
1	1	1

REV.	DATE	ALTERED
		CHECKED
		APPROVED

REV.	DATE	ALTERED
		CHECKED
		APPROVED

TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT

36kV BUS-SECTIONALIZER FOR GIS

BHARAT HEAVY ELECTRICALS LTD. BHOPAL

DEPT. GSG
CODE 35

UNTO. DIMS. GR.

SCALE 1 : 1

WEIGHT (KG.) 10.505 kg

DRN. SNK	SIGN	DATE 16-May-12	NO. OF VAR
CKD. MMR		20-Jul-17	
APPD. NB			

TITLE
PIPE-1

REF. TO. ASSY. DRG.	ITEM NO.	NO. OF ITEM
BD2016DG050_1110		
DRAWING NO.	REV	
BD2016DG050_1111		
SHEET NO.	NO. OF SHEETS	

REV.	DATE	ALTERED
		CHECKED
		APPROVED

REV.	DATE	ALTERED
		CHECKED
		APPROVED

ZONE

REV.	DATE	ALTERED
		CHECKED
		APPROVED

REV.	DATE	ALTERED
		CHECKED
		APPROVED

ZONE

REV.	DATE	ALTERED
		CHECKED
		APPROVED

REV.	DATE	ALTERED
		CHECKED
		APPROVED

ZONE

REV.	DATE	ALTERED
		CHECKED
		APPROVED

REV.	DATE	ALTERED
		CHECKED
		APPROVED

ZONE

REV.	DATE	ALTERED
		CHECKED
		APPROVED

REV.	DATE	ALTERED
		CHECKED
		APPROVED

ZONE

FIRST ANGLE PROJECTION

< ALL DIMENSIONS ARE IN mm. >

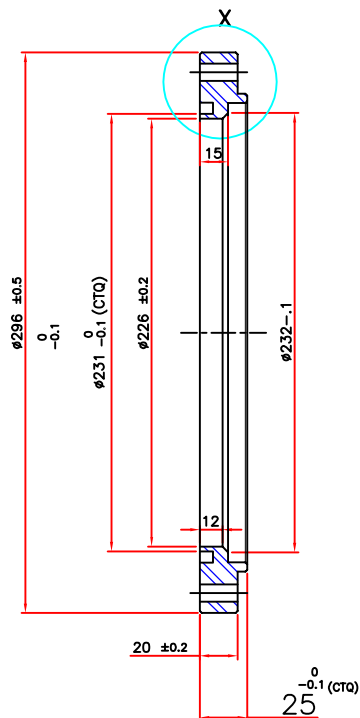
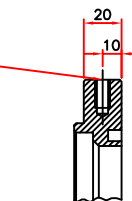
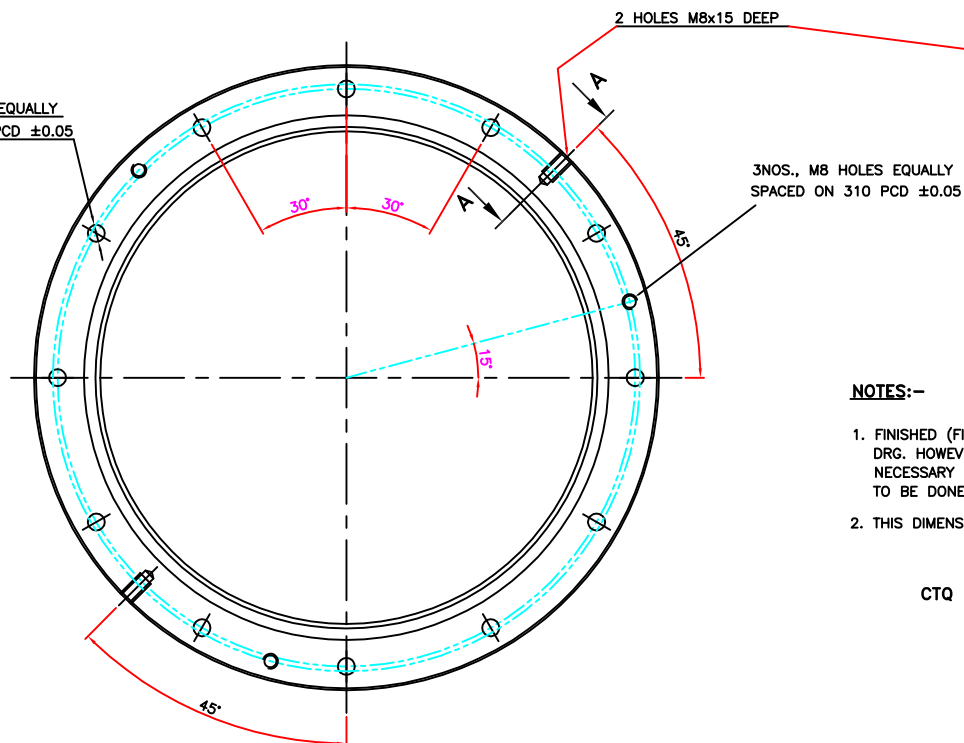
DRAWING NO. BD2016DG050_1112

THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED.
IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

237 00 0160-300-301

REF. DRG. NO.

INVENTORY NO. SIGN. & DATE

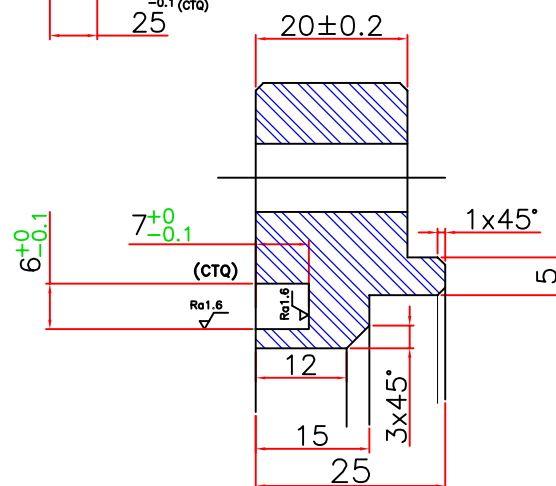
12 HOLES $\phi 9$ EQUALLY
SPACED ON 275 PCD ± 0.05 

SECTION-AA

NOTES:-

1. FINISHED (FINAL) DIMENSIONS ARE GIVEN IN THIS DRG. HOWEVER THE SUPPLIER SHOULD PROVIDE NECESSARY MACHINING ALLOWANCES AS FINAL MACHINING TO BE DONE AFTER WELDING TO ACHIEVE DESIRED ACCURACY
2. THIS DIMENSION SHOULD CORRESPOND TO 0.0

CTQ :- CRITICAL TO QUALITY



ENLARGED DETAIL-X

REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	DRAWING NO.	UNIT WT.	QTY.	ZONE
	001	L TK.x330x330 STAINLESS S. PLATE			4.686	01	
					AA10740		
					MATL. CODE		
					MATL. SPCN.		
					UNIT WT.		
					QTY.		
					ZONE		

ADDITIONAL INFORMATION

STATUS OF DRAWING

DISTRIBUTION OF PRINTS

SWE	SWM	TCX
1	3	1

REV.	DATE	ALTERED
		CHECKED
		APPROVED

REV.	DATE	ALTERED
		CHECKED
		APPROVED

TYPE OF PRODUCT
OR
NAME OF CUSTOMER / PROJECT

33kV/40ka DOUBLE BUS GIS

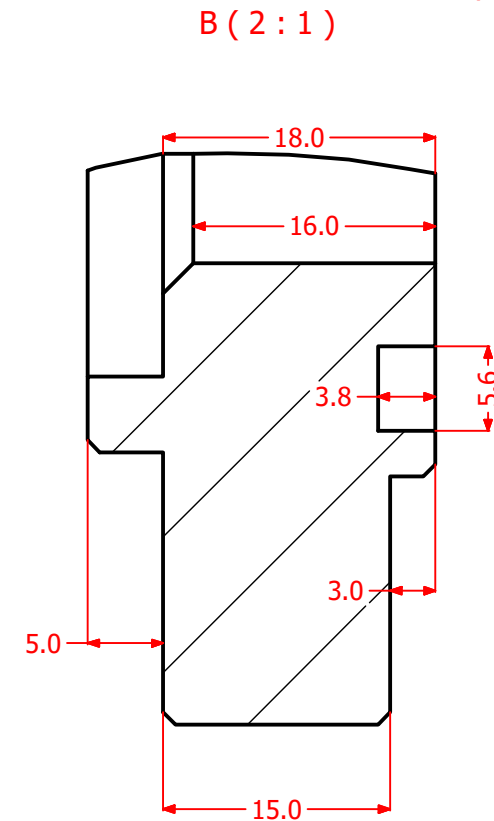
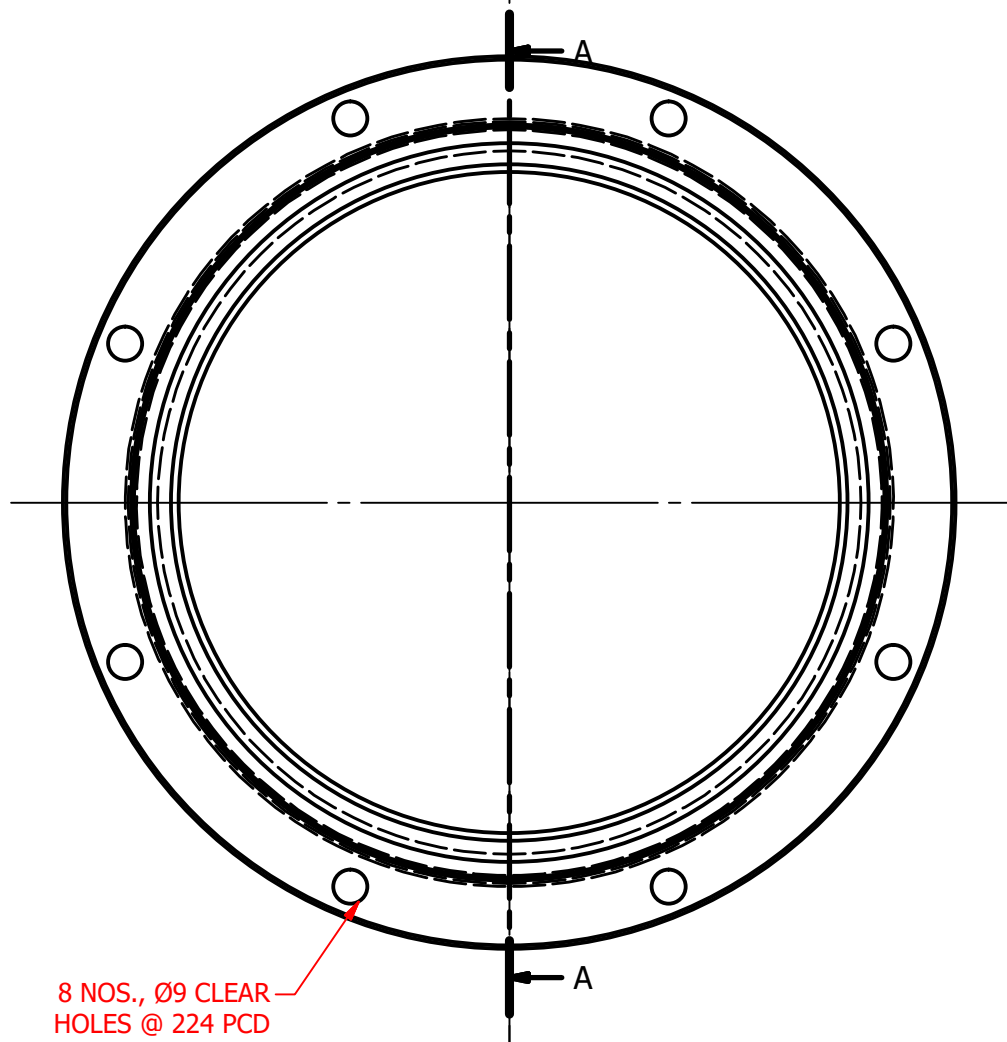
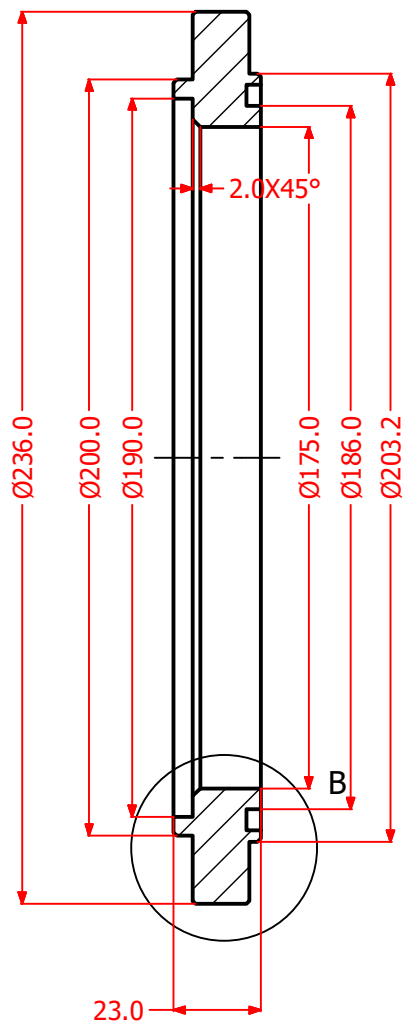
BHARAT HEAVY ELECTRICALS LTD.
BhopalNAME
SIGN
DATE
NO. OF
VARDRAWING NO.
REVSHEET NO. 01
NO. OF SHEETS 01

FLANGE-1

PRADEEP-CADZONE

DRAWING NO. BD2016DG050_1113

(~3.2)



8 NOS., Ø9 CLEAR HOLES @ 224 PCD

NOTE : ALL SHARP CORNERS ARE CHAMFERED TO 1X45°

01	BLANK	DIA 236 X23MM THK	Stainless Steel, Austenitic	2.516 kg
REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	DRAWING NO.

ADDITIONAL INFORMATION				TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT			
STATUS OF DRAWING				36kV BUS-SECTIONALIZER FOR GIS			
DISTRIBUTION OF PRINTS				BHARAT HEAVY ELECTRICALS LTD. BHOPAL			
R&D	SWE	QCK		DRN.	SNK	SIGN	DATE
1	1	1		CKD.	MMR		12-Oct-16
				APPD	NB		20-Jul-17
REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE
		CHECKED			CHECKED		
		APPROVED			APPROVED		
ZONE			ZONE			ZONE	

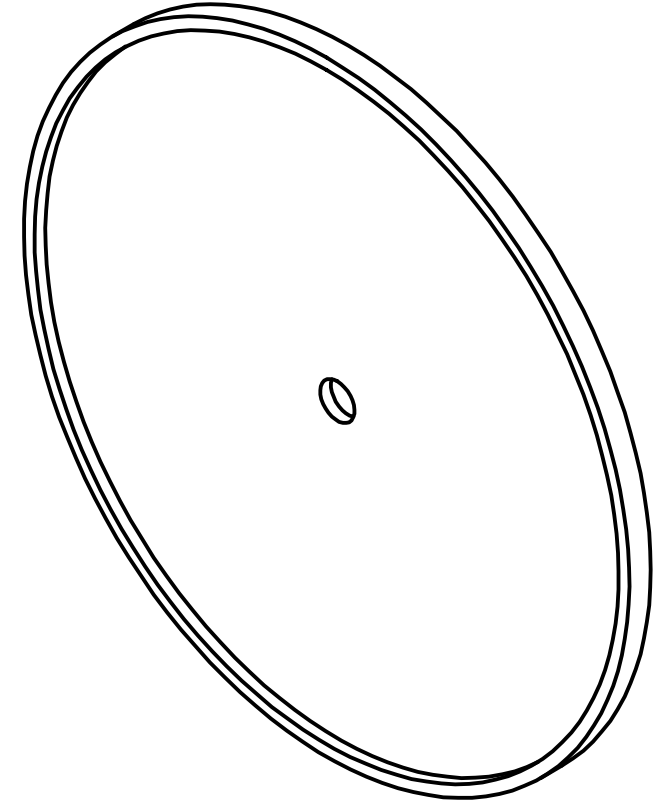
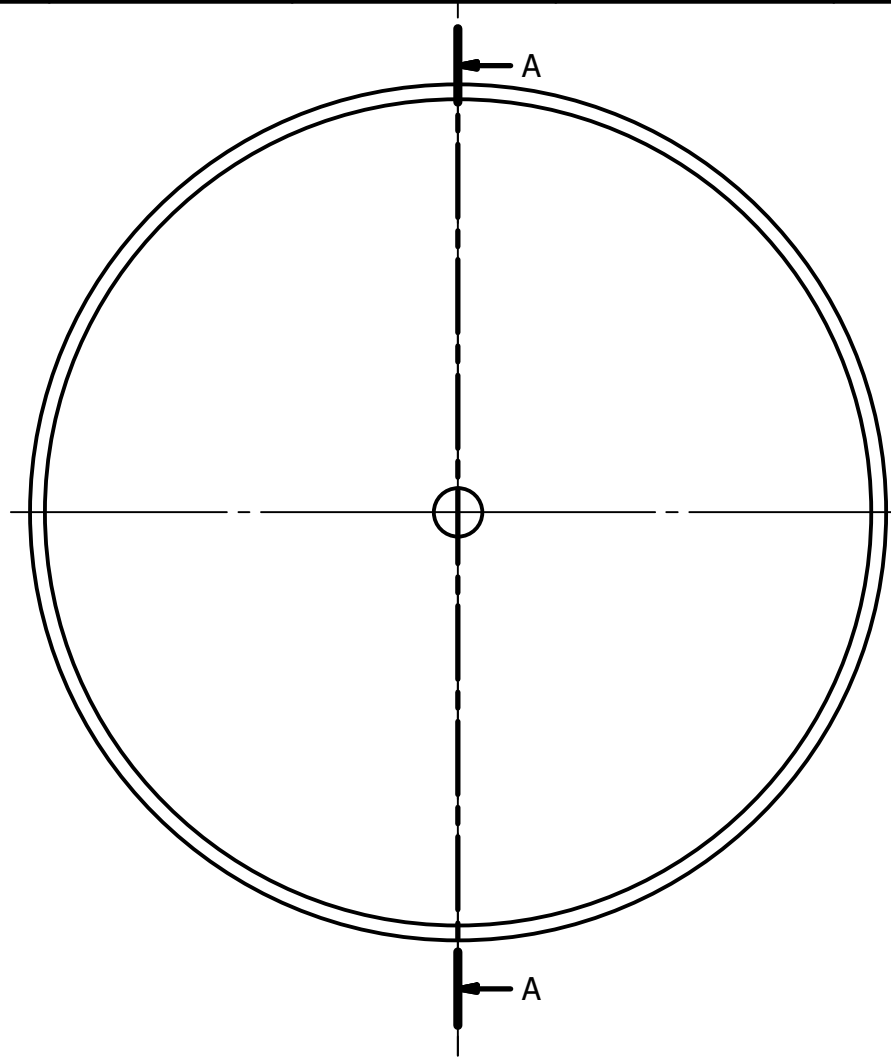
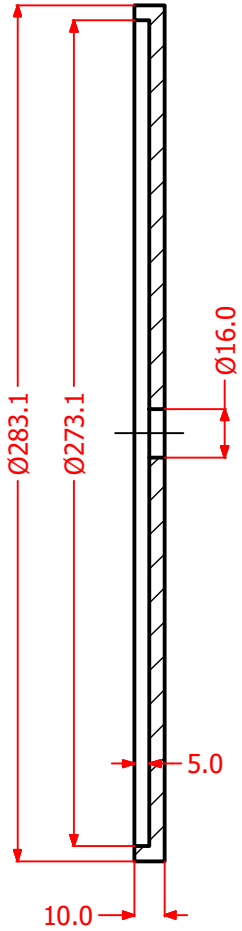
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		CHECKED			CHECKED			CHECKED			CHECKED			CHECKED
		APPROVED			APPROVED			APPROVED			APPROVED			APPROVED
ZONE			ZONE			ZONE			ZONE			ZONE		

DEPT	UNTL	DIMS	GR.	SCALE	WEIGHT (KG.)	REF. TO. ASSY. DRG.	ITEM NO.	NO. OF ITEM
GSG				1 : 1	2.516 kg	BD2016DG050_1110		
CODE	35					BD2016DG050_1113		
TITLE				Flange-2				
				SHEET NO.				NO. OF SHEETS

(~3.2)

DRAWING NO. BD2016DG050_1114

A-2-A (1 215)



NOTE : ALL SHARP CORNERS ARE CHAMFERED TO 0.8X45°

		01	BLANK		DIA 283.1 X 10MM TPK		Stainless Steel, Austenitic		2.695 kg		
									01		
REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	DWG. NO.	IT. NO.	MATL. CODE	UNIT	QTY.	UNIT WT.	CS	ZONE

ADDITIONAL INFORMATION

STATUS OF DRAWING

DISTRIBUTION OF PRINTS

R&D	SWE	QCX
1	1	1

REV.	DATE	ALTERED
		CHECKED
		APPROVED

TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT

36KV BUS-SECTIONALIZER FOR GIS

BHARAT HEAVY ELECTRICALS LTD. BHOPAL

DEPT. GSG
CODE 35

UNTO. DIMS. GR.

SCALE 1 : 1

WEIGHT (KG.) 2.695 kg

DRN.	SNK	SIGN	DATE	NO. OF VAR
CKD.	MMR		07-Oct-16	
APPD.	NB		20-Jul-17	

REF. TO. ASSY. DRG.	ITEM NO.	NO. OF ITEM
BD2016DG050_1110		

TITLE
Blank Cover

DRAWING NO.	REV
BD2016DG050_1114	
SHEET NO.	NO. OF SHEETS

REV.	DATE	ALTERED
		CHECKED
		APPROVED

ZONE	
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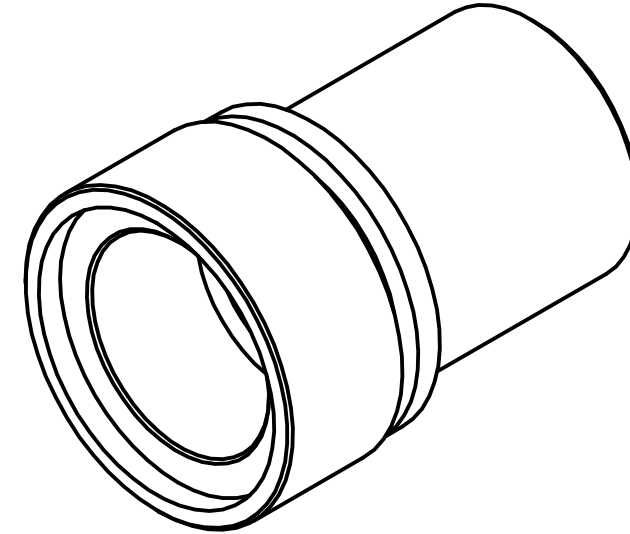
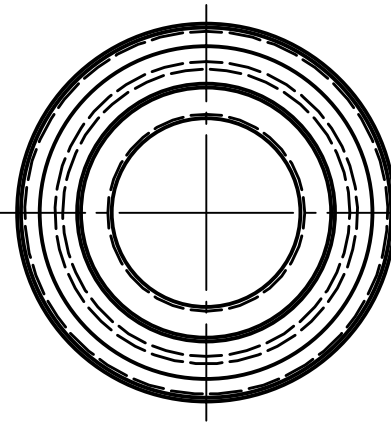
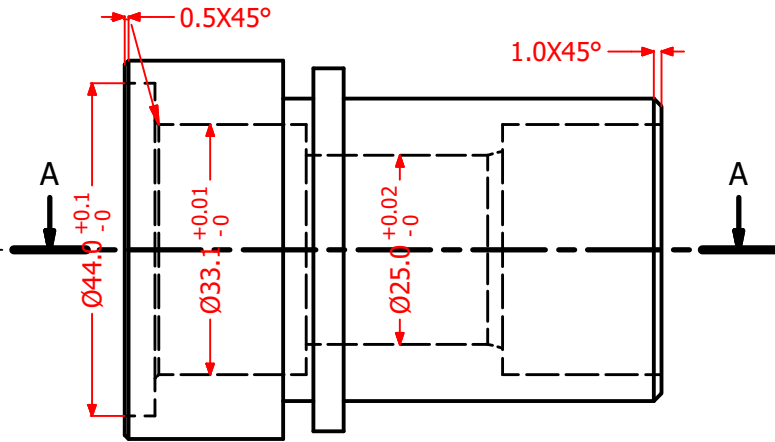
REV.	DATE	ALTERED
		CHECKED
		APPROVED

ZONE	
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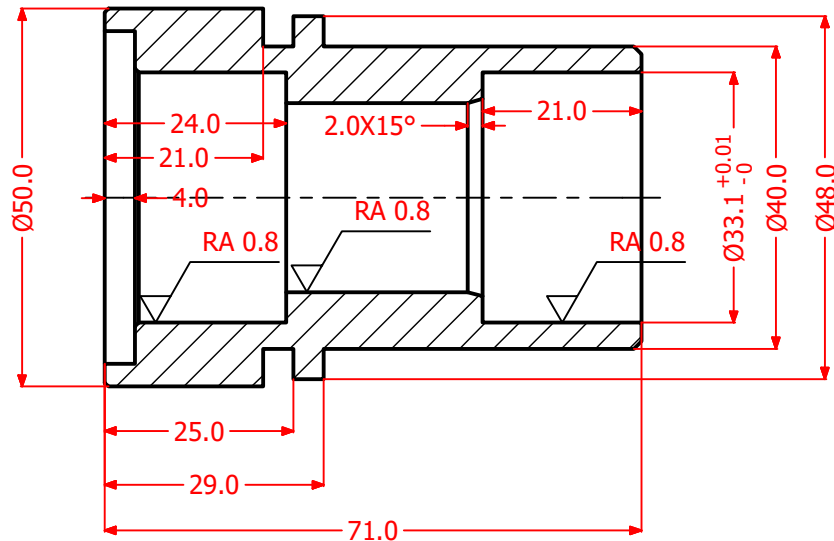
REV.	DATE	ALTERED
		CHECKED
		APPROVED

ZONE	
------	--

DRAWING NO.
BD2016DG050_1111



A-A (1 : 1)



NOTE :

1. FINISHED (FINAL) DIMENSIONS ARE GIVEN IN THIS DRG. HOWEVER THE SUPPLIER SHOULD PROVIDE NECESSARY MACHINING. ALLOWANCES AS FINAL MACHINING. IS TO BE DONE AFTER WELDING TO ACHIEVE DESIRED ACCURACY.

2. NOTE : ALL SHARP CORNERS ARE CHAMFERED TO 0.8X45°

		01		ROD		DIA 50 X 71MM LONG		Stainless Steel, Austenitic		0.418 kg					
REMARKS		VAR. NO.	ITEM NO.	DESCRIPTION		STD	DRAWING NO.	IT. NO.	MATL. CODE	UNIT	UNIT WT.	CS	ZONE		
								VAR.	MATL. SPCN.		QTY.				

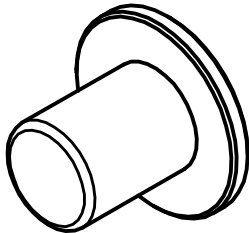
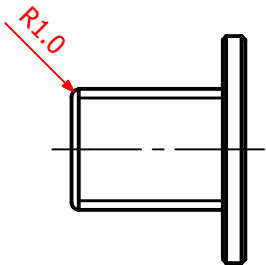
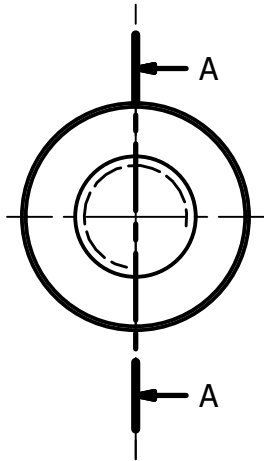
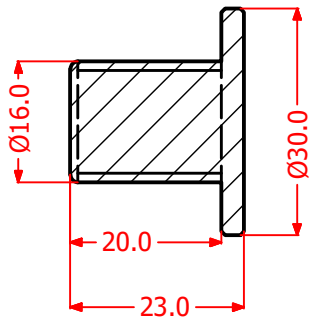
ADDITIONAL INFORMATION				TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT				36kV BUS-SECTIONALIZER FOR GIS											
STATUS OF DRAWING				सि. वि. & वि. BHPAL BHARAT HEAVY ELECTRICALS LTD. BHPAL				DRN.		SNK		SIGN		DATE		NO. OF VAR			
R&D		SWE						CKD.		MMR				26-Aug-13					
1		1								APPD		NB				24-Jul-17			
REV.		DATE		ALTERED		SEPT		UNTOL. DIMS. GR.		SCALE		WEIGHT (KG.)		REF. TO. ASSY. DRG.		ITEM NO.		NO. OF ITEM	
				CHECKED		GSG		⊕		1 : 1		0.418 kg		BD2016DGO50_1110					
		APPROVED		CODE		35													
ZONE						TITLE										REV			
						RFT-L													
						DRAWING NO. BD2016DGO50_1115													
						SHEET NO.										NO. OF SHEETS			



		01 BLOCK		12.5 X 15 X 15MM TIRK		Stainless Steel, Austenitic		0.019 kg.					
REMARKS		VAR. NO.	ITEM NO.	DESCRIPTION		STD	DRAWING NO.	IT. NO.	MATL. CODE	UNIT	QTY.	CS	ZONE
ADDITIONAL INFORMATION				TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT 36KV BUS-SECTIONALIZER FOR GIS									
STATUS OF DRAWING													
DISTRIBUTION OF PRINTS				 BHARAT HEAVY ELECTRICALS LTD. BHOPAL									
R&D		SWE		QCK		DRN.		SNK		SIGN		DATE	
1		1		1		CKD.		MMR				18-Jul-17	
						APPD		NB				20-Jul-17	
REV.		DATE		ALTERED		DEPT		UNTOOL DIMS. GR.		SCALE		WEIGHT (KG.)	
				GSG		CODE		1 : 1		0.019 kg		REF. TO ASSY. DRG.	
				CHECKED		35						ITEM NO.	
				APPROVED								NO. OF ITEM	
ZONE		TITLE						DRAWING NO.					
		Earth Stud						BD2016DG050_1116					
								SHEET NO.					
								NO. OF SHEETS					

(~3.2)

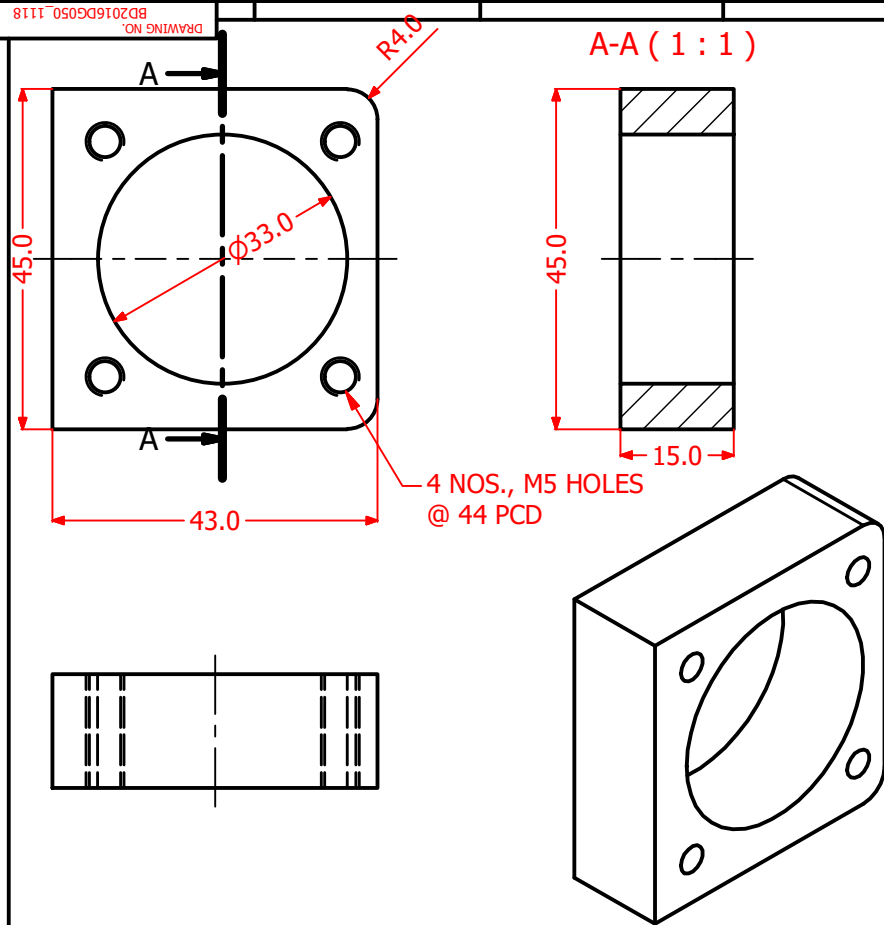
A-A (1 : 1)



NOTE : ALL SHARP CORNERSA ARE CHAMFERED TO 0.8X45°

		01		ROD		DIA 36 X21MM THK		Stainless Steel, Austenitic		0.049 kg		
REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	STD.	DRAWING NO.	IT. NO.	MATL. CODE	C.S. & A.	UNIT	UNIT WT.	ZONE	
						VAR.	MATL. SPCN.		QTY.			
ADDITIONAL INFORMATION			TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT 36kV BUS-SECTIONALIZER FOR GIS									
STATUS OF DRAWING												
DISTRIBUTION OF PRINTS			BHARAT HEAVY ELECTRICALS LTD. BHOPAL									
R&D	SWE	QCX										
1	1	1										
REV.	DATE	ALTERED		DEPT	UNTOL. DIMS. GR.		SCALE	WEIGHT (KG.)	REF. TO. ASSY. DRG.		ITEM NO.	NO. OF ITEM
		CHECKED		GSG			1 : 1	0.049 kg	BD2016DG050_1110			
		APPROVED		CODE								
				35								
ZONE			TITLE Support Stud						DRAWING NO.		REV	
									BD2016DG050_1117			
				SHEET NO.						NO. OF SHEETS		

(~3.2)



NOTE : ALL SHARP CORNERS ARE CHAMFERED TO 1X45°

		01	BLANK	45X43X15MM THK	Stainless Steel, Austenitic	0.123 kg		
REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	DRAWING NO.	IT. NO.	MATL. CODE	UNIT WT.	ZONE
					VAR.	MATL. SPCN.	QTY.	

ADDITIONAL INFORMATION				TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT				
STATUS OF DRAWING				36kV BUS-SECTIONALIZER FOR GIS				
DISTRIBUTION OF PRINTS				BHARAT HEAVY ELECTRICALS LTD. BHOPAL				
R&D	SWE	QCX		DRN.	SNK	SIGN	DATE	NO. OF VAR
1	1	1		CKD.	MMR		20-Jul-17	
				APPD	NB			

DEPT	UNTL. DIMS. GR.	SCALE	WEIGHT (KG.)	REF. TO. ASSY. DRG.	ITEM NO.	NO. OF ITEM
GSG		1 : 1	0.123 kg	BD2016DG050_1110		
CODE	35					

TITLE		Shaft Bracket		DRAWING NO.		REV	
				BD2016DG050_1118			
				SHEET NO.		NO. OF SHEETS	

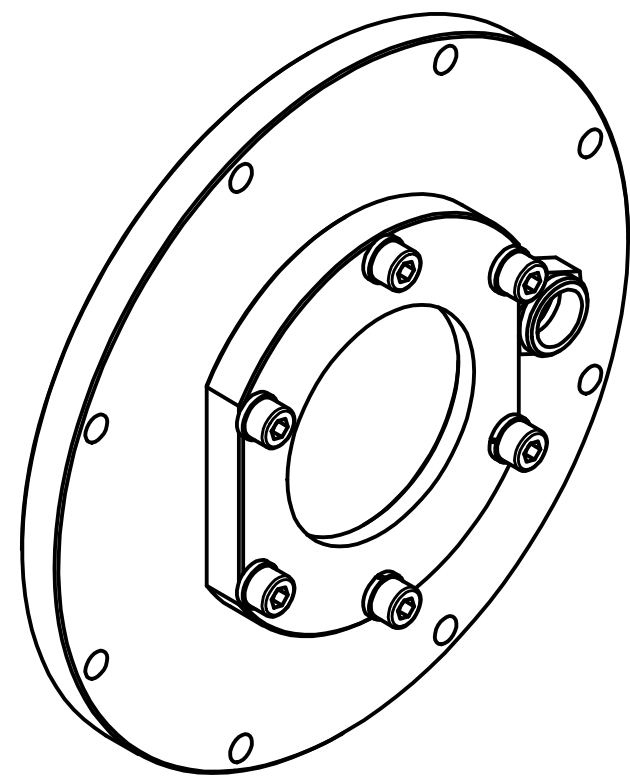
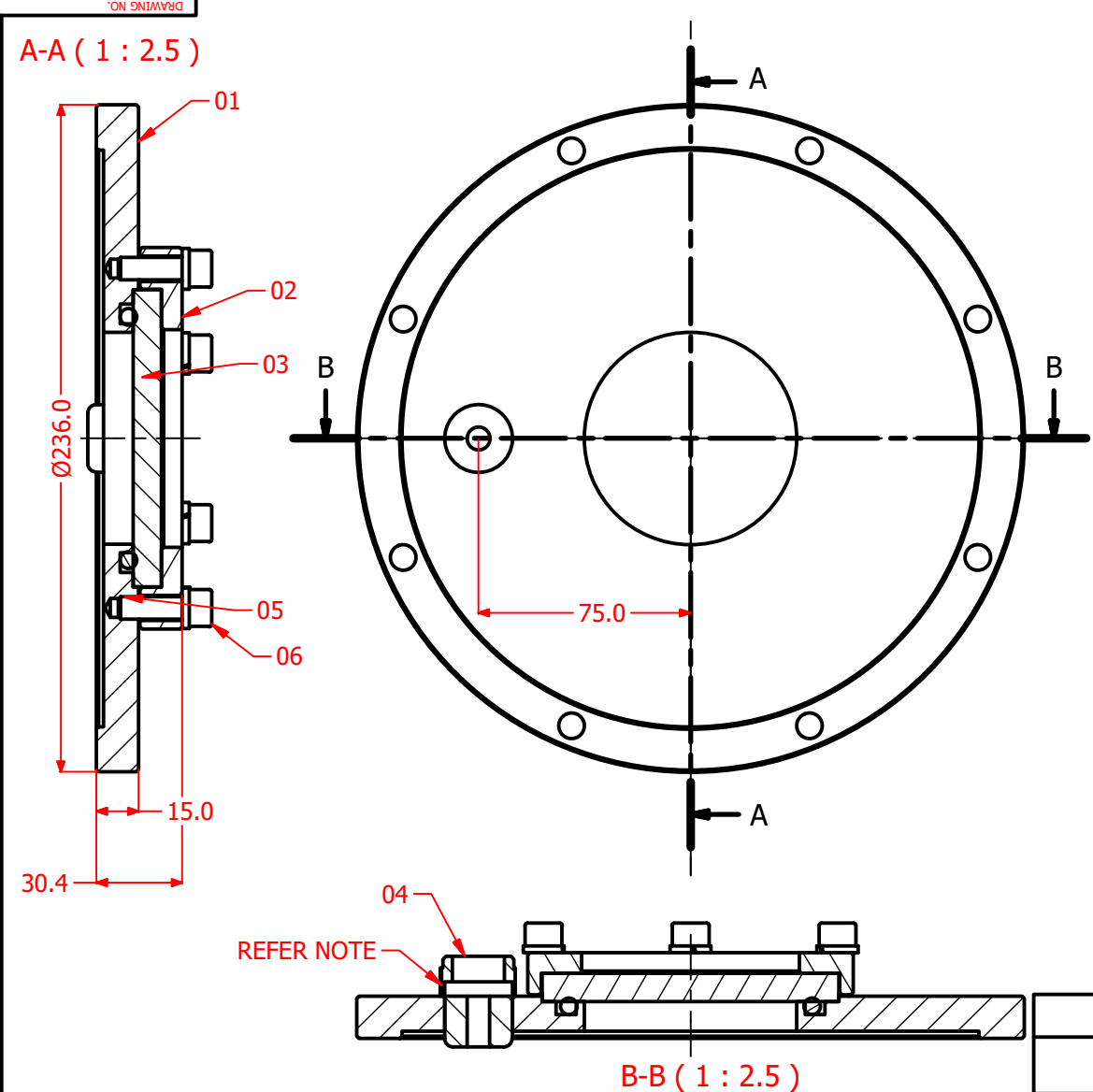
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REF. DRG. NO.

SIGN. & DATE

INVENTORY NO.

DRAWING NO. BD2016DG050_1120



(~3.2)

06	HARDWARE	M8X25MM ALLEN HEAD BOLTS AND SPRING WASHERS	S.S 304	0.02	06				
05	O-RING-86	WIRE DIA 6.0 ID 106.0 MM	NEOPRENE	0.01	01				
04	GAS STUD	BD2016DG050_1123	S.S 304	0.08	01				
03	GLASS	CLEAR TRANSPARENT DIA 130 X 10MM THK	ACRYLIC	0.19	01				
02	WINDOW FLANGE	BD2016DG050_1122	S.S 304	0.75	01				
01	TOP COVER	BD2016DG050_1121	S.S 304	3.9	01				

REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	STD	DRAWING NO.	IT. NO.	MATL. CODE	UNIT	QTY.	UNIT WT.	CS	ZONE

NOTE : ITEM-4 (GAS STUD) IS TIG WELDED TO THE ITEM-1 (TOP COVER) AT THE SPECIFIED LOCATION AS SHOWN.

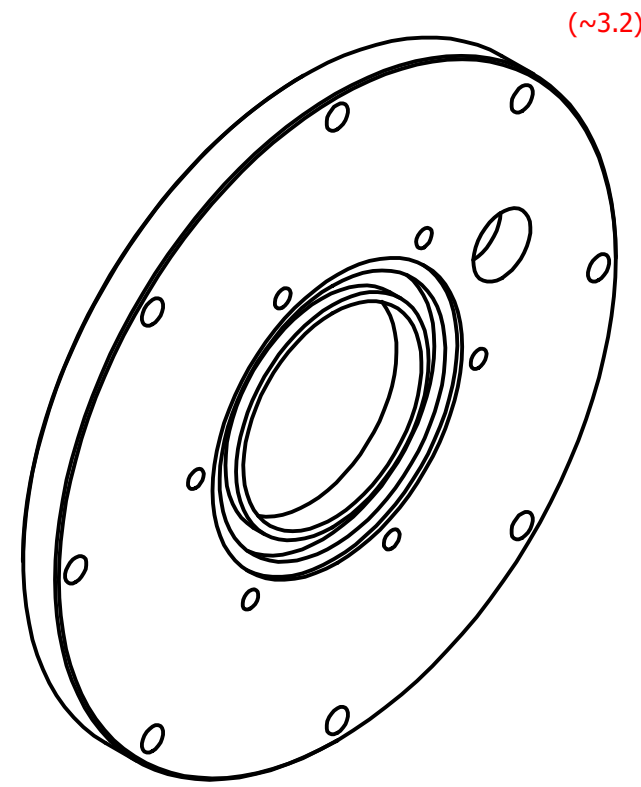
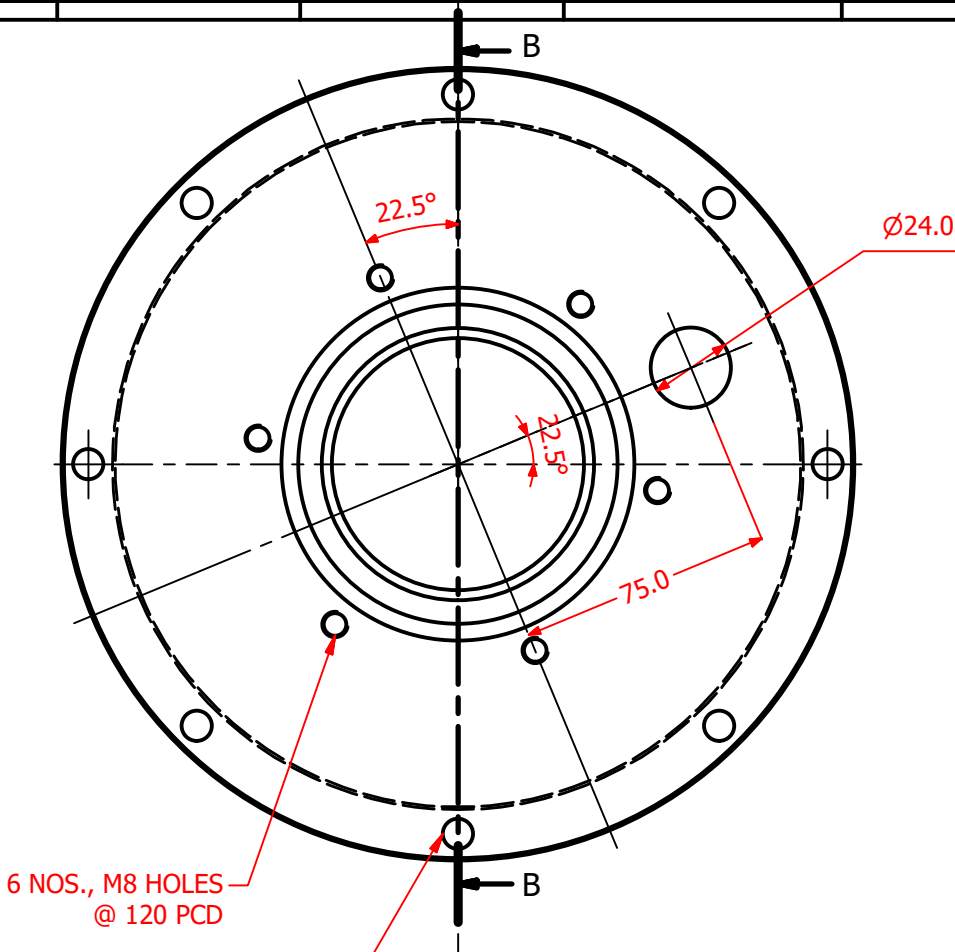
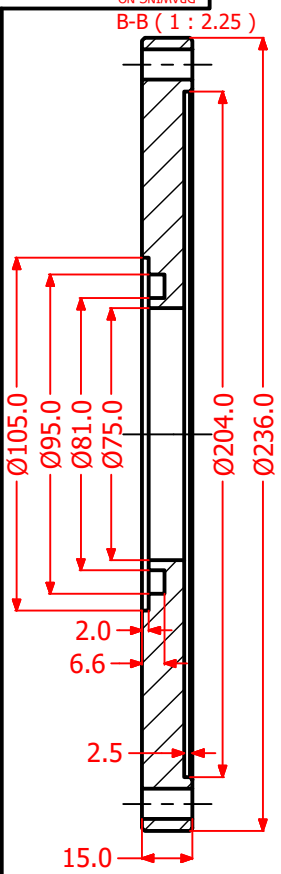
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		CHECKED			CHECKED			CHECKED			CHECKED			CHECKED			CHECKED
		APPROVED			APPROVED			APPROVED			APPROVED			APPROVED			APPROVED

ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE	ZONE

DEPT	UNTL. DIMS. GR.	SCALE	WEIGHT (KG.)	REF. TO. ASSY. DRG.	ITEM NO.	NO. OF ITEM
GSG		1 : 1	5.041 kg	BD2016DG050_1100		
CODE	35			BD2016DG050_1120		

TITLE	DRAWING NO.	REV
Top Cover Assy	BD2016DG050_1120	
	SHEET NO.	NO. OF SHEETS

DRAWING NO.
BD2016DG050_1121

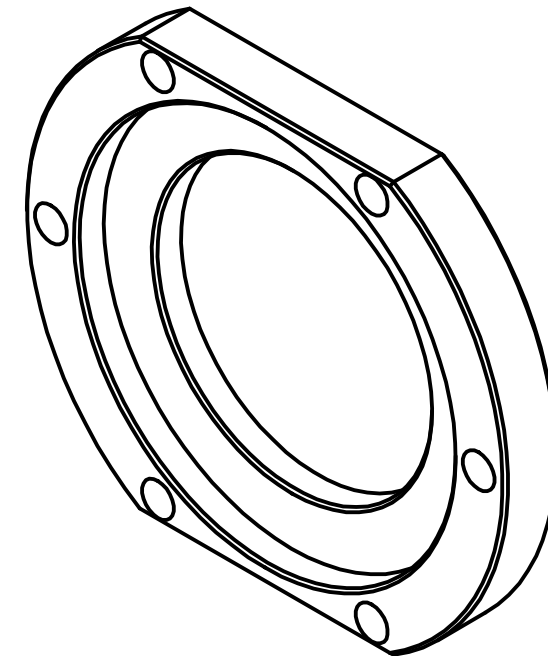
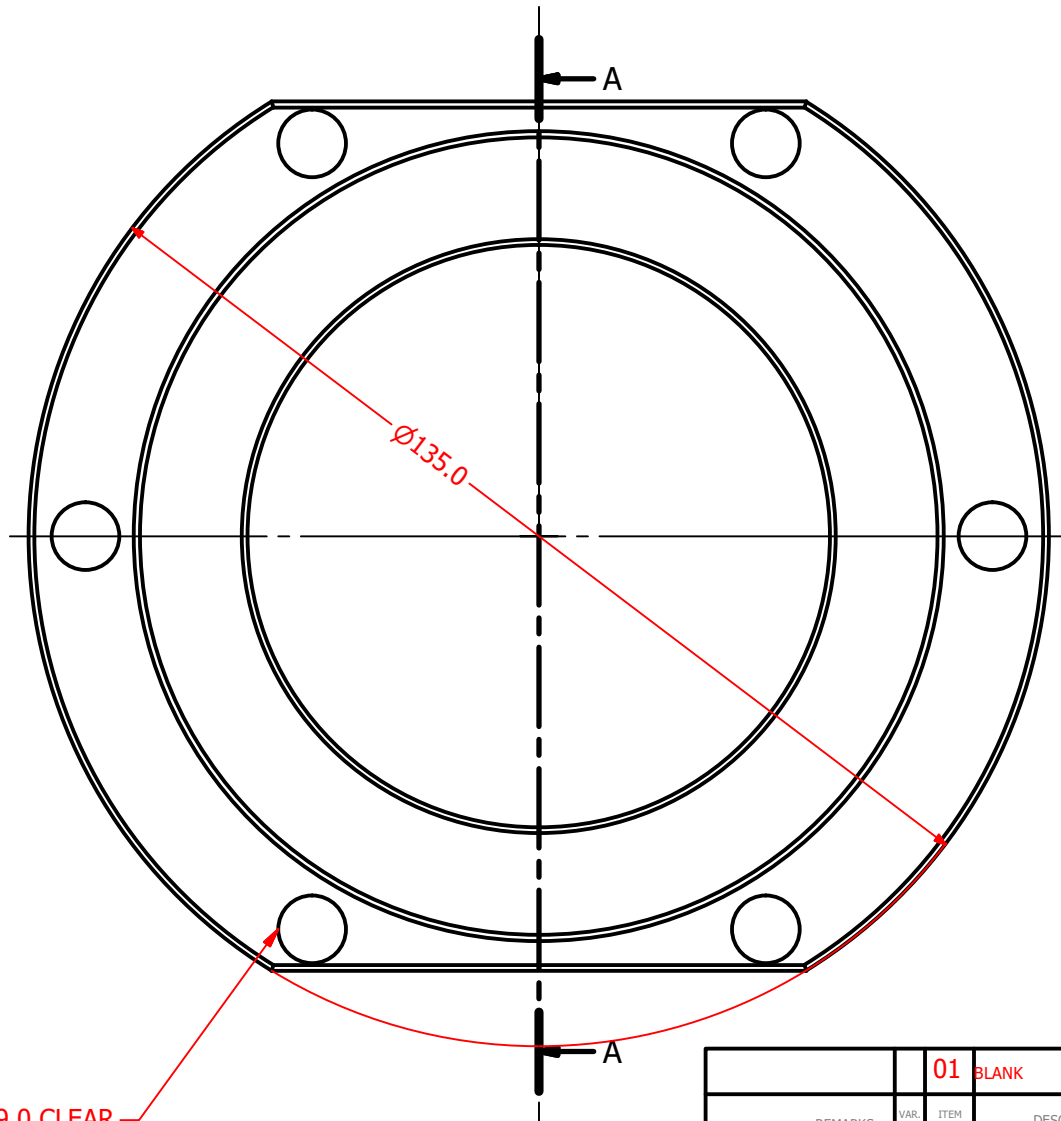
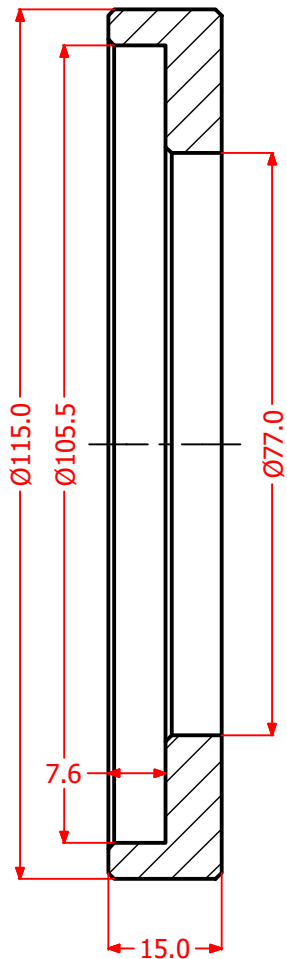


NOTE : ALL SHARP CORNERS ARE CHAMFERED TO 0.5 X 45°

01		BLANK	DIA 236 X 15MM THK		Stainless Steel, Austenitic		3.900 kg		
REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	DRAWING NO.	IT. NO.	MATL. CODE	UNIT WT.	CS	ZONE
					VAR.	MATL. SPCN.	QTY.		
ADDITIONAL INFORMATION				TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT					
STATUS OF DRAWING				36kV BUS-SECTIONALIZER FOR GIS					
DISTRIBUTION OF PRINTS				BHARAT HEAVY ELECTRICALS LTD. BHOPAL					
R&D	SW	QCK		DRN.	SNK	SIGN	DATE	NO. OF VAR	
1	1	1		CKD.	MMR		21-Jul-17		
				APPD	NB				
DEPT	GSG	UNTL	DIMS. GR.	SCALE	WEIGHT (KG.)	REF. TO. ASSY. DRG.		ITEM NO.	NO. OF ITEM
35				1 : 1	3.900 kg	BD2016DG050_1120			
TITLE						DRAWING NO.		REV	
Top Cover						BD2016DG050_1121			
						SHEET NO.		NO. OF SHEETS	

(~3.2)

A-A (1 : 1)



6 NOS., Ø9.0 CLEAR HOLES @ 120 PCD

NOTE : ALL SHARP CORNERS ARE CHAMFERED TO 0.8 X 45°

REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	DIA 135 X 15MM THK	STAINLESS STEEL, AUSTENITIC	UNIT WT.	QTY.
		01	BLANK			0.749 kg	

ADDITIONAL INFORMATION

STATUS OF DRAWING

DISTRIBUTION OF PRINTS

R&D	SWE	QCK
1	1	1

REV.	DATE	ALTERED
		CHECKED
		APPROVED

TYPE OF PRODUCT OR NAME OF CUSTOMER / PROJECT

36KV BUS-SECTIONALIZER FOR GIS

BHARAT HEAVY ELECTRICALS LTD.
BHOPAL

DRN.	SNK	SIGN	DATE	NO. OF VAR
CKD.	MMR		18-Jul-17	
APPD	NB		21-Jul-17	

DEPT	UNTL. DIMS. GR.	SCALE	WEIGHT (KG.)	REF. TO. ASSY. DRG.	ITEM NO.	NO. OF ITEM
GSG		1 : 1	0.749 kg			
CODE	35					

TITLE	DRAWING NO.	REV
Window Flange	BD2016DG050_1122	
	SHEET NO.	NO. OF SHEETS

REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED
		CHECKED			CHECKED			CHECKED			CHECKED
		APPROVED			APPROVED			APPROVED			APPROVED
ZONE			ZONE			ZONE			ZONE		

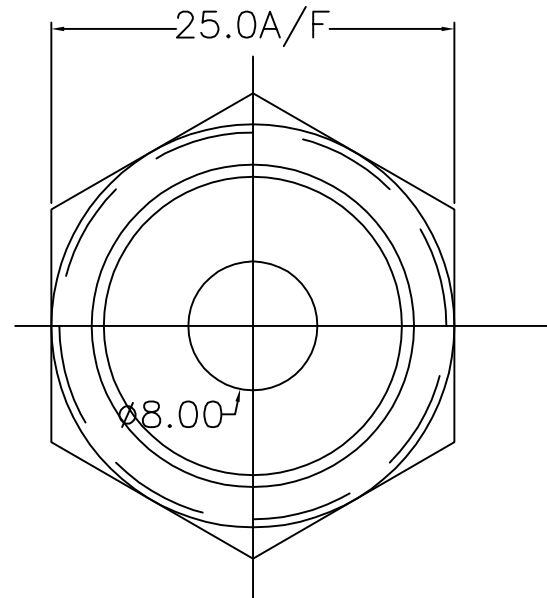
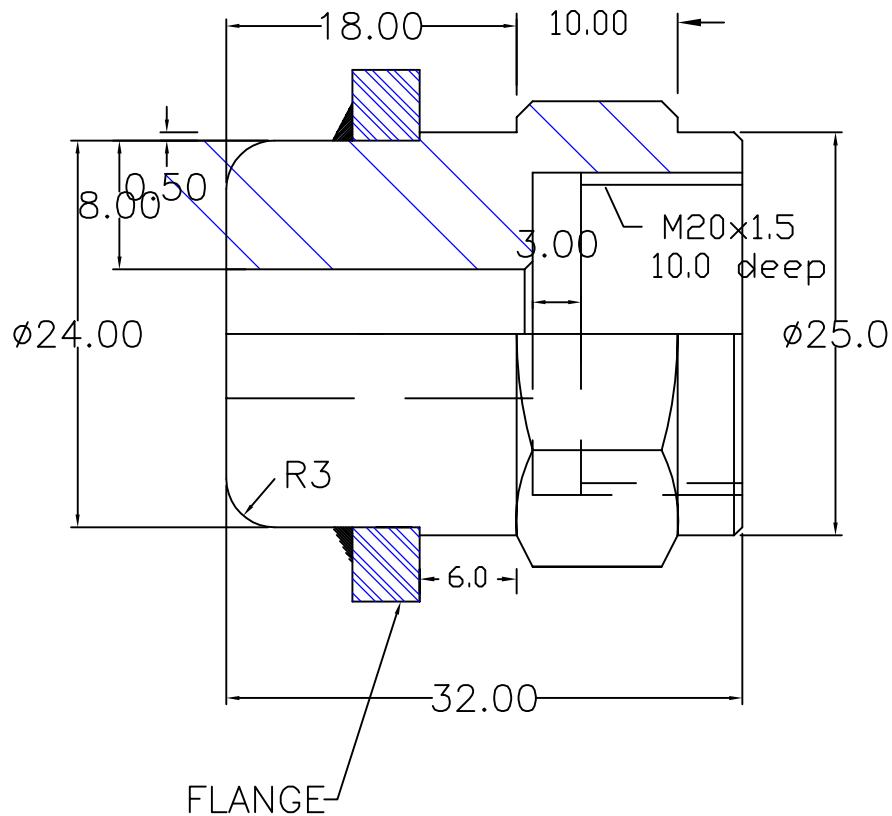
BD2016DG050_1123

DRG. NO.

FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

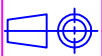
(~3.2)



VAR.00	REMARKS	VAR NO.	ITEM NO.	DESCRIPTION	STD	DRAWING NO.	IT.NO.	MATL. CODE	A C	UNIT	UNIT WT.	QTY.	GS	ZONE
			01	HEX ROD		25 A/FX32		ST.STEEL			0.16 KG.			
								AISI 304-L			1			
							VAR	MATL. SPECN.						

NOTE:-

To be welded to terminal flange
Drill and deburr $\phi 24.0$ hole in base
and weld full on external surface.
Remove all sharp corners use R 0.2

TYPE OF PRODUCT									
NAME OF CUSTOMER									
36kV / 40kA BUS SECTIONALIZER									
		BHARAT HEAVY ELECTRICALS LTD.		DRN	NAME	SIGN.	DATE	NO.OF	
		HYDERABAD		CKD	MMR		11.02.14	VAR.	
				APPD	NB				
DEPT.	GRADE OF TOL. DIM. C/M/F			SCALE	WEIGHT(KG)	REF. TO		ITEM NO.	NO.OF ITEMS
CODE				NTS		BD2016DG050_1120		-	1
TITLE					CARD CODE	DRAWING NO.		REV.	
GAS STUD						BD2016DG050_1123		00	
					SHEET NO.		NO. OF SHEETS		

