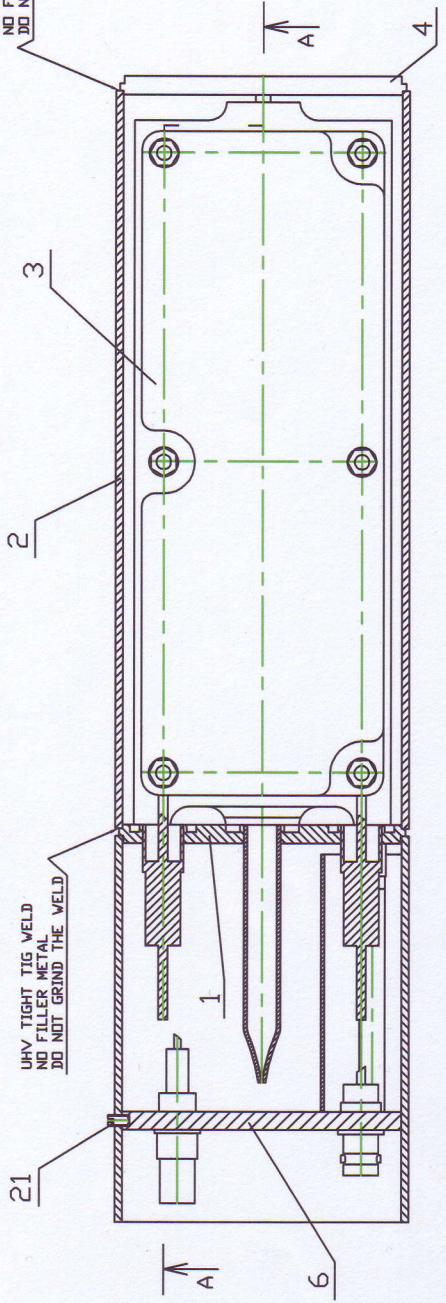
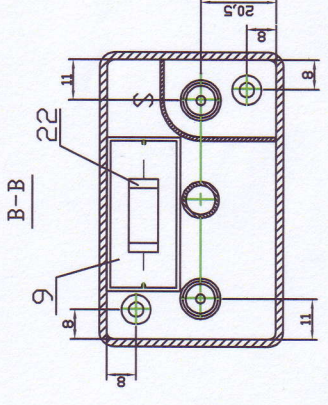
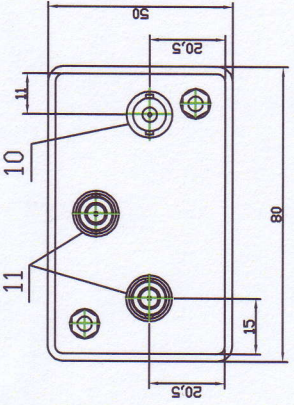


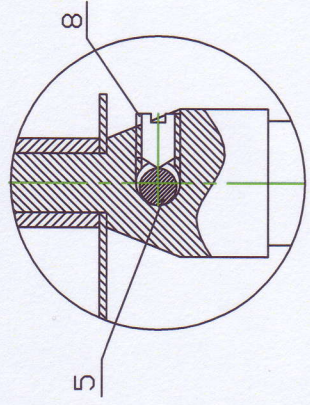
UHV TIGHT TIG WELD
NO FILLER METAL
DO NOT GRIND THE WELD



UHV TIGHT TIG WELD
NO FILLER METAL
DO NOT GRIND THE WELD



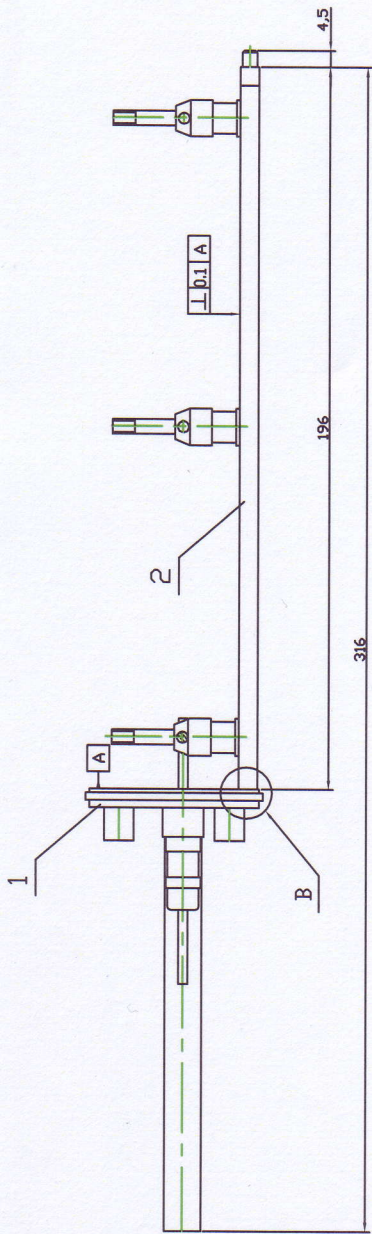
Detail A
(Scale 4:1)
(turned)



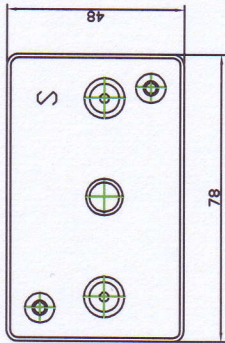
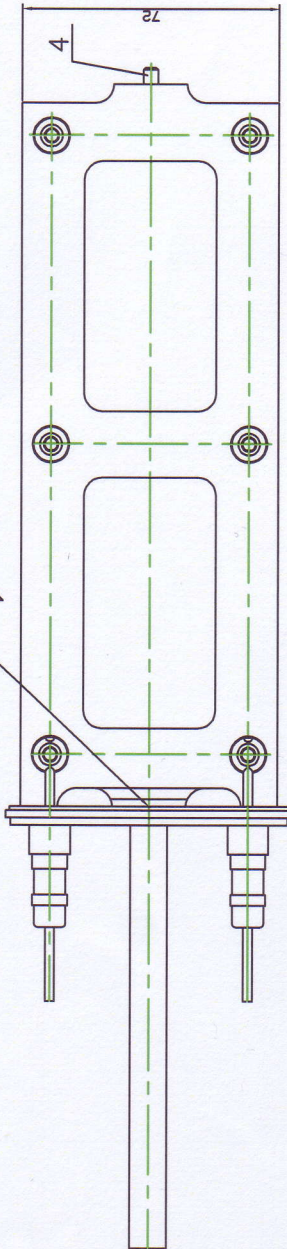
QTY	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. I/EP
1	ELECTRICAL TUBE	12		LHCBLM_F_007	
2	HV CONNECTOR	11	SUMNER	22SHV-50-0-6/133ME	
1	SIGNAL CONNECTOR	10		R41 605 000V	
1	CAPACITOR	9		VJMA MKP 10-0.47 nF/2000V	
2	SCREW M3x3	8	ST. STEEL		
6	MANCHON ISOLANT	7		LHCBLM_F_006	
1	ELECTRICAL PLATE ASSEMBLY	6		LHCBLM_F_005	
2	FEEDTHROUGH WIRE	5			
1	WIRE 2.5 mm diam. copper	4		LHCBLM_F_004	
1	BOTTOM COVER	3		LHCBLM_F_003	
1	ELECTRODE PLATE	2		LHCBLM_F_002	
1	EXTERNAL TUBE	1		LHCBLM_F_001	
1	ELECTRODE SUPPORT ASSEMBLY	1			
QTY	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. I/EP
ENR/ASS S. ENR/S ASS					
Beam Loss Monitor					
SCALE 1:1					
CONTROLLED BY: A. LARINDV 2012-03-26					
RELEASED					
APPROVED					
CAD Document/Item Number					
CONTROLLED					
LHCBLM_F_000					
NOT VALID FOR EXECUTION					
SIZE 2					

QTY	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. I/EP
1	RESISTOR	22		EPG S0220-10Mohms/5kV	
1	SCREW M3x5	21	ST. STEEL		
3	SPACER TYPE A L=12 mm	20	AISI304L	LHCBLM_0007 TYPE A	
6	SPACER TYPE E L=6.25 mm	19	AISI304L	LHCBLM_0007 TYPE E	
12	WASHER #6/42/0.2	18	ST. STEEL	BOSSARD 8N638	
6	HEXAGONAL NUT M4	17	ST. STEEL		
2	WASHER #10x5	16	ST. STEEL		
4	HEXAGONAL NUT M4	15	ST. STEEL		
2	THREAD RODS M4x85	14	ST. STEEL		
2	ALUMINUM TUBE #7x4	13	AV6082	L=63.5 mm	
QTY	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. I/EP

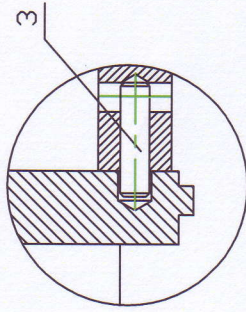
IND.	DATE	IND./NAME	ZONE	MODIFICATION	UPDATED
A	2012-03-26	A. LARINDV			



α1 1x20



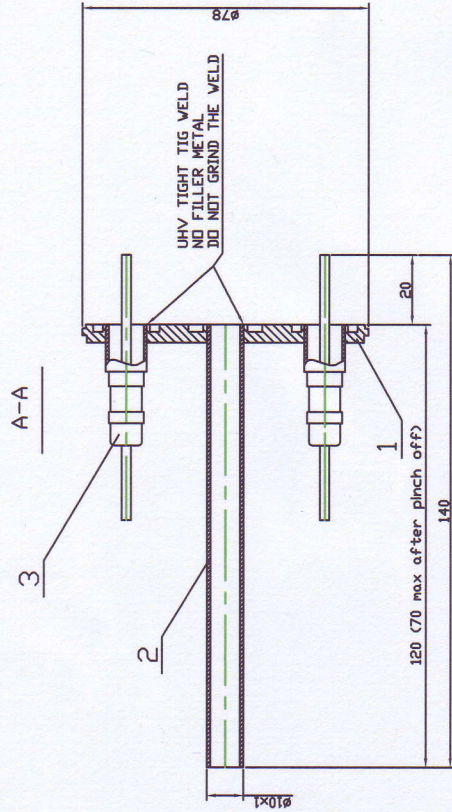
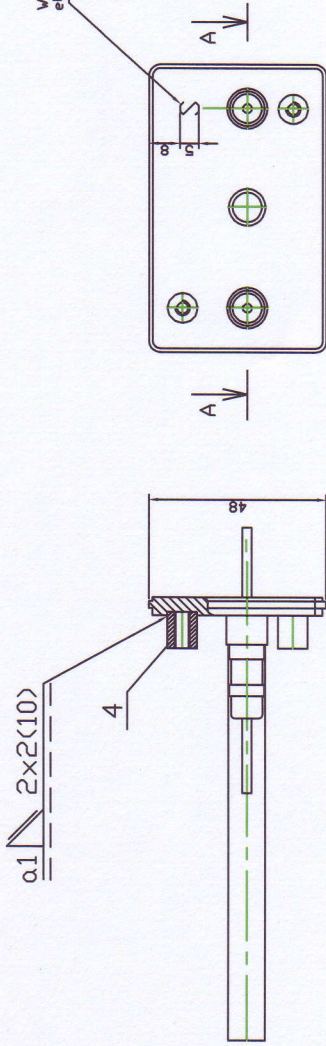
Detail B
Scale: 4:1



1	PIN	4	ST. STEEL	LHCBLM_F_001.3	
2	PIN	3	ST. STEEL		
6	WIRE 2 mm diam. st. steel L=80mm				
	INSULATOR PLATE ASSEMBLY	2		LHCBLM_F_001.2	
	ELECTRODE COVER ASSEMBLY	1		LHCBLM_F_001.1	
001	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. IHEP
EN/ASS		S. EN/S ASS			
Beam Loss Monitor				001	A. LARIONOV 2012-09-26
ELECTRODE SUPPORT ASSEMBLY		SCALE		CONTROLLED	RELEASED
		1:1		APPROVED	
		CAD Documentation Number		CONTROLLED	
NOT VALID FOR EXECUTION		001	LHCBLM_F_001		SIZE IND.
					2

A	2012-09-24	A. LARIONOV	IND.	DATE	NAME/NAME	ZONE	UPDATED	MODIFICATION
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Write on 'S' with on electric pencil



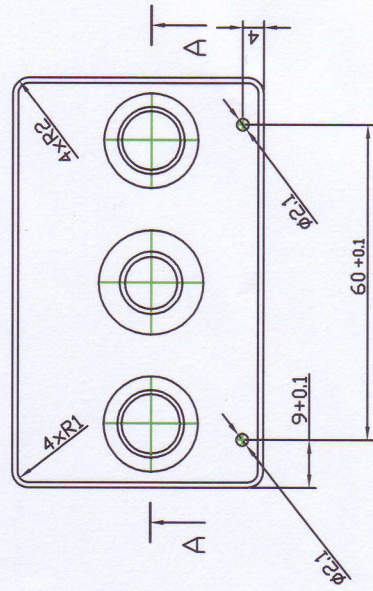
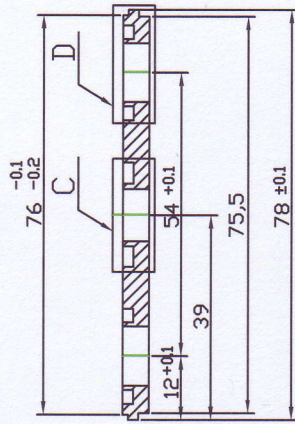
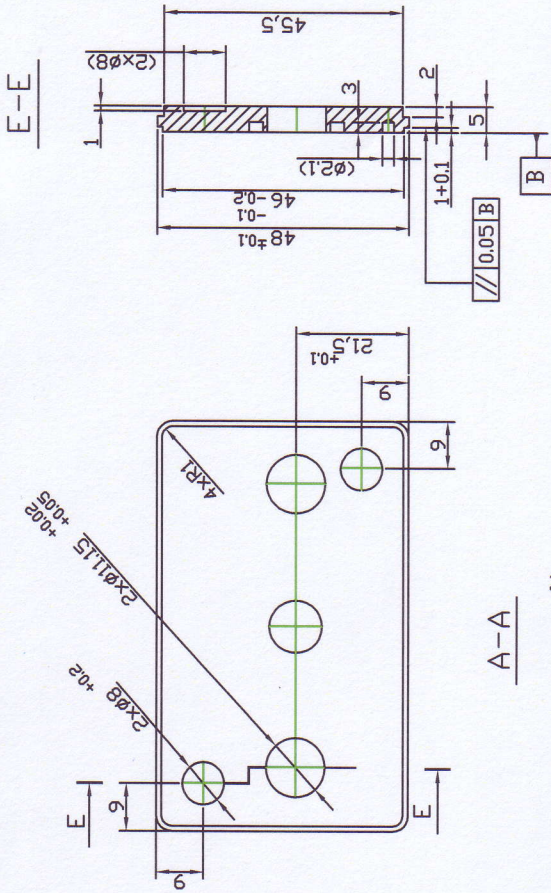
WELDING SPECIFICATION:

- THE WELDS MUST BE EXECUTED BY TIG WELDING
- WITHOUT FILLER MATERIAL
- UNDER ARGON SHIELDING
- WITH 100% PENETRATION
- LEAK TESTING REQUIREMENTS FOR ULTRA HIGH VACUUM COMPONENTS:
- THE COMPONENT SHALL BE LEAK TESTED AT ROOM TEMPERATURE WITH A SENSITIVITY 10^{-10} Pa \cdot m 3 /s USING A CALIBRATED LEAK DETECTOR
- THE LEAK DETECTOR SHALL NOT SHOW ANY DEVIATION WHEN THE COMPONENT IS ENCLOSED IN A HELIUM FILLED ENVELOPE.

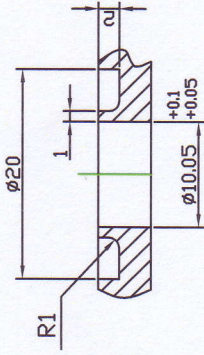
QTY	ENR/ASS	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. TRF
2		WELDED SPACER	4	AISI304L	LHCBLM_0005	
2		FEEDTHROUGH	3		CERAMASEAL 3887-12-V	
1		COPPER TUBE	2			
1		#10x1 L=120 mm	1	AISI304L	LHCBLM_F_001.1	
1		ELECTRODE COVER	1			
1		SHEET 5 mm THK	1			

ENR/ASS		S. ENR'S. ASS	
Beam Loss Monitor		BRNN	A. LARDINDV 2012-09-26
		CONTROLLED	SELEZNEV
		RELEASED	
		APPROVED	
		CAI Documentation Number	
		CONTROLLED	

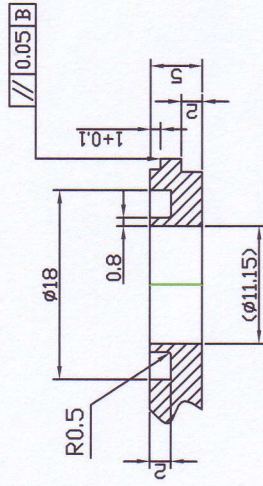
ELECTRODE COVER ASSEMBLY		SCALE	1:1
NOT VALID FOR EXECUTION		GAC	LHCBLM_F_001.1
IND.	DATE	IND.	SIZE
A	2012-04-23	A. LARDINDV	IND.
		IND./NAME	
		ZONE	
		UPDATED	
		MODIFICATION	



Detail C
Scale: 2:1



Detail D
Scale: 2:1



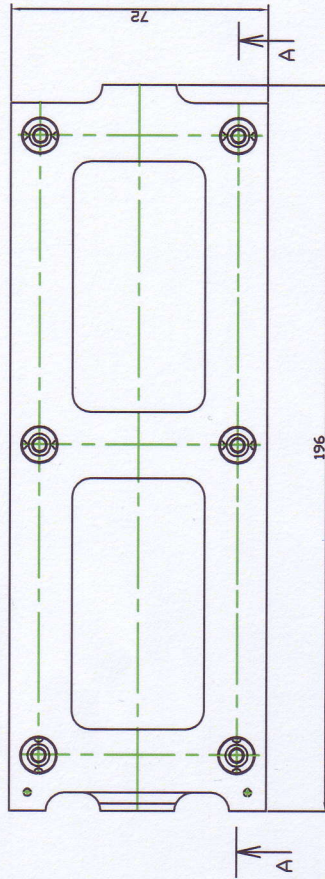
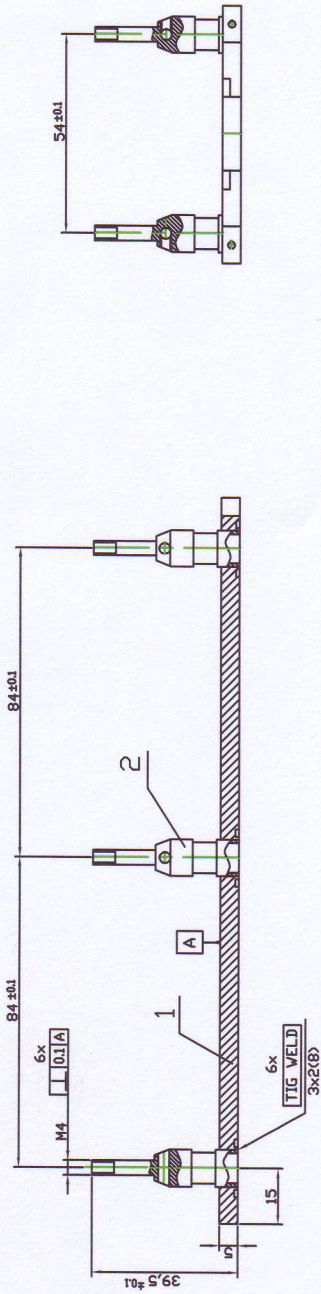
QUA	ENS/ASS	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. IHEP
1		Beam Loss Monitor				
SHEET 5 mm Thk		1		AISI304L	TOLERANCES D4 T3 ISO1127	
ISO 2768-mH		$\sqrt{Ra\ 3.2}$		ISO 13715		REF. IHEP
ELECTRODE COVER		SCALE		1:1		REF. IHEP
NOT VALID FOR EXECUTION		GAC		LHCBLM_F_001.1.1		SIZE
		IND.		IND.		3

B	2012-09-23	A. LARIONOV	UPDATED	IND.	ZONE
A	2012-04-13	A. LARIONOV	UPDATED Added tolerance on dimension 1 to surface B	IND.	ZONE
		MODIFICATION			

IND.	DATE	NOM/NAME	ZONE	IND.

IND.	DATE	NOM/NAME	ZONE	IND.

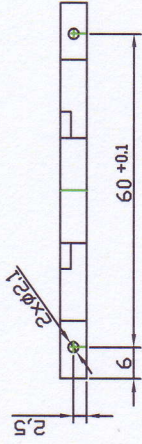
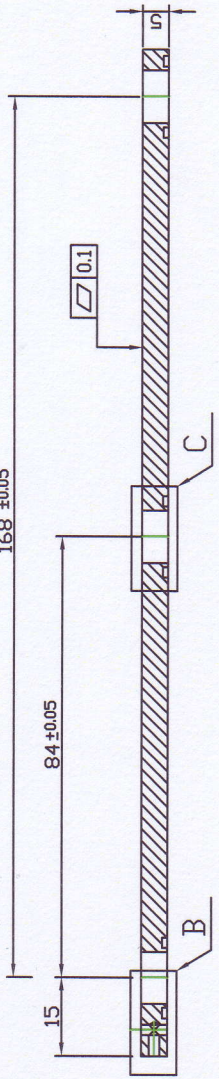
A-A



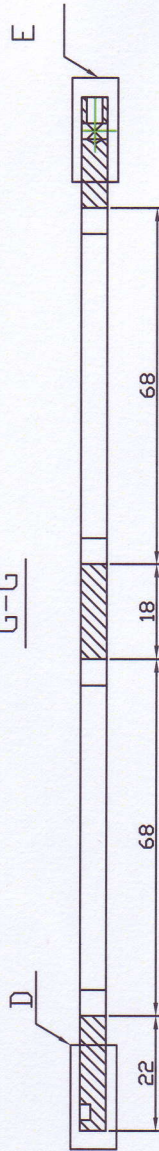
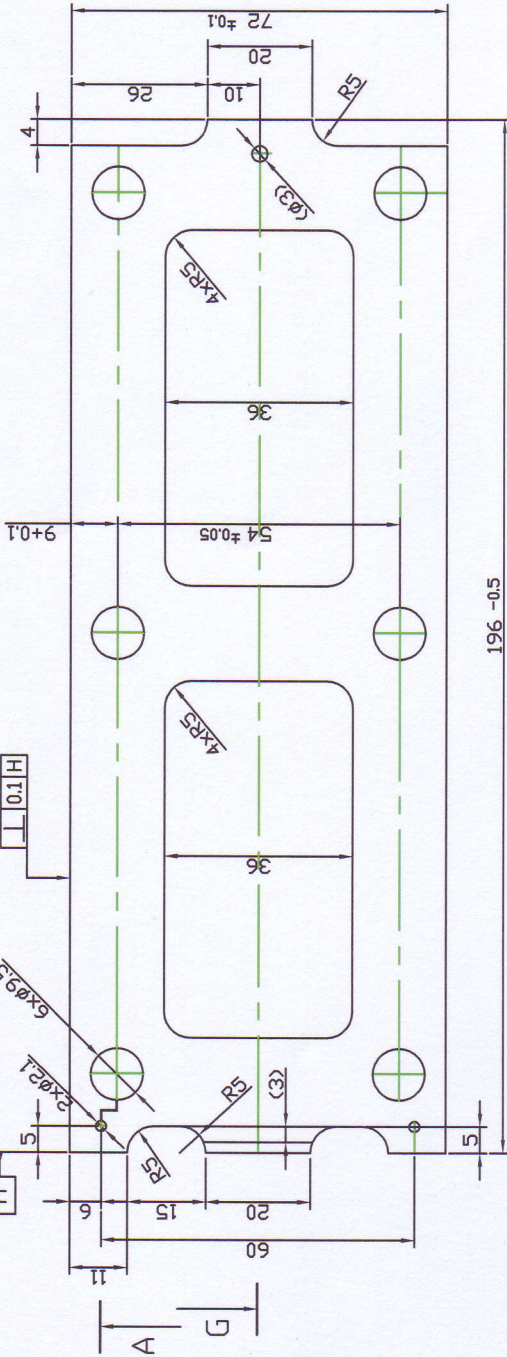
6	MANCHON ISOLANT	2	LHCBLM_F_006		
1	INSULATOR PLATE	1	LHCBLM_F_001.2.1	ASSEMBL	
001	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. DEPT
ENR/ASS		S. ENG'S ASS			
Beam Loss Monitor		DRAWN		A. LARIONOV 2012-03-26	
INSULATOR PLATE ASSEMBLY		SCALE		CONTROLLED	
		1:1		RELEASED	
				APPROVED	
				CAD Representation Number	
				CONTROLLED	
NOT VALID FOR EXECUTION		001	LHCBLM_F_001.2	SIZE	IND.
				2	

A	2012-03-24	A. LARIONOV	IND.	DATE	IND.	DATE	ZONE	MODIFICATION	UPDATED
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A-A

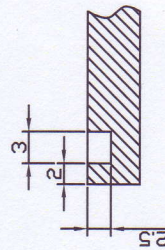


Detail B
Scale: 2:1

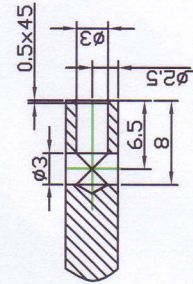


E-E

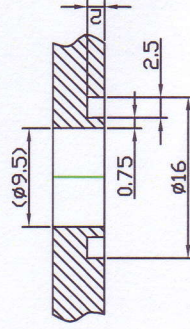
Detail D
Scale: 2:1



Detail E
Scale: 2:1

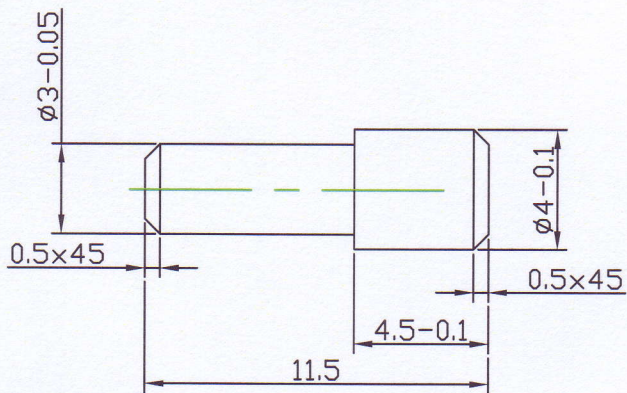


Detail C
Scale: 2:1

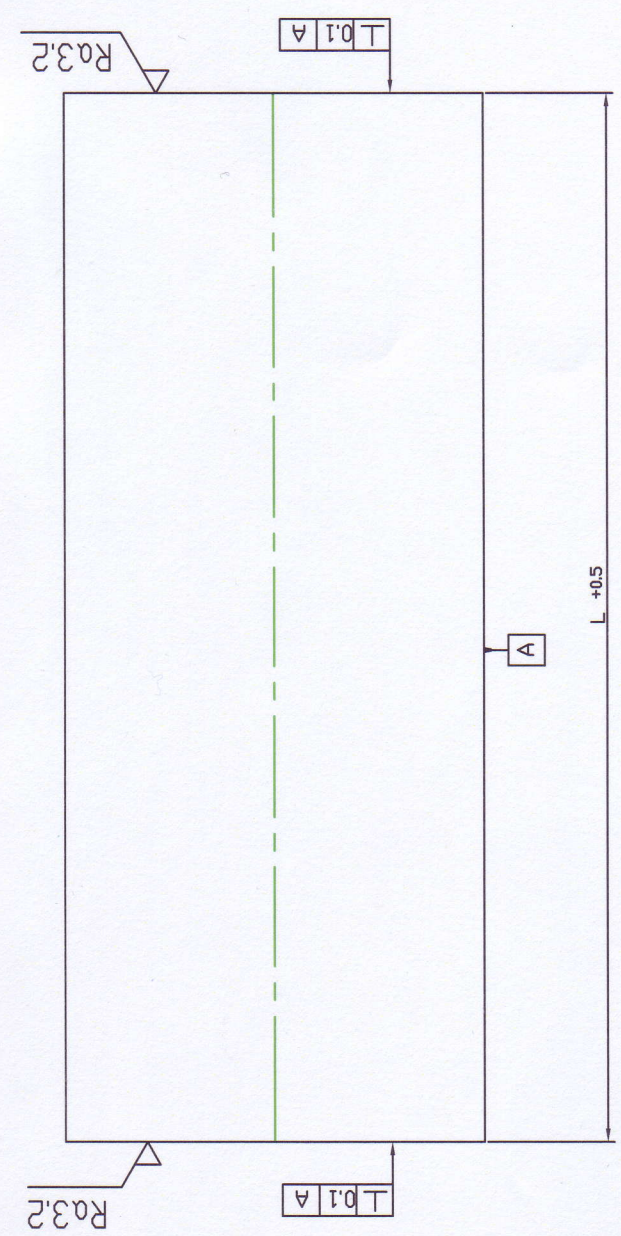


QUA	ENS/ASS	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. IHEP
		ISO 2768-mH	1			
Beam Loss Monitor			S. ENS/S. ASS			
INSULATOR PLATE			SCALE 1:1			
DRAWN			ISO 13715			
CONTROLLED			A. LARIONOV (2012-03-26)			
RELEASED			V. SELEZNEV			
APPROVED						
CAD Documentation Number			CONTROLLED			
QAC			LHCBLM_F_001.2.1			
NOT VALID FOR EXECUTION			SIZE 3			

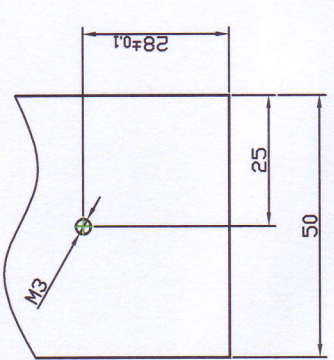
B	2012-09-24	A. LARIONOV	UPDATED
A	2012-04-18	A. LARIONOV	UPDATED
IND.	DATE	NOM/NAME	ZONE
			MODIFICATION



		1	AISI304L	TOLERANCES D4 T3 ISO1127		
QUA	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. IHEP	
ENS/ASS			S . ENS/S . ASS			
ISO 2768-mH		$\sqrt{Ra 3.2}$		ISO 13715	$\begin{matrix} \swarrow -0.3 \\ \searrow +0.3 \end{matrix}$	
Beam Loss Monitor				DRAWN	A. LARIONOV 2012-04-19	
PIN				SCALE	CONTROLLED V. SELEZNEV	
				4:1	RELEASED	
					APPROVED	
					CAD Documentation Number	
NOT VALID FOR EXECUTION				QAC -	LHCBLM_F_001.3	
				SIZE 4	IND. 4	



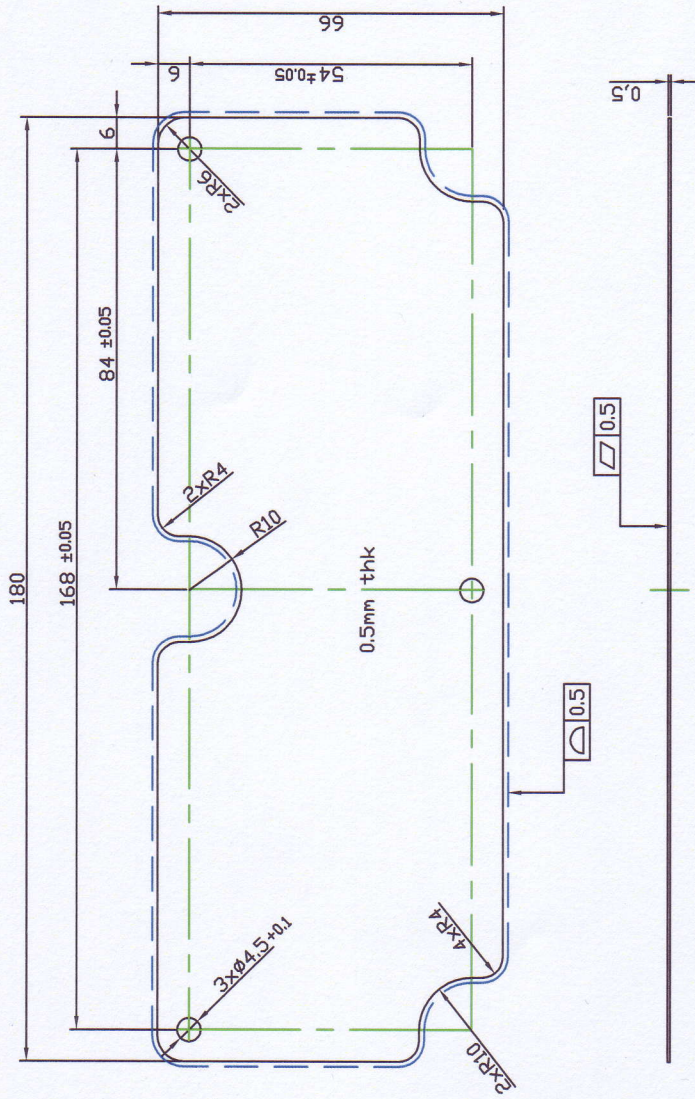
FOR TYPE "B" ONLY



TYPE	L	DESCRIPTION	OBSERVATION
A	200	EXTERNAL TUBE	LHCBLM_F_002
B	105	ELECTRICAL TUBE	LHCBLM_F_007

RECTANGULAR TUBE 80x50x2	1	AIISI304L	TOLERANCES D4 T3 ISO1127
QIA	DESCRIPTION	POS	MAT.
ENS/ASS	ISD 2768-mK	ISD 13715	S . ENS/S . ASS
Beam Loss Monitor	SCALE	1:1	IND.
TUBES	APPROVED	CONTROLLED	2012-03-26
NOT VALID FOR EXECUTION	QAC	LHCBLM_F_002/007	SIZE 3

IND.	DATE	NDM/NAME	ZONE	UPDATED	MODIFICATION
A	2012-04-19	A. LARIONOV			



SHEET 0.5 mm Thk		1	AISI304L	TOLERANCES D4 T3 ISD1127	
QVA	DESCRIPTION	PDS	MAT.	OBSERVATIONS	REF. IHEP
ENS/ASS		S. ENS/S. ASS			
ISO 2768-mH	Beam Loss Monitor	ISO 13715	ISO 13715	ISO 13715	ISO 13715
ELECTRODE PLATE		SCALE	1:1	DRAWN	A. LARIONOV 2012-03-26
				CONTROLLED	V. SELEZNEV
				APPROVED	
				CAD Documentation Number	
				CONTROLLED	
NOT VALID FOR EXECUTION		GAC	-	LHCBLM_F_003	IND. SIZE 3

UPDATED Radius R8.5 and R3.5 changed to R10 and R4

MODIFICATION

A. LARIONOV

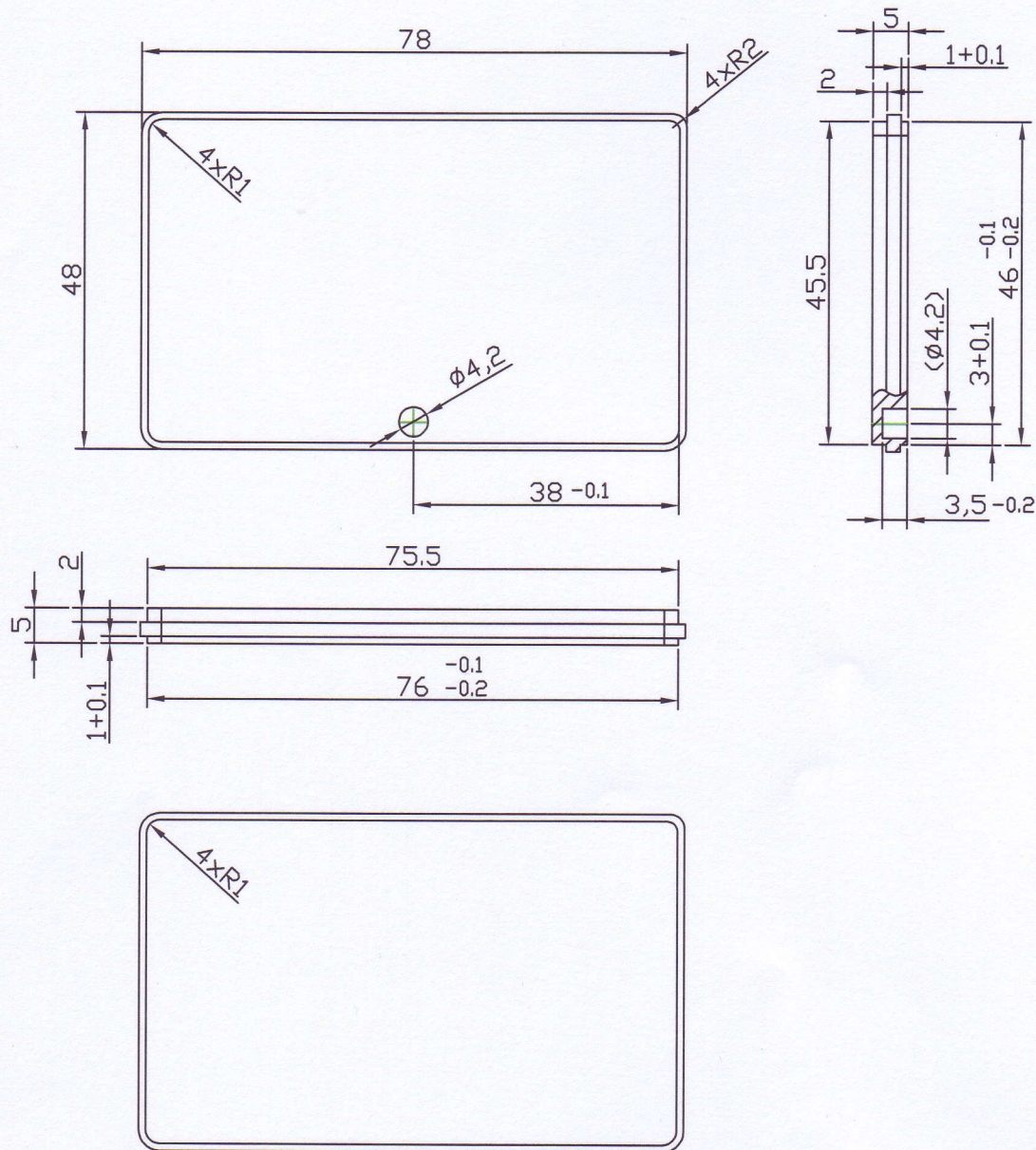
NDM/NAME

2012-04-13

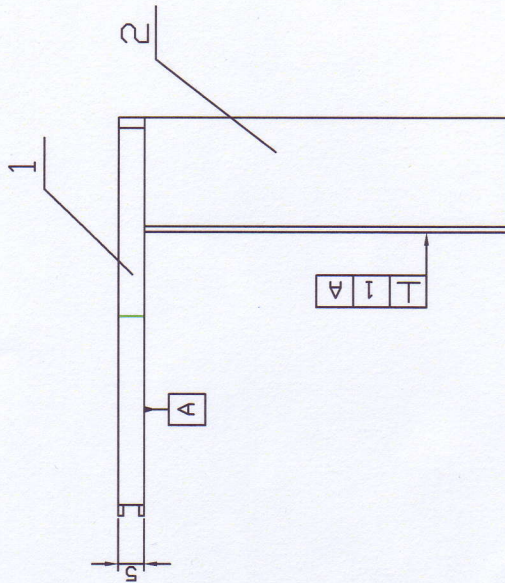
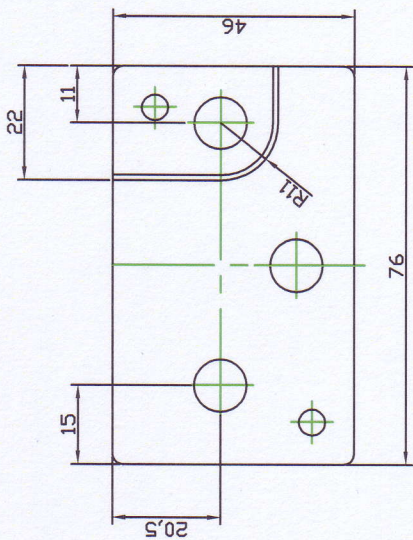
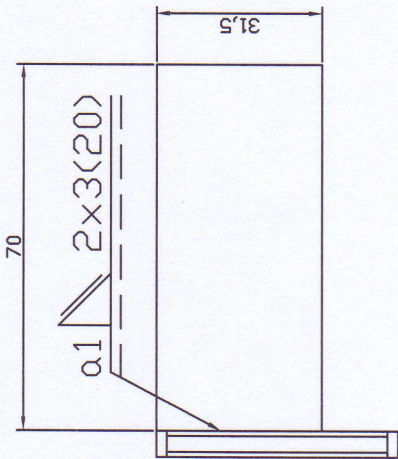
DATE

IND.

IND.

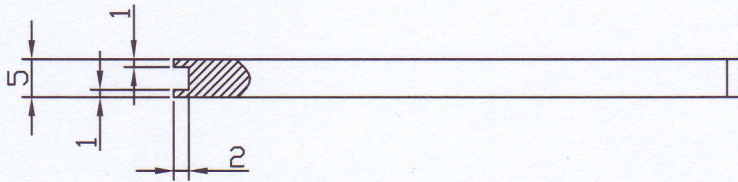
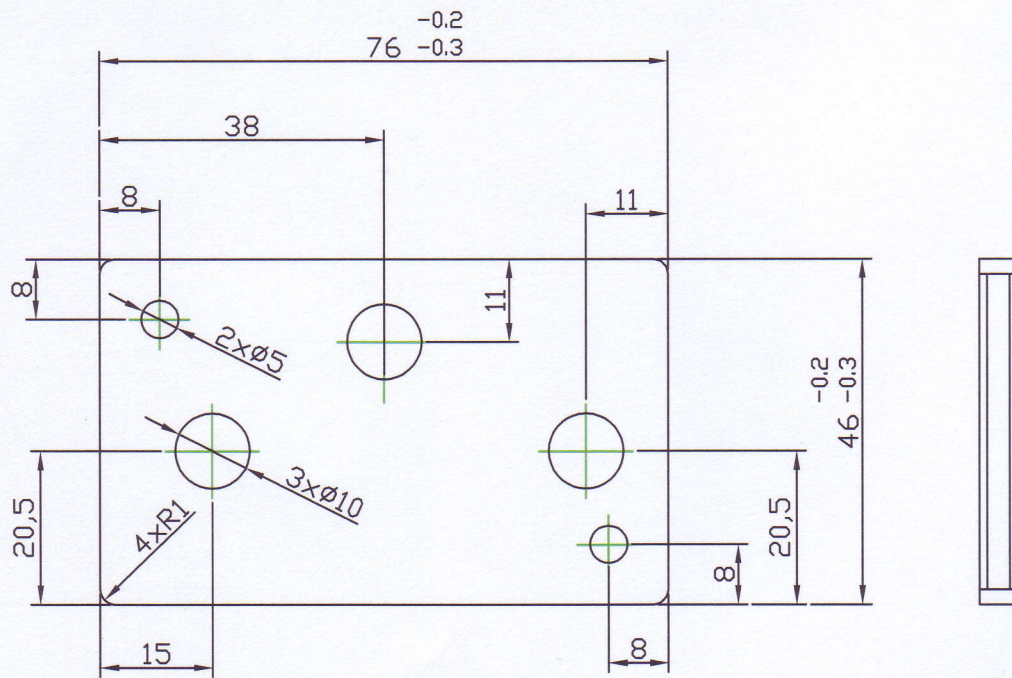


	SHEET 5 mm Thk	1	AISI304L	TOLERANCES D4 T3 ISO1127	
QUA	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. IHQP
ENS/ASS			S . ENS/S . ASS		
ISO 2768-mH		√ Ra 3.2		ISO 13715	
Beam Loss Monitor				DRAWN	A. LARIONOV 2012-04-19
BOTTOM COVER				CONTROLLED	V. SELEZNEV
				RELEASED	
				APPROVED	
				CAD Documentation Number	
NOT VALID FOR EXECUTION				QAC	LHCBLM_F_004
				-	SIZE 4 IND.

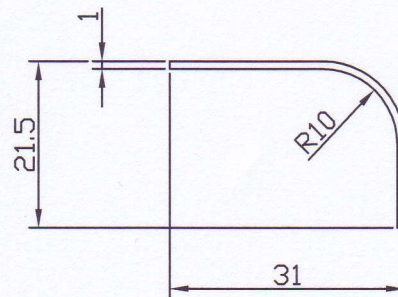
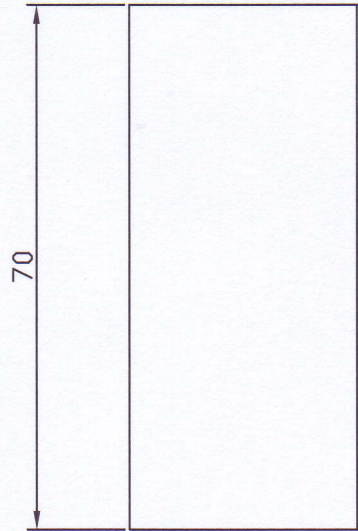


1	SHIELDING	AISI304L	LHCBLM_F_005.2		
	SHEET 1.0 mm Thk	2			
1	ELECTRICAL PLATE	AISI304L	LHCBLM_F_005.1		
		1			
QIA	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. IHEP
ENS/ASS		S. ENS/S. ASS			
Beam Loss Monitor					
DRAWN A. LARIONOV (2012-03-26)					
SCALE					
CONTROLLED V. SELEZNEV					
RELEASED					
APPROVED					
CAD Documentation Number					
CONTROLLED					
ELECTRICAL PLATE ASSEMBLY			QAC	-	LHCBLM_F_005
NOT VALID FOR EXECUTION				SIZE	IND.
				3	

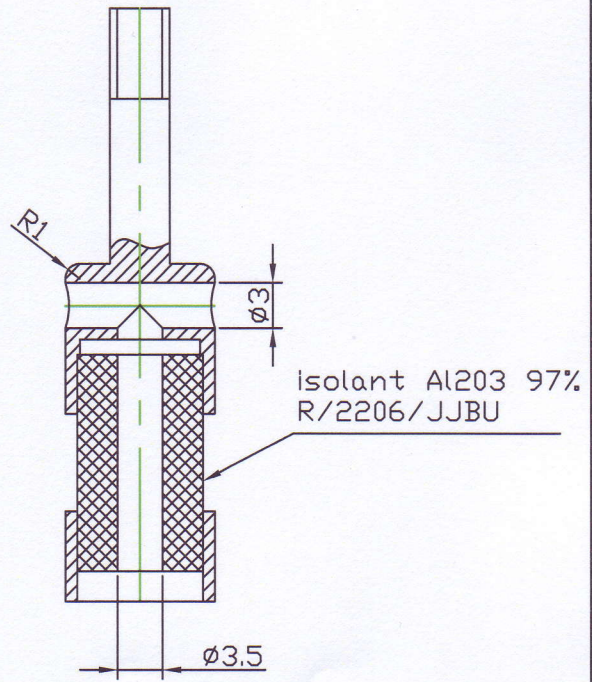
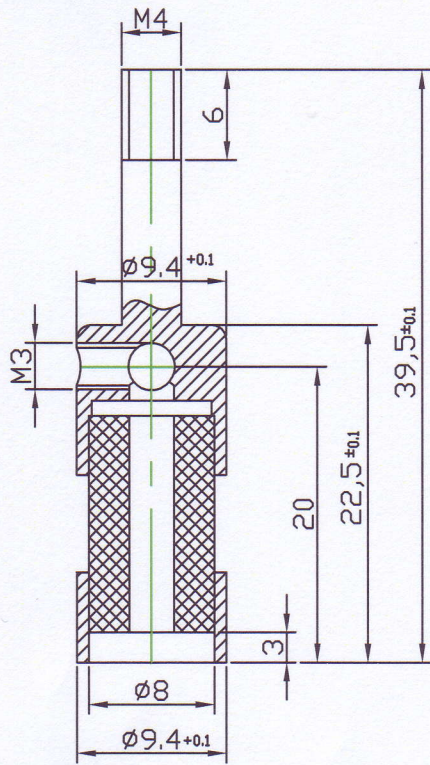
A	2012-07-19	A. LARIONOV	IND.	DATE	NOM/NAME	ZONE	UPDATED	MODIFICATION
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	SHEET 5 mm Thk	1	AISI304L	TOLERANCES D4 T3 ISO1127		
QUA	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. IHEP	
	ENS/ASS			S . ENS/S . ASS		
	ISO 2768-mH		$\sqrt{Ra 3.2}$	ISO 13715	-0.3 $+0.3$	
	Beam Loss Monitor			DRAWN	A. LARIONOV 2012-03-26	
	ELECTRICAL PLATE			SCALE	CONTROLLED V. SELEZNEV	
				1:1	RELEASED	
					APPROVED	
					CAD Documentation Number	
	NOT VALID FOR EXECUTION		QAC -	LHCBLM_F_005.1	SIZE 4 IND.	



	SHEET 1 mm Thk	1	AISI304L	TOLERANCES D4 T3 ISO1127		
QUA	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. IHEP	
ENS/ASS			S . ENS/S . ASS			
ISO 2768-mK		√ Ra 3.2		ISO 13715		
Beam Loss Monitor				DRAWN	A. LARIONOV 2012-03-26	
SHIELDING				SCALE	CONTROLLED V. SELEZNEV	
				1:1	RELEASED	
					APPROVED	
					CAD Documentation Number	
NOT VALID FOR EXECUTION				QAC -	LHCBLM_F_005.2	
				SIZE	IND.	
				4		



QUA	DESCRIPTION	POS	MAT.	OBSERVATIONS	REF. IHEP
ENS/ASS				S . ENS/S . ASS	
ISO 2768-mH	$\sqrt{\text{Ra } 1.6}$			ISO 13715 $\begin{matrix} \text{L-0.3} \\ \text{L+0.3} \end{matrix}$	
Beam Loss Monitor				DRAWN	A. LARIONOV 2012-09-24
MANCHON ISOLANT (modification of R22006JJQB)				SCALE	CONTROLLED V. SELEZNEV
					RELEASED
					APPROVED
					CAD Documentation Number
NOT VALID FOR EXECUTION				CONTROLLED	
		QAC	-	LHCBLM_F_006	SIZE 4 IND. 4