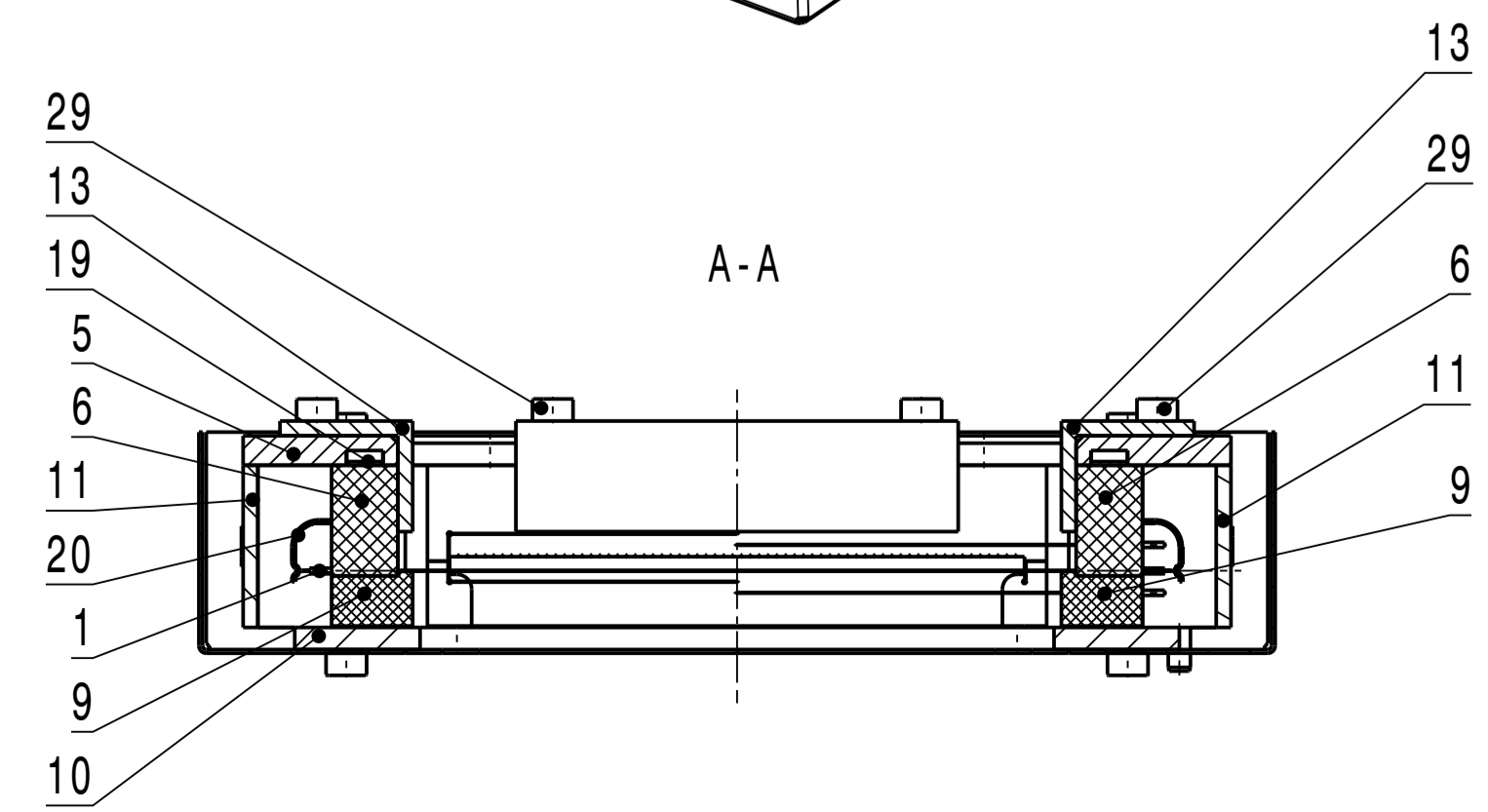
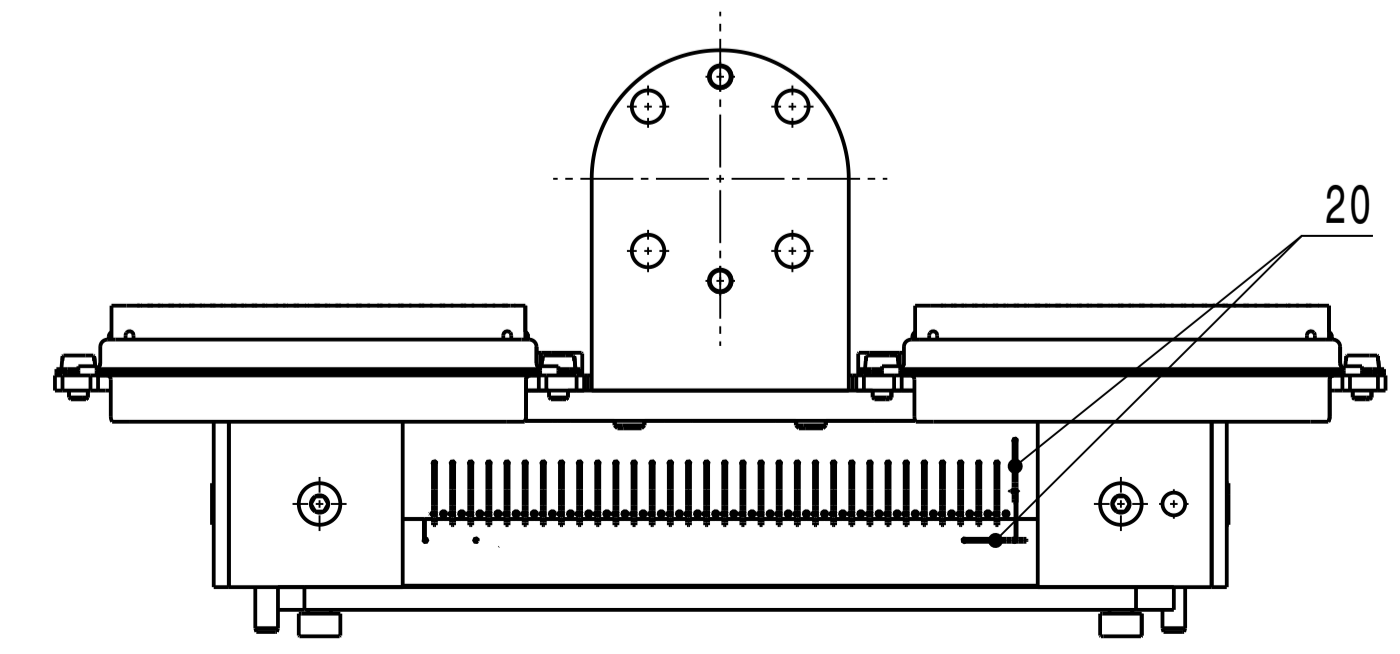


view without aperture and side panel above and down



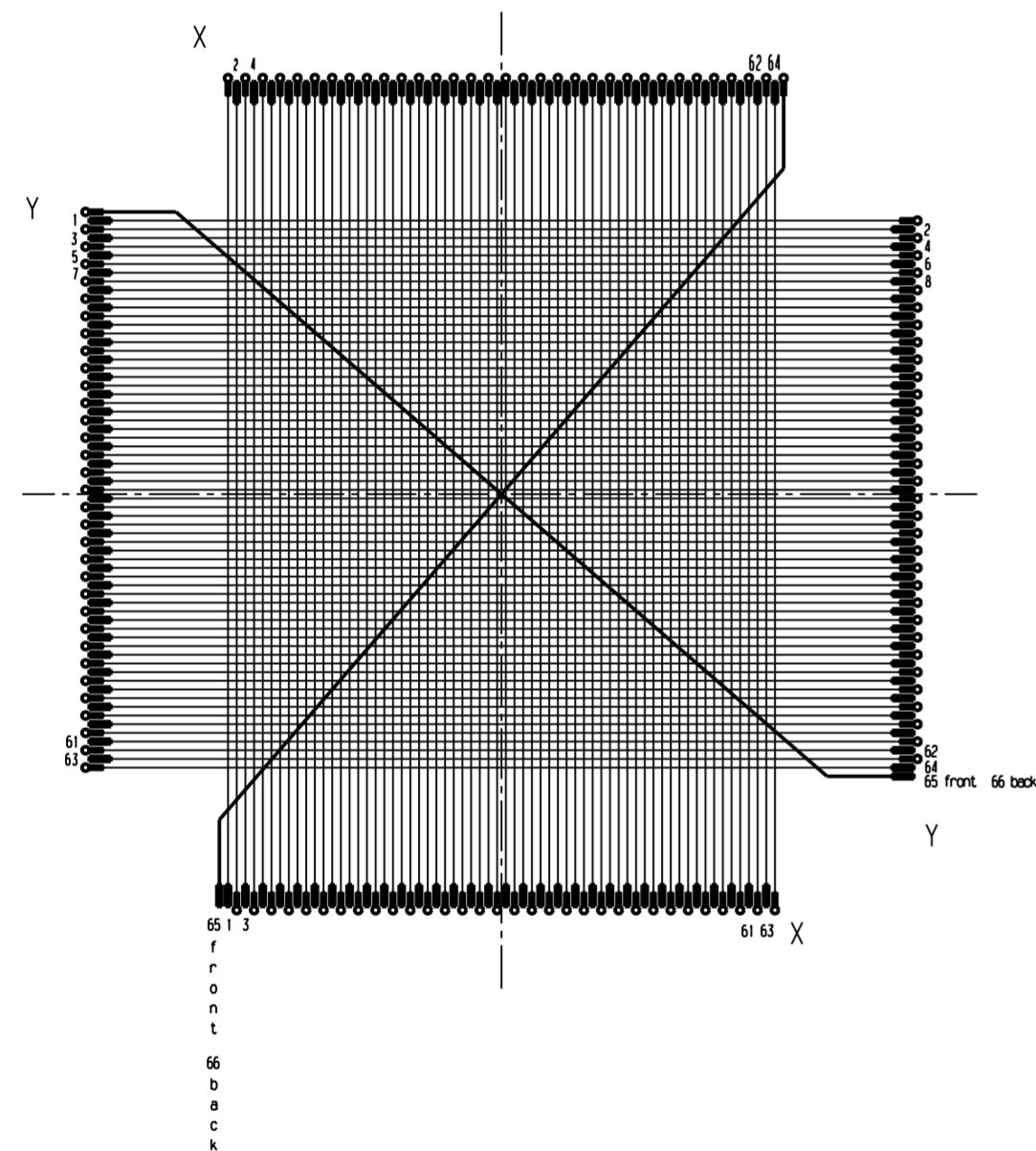
Technische Richtlinien / Technical guidelines
 aktuellen Stand beachten / take note of current status

Nr. / No.	Benennung / Description
F-TG-V-6.2e	Cleaning of standard Vacuum components

BD-type number: FT-DG 2010

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GSI <small>Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt</small>		<small>Surfaces</small> DIN ISO 1302	Approved		<small>Dimensions without tolerance indication</small> DIN ISO 2768-mK EN ISO 13920-BF	<small>Weight</small> Material	Scale 1:1
<small>Drawn</small> 06.05.2013 <small>Checked</small> 09.09.2013 <small>Approved</small> 09.09.2013	<small>Name</small> Gleim, M. Zurkan, O. Lotz, R.	<small>Description</small> Profilgitter SEM-Grid	<small>Drawing No.</small> BD-1009600-A-000	<small>Rev.</small> -	<small>Sheet</small> 1 of 2	<small>Repl. for</small> -	

view in beam-direction



Kanal-Nr. Channel #	PIN-Nr. auf PIN # on	Kanal-Nr. Channel #	PIN-Nr. auf PIN # on	Kanal-Nr. Channel #	PIN-Nr. auf PIN # on	Kanal-Nr. Channel #	PIN-Nr. auf PIN # on
Y	Y1 (flach) (flat)	Y	Y2 (flach) (flat)	X	X1 (flach) (flat)	X	X2 (flach) (flat)
1	1	33	1	1	1	33	1
2	2	34	2	2	2	34	2
3	3	35	3	3	3	35	3
4	4	36	4	4	4	36	4
5	5	37	5	5	5	37	5
6	6	38	6	6	6	38	6
7	7	39	7	7	7	39	7
8	8	40	8	8	8	40	8
9	9	41	9	9	9	41	9
10	10	42	10	10	10	42	10
11	11	43	11	11	11	43	11
12	12	44	12	12	12	44	12
13	13	45	13	13	13	45	13
14	14	46	14	14	14	46	14
15	15	47	15	15	15	47	15
16	16	48	16	16	16	48	16
17	17	49	17	17	17	49	17
18	18	50	18	18	18	50	18
19	19	51	19	19	19	51	19
20	20	52	20	20	20	52	20
21	21	53	21	21	21	53	21
22	22	54	22	22	22	54	22
23	23	55	23	23	23	55	23
24	24	56	24	24	24	56	24
25	25	57	25	25	25	57	25
26	26	58	26	26	26	58	26
27	27	59	27	27	27	59	27
28	28	60	28	28	28	60	28
29	29	61	29	29	29	61	29
30	30	62	30	30	30	62	30
31	31	63	31	31	31	63	31
32	32	64	32	32	32	64	32
	33	65	33		33		33
	34	66	34		34		34
	35		35		35		35
	36		36		36		36
	37		37		37		37

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		Surfaces DIN ISO 1302	Approved			
GSi Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF	Weight	Material		Scale
		Date 06.05.2013 Name Gleim, M.	Description Profilgitter (Steckerbelegung) SEM-Grid		Size A2	
Checked 09.09.2013 Zurkan, O.	Approved 09.09.2013 Lotz, R.	Drawing No. BD-1009600-A-000		Rev.	Sheet 2 of 2	
FR		Prev. Dwg.		Repl. for		

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Planckstrasse 1, 64291 Darmstadt

Rev. No.		Rev.-Doc.-No.		Date		Name	
-							
Approved							
Date		Name		Description			
Drawn	06.05.2013	Gleim, M.		Profilgitter SEM-Grid			
Checked	09.09.2013	Zurkan, O.					
Approved	09.09.2013	Lotz, R.					
Drawing No.				BD-1009600-A-000			Rev.
							-
Prev. Dwg.				Repl. for			

Item	Qty.	Description	Drawing No.	Dimensions (finished part)	Standard / Source of supply	Material	Remark
1	128	Current collector	BD-1009621-A-000 (-)				
2	4	Signal-wire complete	BD-1010433-A-000 (-)				
3							
4	3	Winkel	BD-1001665-P-000 (-)	18x15x2; L=60		EN AW-6060 (AlMgSi0,5)	
5	1	Plate	BD-1009602-P-000 (-)	134x134x4		1.4301 (X5CrNi18-10)	
6	2	Guide strip left and right	BD-1009603-P-000 (-)	88x15x9		Glass ceramic (Macor)	
7	2	Guide strip above and down	BD-1009604-P-000 (-)	88x13x9		Glass ceramic (Macor)	
8	2	Terminal strip above and down	BD-1009605-P-000 (-)	86x11x9,4		Glass ceramic (Macor)	
9	2	Terminal strip left and right	BD-1009607-P-000 (-)	86x11x7,4		Glass ceramic (Macor)	
10	1	Frame	BD-1009609-P-000 (-)	120x120x3		1.4301 (X5CrNi18-10)	
11	2	Side panel left and right	BD-1009610-P-000 (-)	130x22x2		1.4301 (X5CrNi18-10)	
12	2	Side panel above and down	BD-1009611-P-000 (-)	130x22x2		1.4301 (X5CrNi18-10)	
13	1	Mounting Bracket	BD-1009638-P-000 (-)	44x34x19		1.4301 (X5CrNi18-10)	
14	2	Plug holder 1	BD-1009668-P-000 (-)	70x40x2		1.4301 (X5CrNi18-10)	
15	1	Bracket	BD-1009669-P-000 (-)	16x15x2; L=50		EN AW-6060 (AlMgSi0,5)	
16	1	Aperture	BD-1009729-P-000 (-)	182x171,5x35		1.4301 (X5CrNi18-10)	Dimension of sheet metal 229,6x287,2x0,5

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Rev. No.		Rev.-Doc.-No.		Date	Name
-					
Approved					
Date		Name		Description	
Drawn	06.05.2013	Gleim, M.		Profilgitter SEM-Grid	
Checked	09.09.2013	Zurkan, O.			
Approved	09.09.2013	Lotz, R.			
Drawing No.				Rev.	
BD-1009600-A-000				-	
Prev. Dwg.				Repl. for	

Item	Qty.	Description	Drawing No.	Dimensions (finished part)	Standard / Source of supply	Material	Remark
17	4	Distance piece	BD-1010410-P-000 (-)	25x25x22		EN AW-6060 (AlMgSi0,5)	
18							
19	4	Feder	DG070.000.140 (-)	4,9x0,5x58		1.4310	
20	128	Feder	DG140.000.040 (A)	Ø0,4x21		Duratherm 600	
21							
22	2	Hexagon socket head screw		M4x10	Fa Alma; BNr. 1019560; DIN 6912	A2	Silver plated
23	12	Hexagon socket head screw		M3x6	Fa Alma; BNr. 1003954; ISO 4762	A2	Silver plated
24	8	Hexagon socket head screw		M3x10	Fa Alma; BNr. 1003956; ISO 4762	A2	Silver plated
25							
26	8	Cheese head screw		M2.5x4	ISO 1207	A2-50	Silver plated
27							
28	8	Countersunk screw		M3x8	Fa Alma; BNr. 1013092; DIN 7991	A2	Silver plated
29	4	Washer		3	ISO 7090	A2 200HV	
30							
31	10	Dowel pin		Ø3m6x8	ISO 2338	A2	
32	2	Dowel pin		Ø3m6x12	ISO 2338	A2	

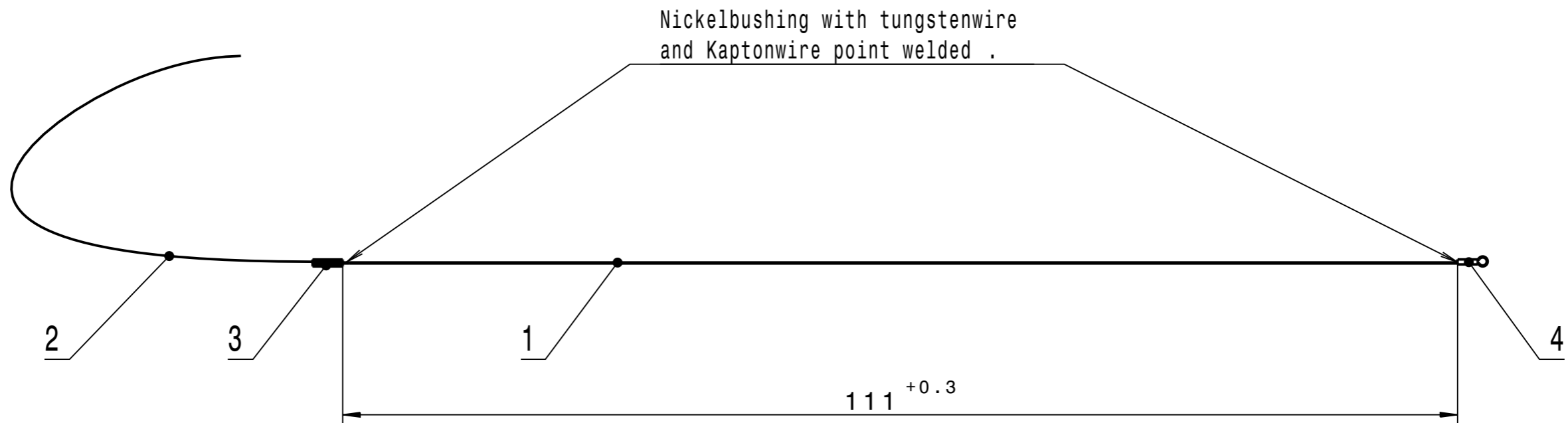
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Rev. No.		Rev.-Doc.-No.		Date		Name	
-							
Approved							
		Date		Name		Description	
Drawn		06.05.2013		Gleim, M.		Profilgitter SEM-Grid	
Checked		09.09.2013		Zurkan, O.			
Approved		09.09.2013		Lotz, R.			
Drawing No.						Rev.	
BD-1009600-A-000						-	
Prev. Dwg.						Repl. for	

Item	Qty.	Description	Drawing No.	Dimensions (finished part)	Standard / Source of supply	Material	Remark
33	2	Dowel pin		Ø4m6x8	ISO 2338	A2	
34							
35							
36	4	Sub-D Plug; female			Allectra; BNr. 211-FS-37-UHV		
37	136	Pin; female			Allectra; BNr. 212-PINF-25		Gold plated
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							



Technische Richtlinien / Technical guidelines	
aktuellen Stand beachten / take note of current status	
Nr. / No.	Benennung / Description
F-TG-V-6.2e	Cleaning of standard Vacuum components

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		Surfaces DIN ISO 1302	Approved			
 Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF	Weight	Scale		
		Material	2:1			
	Date	Name	Description			Size
Drawn	07.05.2013	Gleim, M.	Stromabnehmer			A3
Checked	09.09.2013	Zurkan, O.	Current collector			
Approved	09.09.2013	Lotz, R.	Drawing No.		Rev.	Sheet
			BD-1009621-A-000		-	1 of 1
FR	Prev. Dwg.		Repl. for			

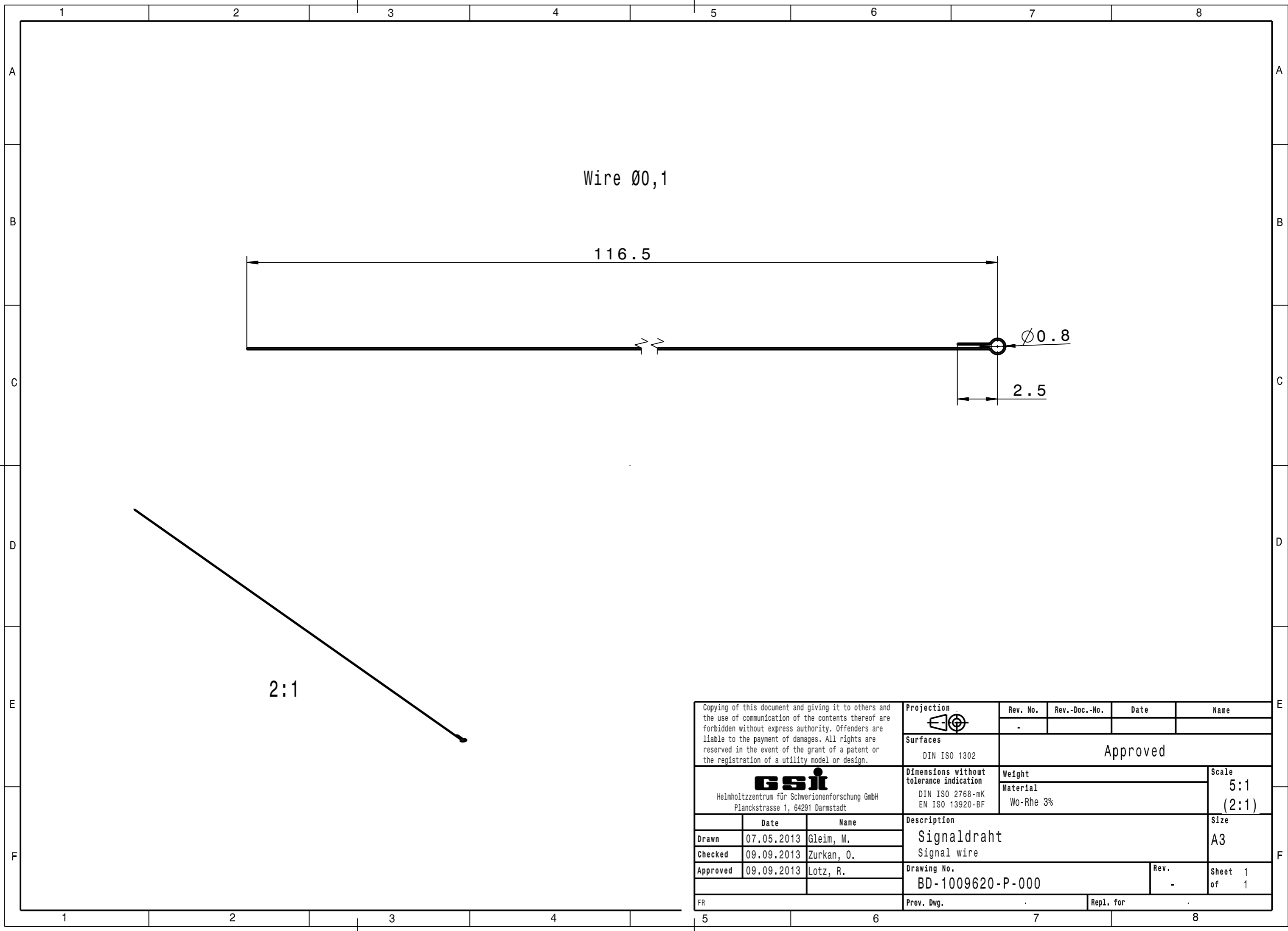
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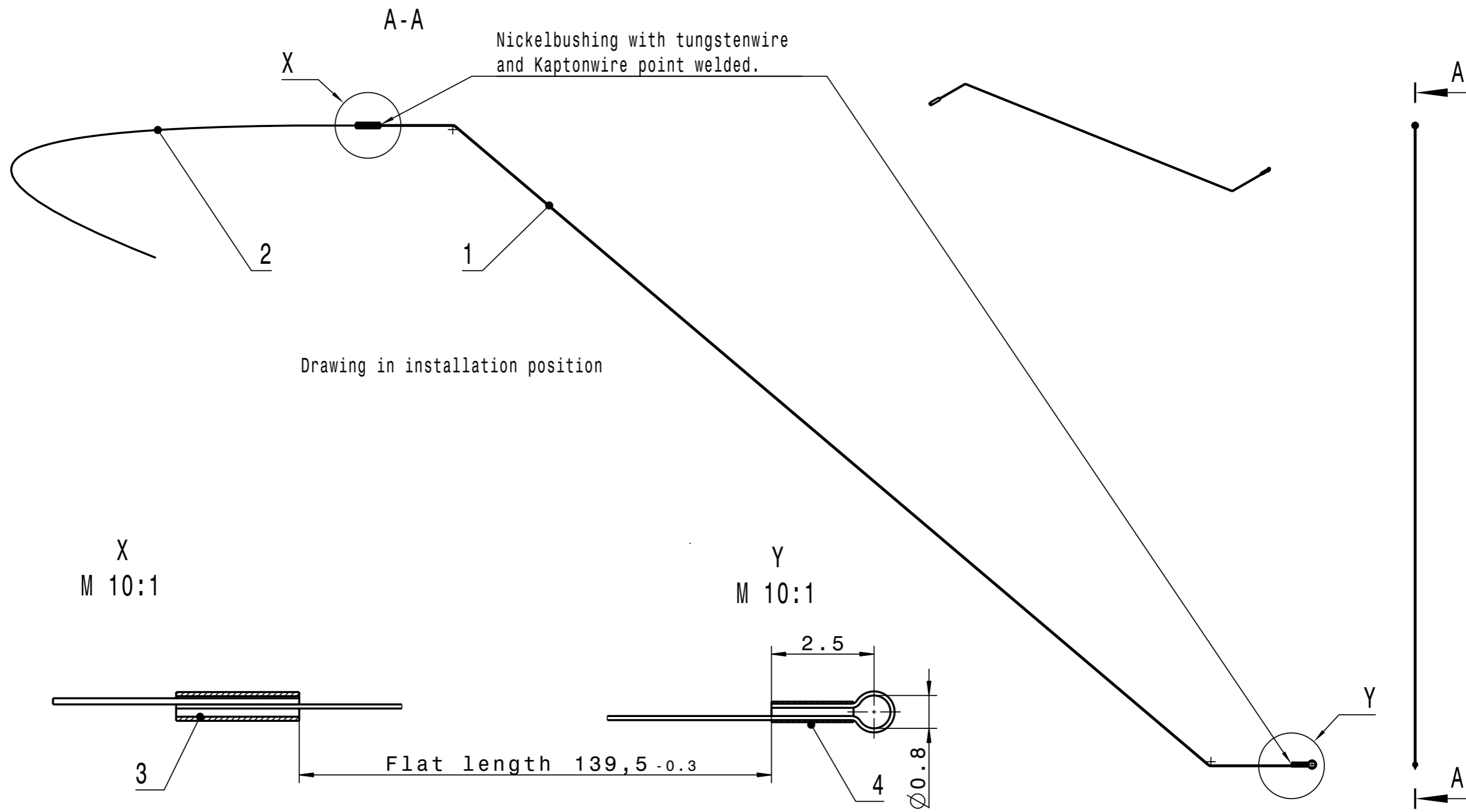
GSI Helmholtzzentrum für Schwerionenforschung GmbH
Planckstrasse 1, 64291 Darmstadt

Rev. No.		Rev.-Doc.-No.		Date		Name	
-							
Approved							
Date		Name		Description Stromabnehmer Current collector			
Drawn	07.05.2013	Gleim, M.					
Checked	09.09.2013	Zurkan, O.					
Approved	09.09.2013	Lotz, R.					
Drawing No.				BD-1009621-A-000		Rev.	
						-	
Prev. Dwg.				Repl. for			

Item	Qty.	Description	Drawing No.	Dimensions (finished part)	Standard / Source of supply	Material	Remark
1	1	Signal wire	BD-1009620-P-000(-)	Ø0,1x122	Fa. Duro-Metall, Kornwestheim	Wo-Re 3%	
2	1	Kapton insulated wire		Ø0,35	Fa. Allectra, BNr. 311-KAPM-035-RAD		L ca. 350mm; cutting to length
3	1	Bushing long		Ø0,7xØ0,5x3	Fa. Schoeller Werke, Hellenthal	Nickel	
4	1	Bushing short		Ø0,5xØ0,3x2	Fa. Schoeller Werke, Hellenthal	Nickel	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							



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				Surfaces DIN ISO 1302		Approved												
GSIT Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt				Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF			Weight Material Wo-Rhe 3%		Scale 5:1 (2:1)									
				<table border="1"> <thead> <tr> <th></th> <th>Date</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>Drawn</td> <td>07.05.2013</td> <td>Gleim, M.</td> </tr> <tr> <td>Checked</td> <td>09.09.2013</td> <td>Zurkan, O.</td> </tr> <tr> <td>Approved</td> <td>09.09.2013</td> <td>Lotz, R.</td> </tr> </tbody> </table>			Date	Name	Drawn	07.05.2013	Gleim, M.	Checked	09.09.2013	Zurkan, O.	Approved	09.09.2013	Lotz, R.	Description Signaldraht Signal wire
	Date	Name																
Drawn	07.05.2013	Gleim, M.																
Checked	09.09.2013	Zurkan, O.																
Approved	09.09.2013	Lotz, R.																
				Drawing No. BD-1009620-P-000			Rev. -	Sheet 1 of 1										
FR				Prev. Dwg.			Repl. for											



Technische Richtlinien / Technical guidelines	
aktuellen Stand beachten / take note of current status	
Nr. / No.	Benennung / Description
F-TG-V-6.2e	Cleaning of standard Vacuum components

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		Surfaces DIN ISO 1302	Approved			
GSIT Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF	Weight	Scale 2:1 (10:1)		
		Material	Description Signal-Draht komplett Signal-wire complete			
Drawn 19.06.2013 Gleim, M.	Checked 09.09.2013 Zurkan, O.	Approved 09.09.2013 Lotz, R.	Drawing No. BD-1010433-A-000		Rev. -	Size A3
FR		Prev. Dwg.		Repl. for		Sheet 1 of 1

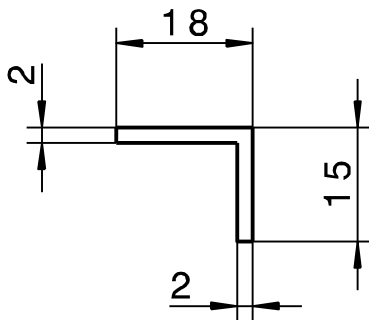
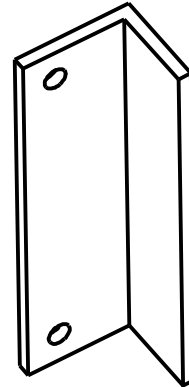
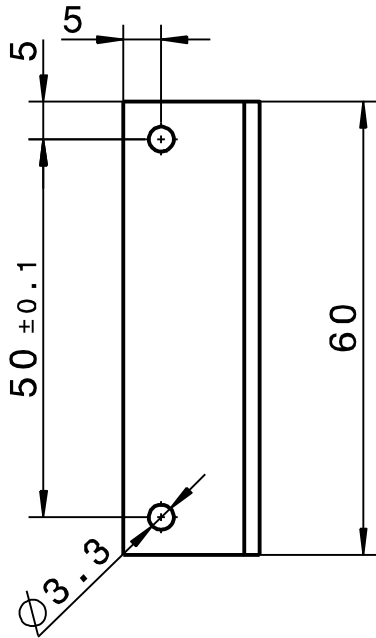
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Rev. No.		Rev.-Doc.-No.		Date		Name	
-							
Approved							
		Date		Name		Description	
Drawn		19.06.2013		Gleim, M.		Signal-Draht komplett Signal-wire complete	
Checked		09.09.2013		Zurkan, O.			
Approved		09.09.2013		Lotz, R.			
Drawing No.						Rev.	
BD-1010433-A-000						-	
Prev. Dwg.						Repl. for	

Item	Qty.	Description	Drawing No.	Dimensions (finished part)	Standard / Source of supply	Material	Remark
1	1	Signal wire		Ø0,1x150,5	Fa. Duro-Metall, Kornwestheim	Wo-Rhe 3%	
2	1	Kapton insulated wire		Ø0,35	Fa. Allectra BNr.: 311-KAPM-035-RAD		L ca. 350mm; cutting to length
3	1	Bushing long		Ø0,7xØ0,5x3	Fa. Schoeller Werke, Hellenthal	Nickel	
4	1	Bushing short		Ø0,5xØ0,3x2	Fa. Schoeller Werke, Hellenthal	Nickel	
5							
6							
7							
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10							
11							
12							
13							
14							
15							
16							



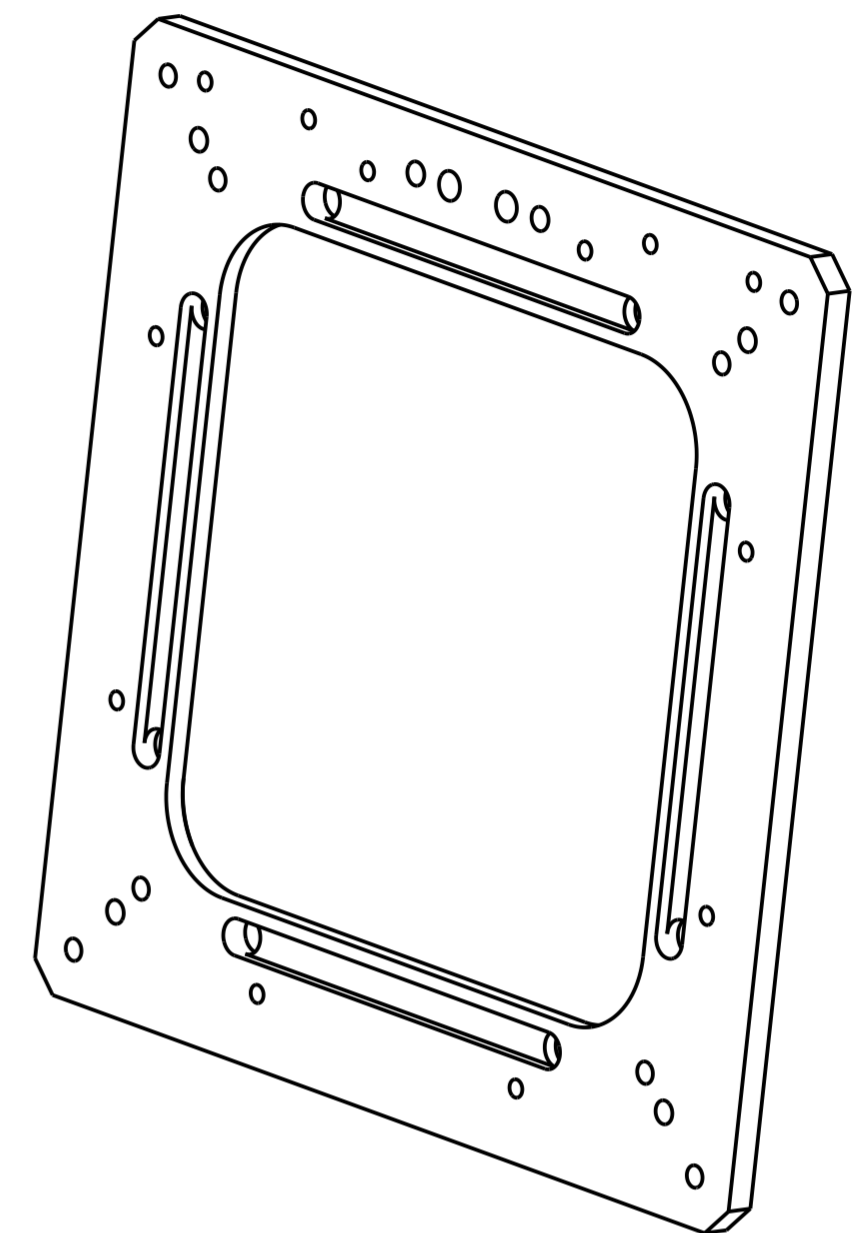
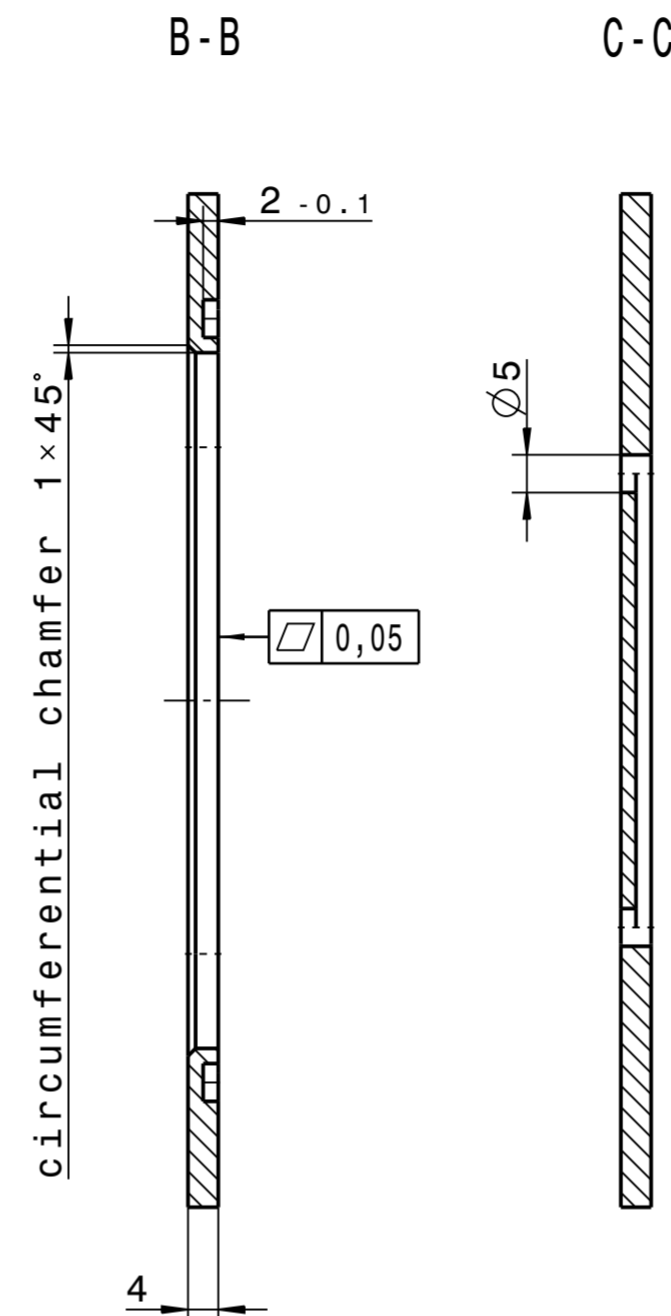
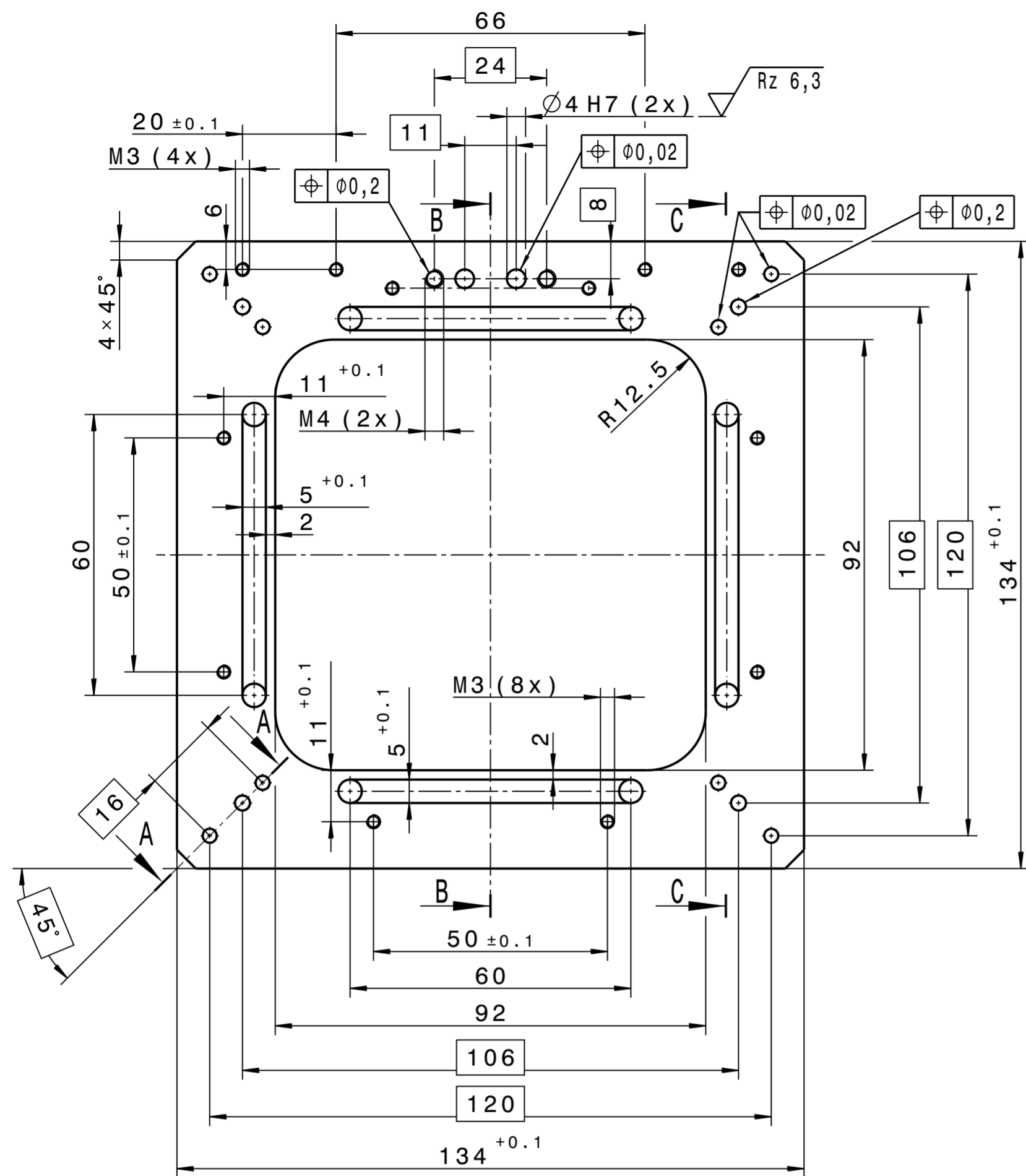
Fertigung entsprechend "Technische Richtlinien" für UHV-Bauteile (aktuellen Stand beachten)

Technische Richtlinien	
Nummer	Benennung
6.2	Reinigung von Vakuum-Bauteilen

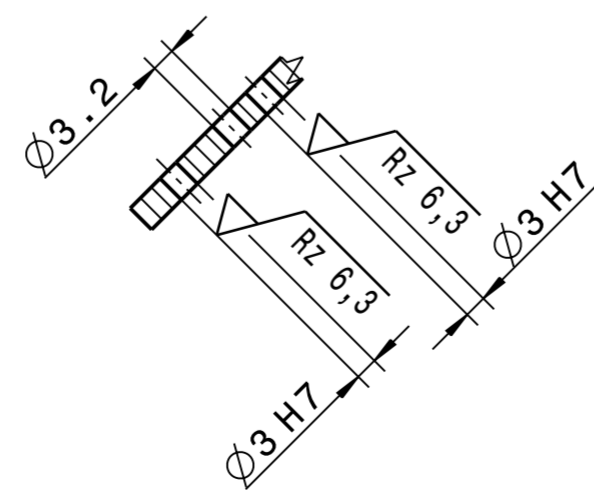
Kanten ISO 13715 $\begin{matrix} \swarrow & \searrow \\ +0.3 & -0.1 \end{matrix}$

∇ Rz 25

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		Surfaces DIN ISO 1302	Approved			
 Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF	Weight Material EN AW-6060 (AlMgSi0,5)	Scale 1:1		
		Description Winkel			Size A4	
Drawn	Date	Name	Drawing No.		Rev.	Sheet
Checked	21.09.2011	STOERMER	BD-1001665-P-000		-	1
Approved	25.10.2011	ZURKAN				of
	26.10.2011	LOTZ				1
FR	Prev. Dwg.		Repl. for			



A-A

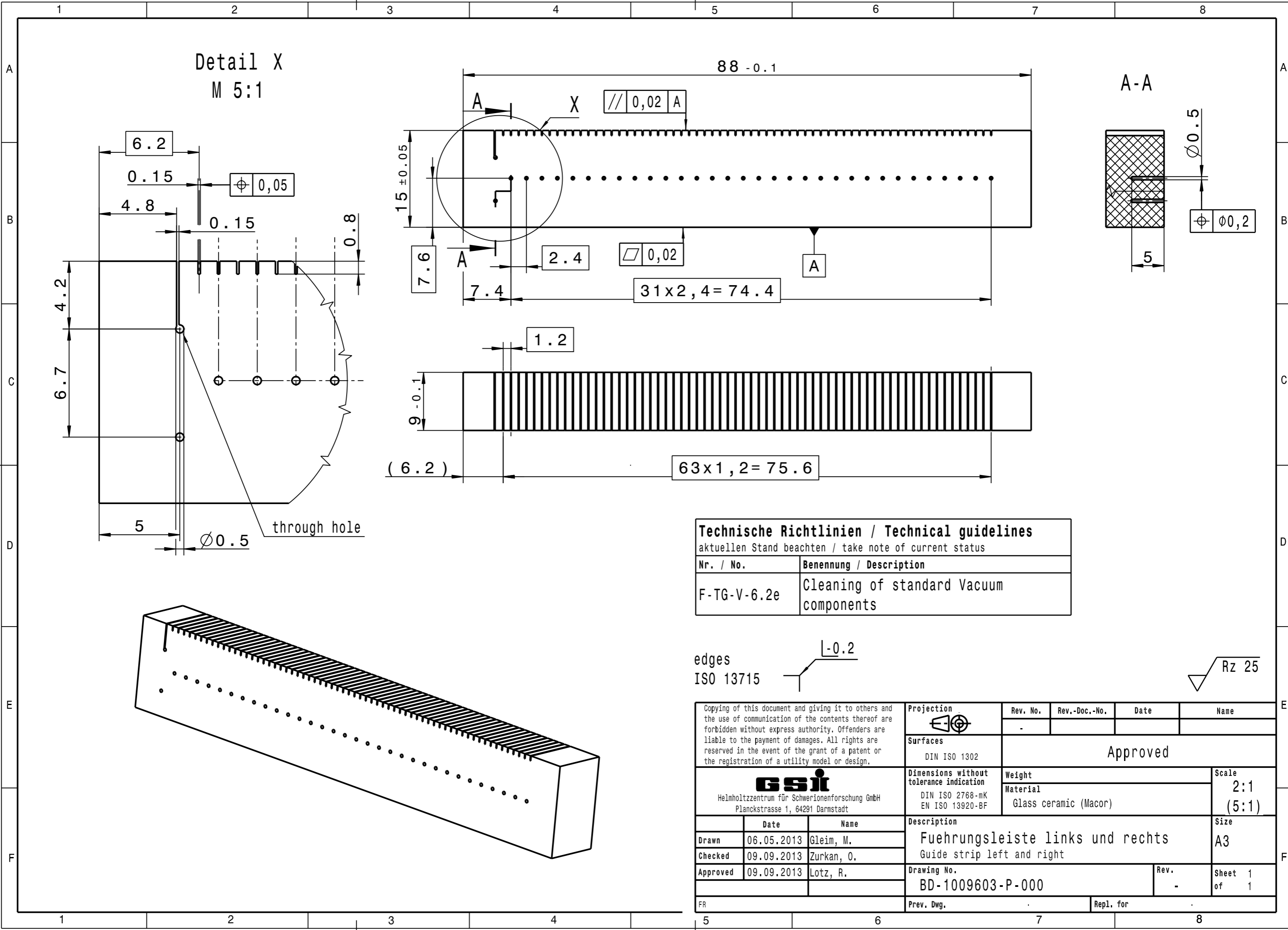


Technische Richtlinien / Technical guidelines
 aktuellen Stand beachten / take note of current status

Nr. / No.	Benennung / Description
F-TG-V-2.5e	Vacuum firing for hydrogen degassing of materials and UHV vacuum chambers
F-TG-V-6.2e	Cleaning of standard Vacuum components



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			-	-	-	-
Surfaces DIN ISO 1302		Approved				
Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF		Weight	Material		Scale	
HeInholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		1.4301 (X5CrNi18-10)			1:1	
Drawn	06.05.2013	Gleim, M.	Description		Size	
Checked	09.09.2013	Zurkan, O.	Platte		A2	
Approved	09.09.2013	Lotz, R.	Drawing No.		Sheet 1 of 1	
FR		BD-1009602-P-000		Rev.		
		Prev. Dwg.		Repl. for		



Detail X
M 5:1

88 - 0.1

A-A

6.2

0.15

4.8

0.15

0.8

4.2

6.7

5

∅ 0.5

through hole

15 ± 0.05

7.6

2.4

7.4

▱ 0,02

31 x 2,4 = 74.4

1.2

9 - 0.1

(6.2)

63 x 1,2 = 75.6

∅ 0.5

∅ 0,2

5

Technische Richtlinien / Technical guidelines

aktuellen Stand beachten / take note of current status

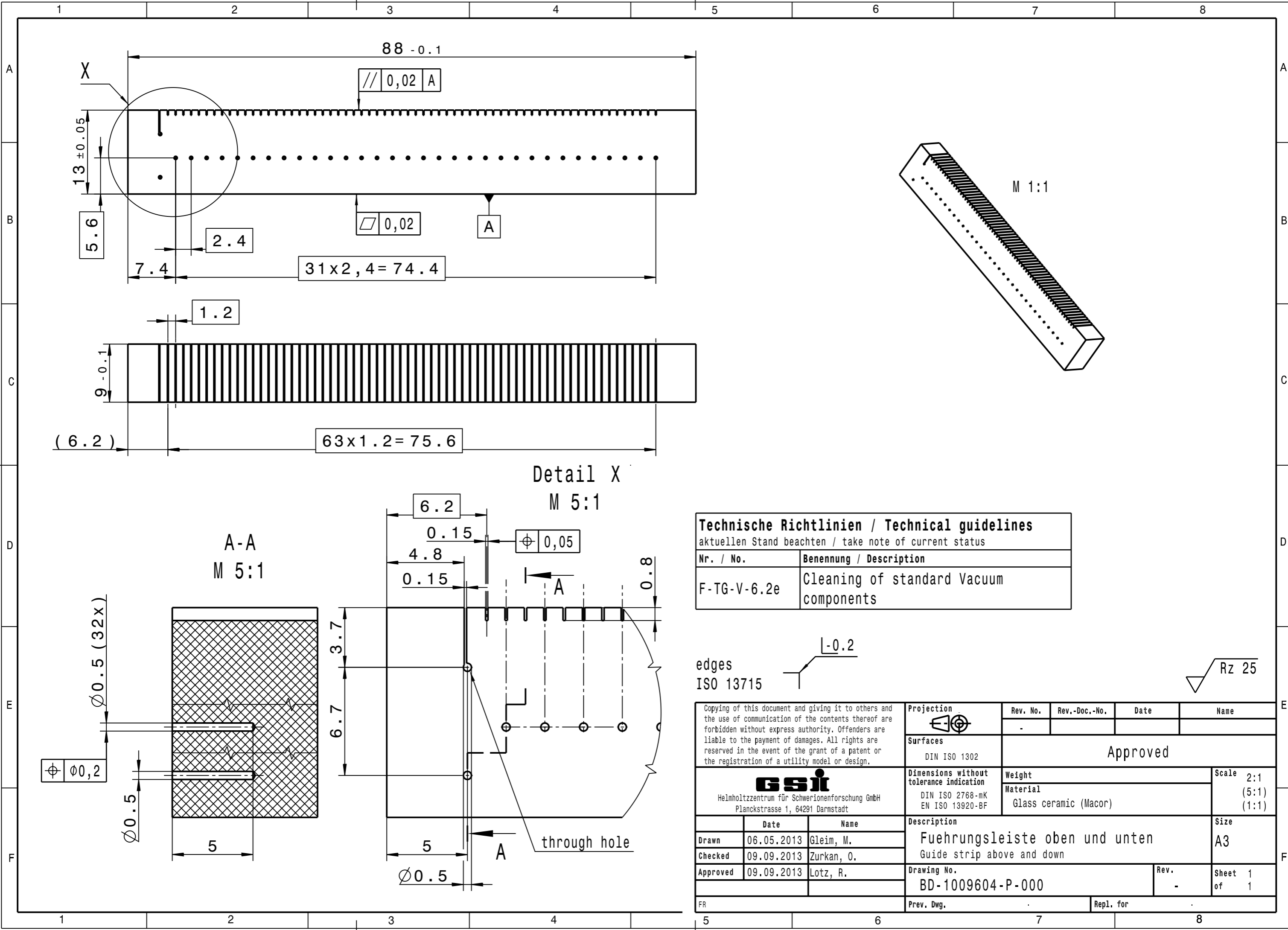
Nr. / No.	Benennung / Description
F-TG-V-6.2e	Cleaning of standard Vacuum components

edges
ISO 13715

┌-0.2

▽ Rz 25

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	Surfaces DIN ISO 1302	Approved			
GSIT Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt	Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF	Weight	Scale 2:1 (5:1)		
		Material Glass ceramic (Macor)			
	Date	Name	Description		Size
Drawn	06.05.2013	Gleim, M.	Fuhrungsleiste links und rechts Guide strip left and right		A3
Checked	09.09.2013	Zurkan, O.			
Approved	09.09.2013	Lotz, R.	Drawing No. BD-1009603-P-000		Rev. -
FR	Prev. Dwg.		Repl. for		Sheet 1 of 1

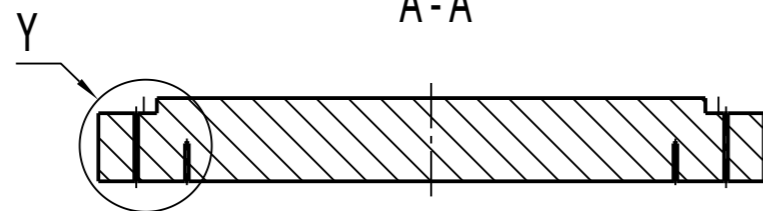
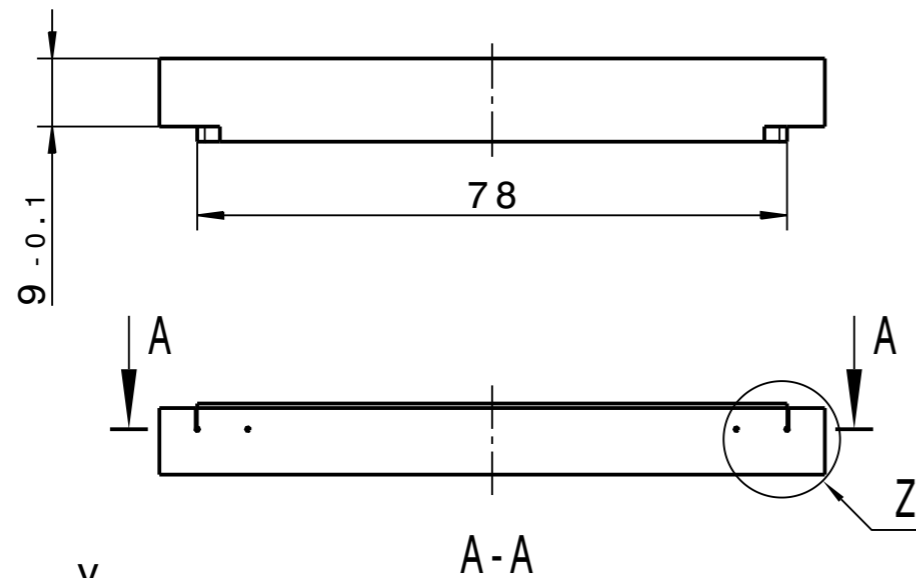
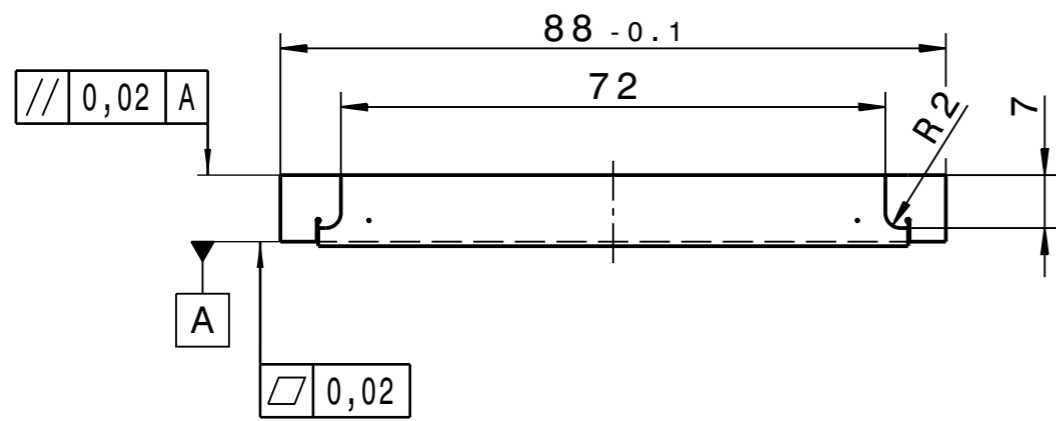


Technische Richtlinien / Technical guidelines	
aktuellen Stand beachten / take note of current status	
Nr. / No.	Benennung / Description
F-TG-V-6.2e	Cleaning of standard Vacuum components

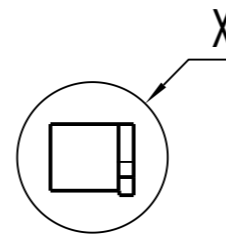
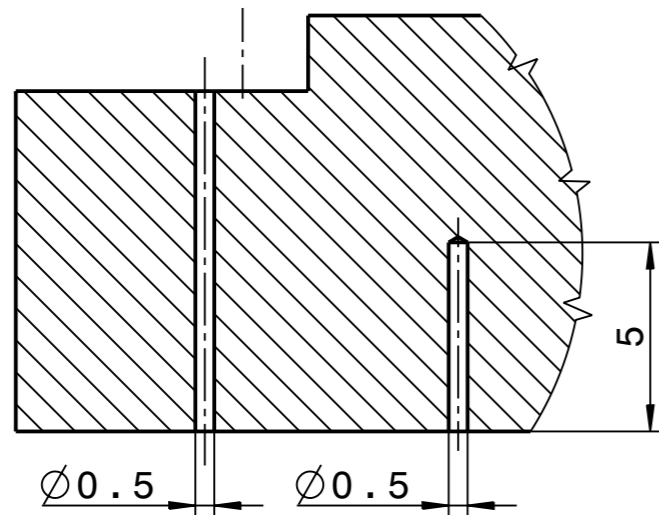
edges
ISO 13715

Rz 25

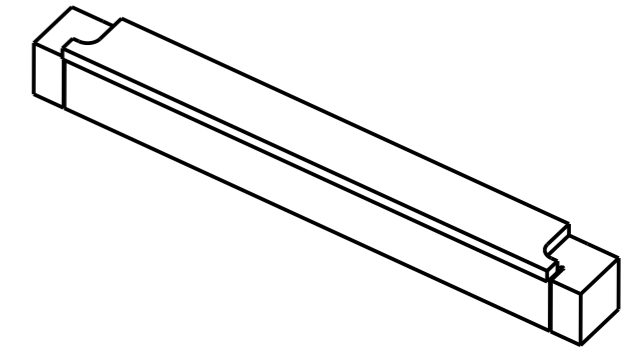
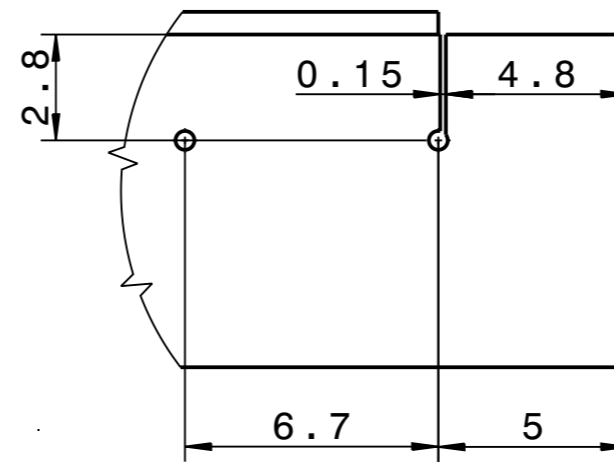
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			-			
GSIT Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Surfaces	Approved			
		DIN ISO 1302				
Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF		Weight	Scale 2:1 (5:1) (1:1)			
		Material Glass ceramic (Macor)				
Description Fuehrungsleiste oben und unten Guide strip above and down		Date	Size A3			
		Name				
Drawn	06.05.2013	Gleim, M.	Drawing No. BD-1009604-P-000			
Checked	09.09.2013	Zurkan, O.				
Approved	09.09.2013	Lotz, R.				
FR		Prev. Dwg.	Repl. for			



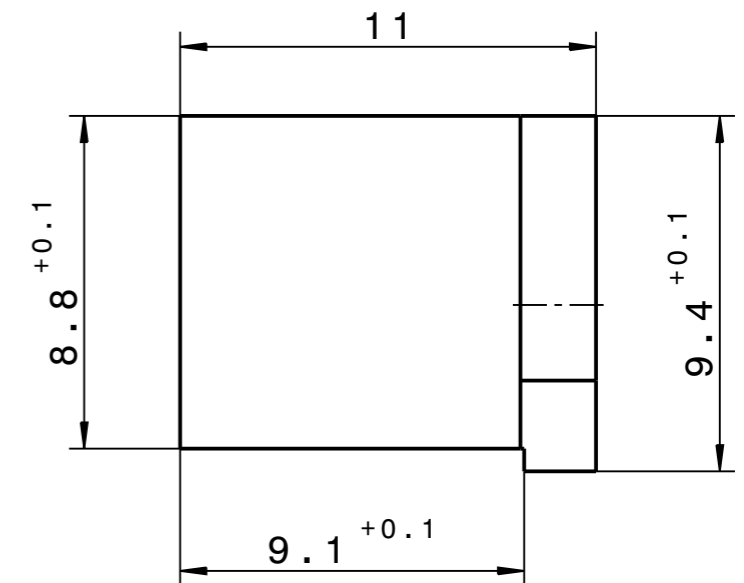
Y
M 5:1



Z
M 5:1



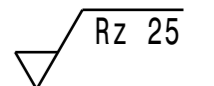
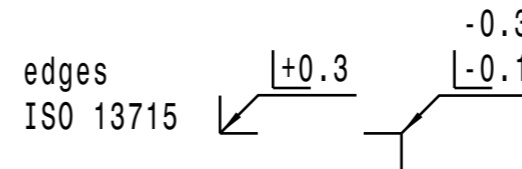
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M 5:1



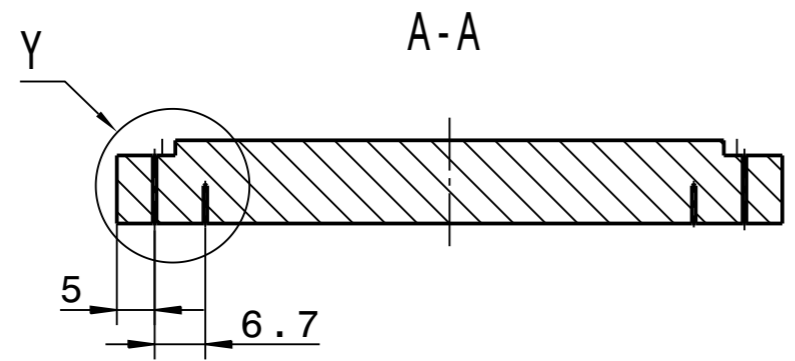
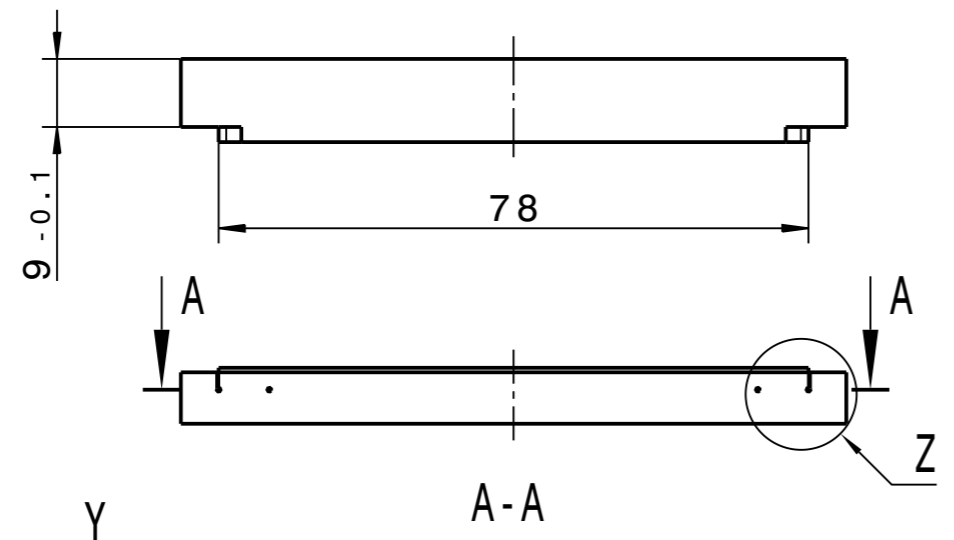
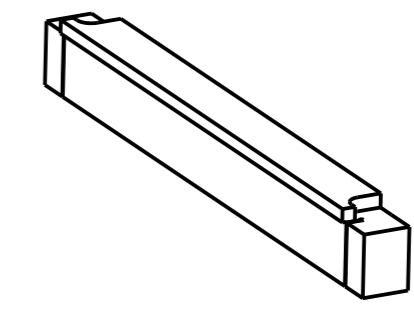
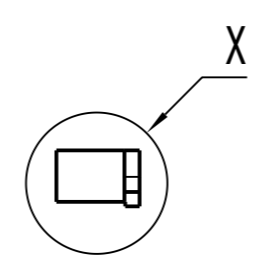
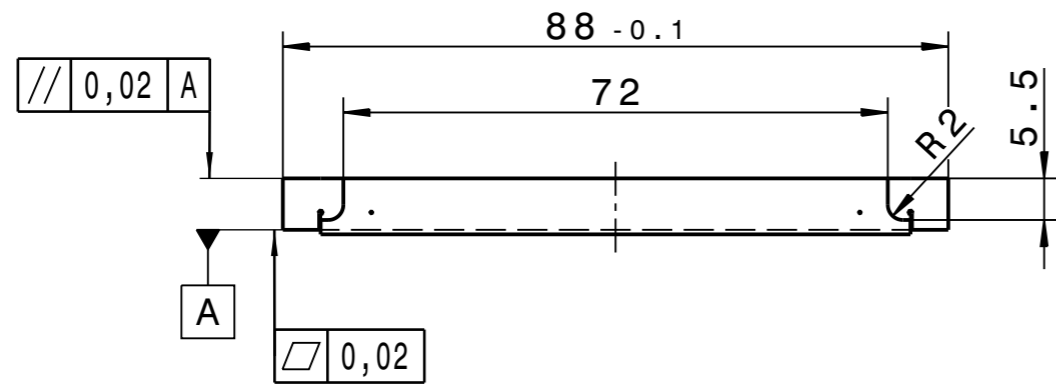
Technische Richtlinien / Technical guidelines

aktuellen Stand beachten / take note of current status

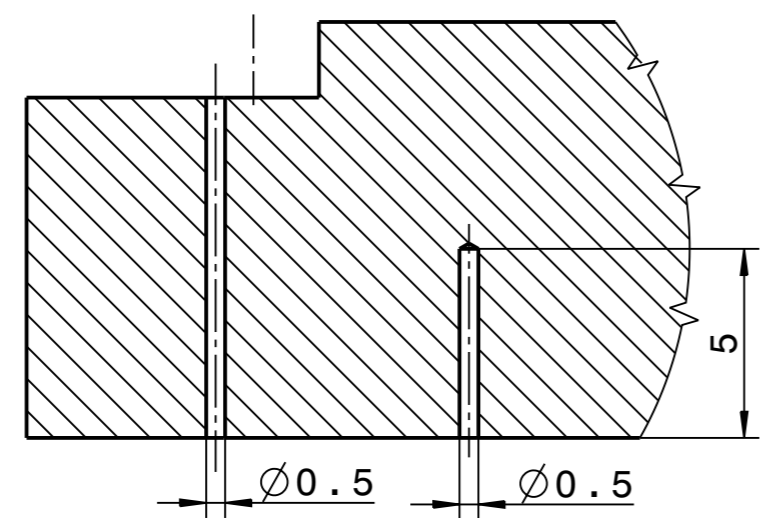
Nr. / No.	Benennung / Description
F-TG-V-6.2e	Cleaning of standard Vacuum components



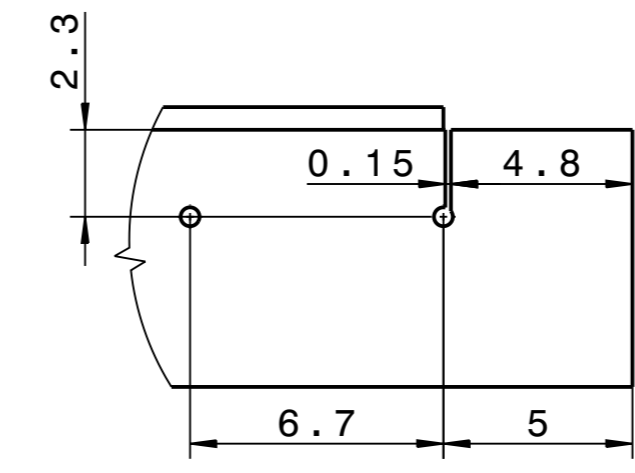
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		Surfaces DIN ISO 1302	Approved			
GSIT Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF	Weight	Scale		
		Material Glass ceramic (Macor)	1:1 (5:1)			
Description Klemmleiste oben und unten Terminal strip above and down		Size A3		Drawing No. BD-1009605-P-000		
Drawn 06.05.2013 Gleim, M.	Checked 09.09.2013 Zurkan, O.	Approved 09.09.2013 Lotz, R.	Rev. -	Sheet 1 of 1		
FR		Prev. Dwg.	Repl. for			



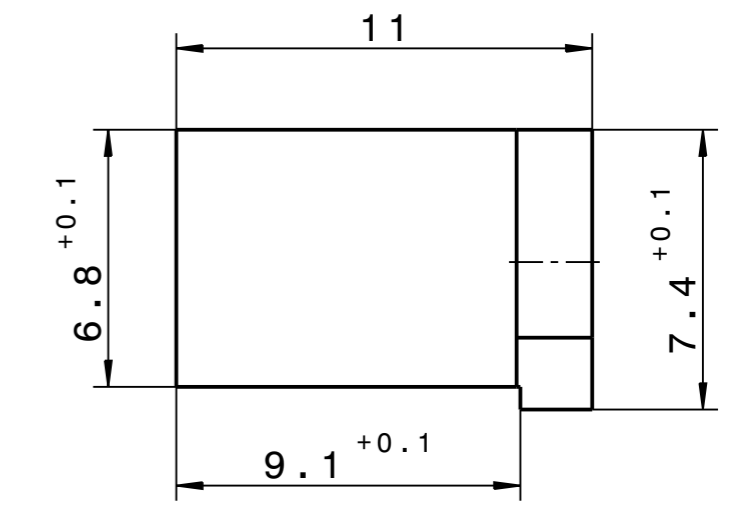
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M 5:1



Z
M 5:1



X
M 5:1



Technische Richtlinien / Technical guidelines

aktuellen Stand beachten / take note of current status

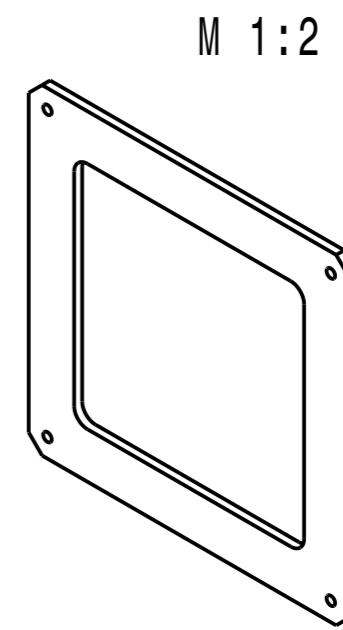
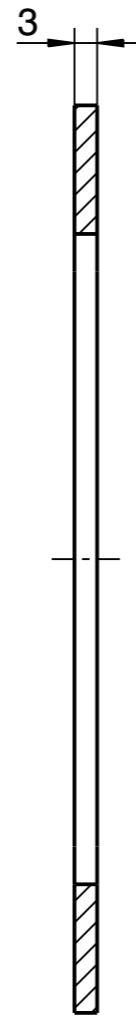
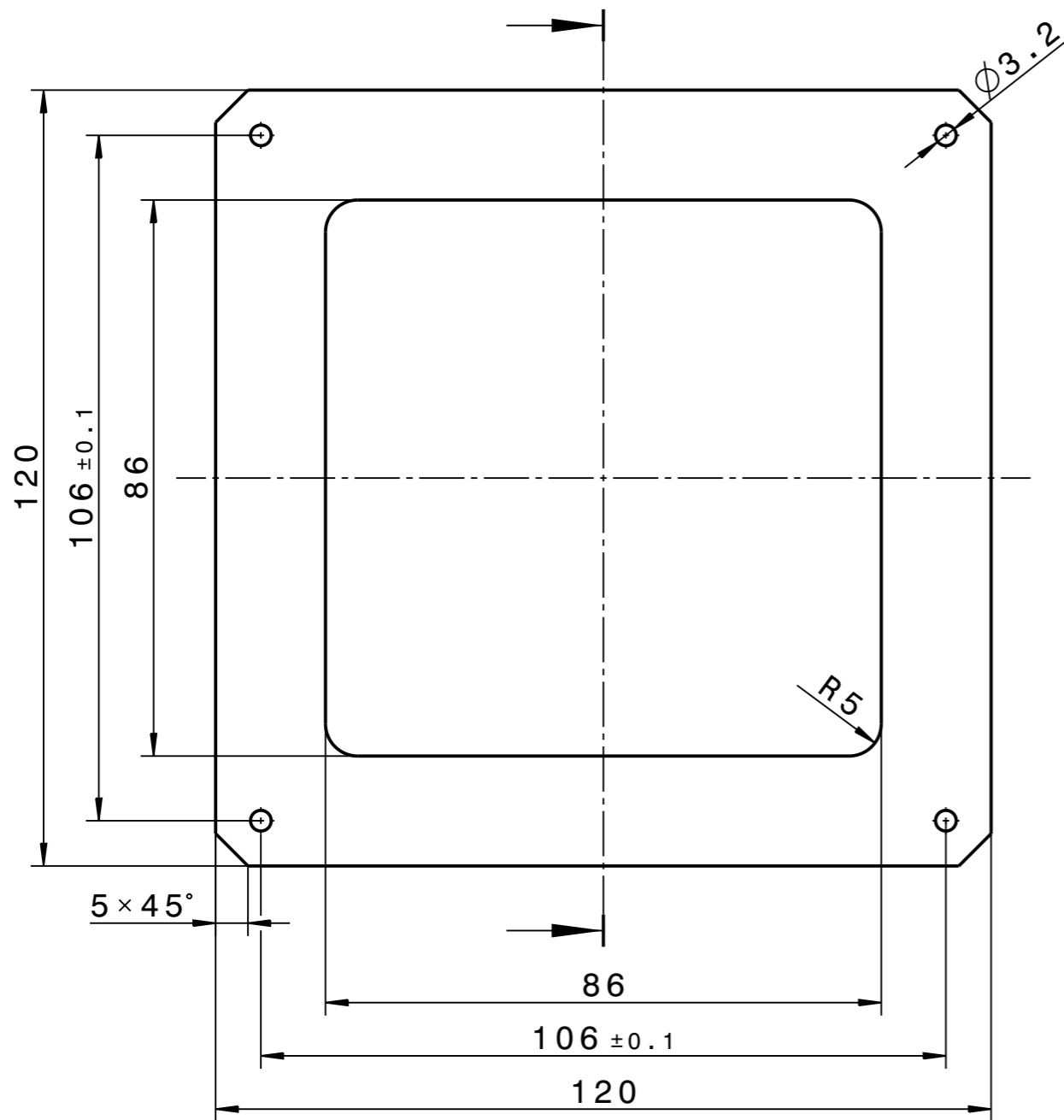
Nr. / No.	Benennung / Description
F-TG-V-6.2e	Cleaning of standard Vacuum components

edges
ISO 13715

+0.3
-0.1

Rz 25

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	Surfaces DIN ISO 1302	Approved											
GSIT Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt	Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF	Weight	Scale 1:1 (5:1)										
		Material Glass ceramic (Macor)	Size A3										
<table border="1"> <thead> <tr> <th>Date</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>Drawn 06.05.2013</td> <td>Gleim, M.</td> </tr> <tr> <td>Checked 09.09.2013</td> <td>Zurkan, O.</td> </tr> <tr> <td>Approved 09.09.2013</td> <td>Lotz, R.</td> </tr> </tbody> </table>	Date	Name	Drawn 06.05.2013	Gleim, M.	Checked 09.09.2013	Zurkan, O.	Approved 09.09.2013	Lotz, R.	Description Klemmleiste links und rechts Terminal strip left and right		Size A3		
Date	Name												
Drawn 06.05.2013	Gleim, M.												
Checked 09.09.2013	Zurkan, O.												
Approved 09.09.2013	Lotz, R.												
FR	Prev. Dwg.	Repl. for		Rev.	Sheet 1 of 1								



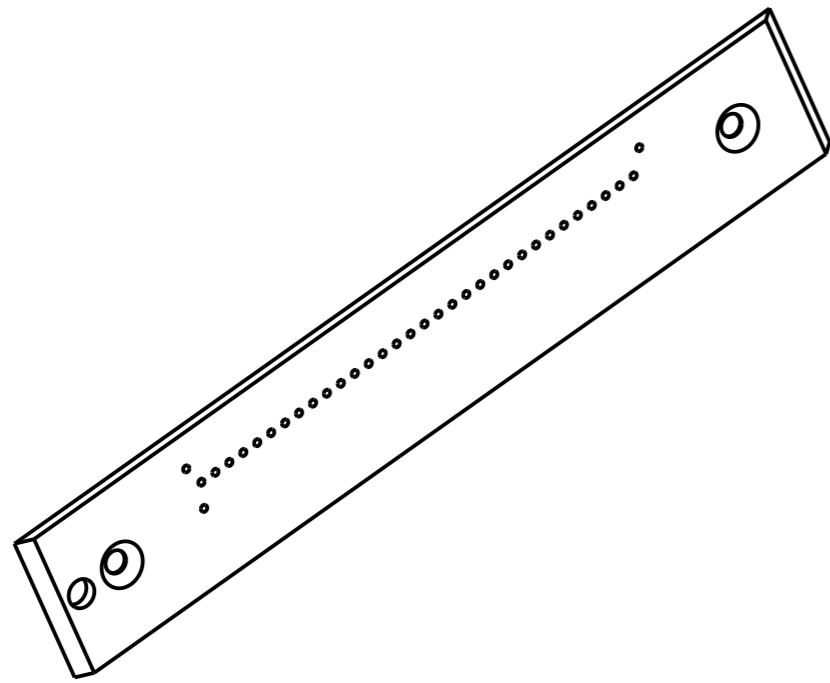
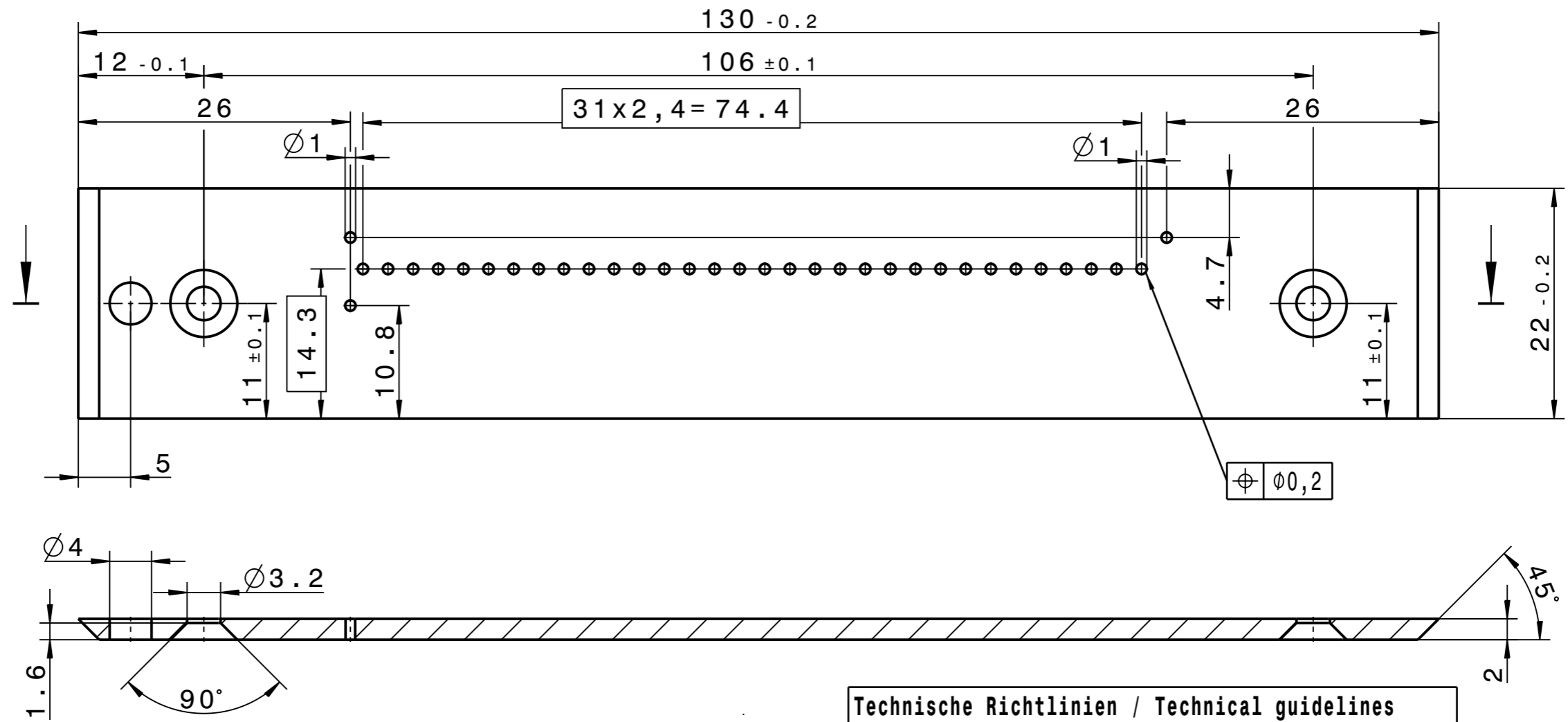
Technische Richtlinien / Technical guidelines	
aktuellen Stand beachten / take note of current status	
Nr. / No.	Benennung / Description
F-TG-V-2.5e	Vacuum firing for hydrogen degassing of materials and UHV vacuum chambers
F-TG-V-6.2e	Cleaning of standard Vacuum components

edges
ISO 13715

+0.3
-0.3
-0.1

Rz 25

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		Surfaces	Approved			
GSIT Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Dimensions without tolerance indication	Weight	Scale		
		DIN ISO 2768-mK EN ISO 13920-BF	1.4301 (X5CrNi18-10)	1:1 (1:2)		
Date	Name	Description	Size			
Drawn 07.05.2013	Gleim, M.	Rahmen	A3			
Checked 09.09.2013	Zurkan, O.	Frame				
Approved 09.09.2013	Lotz, R.	Drawing No.	Rev.	Sheet		
		BD-1009609-P-000	-	1 of 1		
FR	Prev. Dwg.	Repl. for				



Technische Richtlinien / Technical guidelines

aktuellen Stand beachten / take note of current status

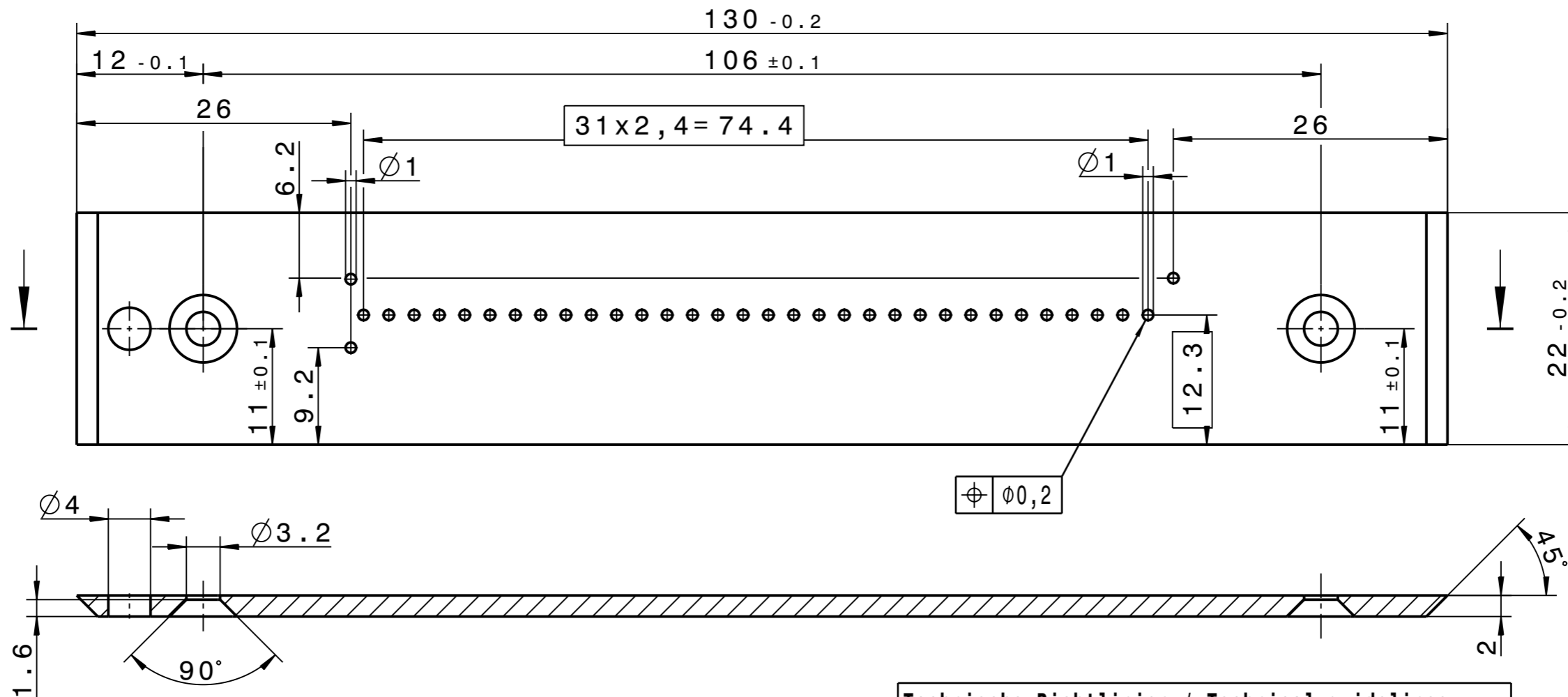
Nr. / No.	Benennung / Description
F-TG-V-2.5e	Vacuum firing for hydrogen degassing of materials and UHV vacuum chambers
F-TG-V-6.2e	Cleaning of Vacuum standard components

edges
ISO 13715

+0.3
-0.1

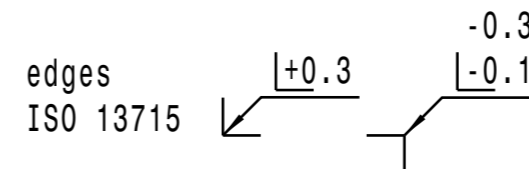
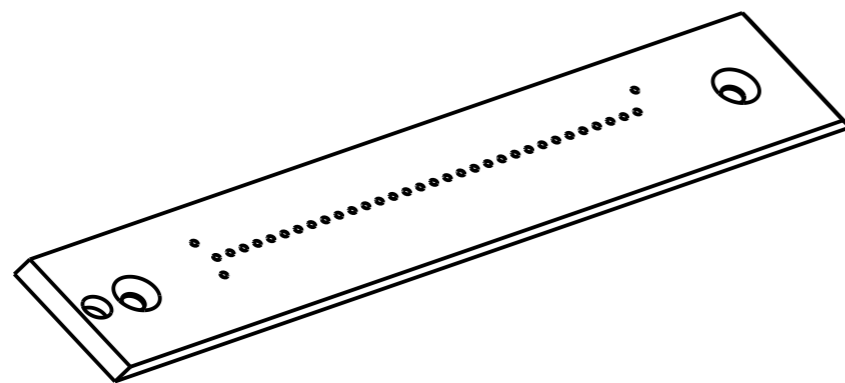
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		Surfaces	Approved			
 Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Dimensions without tolerance indication	Weight	Scale		
		DIN ISO 2768-mK EN ISO 13920-BF	1.4301 (X5CrNi18-10)	2:1		
Date	Name	Description				Size
Drawn 07.05.2013	Gleim, M.	Seitenteil links und rechts Side panel left and right				A3
Checked 09.09.2013	Zurkan, O.	Drawing No.				Rev.
Approved 09.09.2013	Lotz, R.	BD-1009610-P-000				Sheet 1 of 1
FR	Prev. Dwg.	Repl. for				



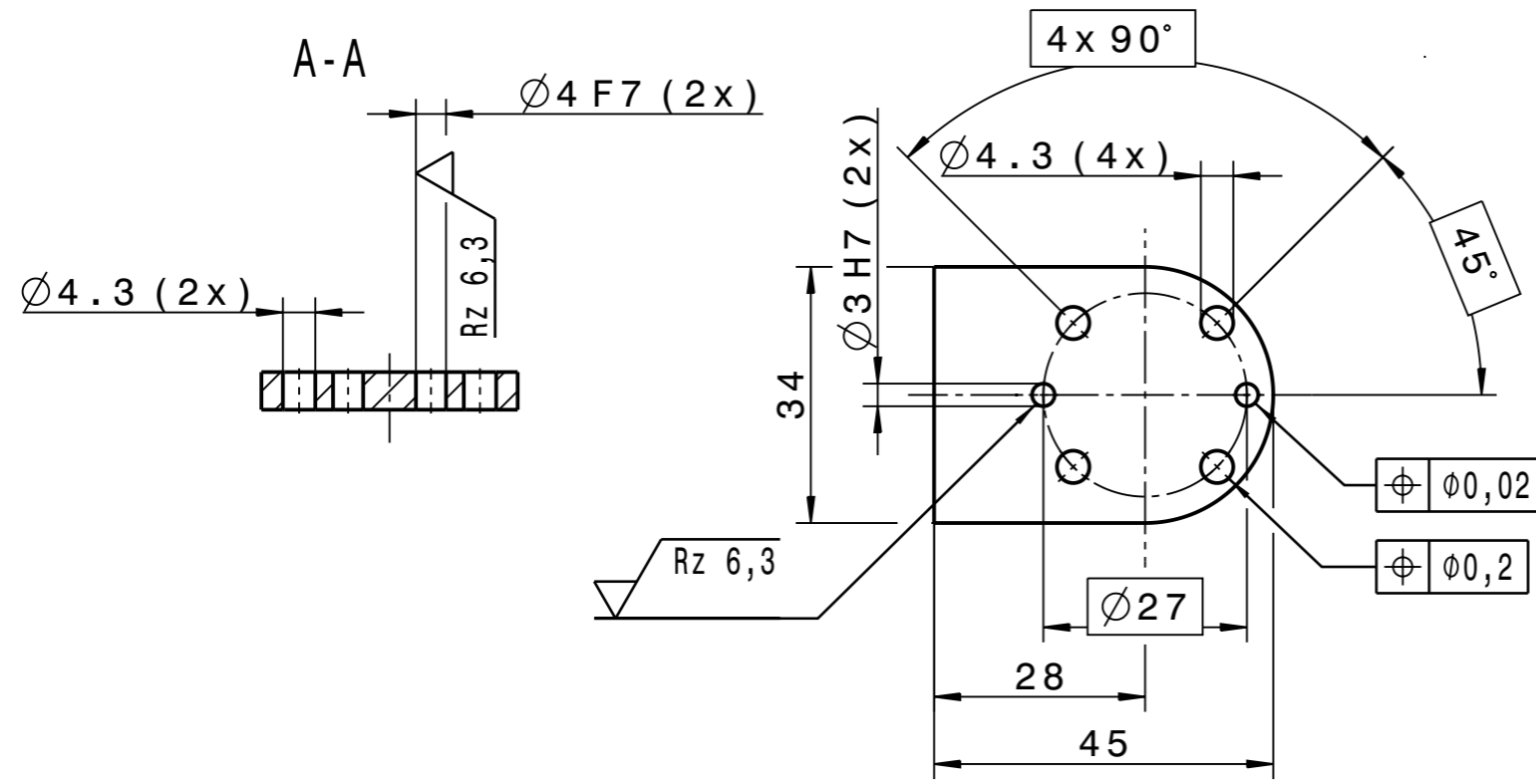
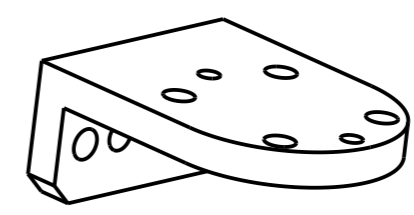
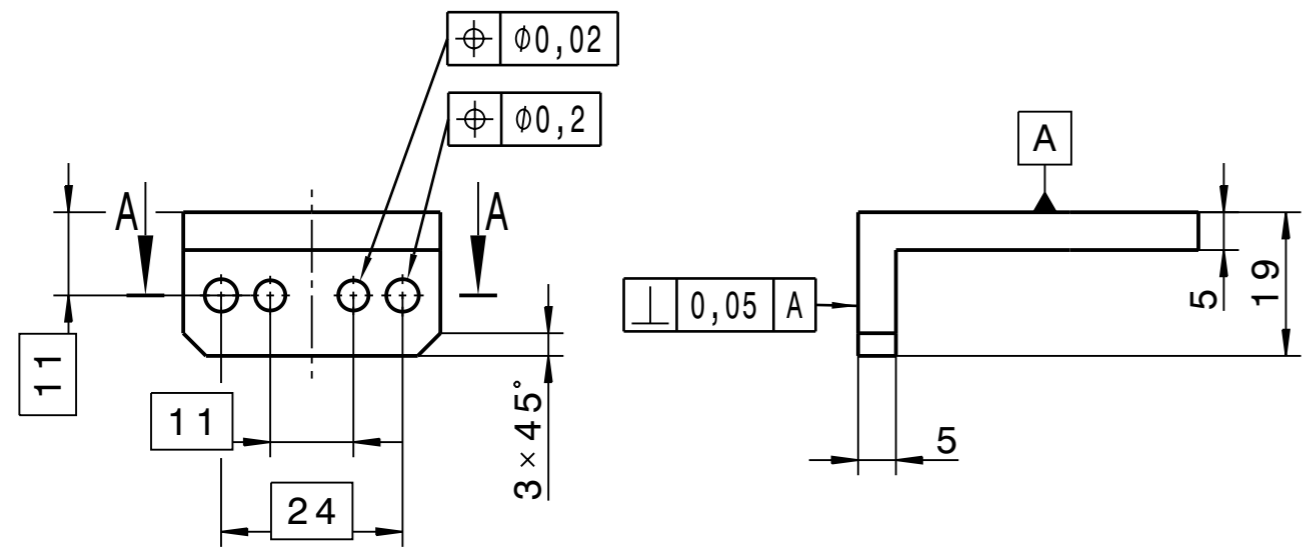
Technische Richtlinien / Technical guidelines
 aktuellen Stand beachten / take note of current status

Nr. / No.	Benennung / Description
F-TG-V-2.5e	Vacuum firing for hydrogen degassing of materials and UHV vacuum chambers
F-TG-V-6.2e	Cleaning of standard Vacuum components



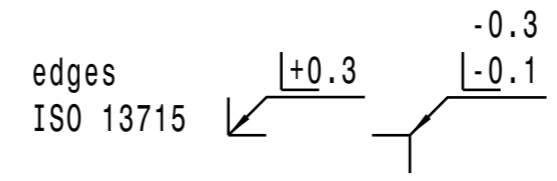
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GSIT Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Surfaces	Approved														
		DIN ISO 1302															
Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF		Weight	2:1														
		Material 1.4301 (X5CrNi18-10)															
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Approved	09.09.2013	Lotz, R.															
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FR		Drawing No.	Rev.	Sheet 1 of 1													
		BD-1009611-P-000	-														
		Prev. Dwg.	Repl. for														

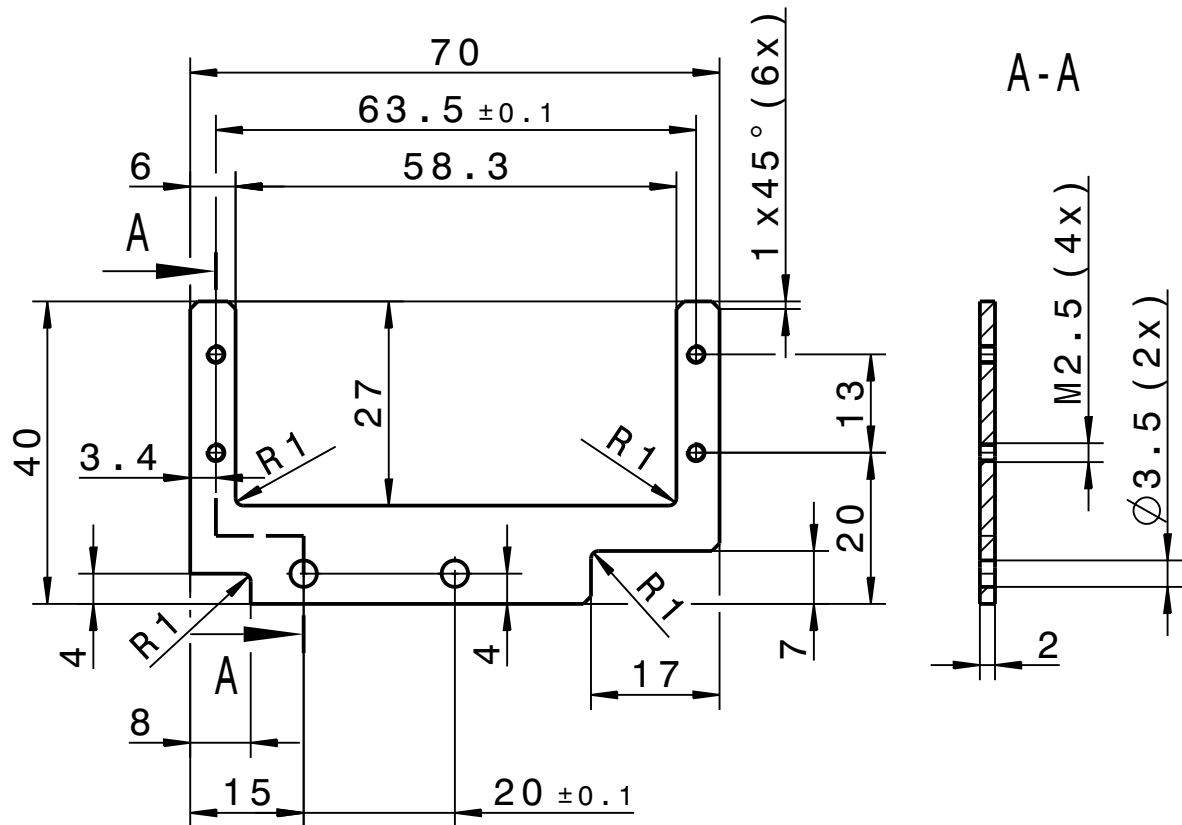


Technische Richtlinien / Technical guidelines
 aktuellen Stand beachten / take note of current status

Nr. / No.	Benennung / Description
F-TG-V-2.5e	Vacuum firing for hydrogen degassing of materials and UHV vacuum chambers
F-TG-V-6.2e	Cleaning of standard Vacuum components



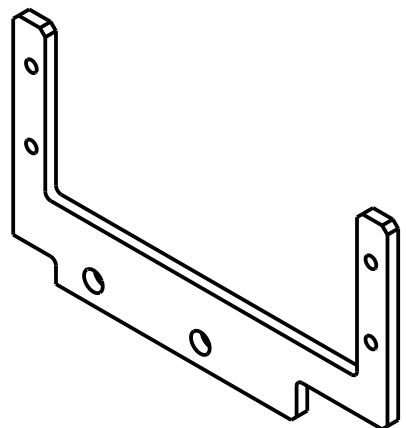
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		Surfaces	Approved			
Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		DIN ISO 1302				
		DIN ISO 2768-mK EN ISO 13920-BF	Material	1:1		
Description		Description		Size		
Drawn	Date	Name	Befestigungswinkel		A3	
Checked	09.09.2013	Zurkan, O.	Mounting bracket			
Approved	09.09.2013	Lotz, R.	Drawing No.		Sheet 1 of 1	
		BD-1009638-P-000		Rev.		
FR		Prev. Dwg.		Repl. for		



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Nr. / No.	Benennung / Description
F-TG-V-2.5e	Vacuum firing for hydrogen degassing of materials and UHV vacuum chambers
F-TG-V-6.2e	Cleaning of standard Vacuum components

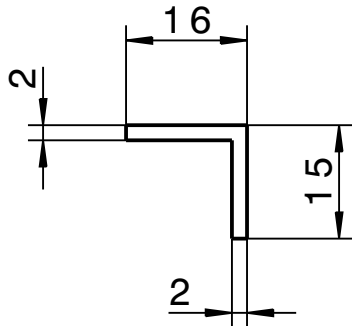
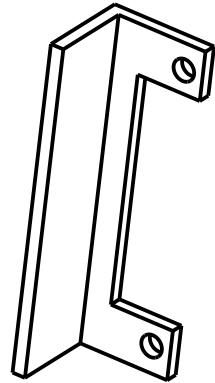
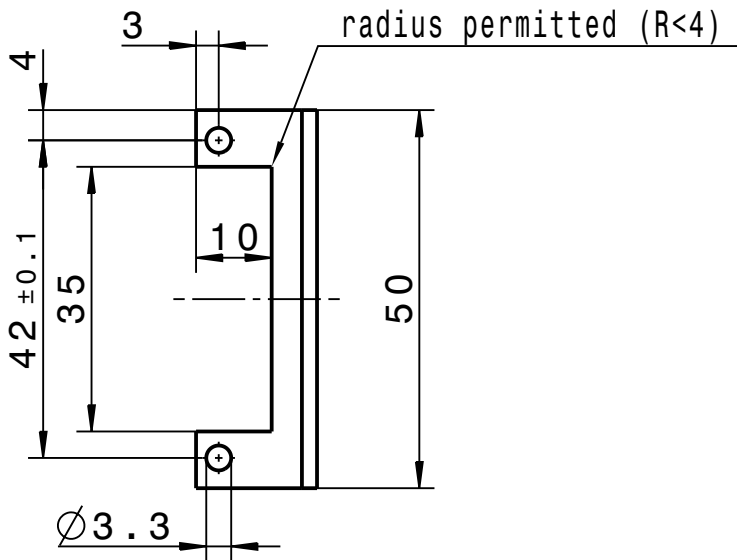


edges ISO 13715

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Rz 25

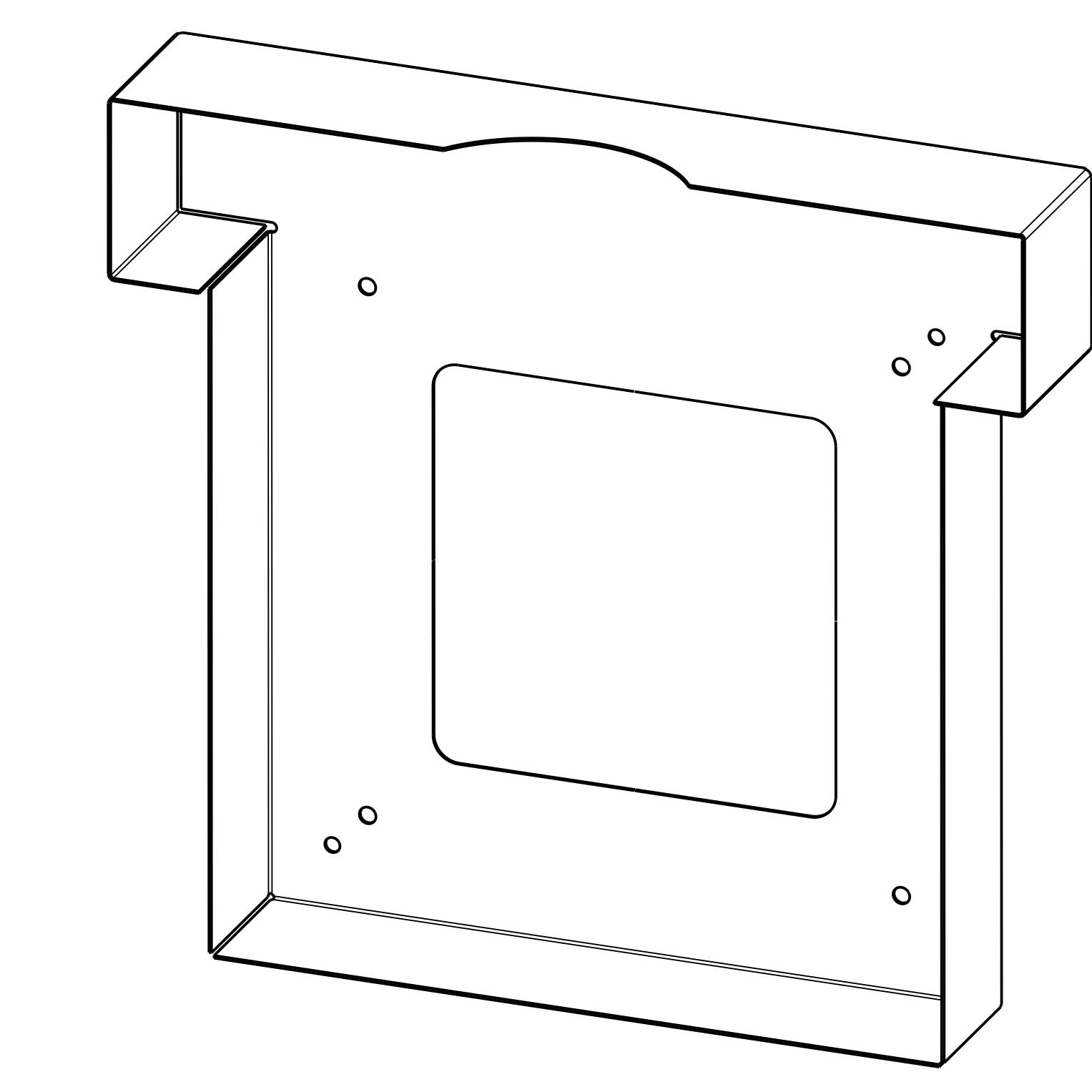
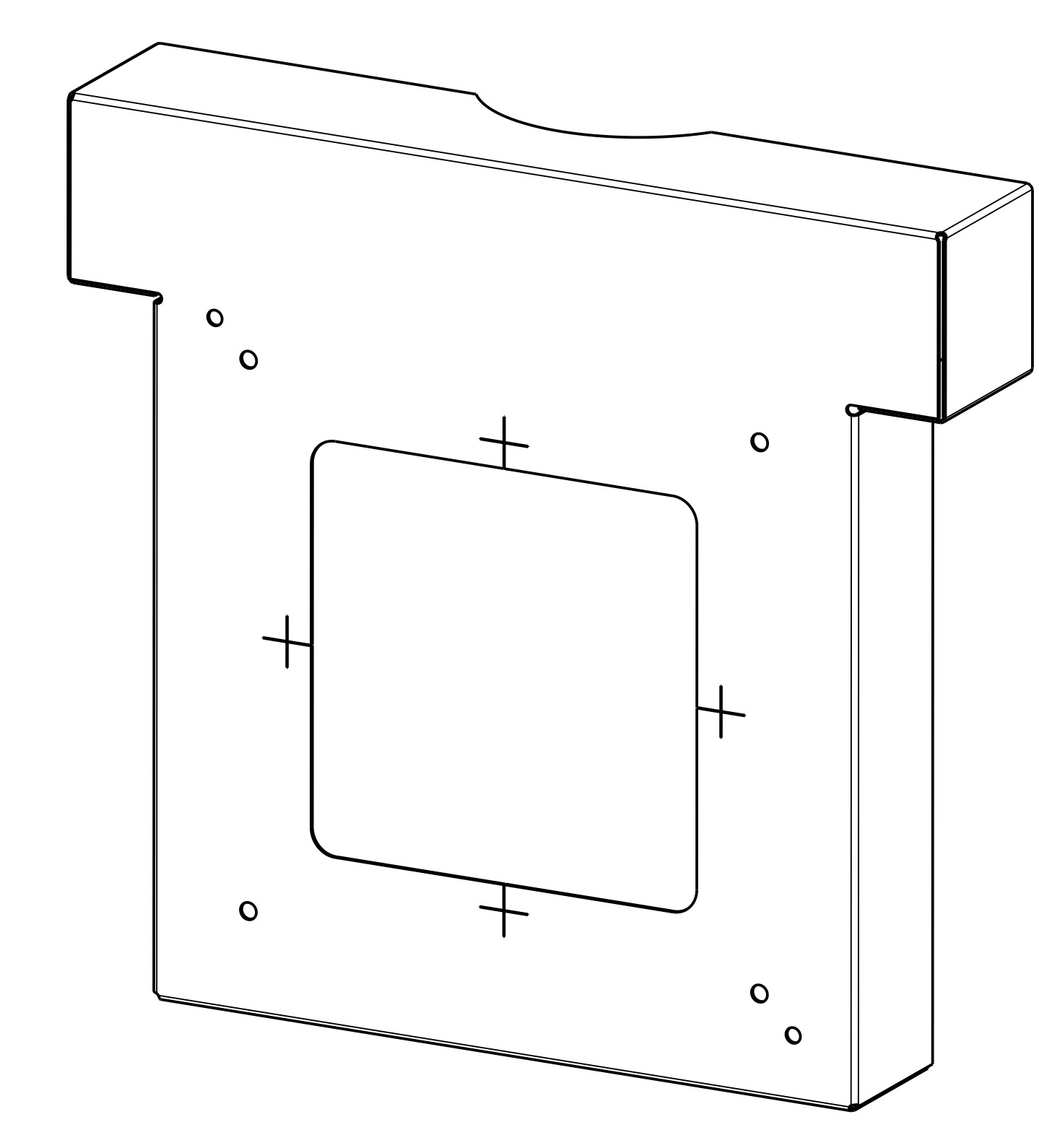
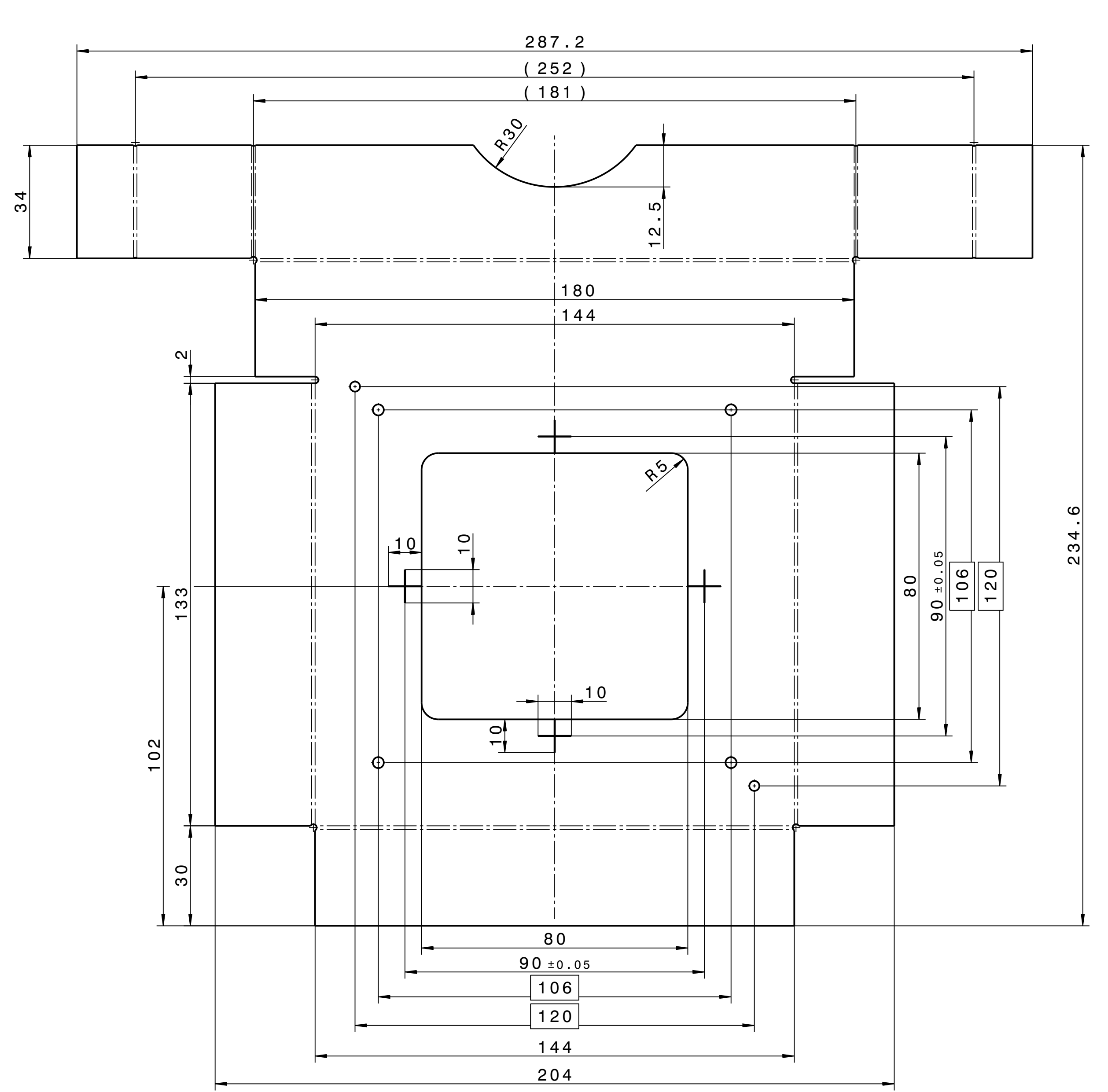
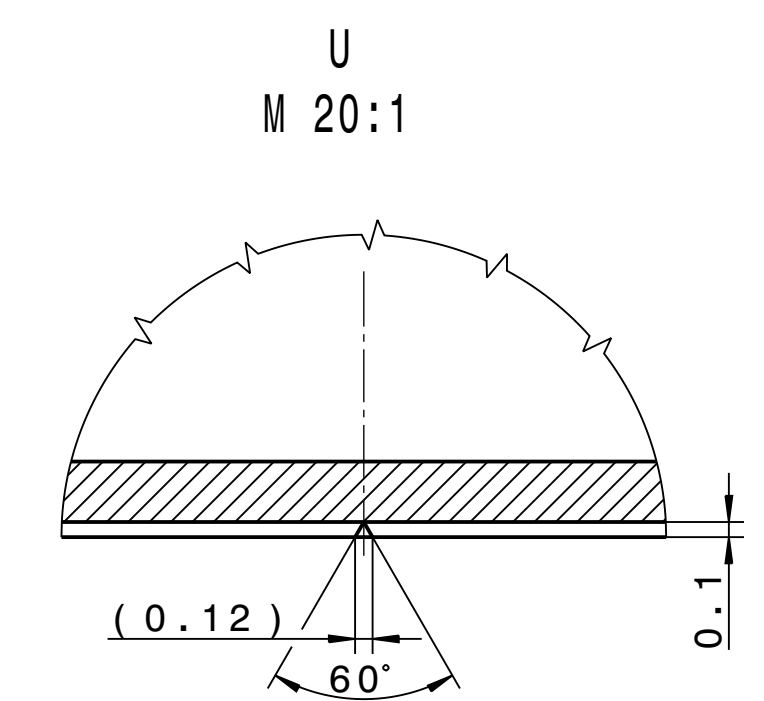
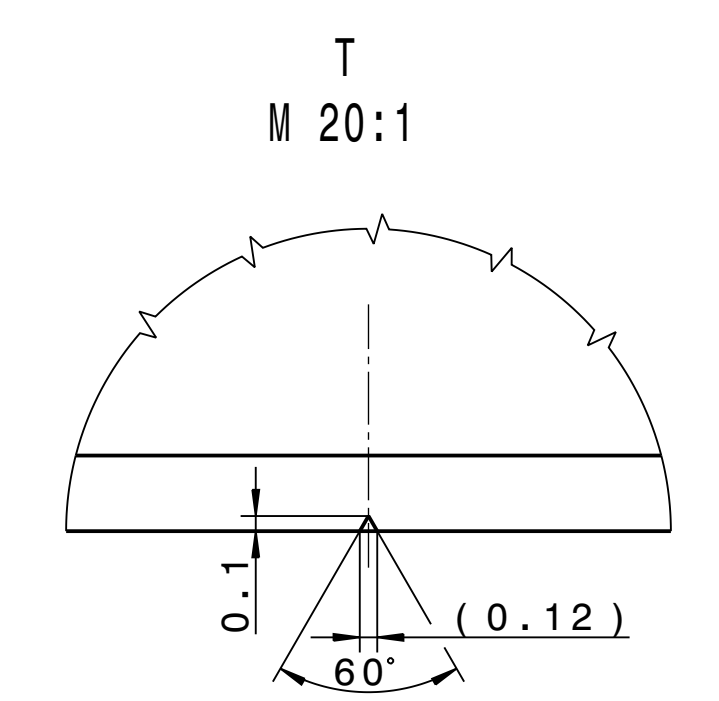
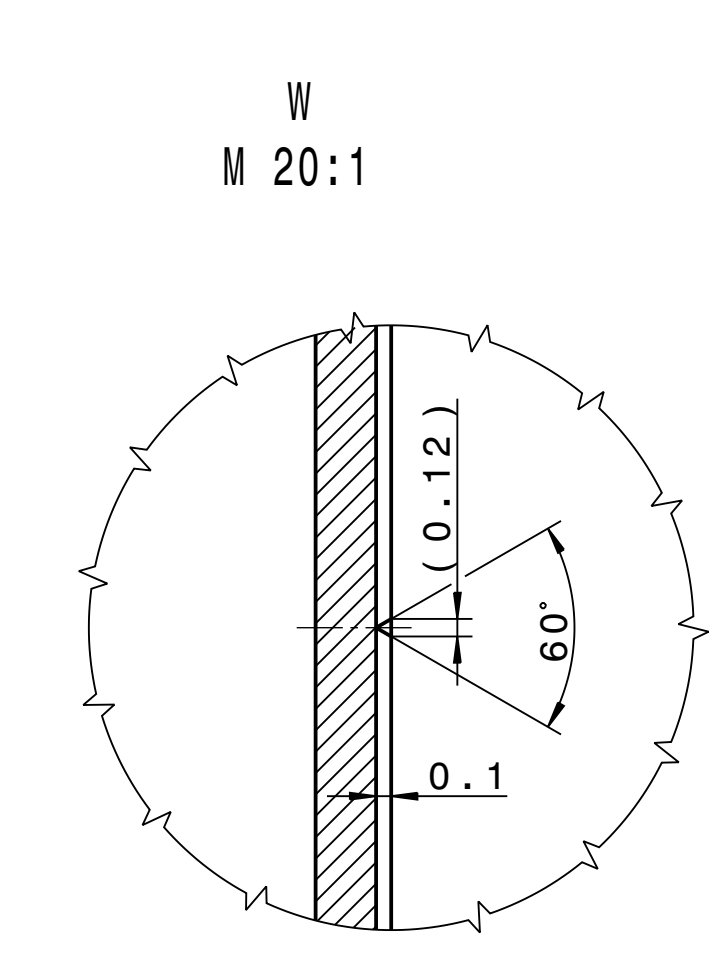
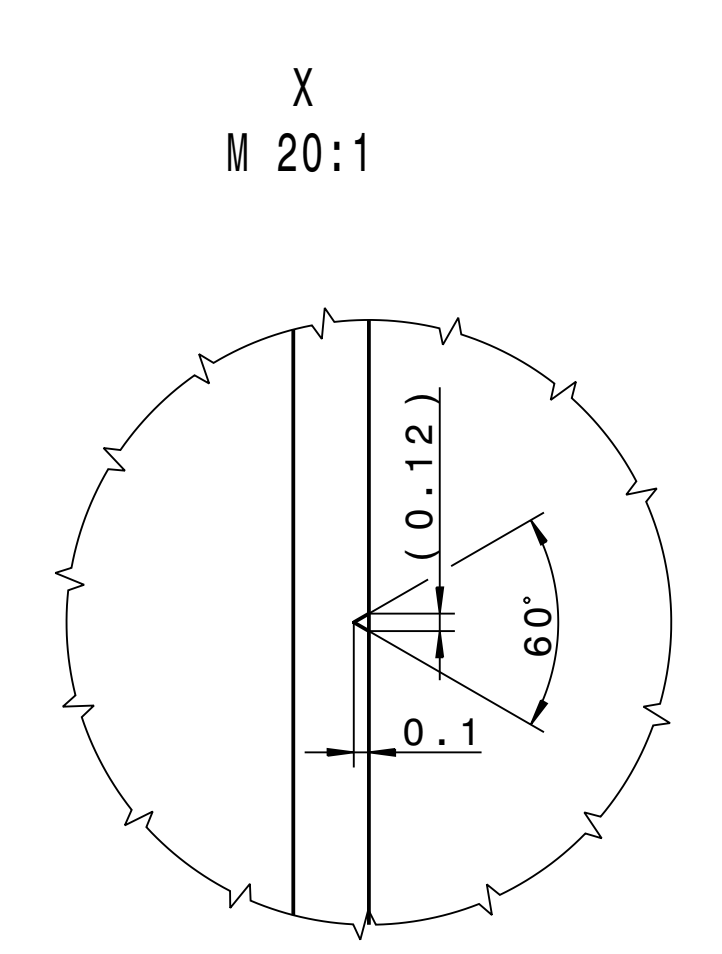
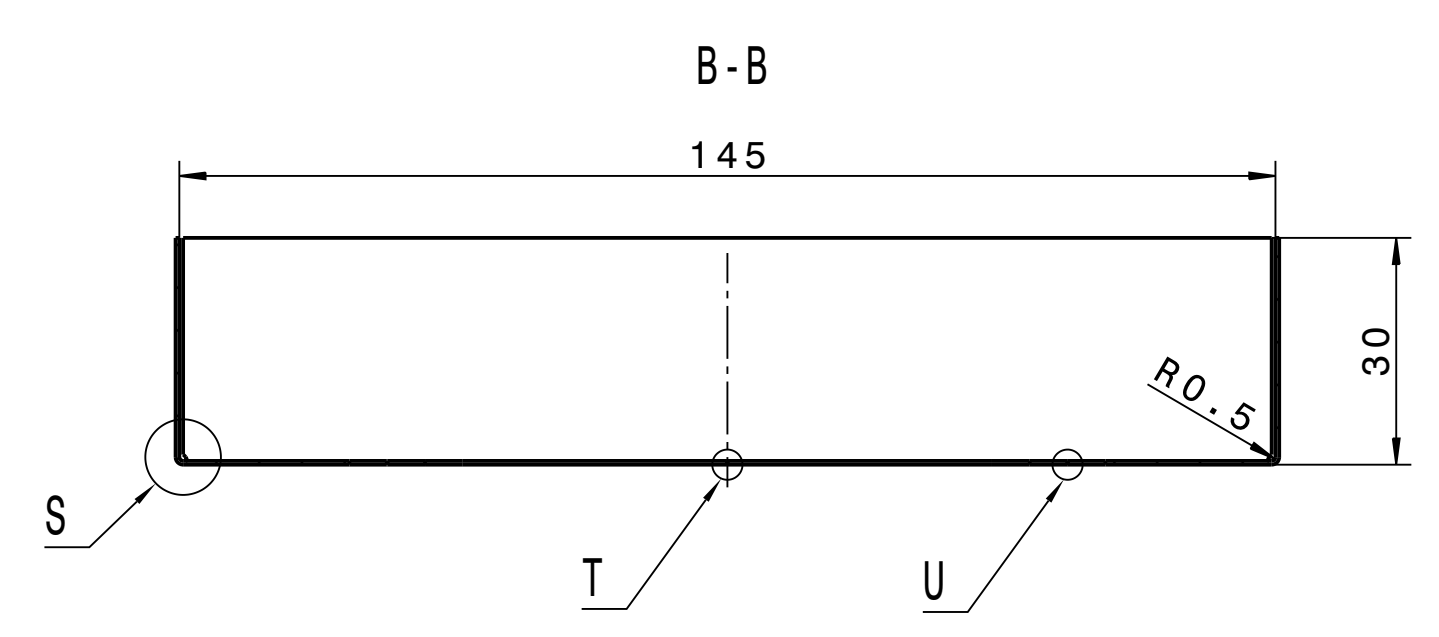
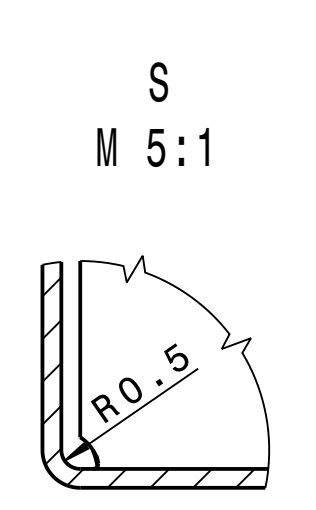
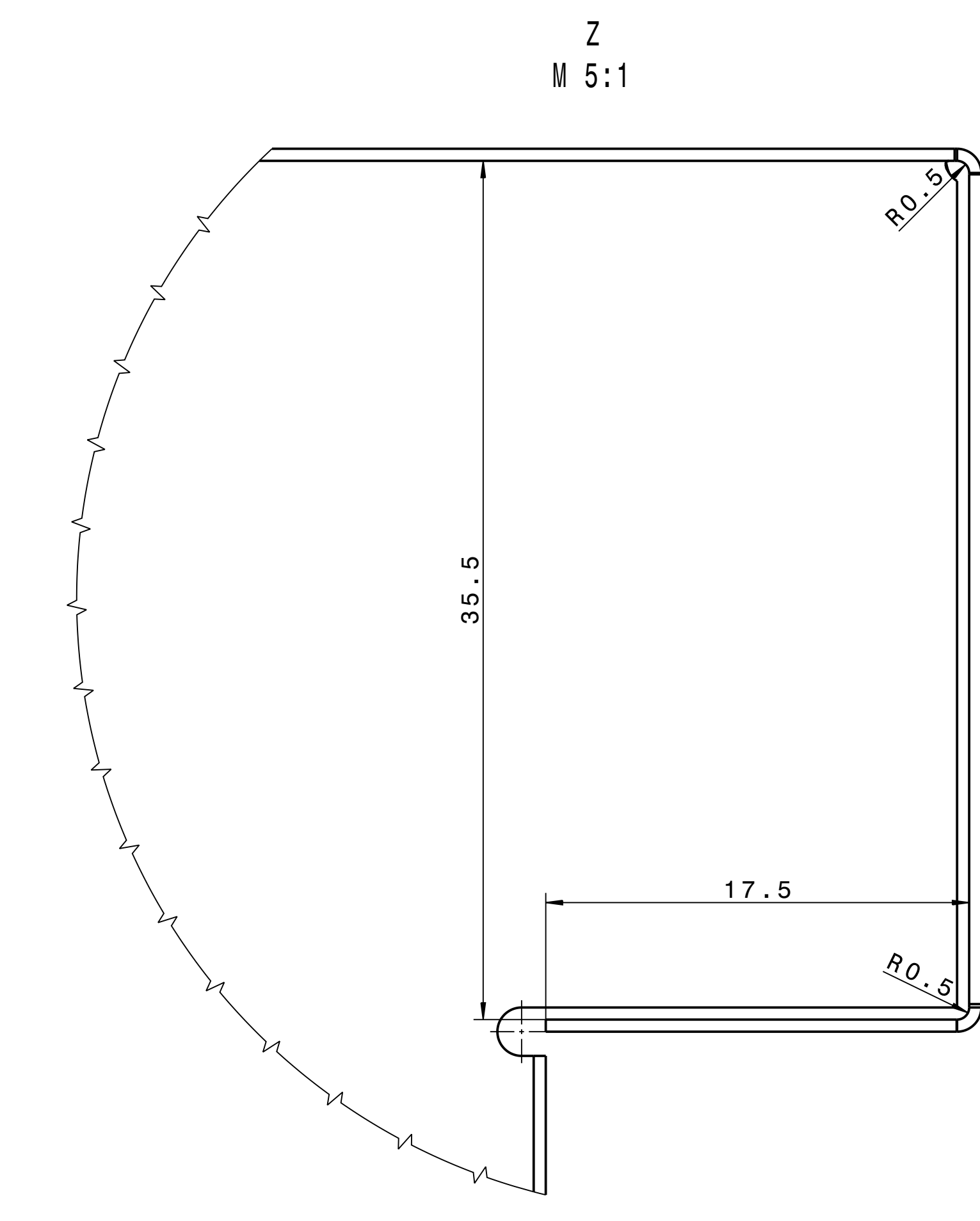
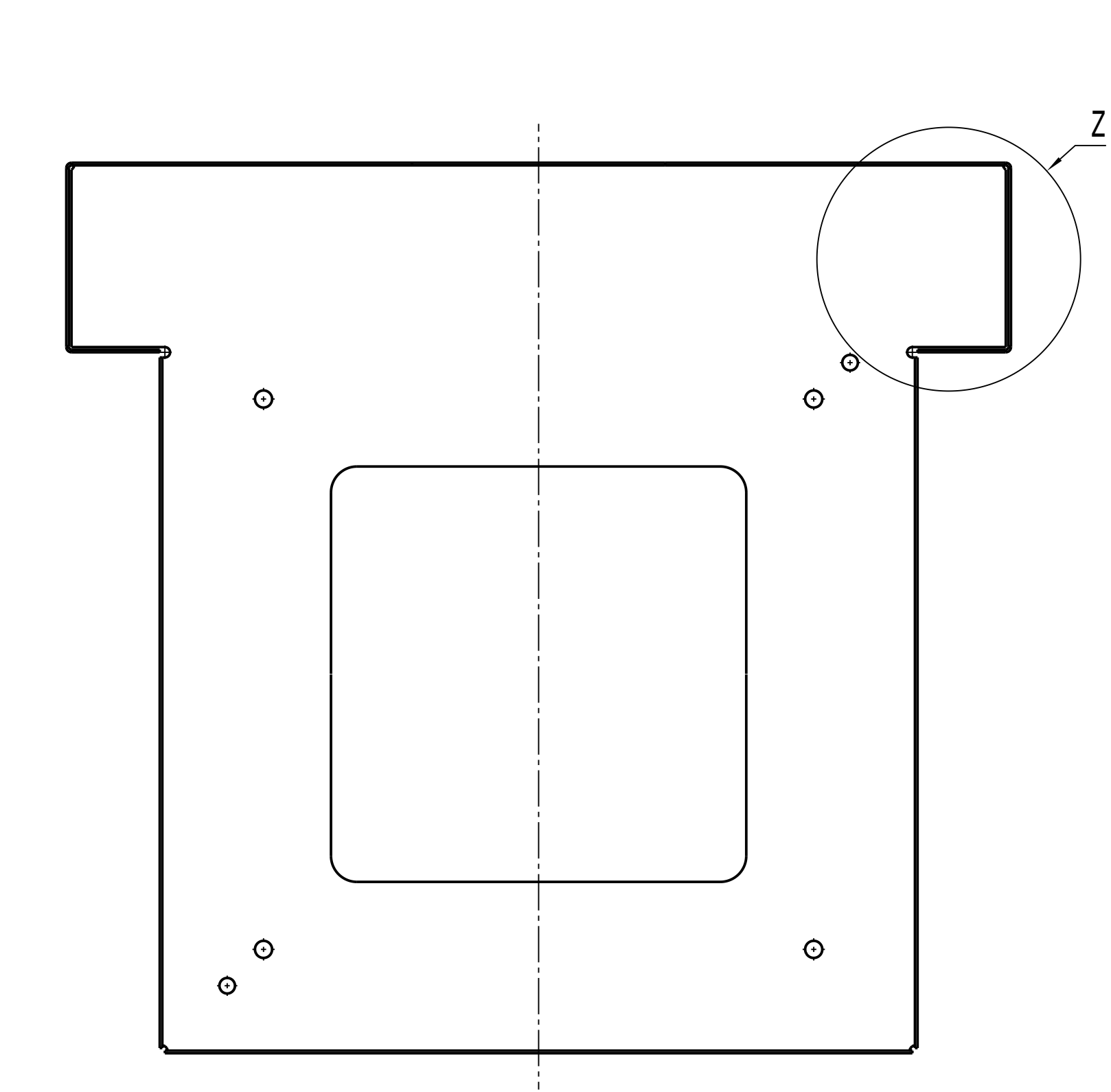
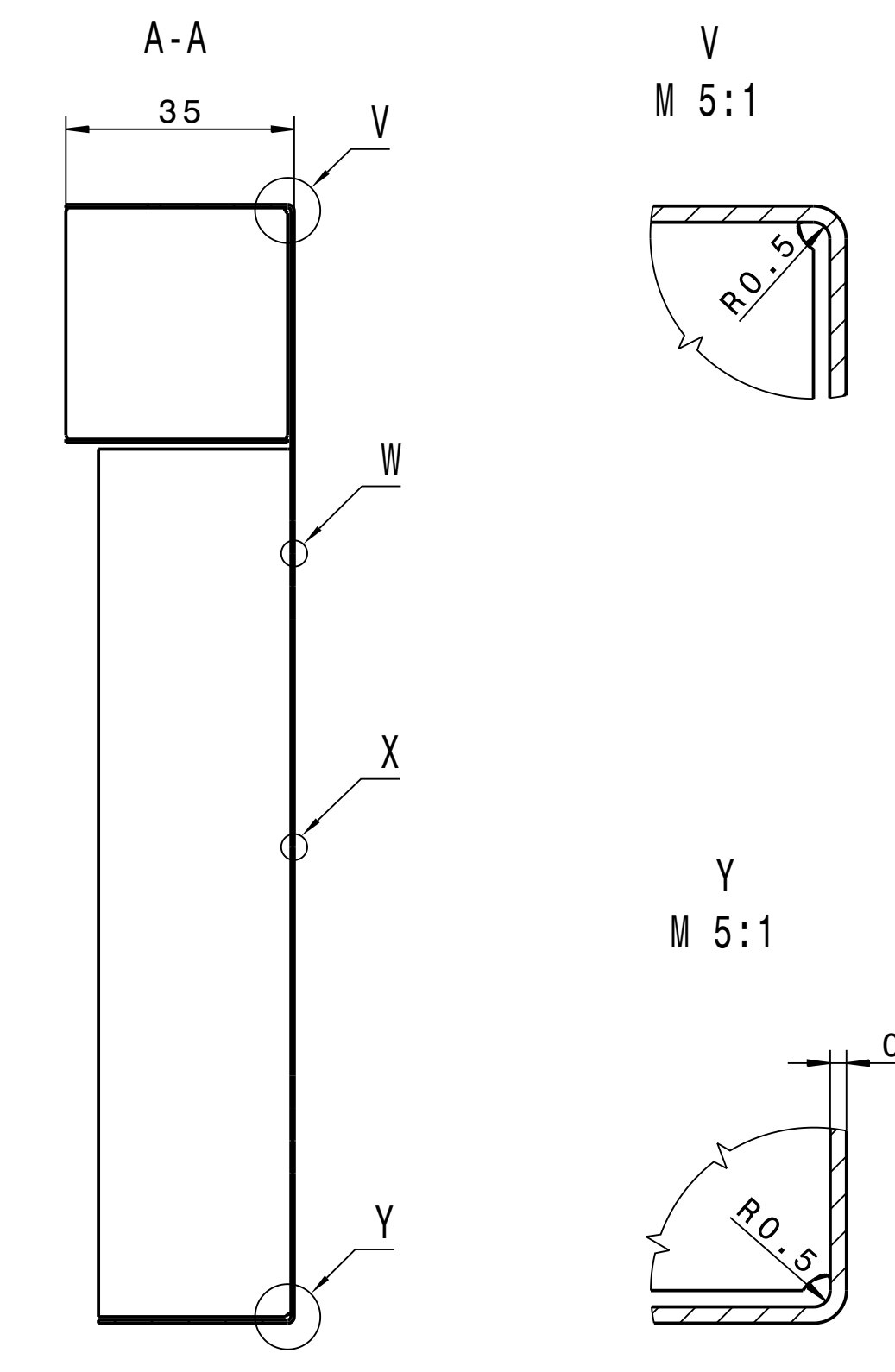
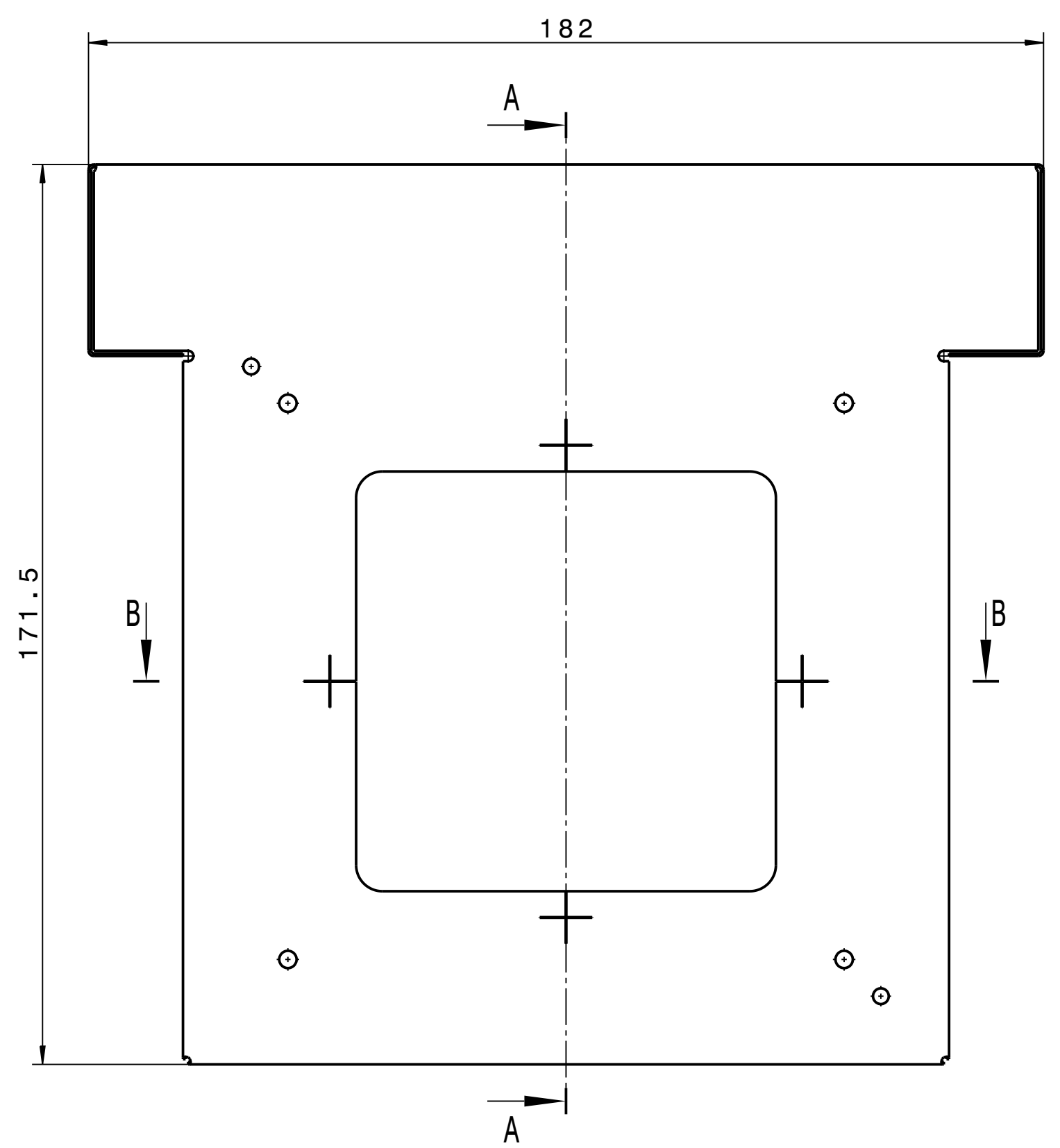
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		Surfaces DIN ISO 1302	Approved			
 Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF	Weight Material 1.4301 (X5CrNi18-10)	Scale 1:1		
		Date Name	Description Steckerhalter Plug holder			Size A4
Drawn 25.06.2013 Gleim, M.	Checked 09.09.2013 Zurkan, O.	Approved 09.09.2013 Lotz, R.	Drawing No. BD-1009668-P-000		Rev. -	Sheet 1 of 1
FR	Prev. Dwg.		Repl. for			



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aktuellen Stand beachten / take note of current status	
Nr. / No.	Benennung / Description
F-TG-V-6.2e	Cleaning of standard Vacuum components

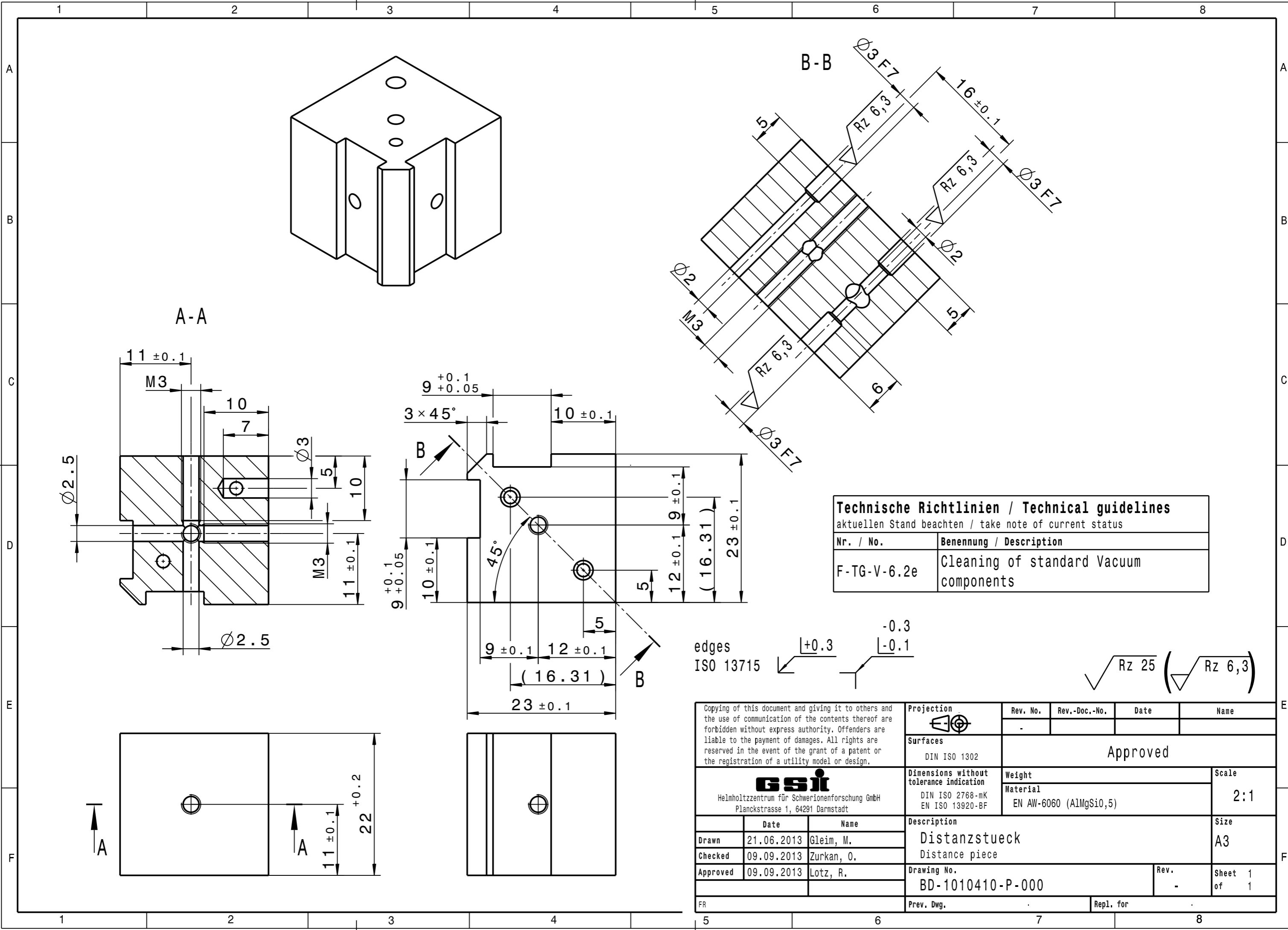
Kanten
ISO 13715

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	Surfaces DIN ISO 1302	Approved			
 Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt	Dimensions without tolerance indication DIN ISO 2768-mK EN ISO 13920-BF	Weight	Scale 1:1		
		Material EN AW-6060 (AlMgSi0,5)			
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Drawn	15.05.2013	Gleim, M.	Winkel		A4
Checked	09.09.2013	Zurkan, O.	Bracket		
Approved	09.09.2013	Lotz, R.	Drawing No. BD-1009669-P-000		Rev. -
FR	Prev. Dwg.		Repl. for		



Technische Richtlinien / Technical guidelines	
aktuellem Stand beachten / take note of current status	
Nr. / No.	Benennung / Description
F-TG-V-2.5e	Vacuum firing for hydrogen degassing of materials and UHV vacuum chambers
F-TG-V-6.2e	Cleaning of standard Vacuum components

edges		+0.1	-0.1	√ Rz 25
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Projection	ISO 13715	Rev. No.	Rev.-No.-No.	Date
Surfaces	ISO 1300	Approved		Scale
Dimensions without tolerance indication	EN ISO 1798-04	Weight	1.4001 (XSCNi10-10)	1:1 (S-1)
Material	EN ISO 1798-04	Material	1.4001 (XSCNi10-10)	(S-1) (20:1)
Manufacturer	ESB	Part No.	BD-1009729-P-000	Sheet 1 of 1
Date	21.09.2013	Drawn	Lotz, R.	
Checked	09.09.2013	Checked	Lotz, R.	
Approved	09.09.2013	Approved	Lotz, R.	
Part No.	BD-1009729-P-000	Rev.		
Part No.		Part No.		



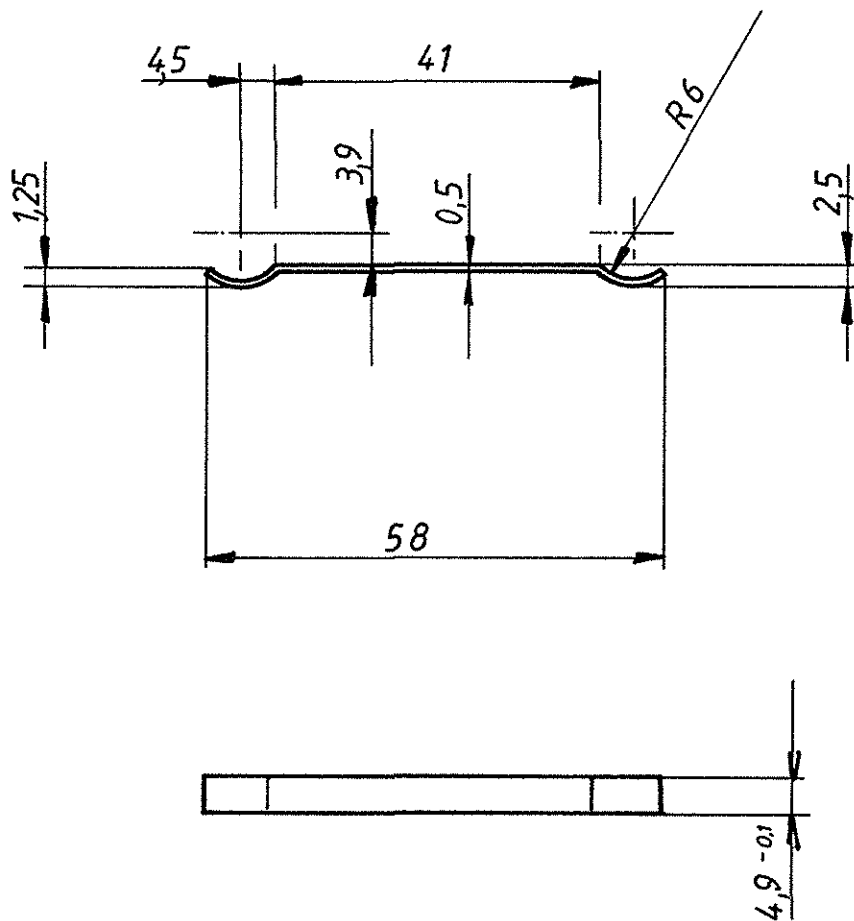
Technische Richtlinien / Technical guidelines	
aktuellen Stand beachten / take note of current status	
Nr. / No.	Benennung / Description
F-TG-V-6.2e	Cleaning of standard Vacuum components

edges
ISO 13715

$+0.3$ -0.3
 -0.1

$\sqrt{Rz 25}$ ($\sqrt{Rz 6,3}$)

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		Surfaces	Approved			
GSIT Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Dimensions without tolerance indication	Weight	Scale		
		DIN ISO 2768-mK EN ISO 13920-BF	EN AW-6060 (AlMgSi0,5)	2:1		
Drawn 21.06.2013 Gleim, M. Checked 09.09.2013 Zurkan, O. Approved 09.09.2013 Lotz, R.		Description			Size	
		Distanzstueck Distance piece			A3	
FR		Drawing No. BD-1010410-P-000			Rev.	Sheet 1 of 1
		Prev. Dwg.			Repl. for	

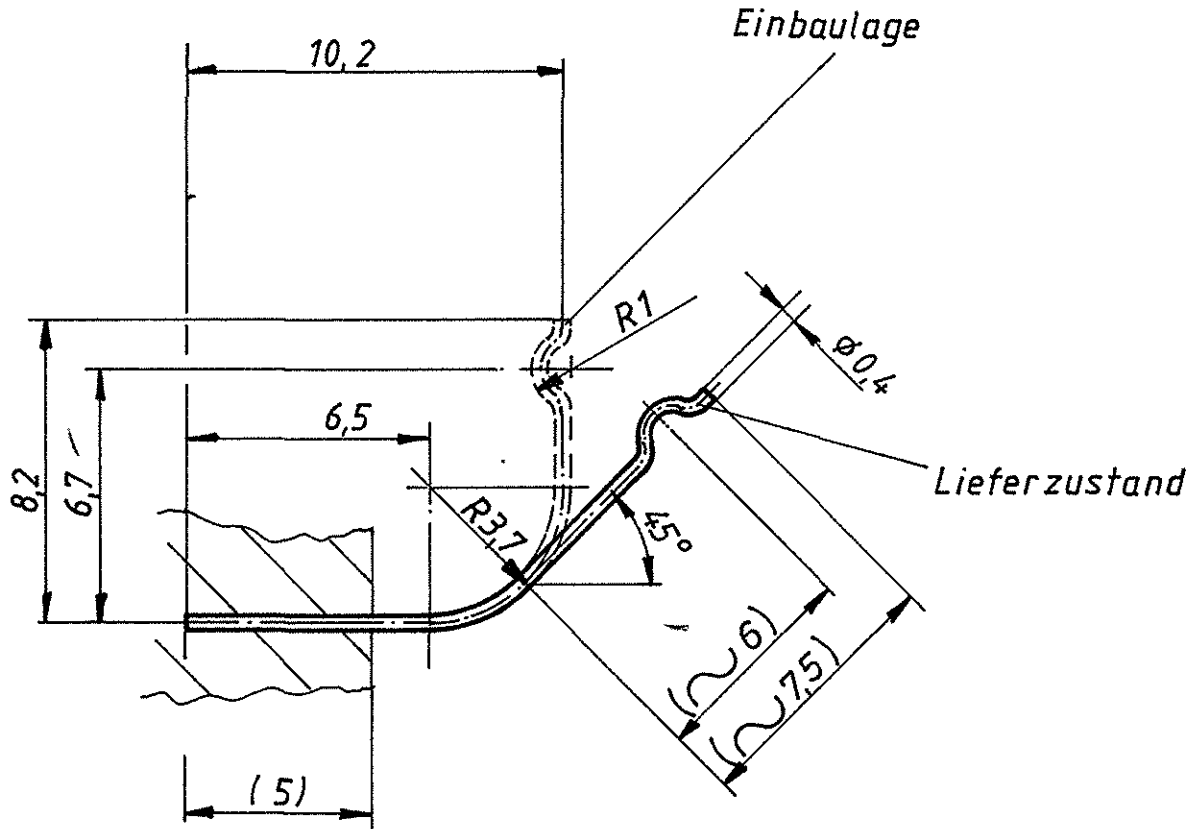


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 werden, sie darf durch den Empfänger oder Dritte auch nicht in anderer Weise
 abbildlich verwendet werden. Zuwiderhandlungen verpflichten zu Schadener-
 satz und können strafrechtliche Folgen haben.

entgratet		Freimaß- toleranzen DIN 7168 m	Gewicht kg / Stck	Werkstoff 1.43 10 hart	Maßstab 1:1
Oberfl nach DIN 3141, Reihe 2					
~	▽	1380	Tag	Feder	Blatt - Nr
▽	vak	Bearb	Name		Blattanzahl
▽	▽	Gepr			
▽	▽	Norm			
		GSI DARMSTADT		DG 070.000. 140	
Aus- gabe	Anderung			Tag	Name

Federdraht nach dem Biegen 2h bei 600°C im Vakuumofen oder unter Schutzgas aushärten und langsam erkalten lassen.



M 1:1

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entgratet		Freimaßtoleranzen		Gewicht		Werkstoff		Maßstab	
Oberfl nach DIN 3141, Reihe 2		DIN		kg / Stck		Duratherm 600		5:1	
~		7168 m						(1:1)	
▽		1980		Tag		Name		Blatt - Nr	
▽		Bearb		U. M.		Klein		Blattanzahl	
▽		Gepr		U. M.		Klein			
▽		Norm		U. M.		Klein			
a		21.7.		GSI		DG 140.000.040			
Ausgabe		Änderung		Tag		Name		Ersatz für	
						DARMSTADT		Ersetzt durch	