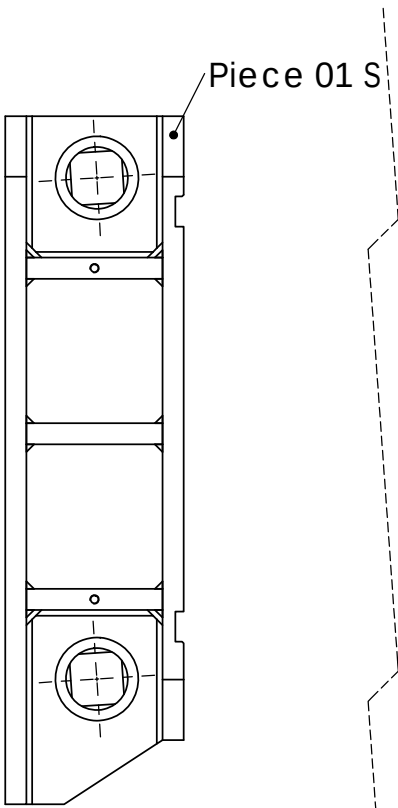
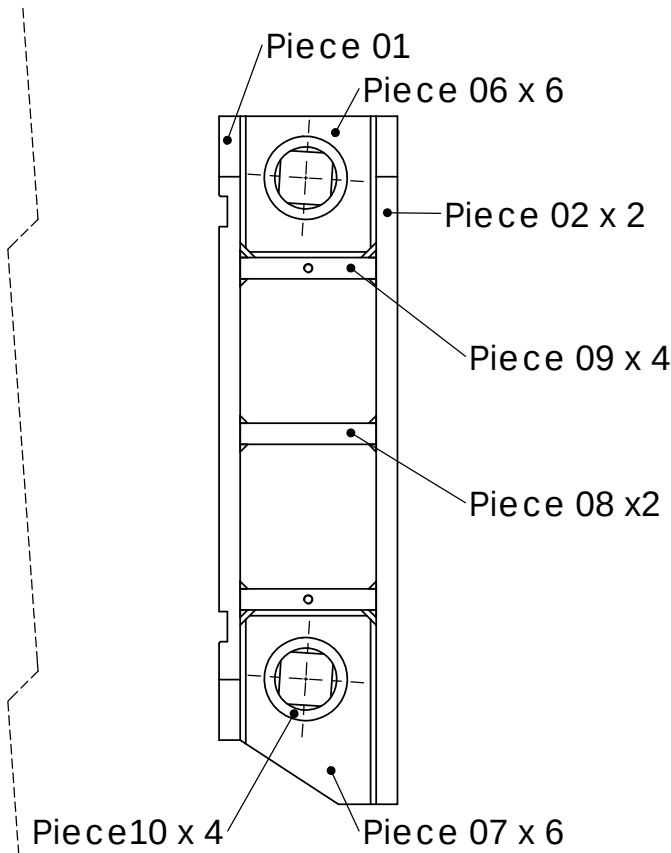
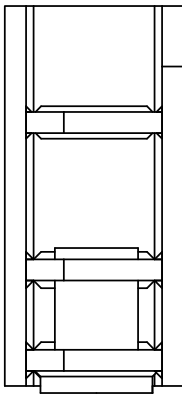




Driving and Driving system
symmetric frame

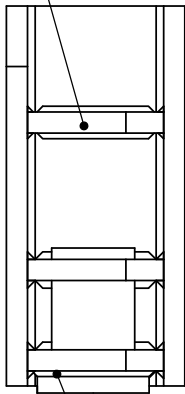


Driving and Driving
system frame



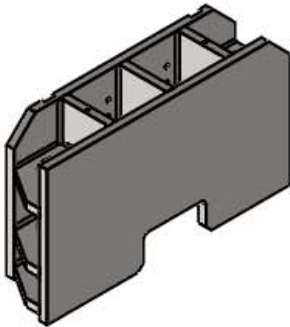
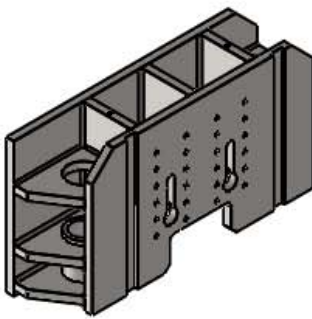
Fillet weld,
doubletee joint 7,5 mm

4 pieces



Fillet weld, tee joint 7,5 mm

4 pieces



Isometric view
Scale 1:20

Manufacturing notes

- 1) Pre-machining to weld the pieces
- 2) Weld the part
- 3) Weld non-destructive testing
- 4) Stress-relief after welding
- 5) Shoot peening
- 6) Primed coating
- 7) Final machining

Welding

All the pieces are welded.

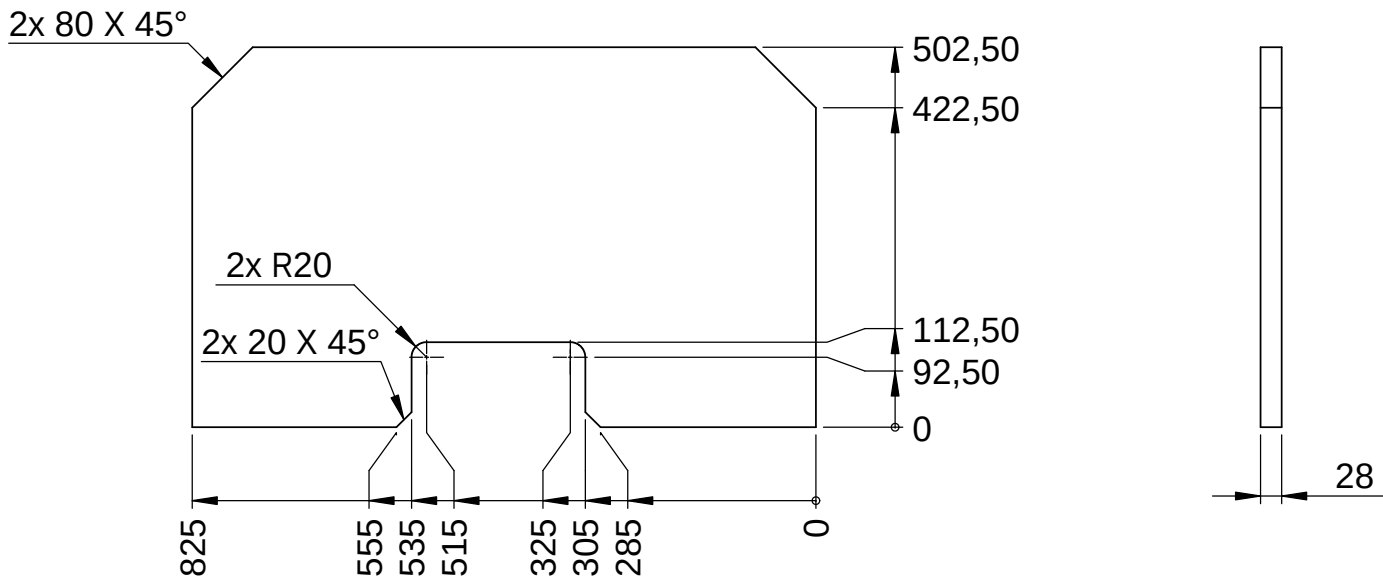
In general fillet welds,
Type: double tee joint / 10 mm

More details in the 3D file.

1.0	Minor modifications					RGG	26/10/15
0.0	Initial issue					RGG	06/05/15
Rev.	MODIFICATION					NAME	DATE
Drawn:	Approved :	Project	Document type	Description			
RGG		CTA-LST	Part	Guiding System Frame			
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number	
				Quantity	4	147.011.1189	
		Wght(kg)	565				
		RAL					
		 A3	Scale 1:10	All dimensions mm	Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:		
This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.							

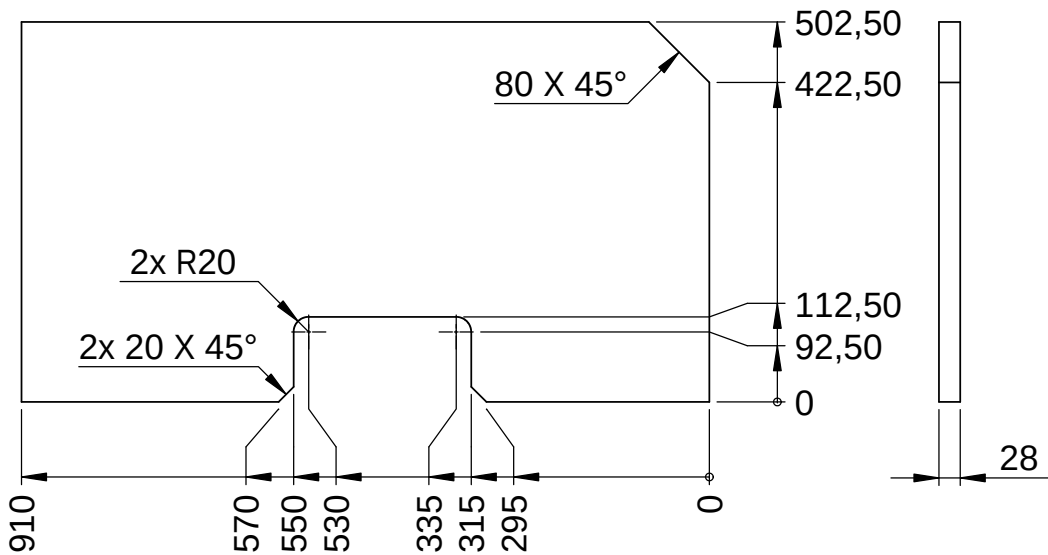
Piece 01

Unit/s: 2
Supply: 828 mm x 505 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 83,4 kg
Note: Before final machining Part 01 and Part 01 S are the same



Part 02

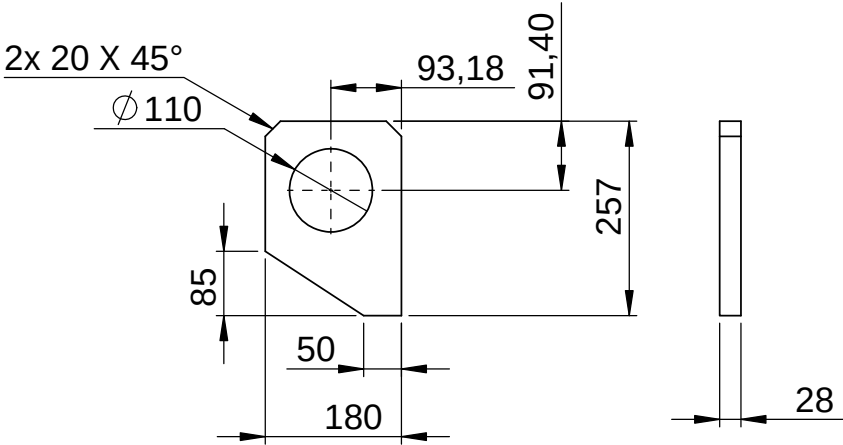
Unit/s: 2
Supply: 913 mm x 505 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 93,3 kg



1.0	Minor modifications		RGG	26/10/15	
0.0	Initial issue		RGG	06/05/15	
Rev.	MODIFICATION			NAME	DATE
Drawn:	Approved :	Project	Document type	Description	
RGG		CTA-LST	Part	Guiding System Frame	
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355
				Quantity	4
				Wght(kg)	565
				RAL	
				Scale	1:10
This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.				All dimensions mm	Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:

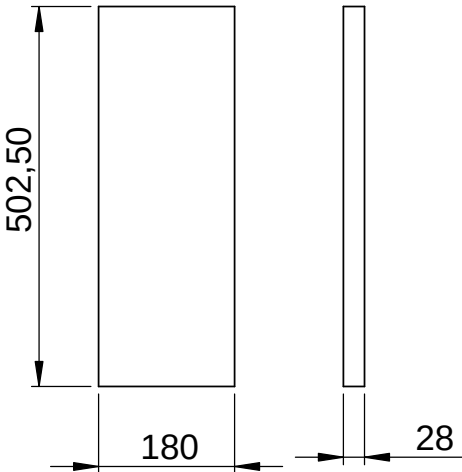
Piece 07

Unit/s: 6
Supply: 261 mm x184mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 6,7 kg



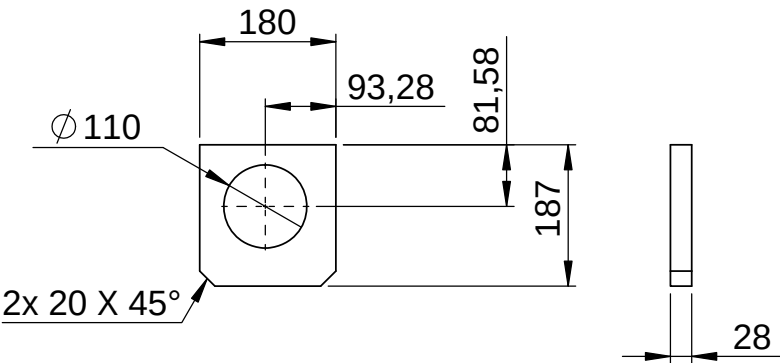
Piece 09

Unit/s: 4
Supply: 506 mm x 184 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 19,8 kg



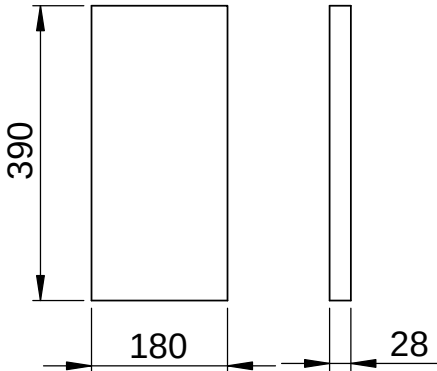
Piece 06

Unit/s: 6
Supply: 191 mm x 184 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 5,2 kg



Piece 08

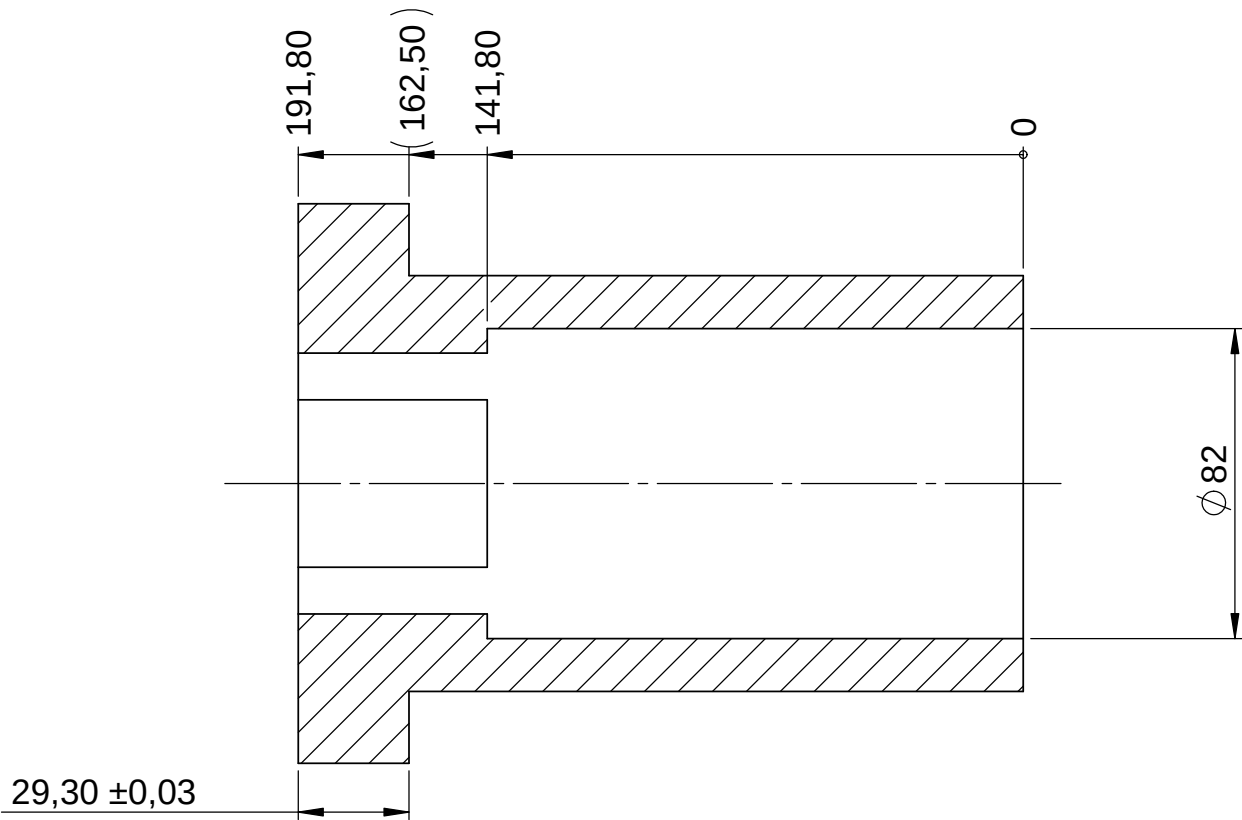
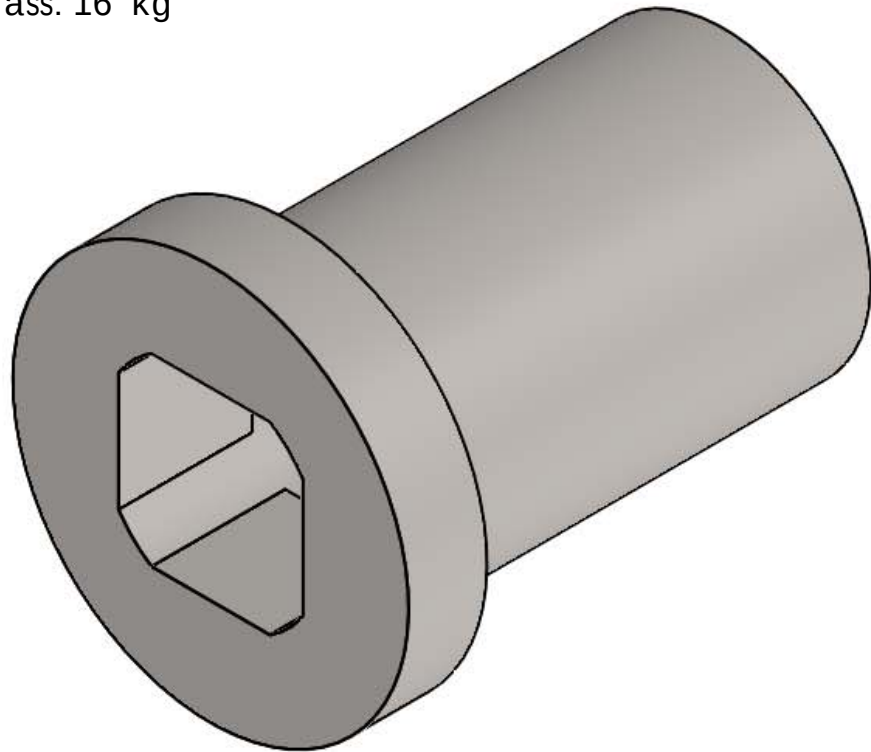
Unit/s: 2
Supply: 394 mm x 184 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 15,3 kg



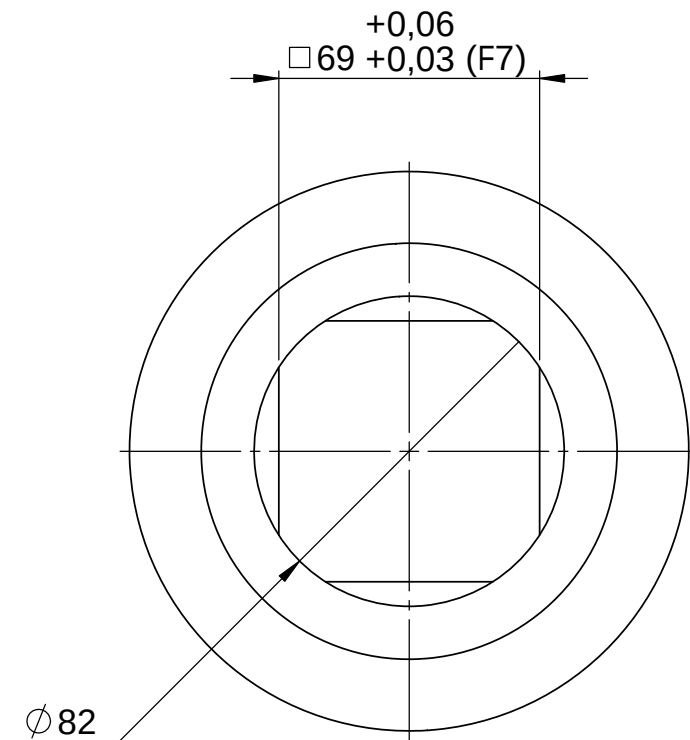
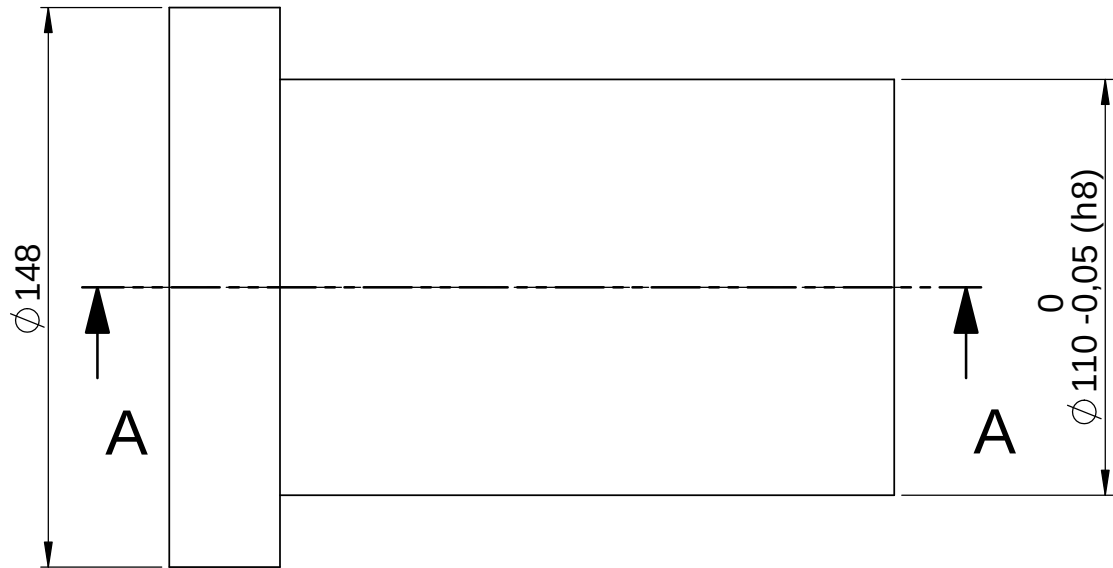
1.0	Minor modifications					RGG	26/10/15	
0.0	Initial issue					RGG	06/05/15	
Rev.	MODIFICATION					NAME	DATE	
Drawn:	Approved :	Project	Document type	Description				
RGG		CTA-LST	Part	Guiding System Frame				
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number		
 Institut de Física d'Altes Energies (IFAE) Edifici Cn, Universitat Autònoma de Barcelona (UAB), E-08193 Bellaterra (Barcelona), Spain www.ifae.es rgarcia@ifae.es				Quantity	4	147.011.1189		
				Wght(kg)	565			
				RAL				
				 A3	Scale 1:10	All dimensions mm	<u>Unless Otherwise State:</u> General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:	
This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.								

Piece 10

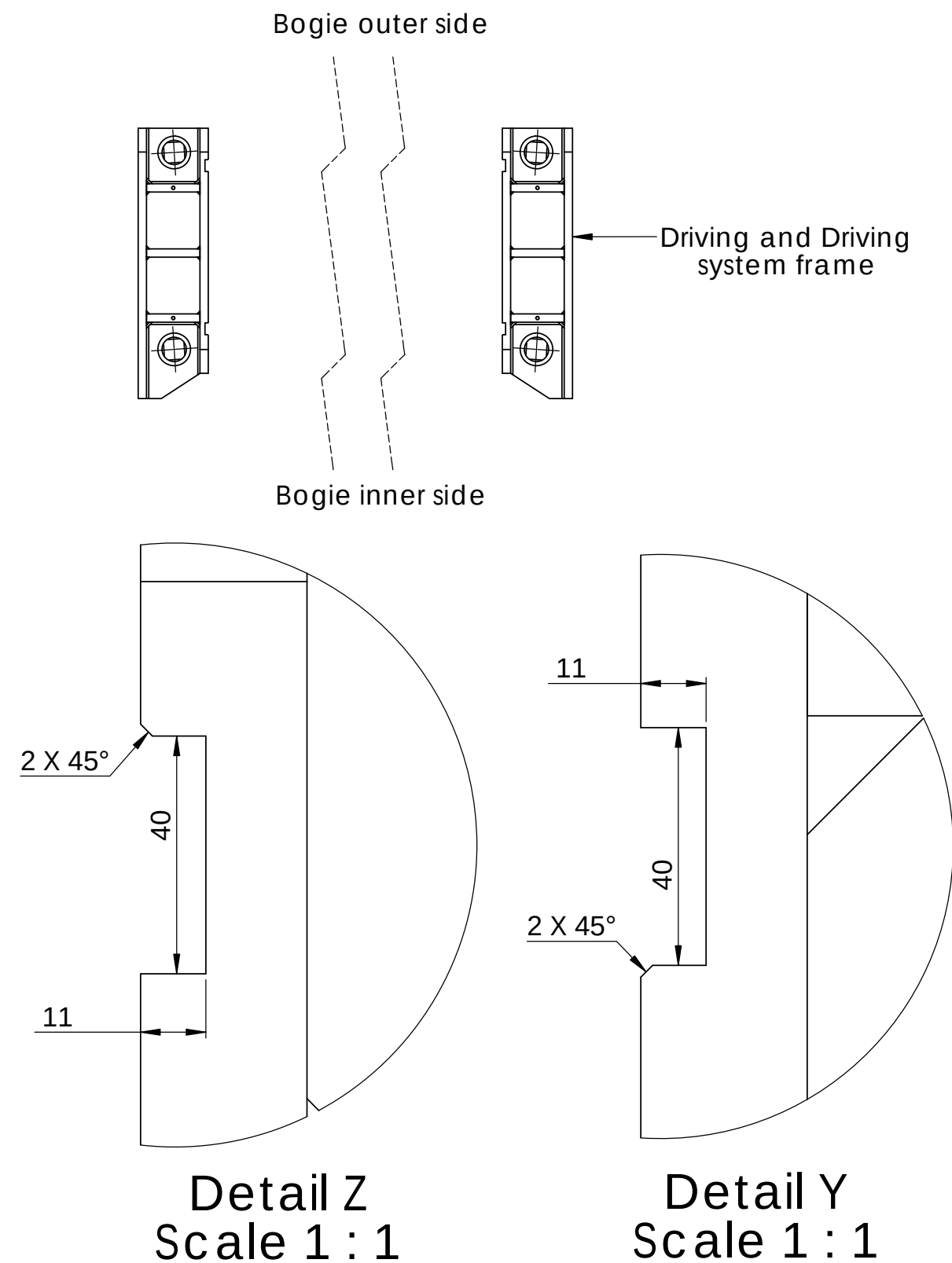
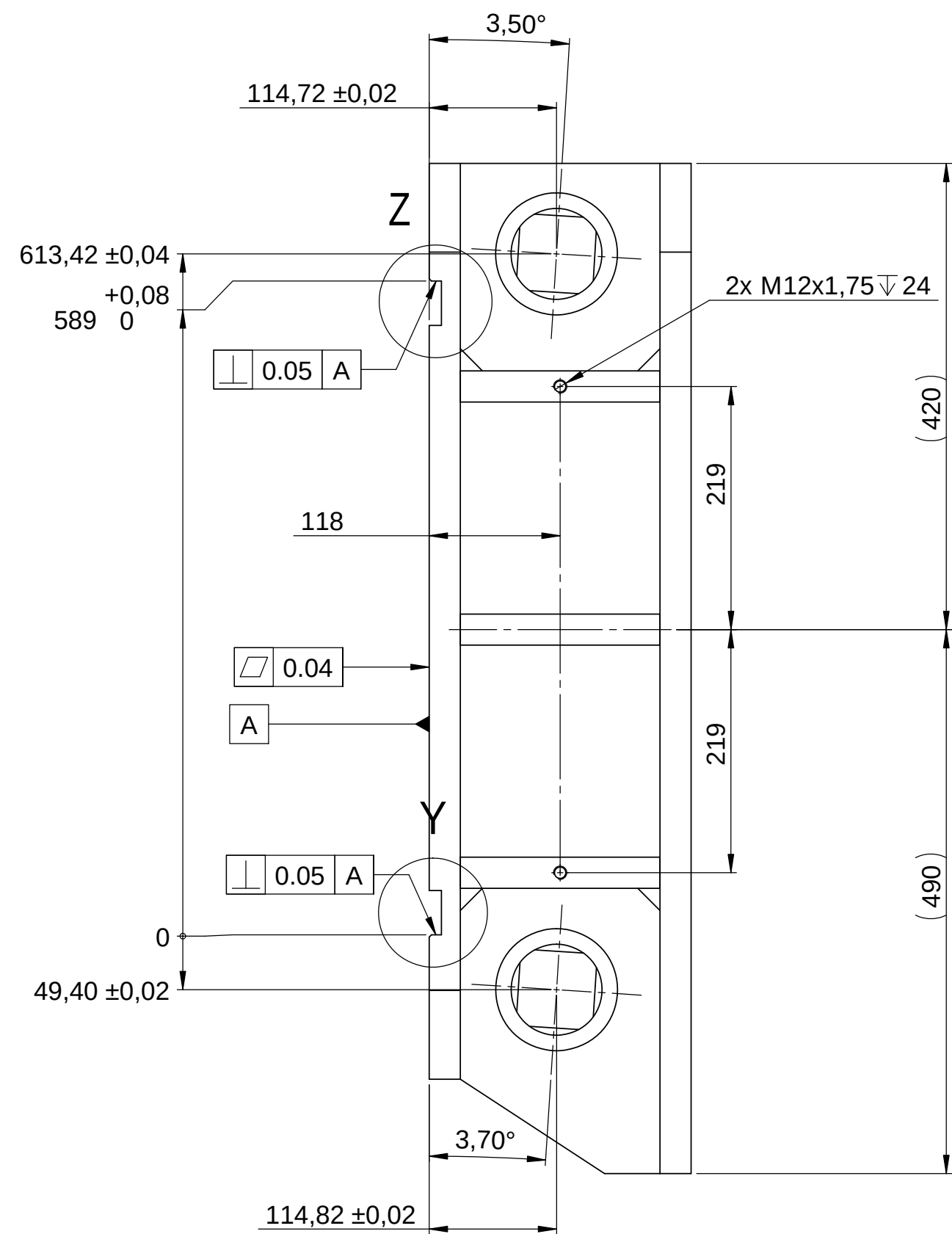
Unit/s: 4
Supply: Ø 150 mm x 196 mm
Material: Steel EN 10025-3 --- S355N
Mass: 16 kg



Cross section A-A



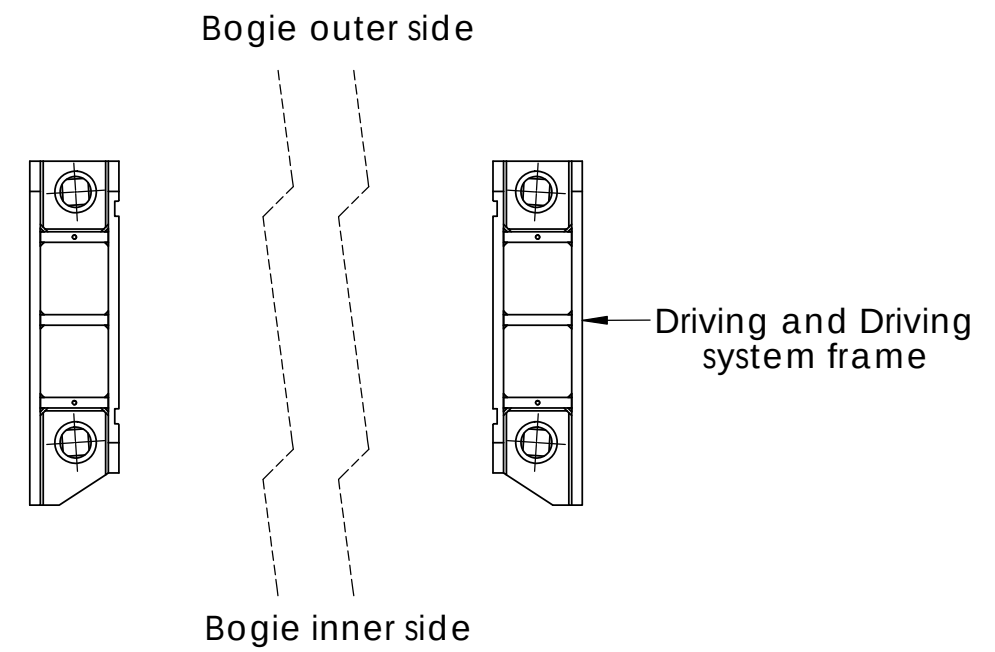
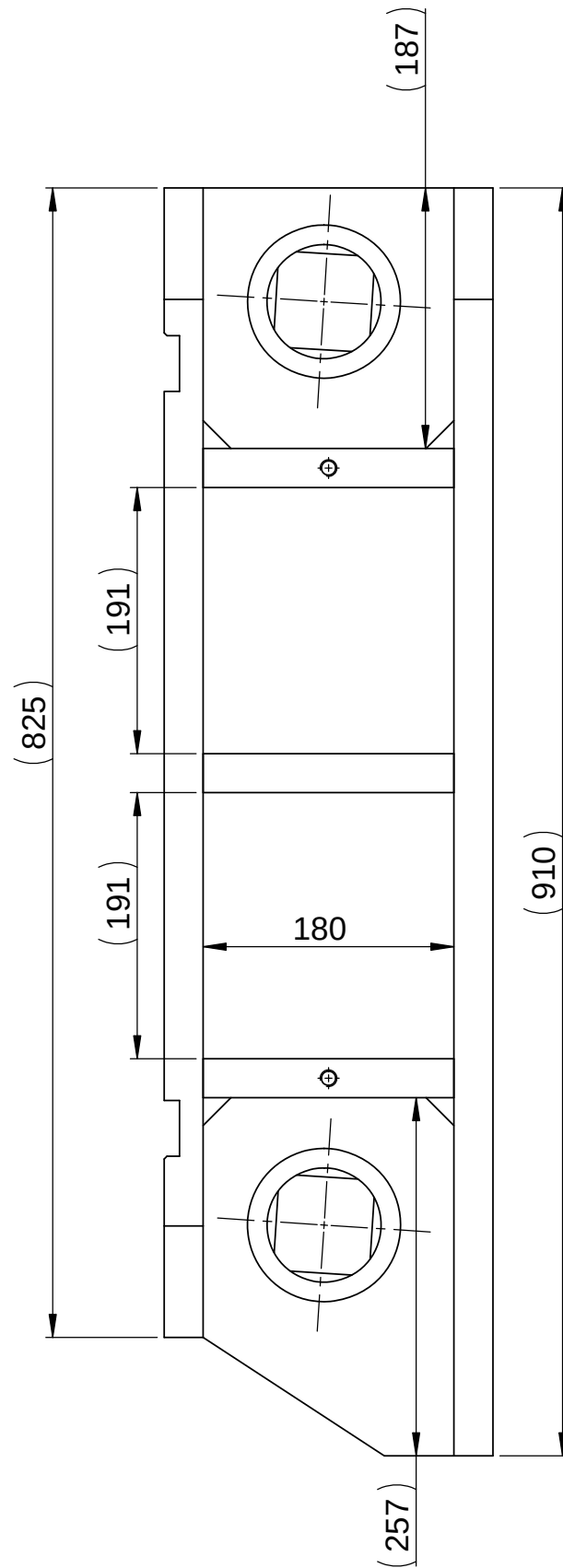
1.0	Minor modifications	RGG	26/10/15
0.0	Initial issue	RGG	06/05/15
Rev.	MODIFICATION	NAME	DATE
Drawn:	Approved :	Project	Document type
RGG		CTA-LST	Part
Checked :	Authorized :		
		Description	
		Guiding System Frame	
		Material	Steel EN 10025-2/3 --- S355
		Quantity	4
		Wght(kg)	565
		RAL	
		Scale	1:2
		Document number	
		147.011.1189	
		Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:	

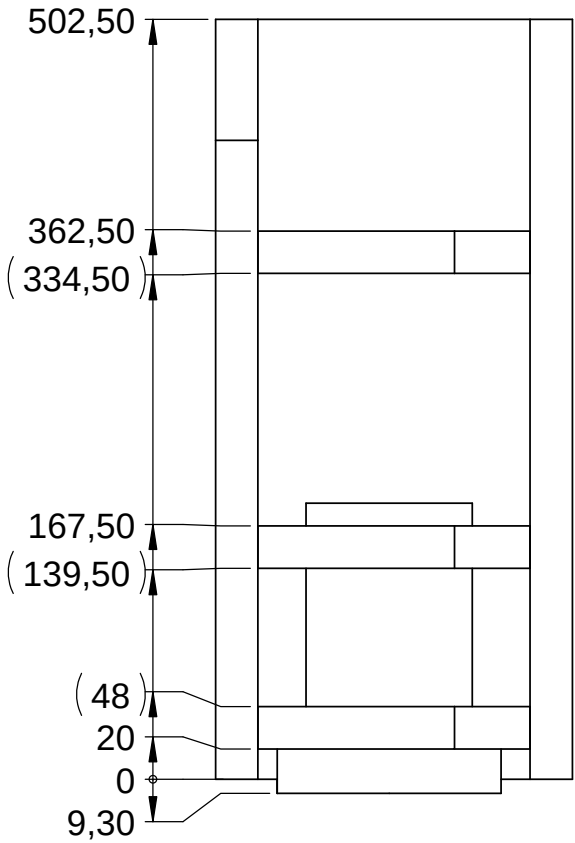
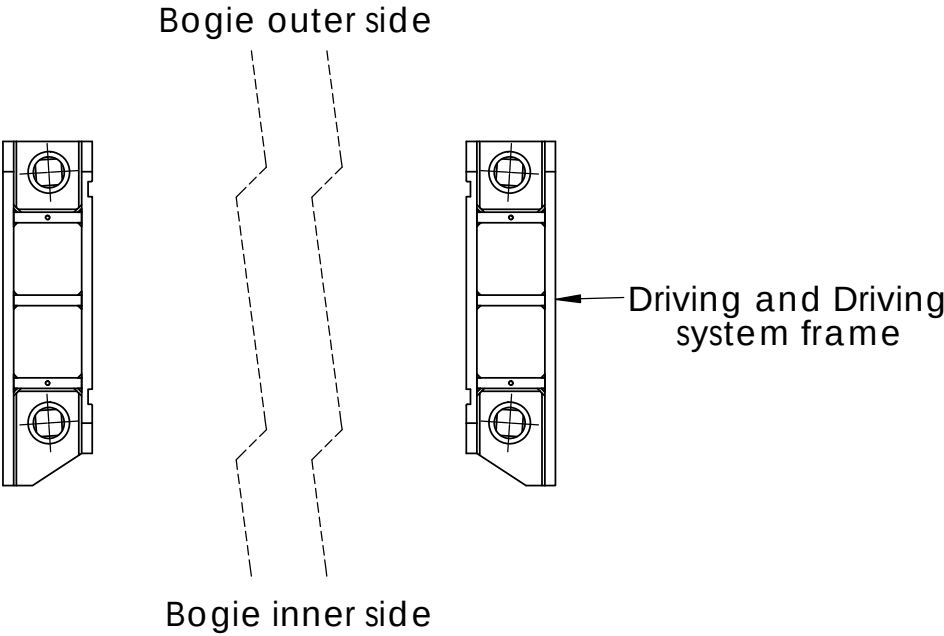
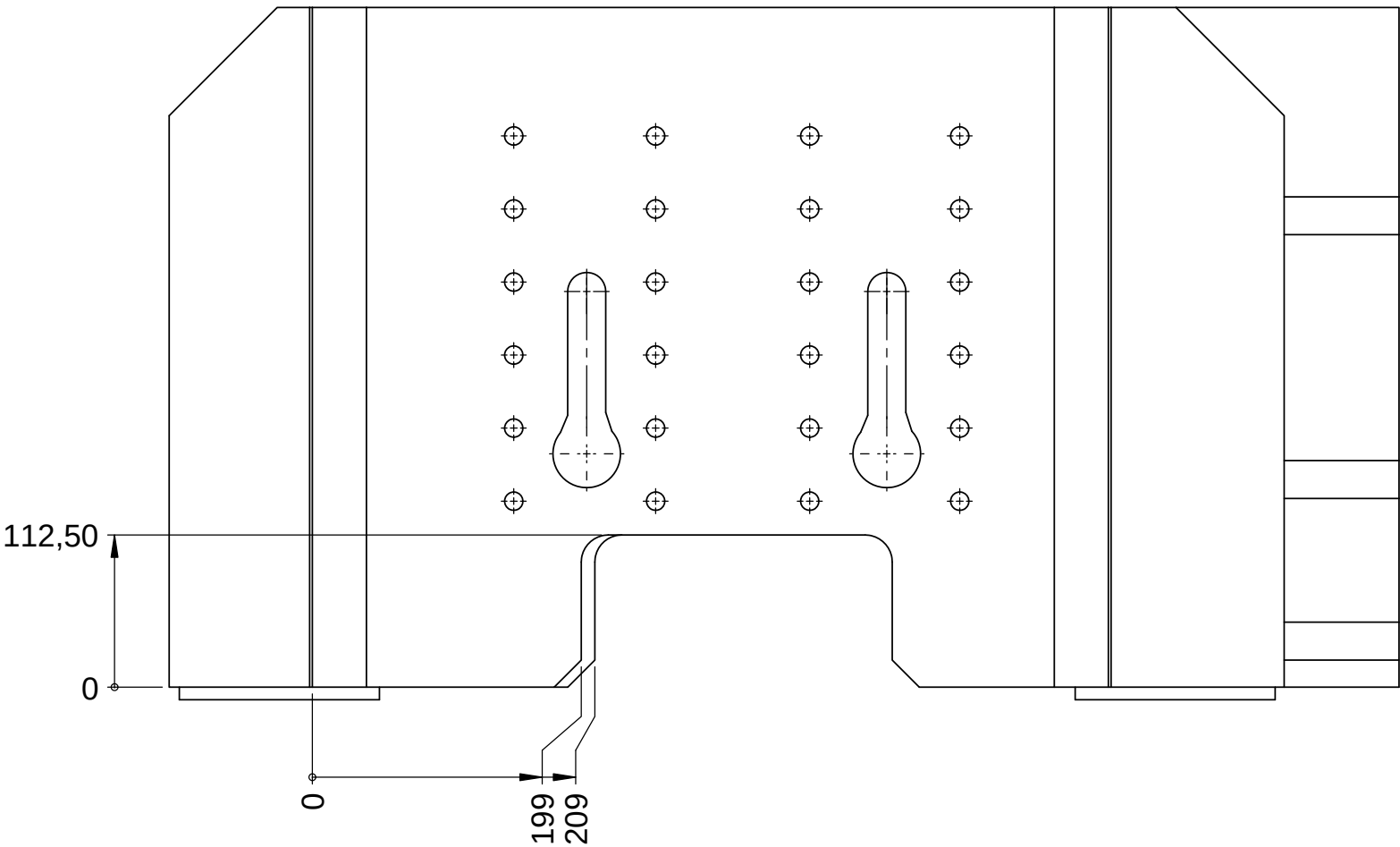


1.0	Minor modifications	RGG	26/10/15
0.0	Initial issue	RGG	06/05/15
Rev.	MODIFICATION		NAME
Drawn:	Approved :	Project	Document type
RGG		CTA-LST	Part
Checked :	Authorized :	Description	
		Guiding System Frame	
		Material	Steel EN 10025-2/3 --- S355
		Quantity	4
		Wght(kg)	565
		RAL	
		Scale	1:5
		Document number	
		147.011.1189	
		Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:	

This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.

IFAE Institut de Física d'Altes Energies (IFAE)
Edifici Cn, Universitat Autònoma de Barcelona (UAB), E-08193 Bellaterra (Barcelona), Spain
www.ifae.es
rgarcia@ifae.es

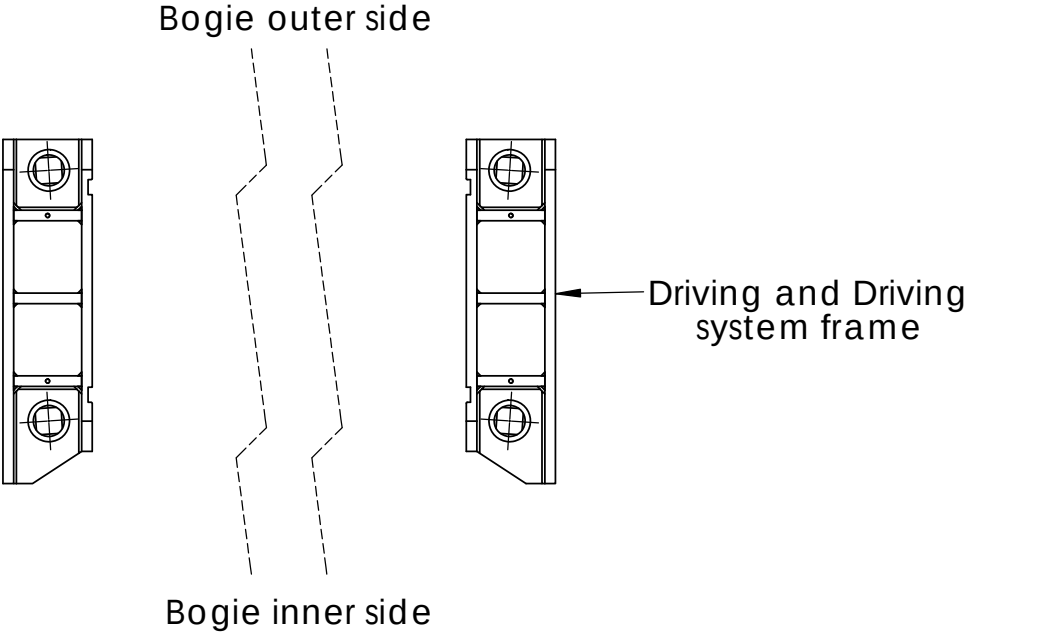
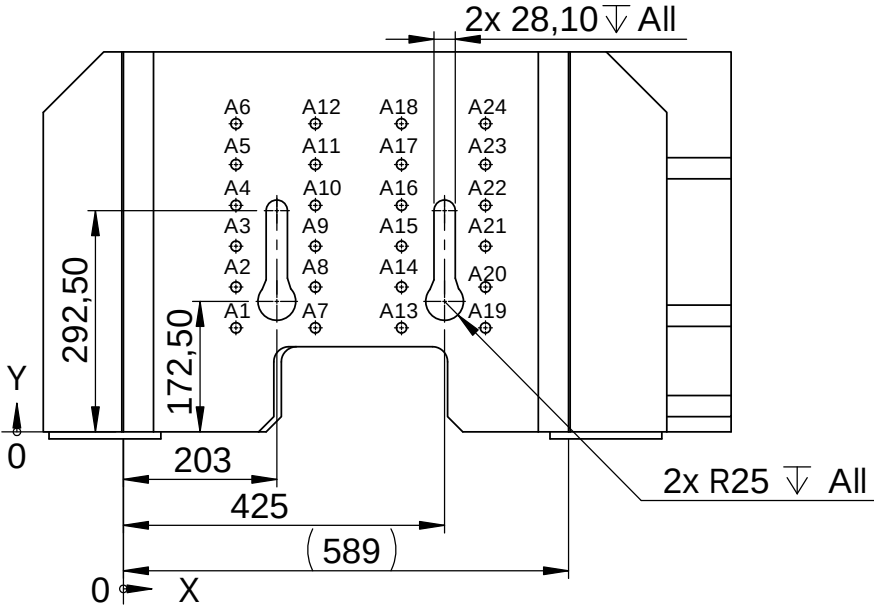
[illegible]



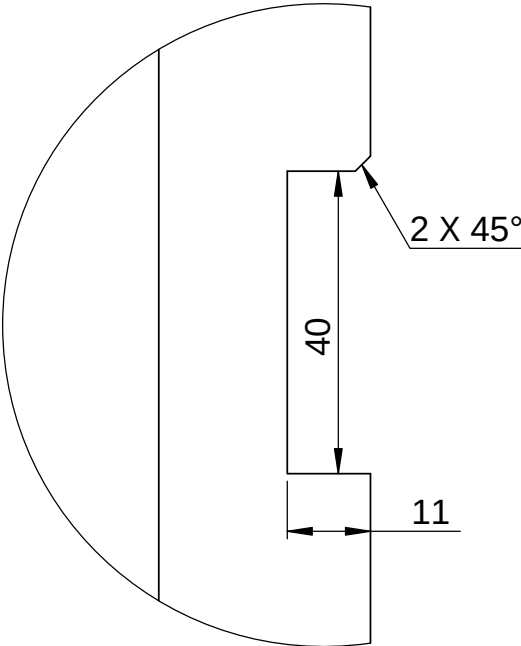
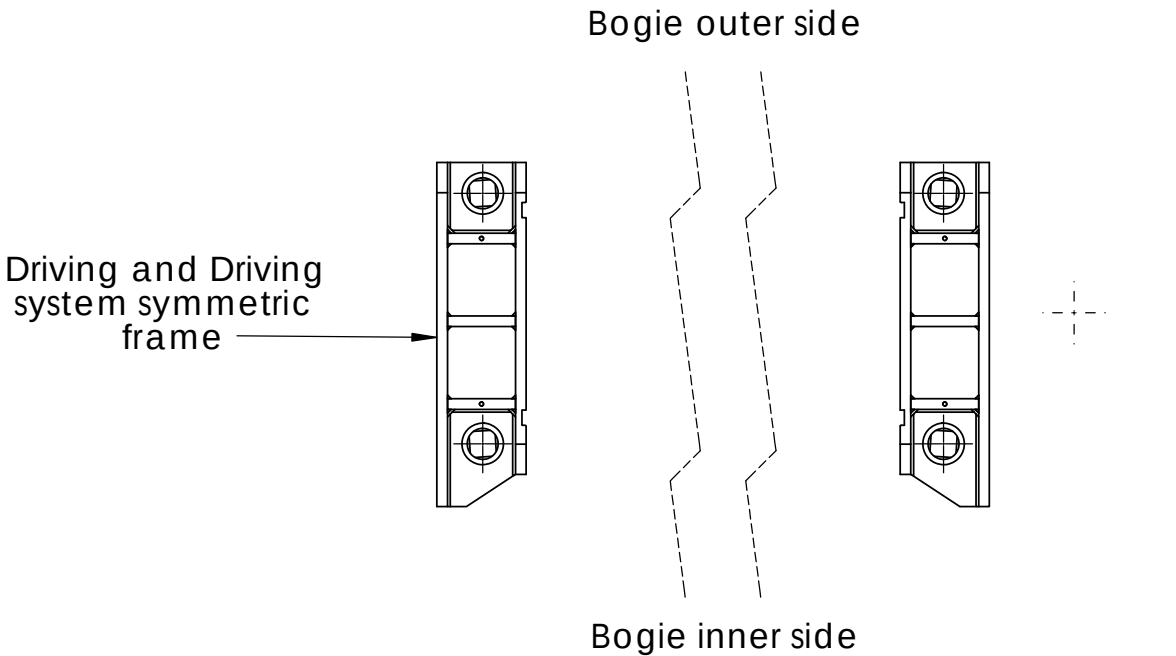
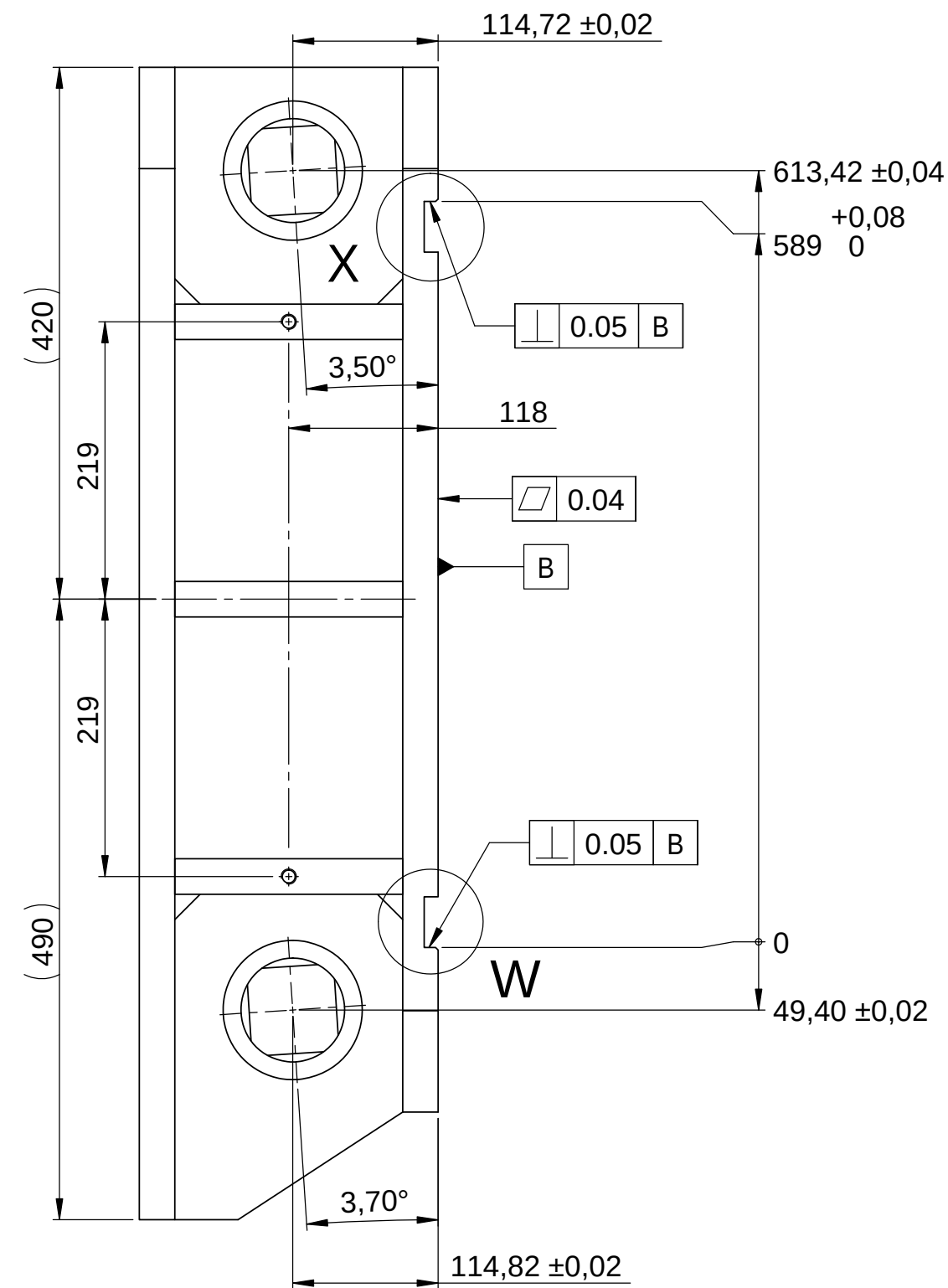
1.0	Minor modifications				RGG	26/10/15	
0.0	Initial issue				RGG	06/05/15	
Rev.	MODIFICATION				NAME	DATE	
Drawn:	Approved :	Project	Document type	Description			
RGG		CTA-LST	Part	Guiding System Frame			
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number	
				Quantity	4		
 Institut de Física d'Altes Energies (IFAE) Edifici Cn, Universitat Autònoma de Barcelona (UAB), E-08193 Bellaterra (Barcelona), Spain www.ifae.es rgarcia@ifae.es				Wght(kg)	565	147.011.1189	
				RAL			
				 A3			
				Scale 1:5		All dimensions mm	Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:
This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.							

Item	X	Y
A1	149	137,50
A2	149	191,50
A3	149	245,50
A4	149	299,50
A5	149	353,50
A6	149	407,50
A7	254	137,50
A8	254	191,50
A9	254	245,50
A10	254	299,50
A11	254	353,50
A12	254	407,50
A13	368	137,50
A14	368	191,50
A15	368	245,50
A16	368	299,50
A17	368	353,50
A18	368	407,50
A19	479	137,50
A20	479	191,50
A21	479	245,50
A22	479	299,50
A23	479	353,50
A24	479	407,50

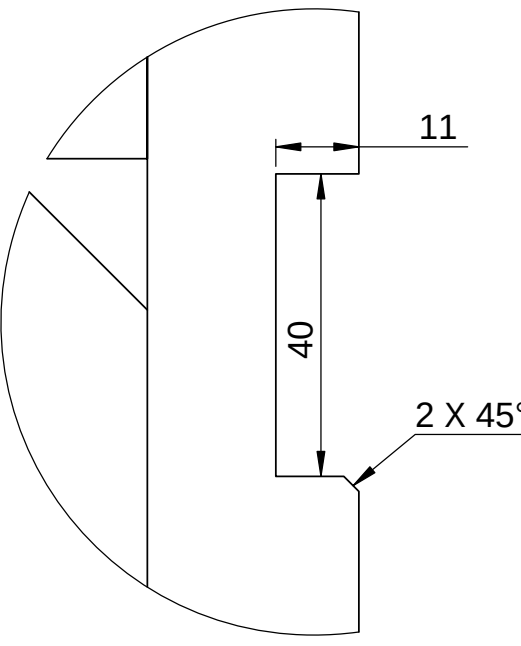
Hole type A ==> $\varnothing$ 13,5 ∇ All



1.0	Minor modifications			RGG	26/10/15	
0.0	Initial issue			RGG	06/05/15	
Rev.	MODIFICATION			NAME	DATE	
Drawn:	Approved :	Project	Document type	Description		
RGG		CTA-LST	Part	Guiding System Frame		
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number
 Institut de Física d'Altes Energies (IFAE) Edifici Cn, Universitat Autònoma de Barcelona (UAB), E-08193 Bellaterra (Barcelona), Spain www.ifae.es rgarcia@ifae.es		Quantity	4	147.011.1189		
		Wght(kg)	565			
		RAL		All dimensions mm	<u>Unless Otherwise State:</u> General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:	
		 A3	Scale 1:10			
This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.						

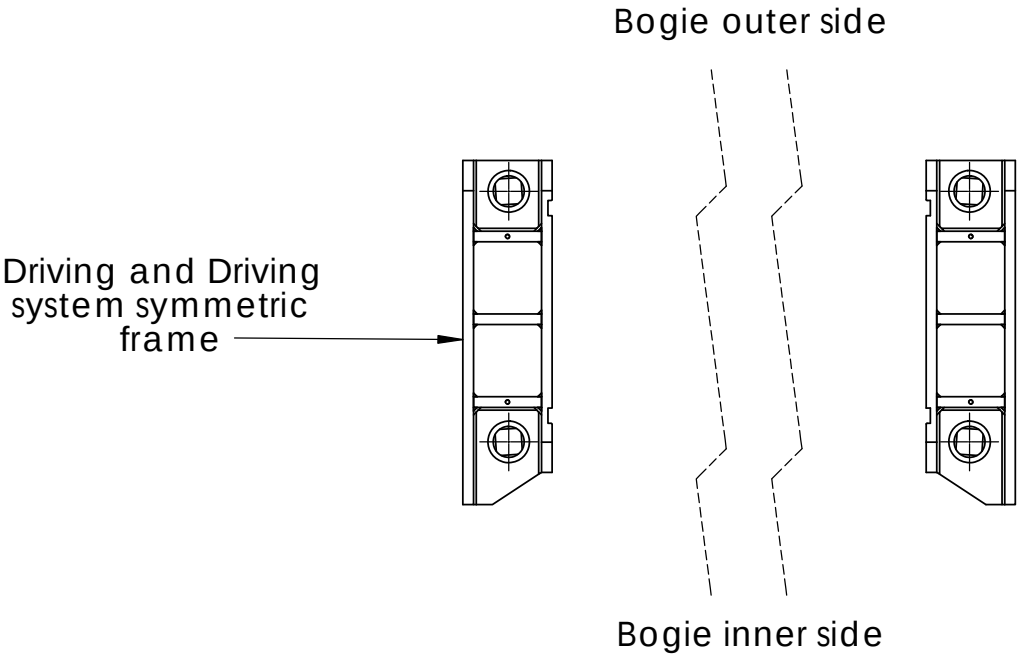
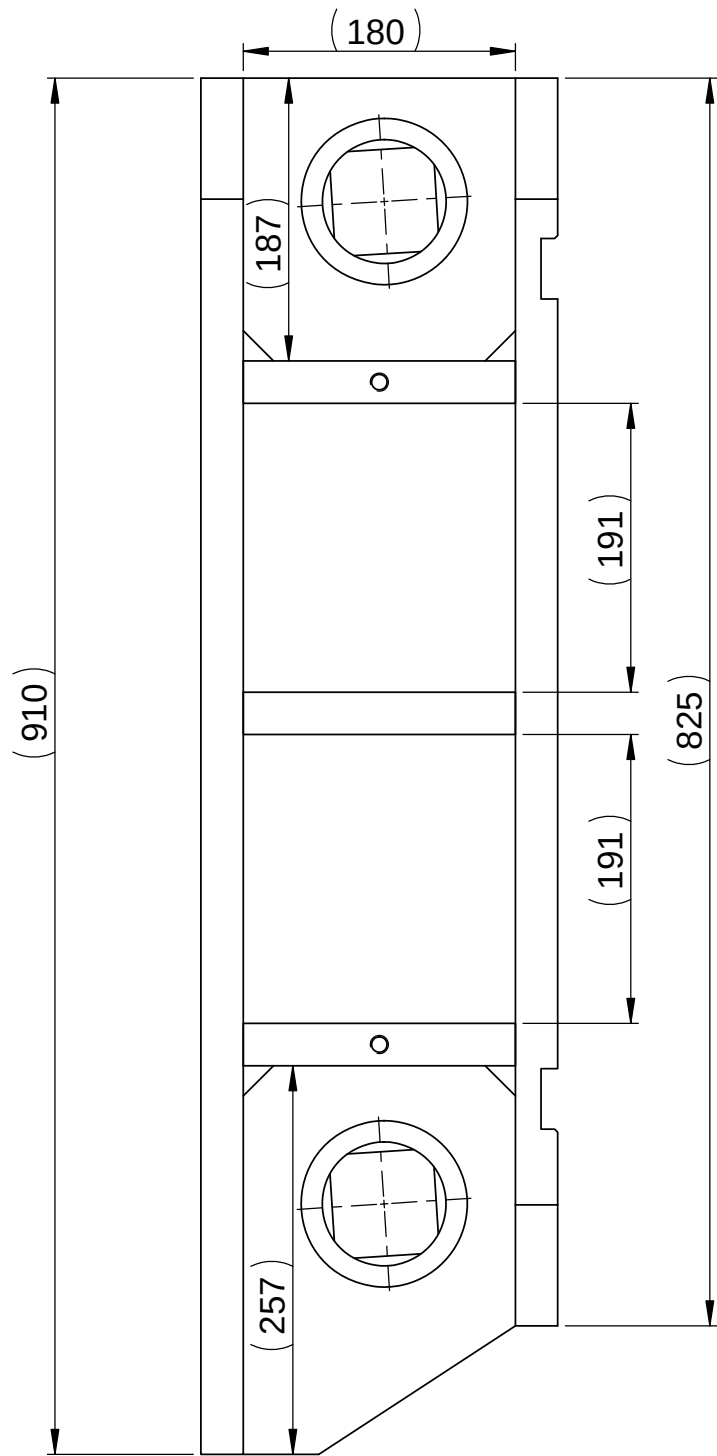


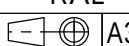
Detail X
Scale 1 : 1

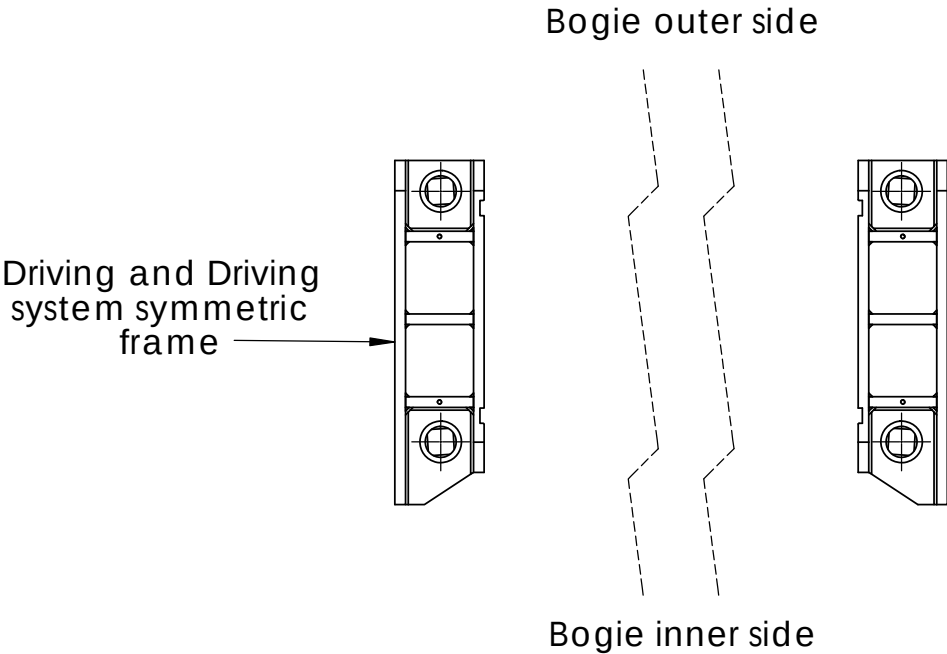
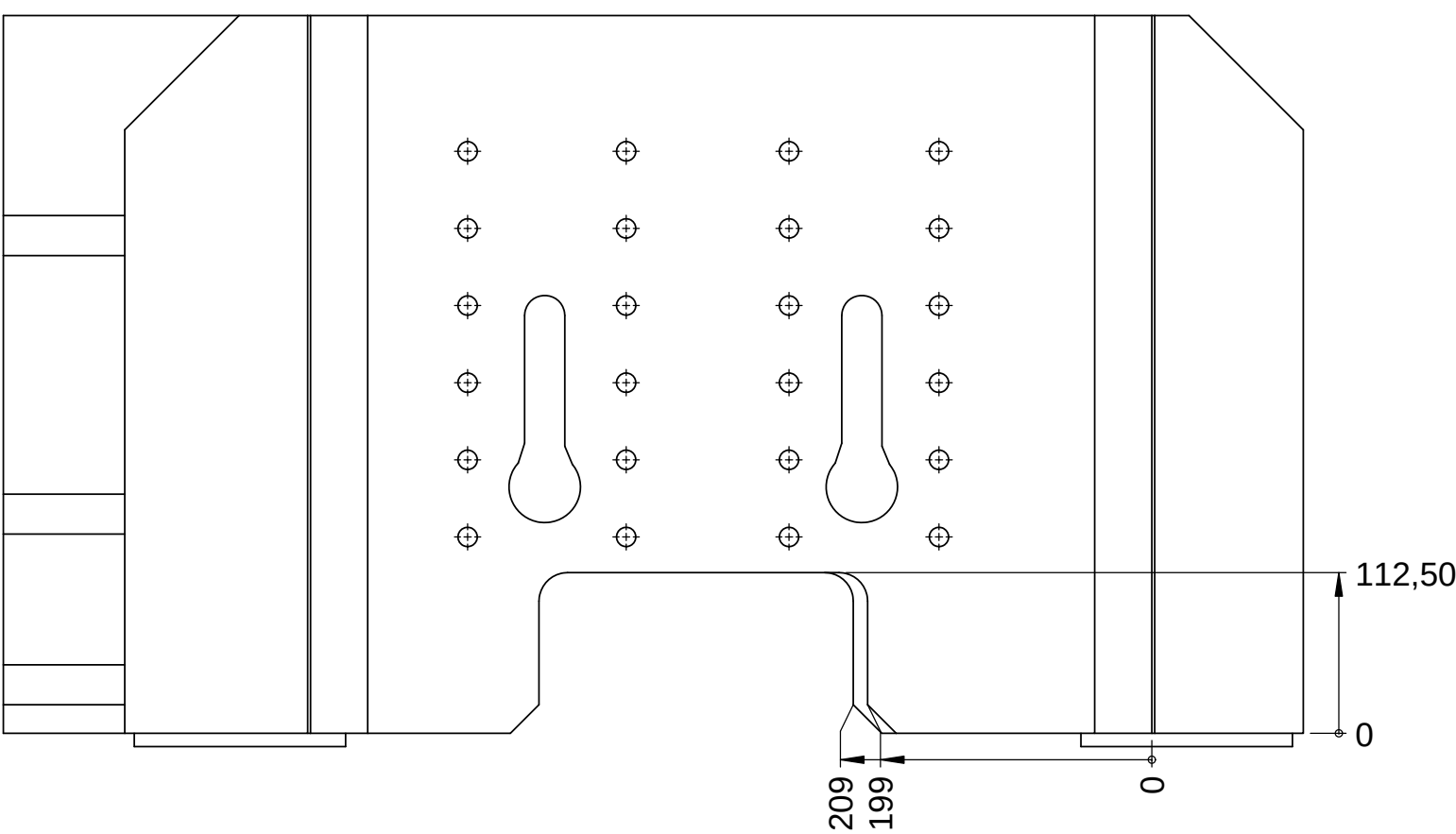
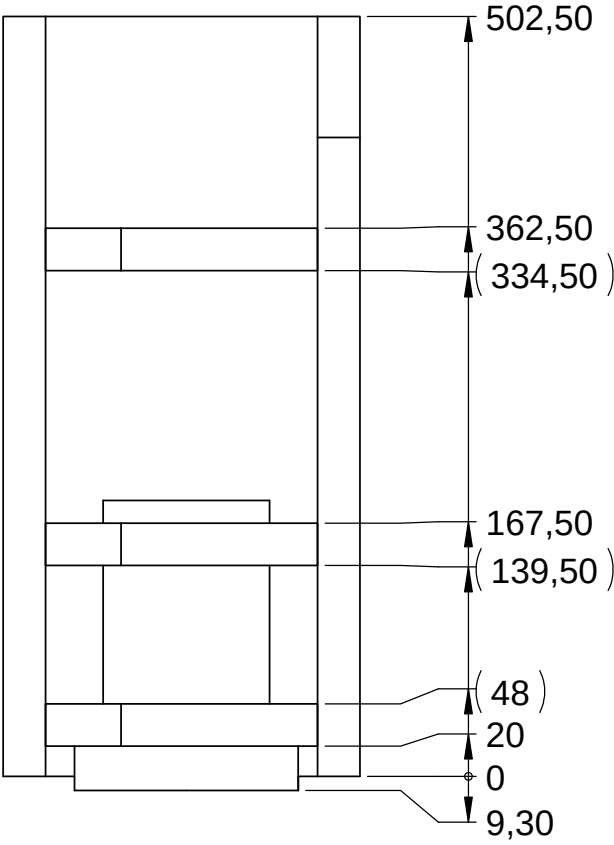


Detail W
Scale 1 : 1

1.0	Minor modifications			RGG	26/10/15	
0.0	Initial issue			RGG	06/05/15	
Rev.	MODIFICATION			NAME	DATE	
Drawn:	Approved :	Project	Document type	Description		
RGG		CTA-LST	Part	Guiding System Frame		
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number
 Institut de Física d'Altes Energies (IFAE) Edifici Cn, Universitat Autònoma de Barcelona (UAB), E-08193 Bellaterra (Barcelona), Spain www.ifae.es rgarcia@ifae.es		Quantity	4	147.011.1189		
		Wght(kg)	565			
		RAL		All dimensions mm	<u>Unless Otherwise State:</u> General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:	
		 A3	Scale 1:5			
This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.						



1.0	Minor modifications				RGG	26/10/15	
0.0	Initial issue				RGG	06/05/15	
Rev.	MODIFICATION				NAME	DATE	
Drawn:	Approved :	Project	Document type	Description			
RGG		CTA-LST	Part	Guiding System Frame			
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number	
				Quantity	4	147.011.1189	
		Wght(kg)	565				
		RAL					
		 A3	Scale 1:5	All dimensions mm	Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:		
This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.							

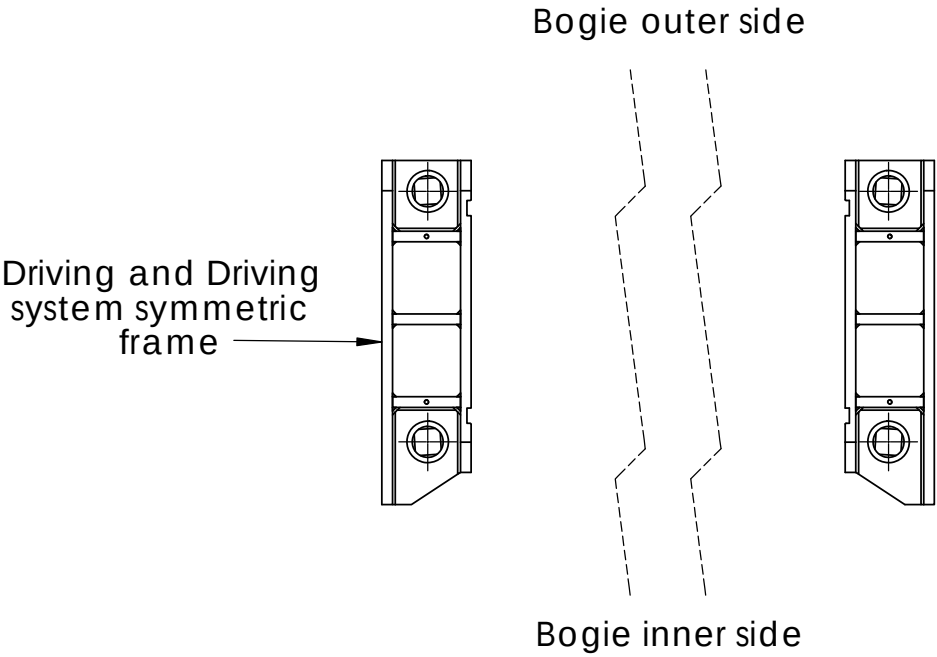


1.0	Minor modifications			RGG	26/10/15	
0.0	Initial issue			RGG	06/05/15	
Rev.	MODIFICATION			NAME	DATE	
Drawn:	Approved :	Project	Document type	Description		
RGG		CTA-LST	Part	Guiding System Frame		
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number
				Quantity	4	147.011.1189
		Wght(kg)	565			
		RAL				
		 A3	Scale 1:5	All dimensions mm	Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:	
This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.						

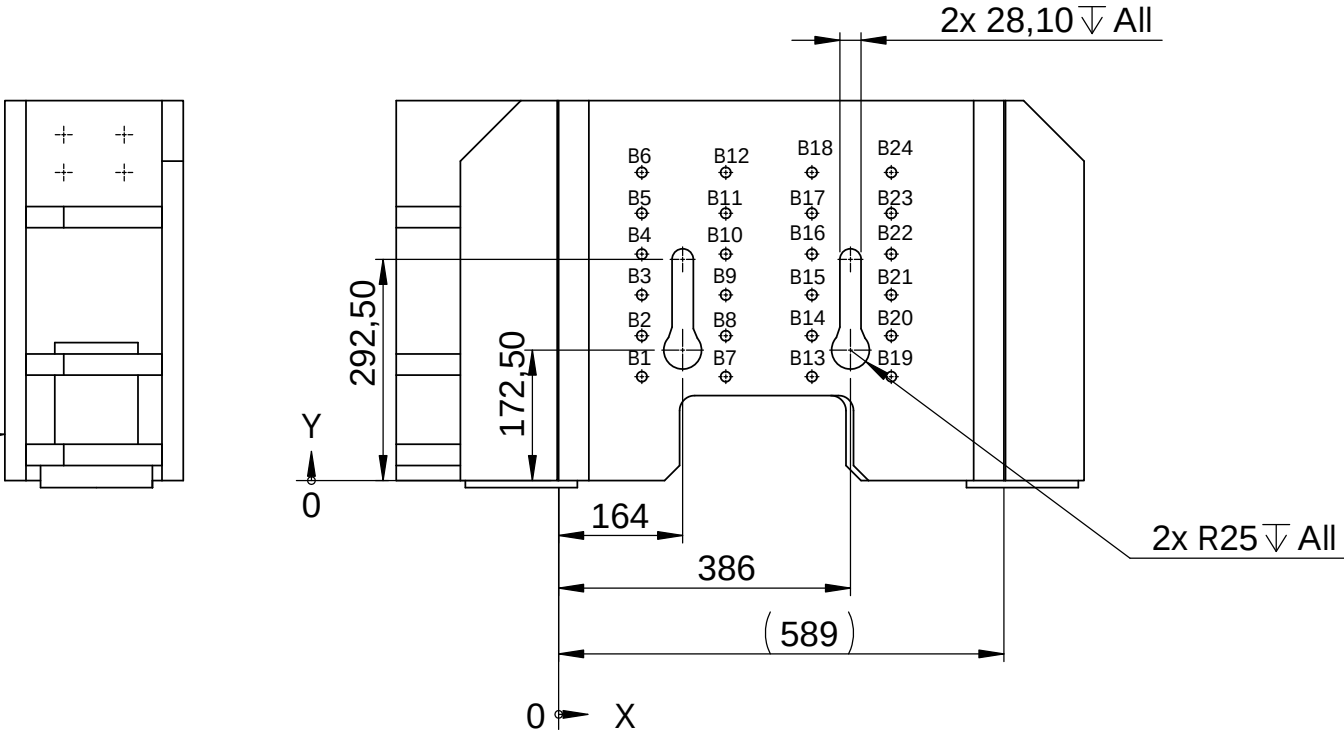
Item	X	Y
B1	110	137,50
B2	110	191,50
B3	110	245,50
B4	110	299,50
B5	110	353,50
B6	110	407,50
B7	221	137,50
B8	221	191,50
B9	221	245,50
B10	221	299,50
B11	221	353,50
B12	221	407,50

Item	X	Y
B13	335	137,50
B14	335	191,50
B15	335	245,50
B16	335	299,50
B17	335	353,50
B18	335	407,50
B19	440	137,50
B20	440	191,50
B21	440	245,50
B22	440	299,50
B23	440	353,50
B24	440	407,50

Hole type B ==> $\varnothing$ 13,5 ∇ All

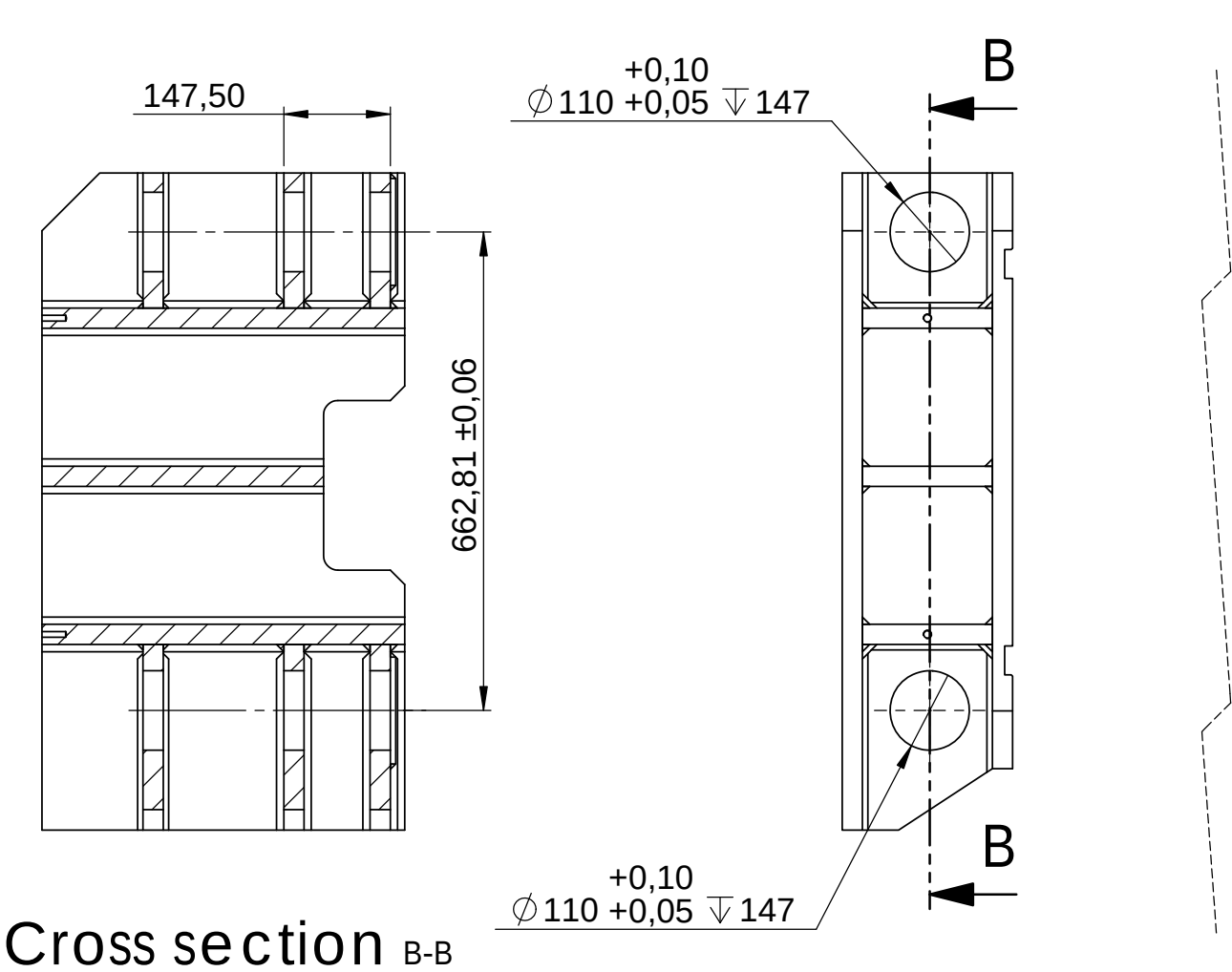


Pending to add some holes to fix the dry lubrication applicator

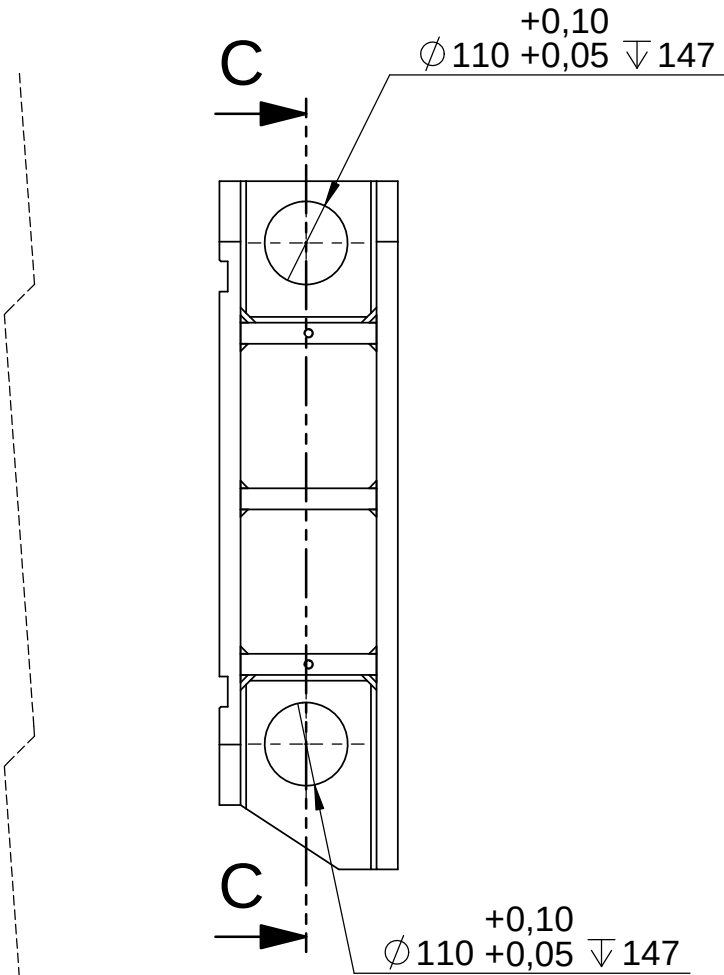


1.0	Minor modifications			RGG	26/10/15
0.0	Initial issue			RGG	06/05/15
Rev.	MODIFICATION			NAME	DATE
Drawn:	Approved :	Project	Document type	Description	
RGG				Guiding System Frame	
Checked :	Authorized :	CTA-LST	Part		
				Material	Steel EN 10025-2/3 --- S355
				Quantity	4
				Wght(kg)	565
				RAL	
				Scale	1:10
				147.011.1189	
				All dimensions mm	
				Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:	

This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.



Cross section B-B



Cross section C-C

1.0	Minor modifications				RGG	26/10/15		
0.0	Initial issue				RGG	06/05/15		
Rev.	MODIFICATION				NAME	DATE		
Drawn:		Approved :	Project	Document type	Description			
RGG			CTA-LST	Part	Guiding System Frame			
Checked :		Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number	
					Quantity	4	147.011.1189	
			Wght(kg)	565				
			RAL					
			 A3	Scale 1:10	All dimensions mm	Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:		
This drawing and any information or descriptive material set out on it are the confidential and property of the IFAE and MUST NOT BE DISCLOSED, COPIED, LOANED in whole or part or used for any purpose without the written permission of the IFAE.								