



THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

COMMUNICATION CONCERNING APPROVAL GRANTED OF A TYPE OF MECHANICAL
COUPLING DEVICE OR COMPONENT, PURSUANT TO REGULATION NO 55.02



Approval No: E11*55R02/02*12313*00

1. Trade name or mark of the device or component: Brink
2. Type of device or component:
40178
3. Manufacturer's name and address:
Brink Towing Systems B.V.
Industrieweg 5
NL - 7951 CX Staphorst
The Netherlands
4. If applicable, name and address of the manufacturer's representative:
Not applicable
5. Alternative supplier's names or trademarks applied to the device or component:
Not applicable
6. Name and address of company or body taking responsibility for the conformity of production:
See item 3
7. Submitted for approval on: 09 May 2025

8. Technical service responsible for conducting approval tests: TÜV SÜD Auto Service GmbH

9. Brief description:

9.1. Type and class of device or component: 40178, A50-X

9.2. Characteristic values:

9.2.1. Primary values:

D 6,93 kN

D_c 6,93 kN

S 75 kg

U - tonnes

V - kN

Alternative values: Not applicable

D - kN

D_c - kN

S - kg

U - tonnes

V - kN

9.3. For Class A mechanical coupling devices or components, including towing brackets:

Vehicle manufacturer's maximum permissible vehicle mass: 2400 kg

Distribution of maximum permissible vehicle mass between the axles:

front: 1078 kg, rear 868 kg

Vehicle manufacturer's maximum permissible towable trailer mass: 975 kg

Vehicle manufacturer's maximum permissible static mass on coupling ball: 75 kg

Maximum mass of the vehicle, with bodywork, in running order, including coolant, oils, fuel, tools and spare wheel (if supplied) but not including driver: 1946 kg

Loading condition under which the tow ball height of a mechanical coupling device fitted to category M1 ⁽¹⁾ vehicles is to be measured -see paragraph 2 of Annex 7, Appendix 1:

As declared by the vehicle manufacturer

- 9.4. For class B coupling heads, is the coupling head intended to be fitted to an unbraked O₁ trailer:
Not applicable
10. Instructions for the attachment of the coupling device or component type to the vehicle and photographs or drawings of the mounting points (see Annex 2, Appendix 1) given by the vehicle manufacturer: See manufacturers documentation
11. Information on the fitting of any special reinforcing brackets or plates or spacing components necessary for the attachment of the coupling device or component (see Annex 2, Appendix 1):
Not applicable
12. Additional information where the use of the coupling device or component is restricted to special types of vehicles - see Annex 5, paragraph 3.4.: Not applicable
13. For Class K hook type couplings, details of the drawbar eyes suitable for use with the particular hook type: Not applicable
14. Date of test report: 09.05.2025
15. Number of test report: 25-00149-CX-GBM-00
16. Approval mark position: Type plate on crossbeam
17. Reason(s) for extension of approval:

Not applicable
18. Approval GRANTED
19. Place: BRISTOL
20. Date: 09 MAY 2025

21. Signature:



C McCABE
Chief Technical and Statutory Operations Officer

22. The list of documents deposited with the Type Approval Authority which has granted approval is annexed to this communication and may be obtained on request.

Any remarks: None

(1) As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.3, para. 2 - www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html.



Vehicle
Certification
Agency

THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

APPROVAL NUMBER: E11*55R02/02*12313*00

INFORMATION PACKAGE CONTENTS

INDEX REVISION NUMBER: 00

Conformity of Production (COP) Declaration COP Confirmed

Assessment Method Compliance Statement

Date of Initial Clearance Pre 2013

Date of Last Clearance March 2025

Total number of sheets: 20 (Twenty)

Reasons for Revision: Not applicable

Revision Date
&
Office Stamp

Information Document No. 40178

Relating to the EEC Type Approval as a component of Mechanical Coupling Devices for Motor Vehicles and their trailers (ECE R55).

0 GENERAL

0.1 Make (trade name of Manufacture): Brink.

0.2 Type and commercial description(s): 40178

0.5 Name and address of manufacturer: Brink Towing Systems B.V., Industrieweg 5, NL-7951 CX, Staphorst

0.7 In the case of components and separate technical units, location and method of affixing of the EEC approval mark: type plate on crossbeam.

0.8 Address(es) of assembly plants(s): **Brink Towing Systems B.V.**, Industrieweg 5, NL-7951 CX Staphorst, The Netherlands / **Brink Towing Systems SARL**, 7 Rue Henry Rol Tanguy, ZAC Les Naux, 51450 Bétheny (Reims), France / **Brink Towing Systems (Pty) Ltd**, 14 Old Fields Road, Mkondeni, 3200 Pietermaritzburg, South Africa / **Brink Towing Systems (Thailand) Co. Ltd**, 64/77-81 Moo.4 Eastern Seaboard Industrial Estate, ESIE 14, Pluak Daeng Pluak Daeng, Rayong, 21140, Thailand

1 CONNECTIONS BETWEEN DRAWING AND TRAILERS SEMI-TRAILERS

1.1 Detailed technical description (including drawings and material specifications) of the type of the mechanical coupling device: See drawing nr. 4017805_01 Version F of 07-04-2025

1.2 Class and type of the coupling device(s): A50-X

1.3 Maximum D-value (1): 6,93 kN

1.4 Maximum vertical load S at the coupling point (1): 75 Kg

1.5 Maximum load U at the fifth wheel coupling (1): -- t

1.6 Maximum V-value (1): -- kN

1.7 Instructions of attachment of the coupling type to the vehicle and photographs or drawing of the fixing points at the vehicle given by the manufacturer; additional information if the use of the coupling type is restricted to special types of vehicles:
see fitting instructions type 4017875 dated 10-04-2025

1.8 information of the fitting of special towing brackets or mounting plates (1):
--

Staphorst, 14-04-2025



Additional information regarding item 9. of ECE R55 Annex 1

0 GENERAL

Make (trade name of Manufacture): Brink.

Type and commercial description(s): 40178

Name and address of manufacturer: Brink Towing Systems B.V., Industrieweg 5, NL-7951 CX, Staphorst

9 Brief Description

9.1 Type and class of device or component: A50-X

9.2 Primary values:

D 6,93 kN S 75 kg

Alternative values: Not applicable

9.3 For class A mechanical coupling devices or components, including towing brackets:

Vehicle manufacturer's maximum permissible vehicle mass: 2400 kg

Distribution of maximum permissible vehicle mass between the axles: Front 1078 kg
Back 868 kg

Vehicle manufacturer's maximum permissible towable trailer mass: 975 kg

Vehicle manufacturer's maximum permissible static vertical mass on coupling ball: 75 kg

Maximum mass of the vehicle, with bodywork, in running order, including coolant, oils, fuel, tools and spare wheel (if supplied) but not including driver: 1946 kg

Loading condition under which the tow ball height of a mechanical coupling device fitted to category M1 vehicles is to be measured - see paragraph 2 of annex 7, appendix 1:
as declared by the vehicle manufacturer

If known EC type approval of vehicle:



Please complete information of attached drawings and manuals in the sheet below:

				Original date	Ver./Ch.	Rev	dtd.	Date	Reason for change: (in case of extension)
-1 drawing nr:	4017805_01	Sheet	1 of 1	from 09-02-2022	Version	F	dtd.	07-04-2025	
-1 drawing nr:	40178_10	Sheet	1 of 2	from 08-02-2022	Version	F	dtd.	07-04-2025	
-1 drawing nr:	40178_10	Sheet	2 of 2	from 08-02-2022	Version	F	dtd.	07-04-2025	
-1 drawing nr:	40178_11	Sheet	1 of 2	from 27-07-2023	Version	C	dtd.	18-10-2024	
-1 drawing nr:	40178_12	Sheet	1 of 2	from 27-07-2023	Version	C	dtd.	26-11-2024	
-1 drawing nr:	40178_13	Sheet	1 of 2	from 27-07-2023	Version	B	dtd.	29-11-2024	
-1 drawing nr:	40178_14	Sheet	1 of 2	from 27-07-2023	Version	B	dtd.	29-11-2024	
-1 drawing nr:	40178_24	Sheet	1 of 2	from 31-08-2023	Version	B	dtd.	29-11-2024	
-1 drawing nr:	40178_20	Sheet	1 of 1	from 14-07-2023	Version	C	dtd.	29-11-2024	
-1 drawing nr:	40178_30	Sheet	1 of 1	from 01-09-2023	Version	C	dtd.	29-11-2024	
-1 drawing nr:	40178_21	Sheet	1 of 2	from 14-07-2023	Version	D	dtd.	17-12-2024	
-1 drawing nr:	40178_22	Sheet	1 of 2	from 31-08-2023	Version	B	dtd.	08-10-2024	
-1 drawing nr:	40178_23	Sheet	1 of 2	from 31-05-2023	Version	C	dtd.	29-11-2024	
-1 drawing nr:	40178_31	Sheet	1 of 2	from 14-07-2023	Version	D	dtd.	17-12-2024	
-1 drawing nr:	60_65XX_85	Sheet	1 of 1	from 16-12-2021	Version	A	dtd.	21-12-2021	
-1 drawing nr:	40178_16	Sheet	1 of 2	from 07-06-2023	Version	D	dtd.	14-02-2025	
-1 drawing nr:		Sheet	of	from					
-1 drawing nr:		Sheet	of	from					
-1 drawing nr:		Sheet	of	from					

Fitting instructions

Alternative fitting instructions (optional):

4017875

from

10-04-2025

Confirmation



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NOTES:
Materials used conform to NES M0301 (Substance Use Restrictions)
Design according to: 00-TF [500-I45D] & E1130 NADSO [3]
Parts conform to NES M0302 (Reach compliance)
Meets ECE Regulation No. 55 Rev 2
Meets ADR 62/02
Paint specification according to internal standards : BN1-006 type C03 (NL)
Design (including coating performance) must comply with Nissan Standard: Towbar RNADS_1
Weld spatter specification according to internal standards: Wi-LAS8-1(NL)

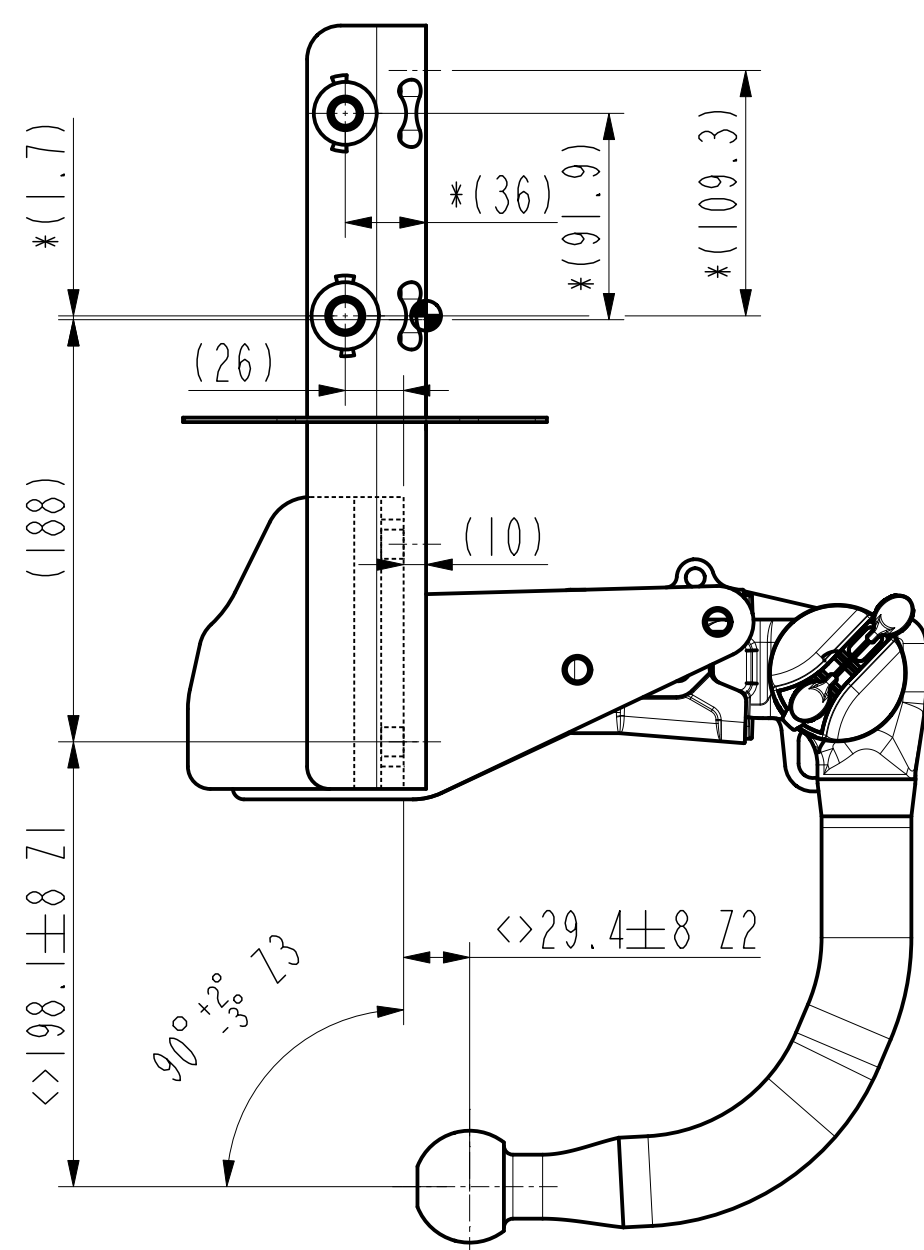
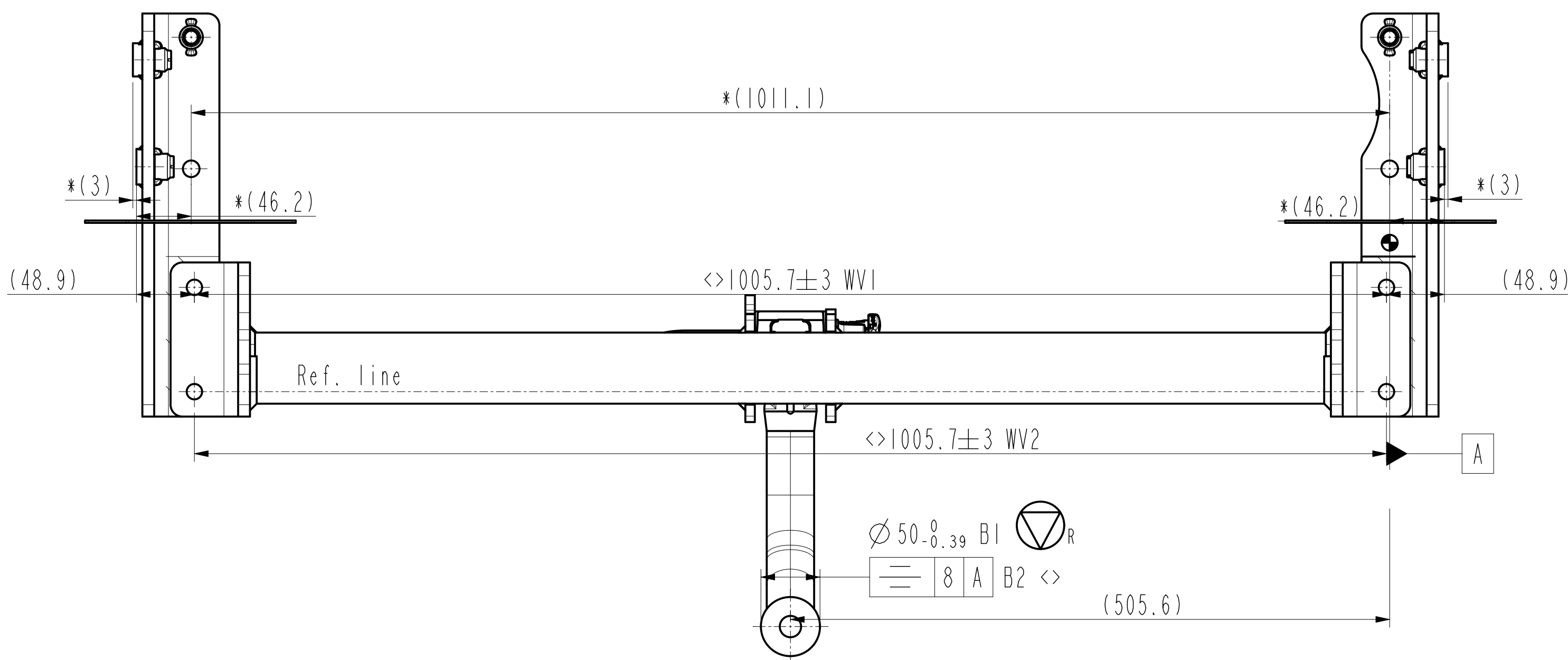
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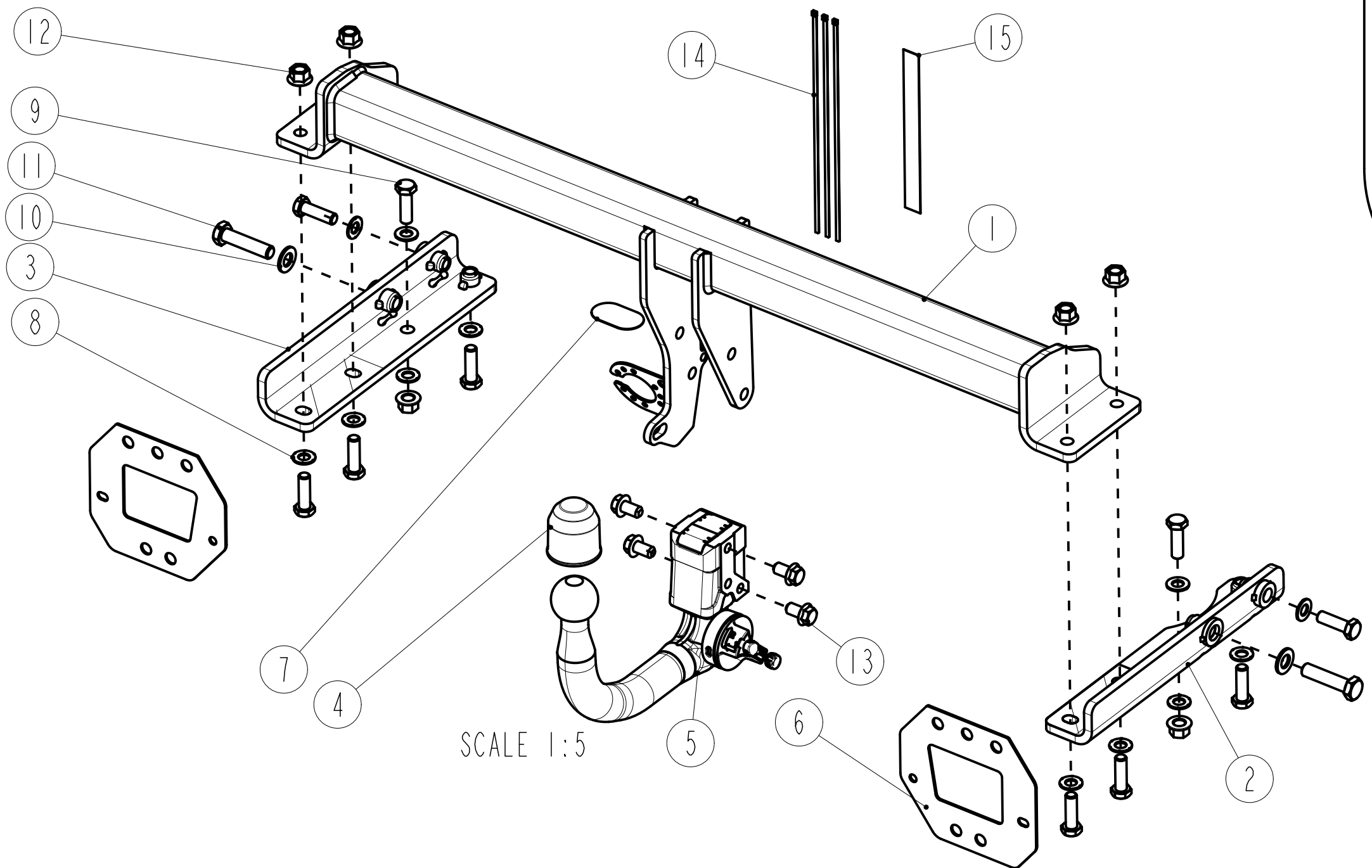
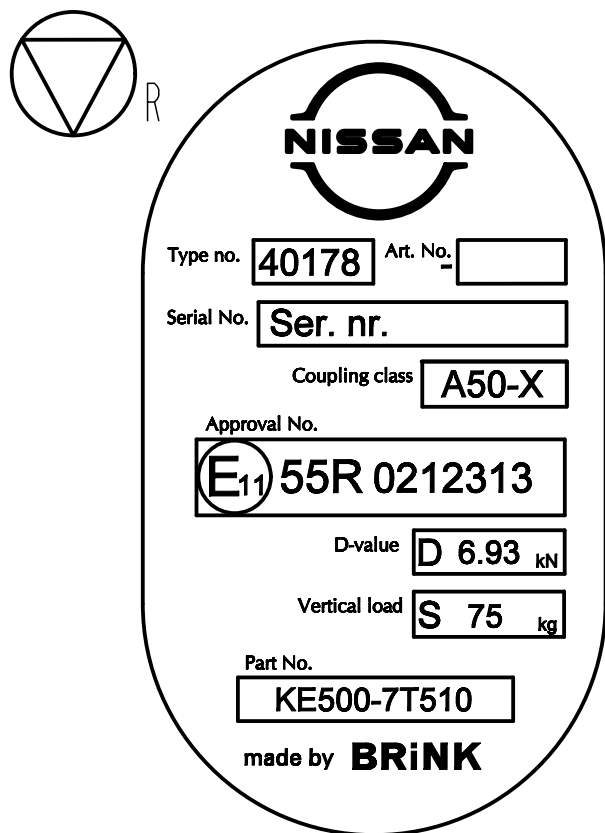
* = fittingpointmeasure

Character-figure combination on behalf of controlreport

Max. vehicle mass	2560 kg
Max. towing capacity	975 kg
Vertical load	75kg
D-value	6.93kN
Approval number	55R-0212313
R55 test	Euro



Fixing points coordinates (mm):			
Point	X	Y	Z
R1	3158.2	551.8	240.7
R2	3068.0	554.8	240.7
R3	3048.9	505.6	204.7
R4	3159.9	505.6	204.7
L1	3158.2	-551.8	240.7
L2	3068.0	-554.8	240.7
L3	3048.9	-505.6	204.7
L4	3159.9	-505.6	204.7
Ballcenter coordinates (mm):			
	3546	0	185.3



- $\ast$ 160Nm $\pm$ 4%
 - $\ast$ 190Nm $\pm$ 4%
 - $\ast$ 125Nm $\pm$ 4%
- Nissan part number KE500-99918

15	1	8625005	Tape 3M 5076 200x20mm	3M_5076	200x20mm --
14	3	9904051	Tie wrap 288x4,5mm black	PA_66	---
13	4	9420025	Flangebolt RIPP	100	M12x22 --
12	6	9430612	Selflocking flange nut	10	M12 - DIN6927
11	2	9414061	Bolt	10_9	M14x60 - DIN933
10	2	9483014	Plainwasher	ST	M14 - DIN125A
9	10	9412041	Bolt	10_9	M12x40 - DIN933
8	12	9484212	Contact-lock Washer	ST	M12 --
7	1	8575001	Typeplate(label)	POLYESTER	---
6	2	40178_16	Reinforcement plate	DC01	Pl. 2mm - EN 10051
5	1	60_6504_85	BMU system V5 SL 6504		---
4	1	8077328	BALLCAP-NISSAN-	HDPE	---
3	1	40178_30	Side Arm LHS Assy		---
2	1	40178_20	Side Arm RHS Assy		---
1	1	40178_10	Weld assy		---

pos	qty	number	name	material	material dimension
			created by: BR	material description:	---
			creation date: 09-02-22	material dimension: --	---
			mass: 25.385 kg	last changed by: Robert Koetsier	---
			part nr.: --	last change date: 07-04-2025 09:11	---
			approval date: 07-Apr-2025	approved by: Emiel van de Wetering	---
			PO Box 24, 7350 AA Staphorst The Netherlands 7, rue Rot. Torguy ZAC les Naux 54500 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa	name	Towbar Detachable P210
			scale: 3:10	drawing number: 4017805_01	release status: Prerelease/STA
			sheet: 1 of 1	version: 1.0	release date: 09 May 25

<> = Significant Characteristic

ment 40178

3

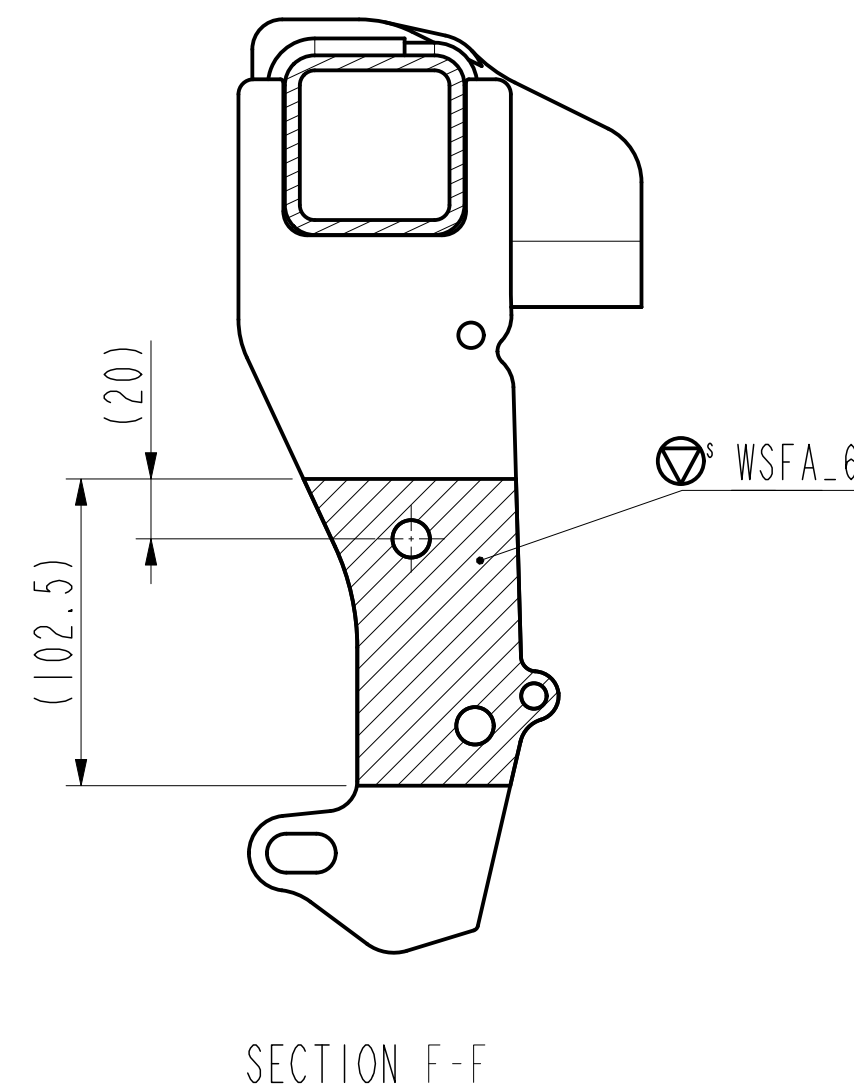
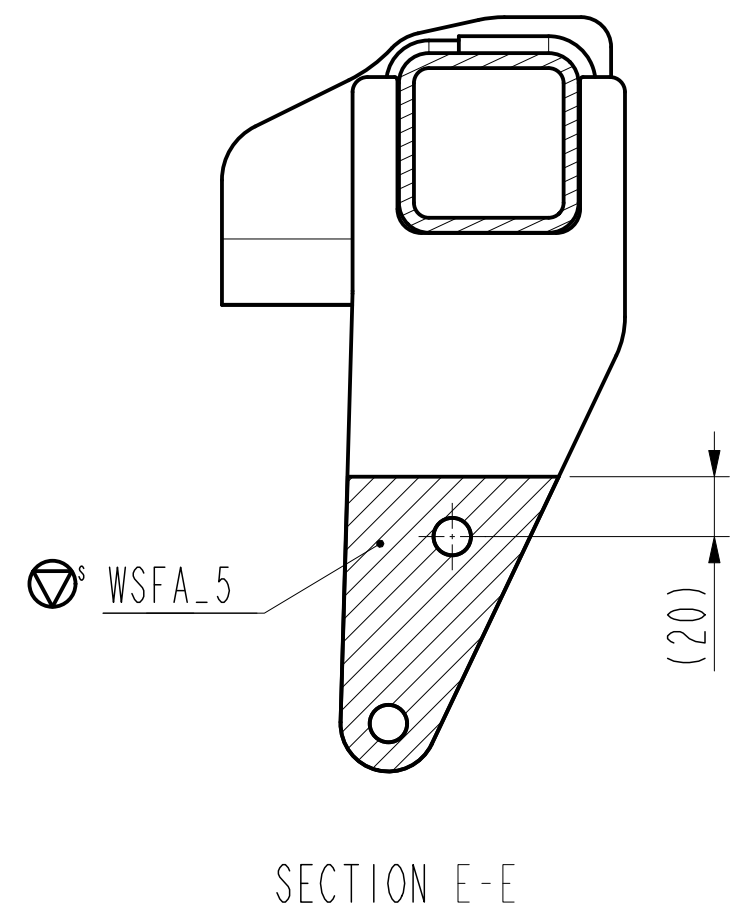
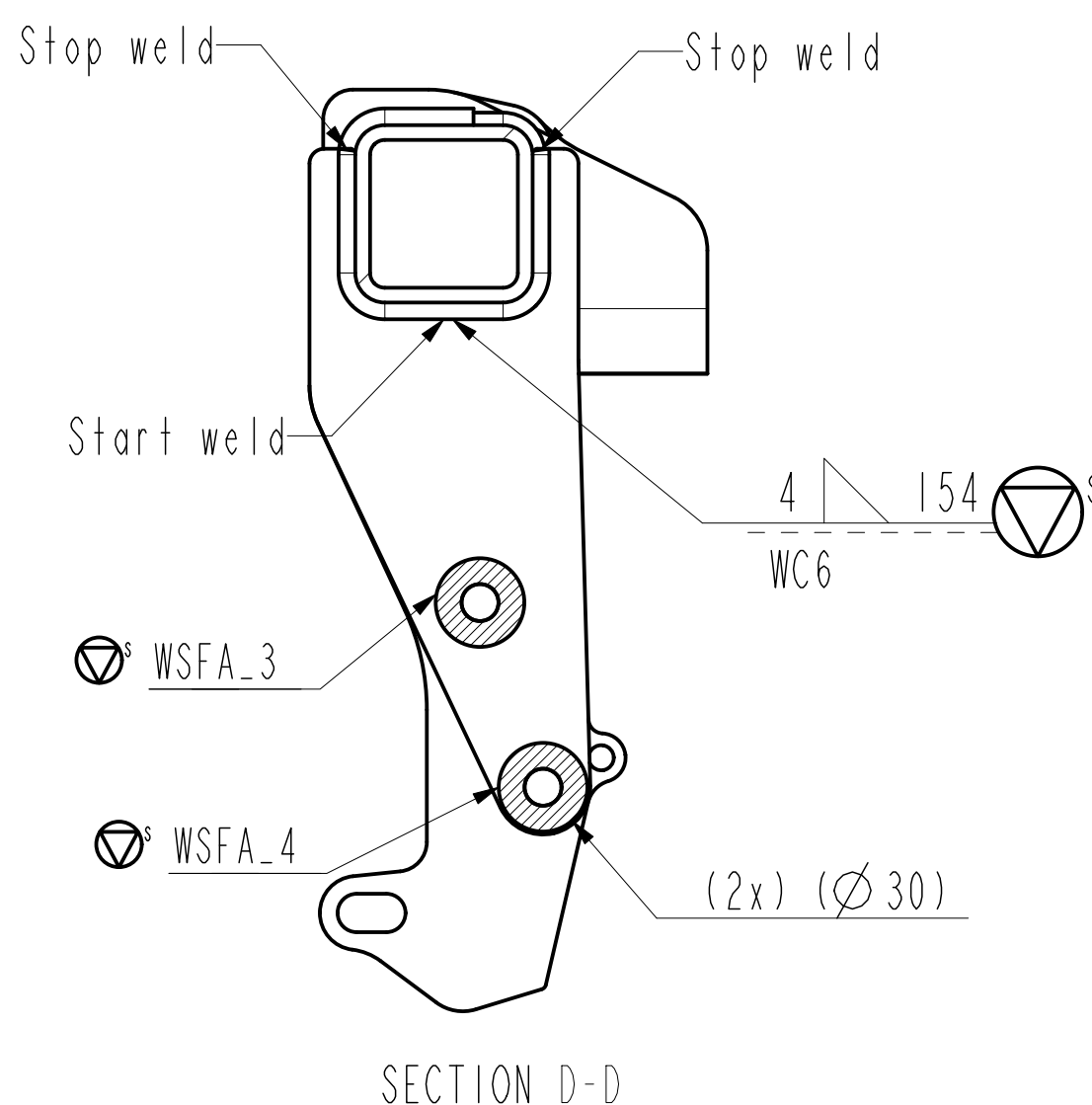
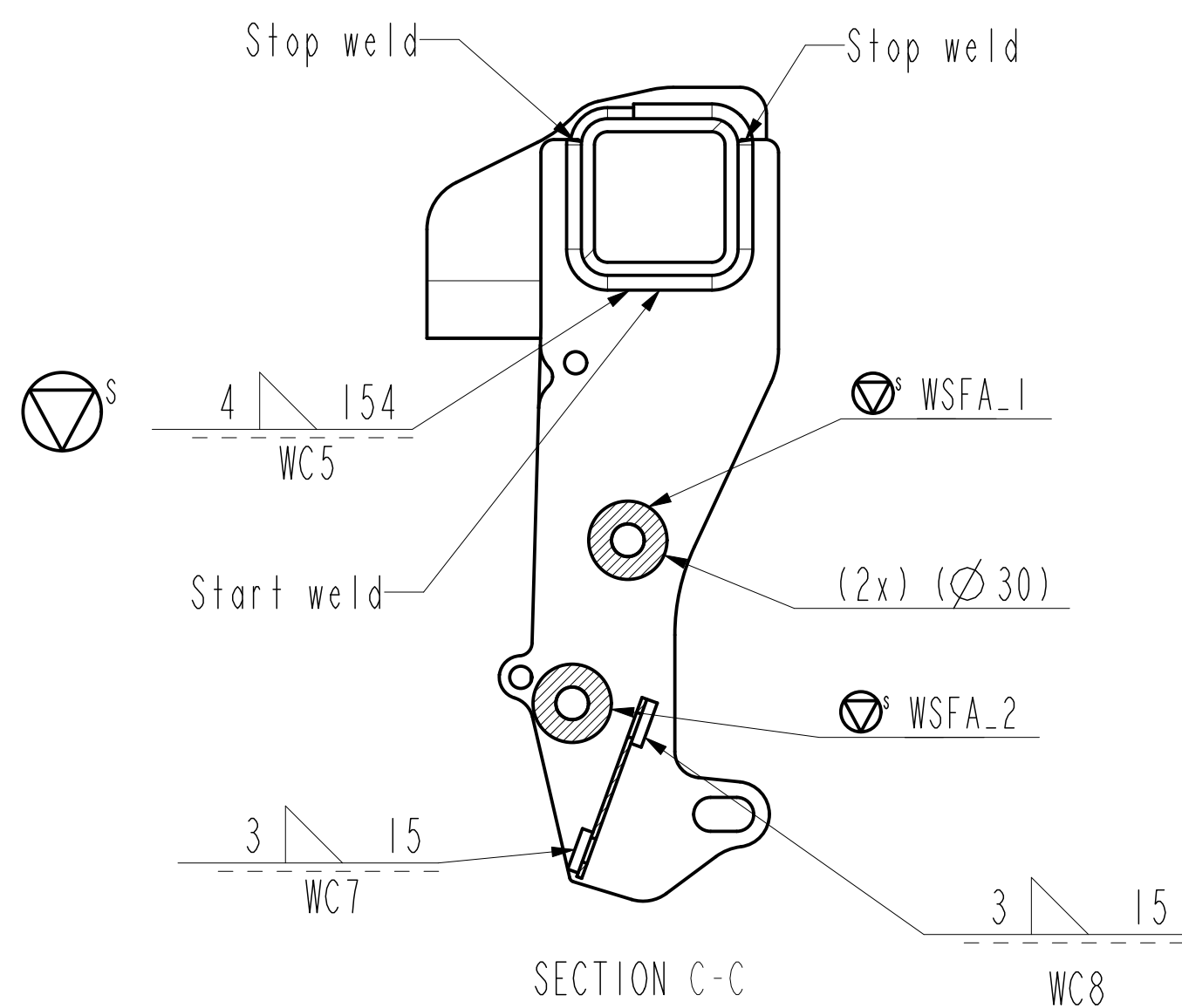
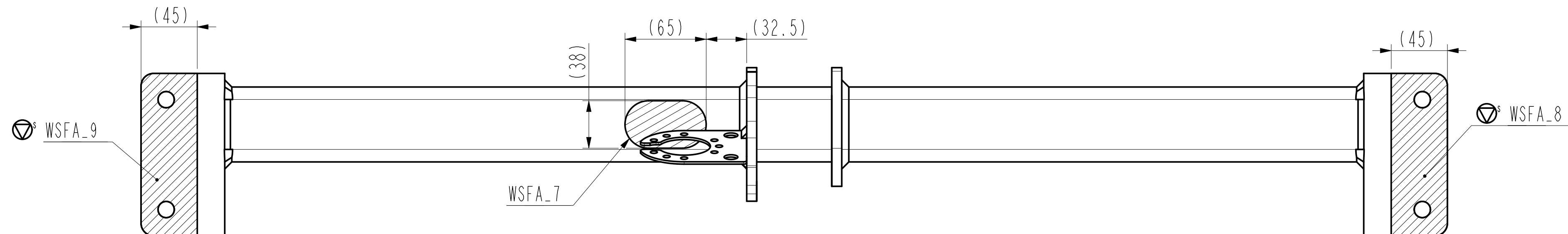
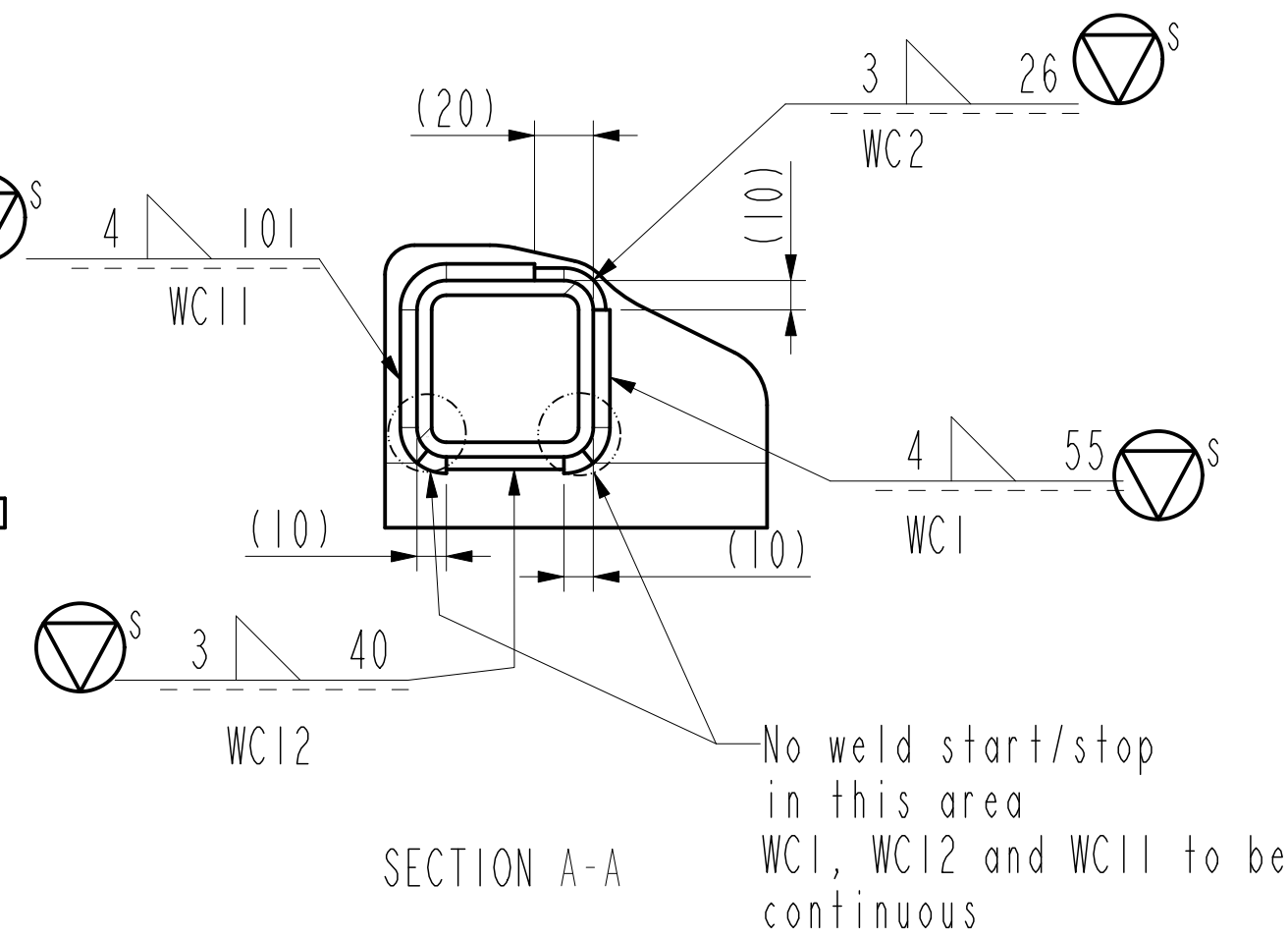
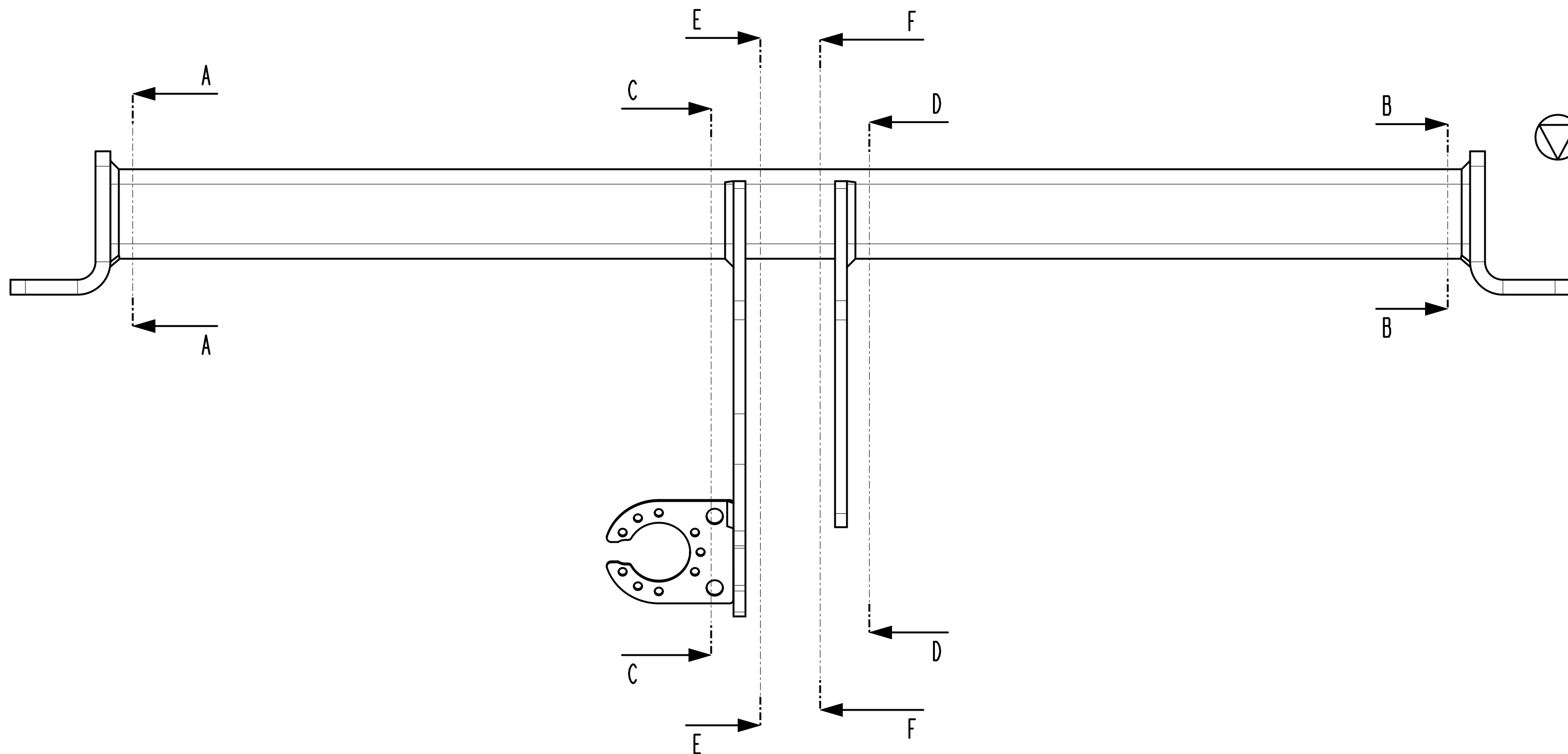
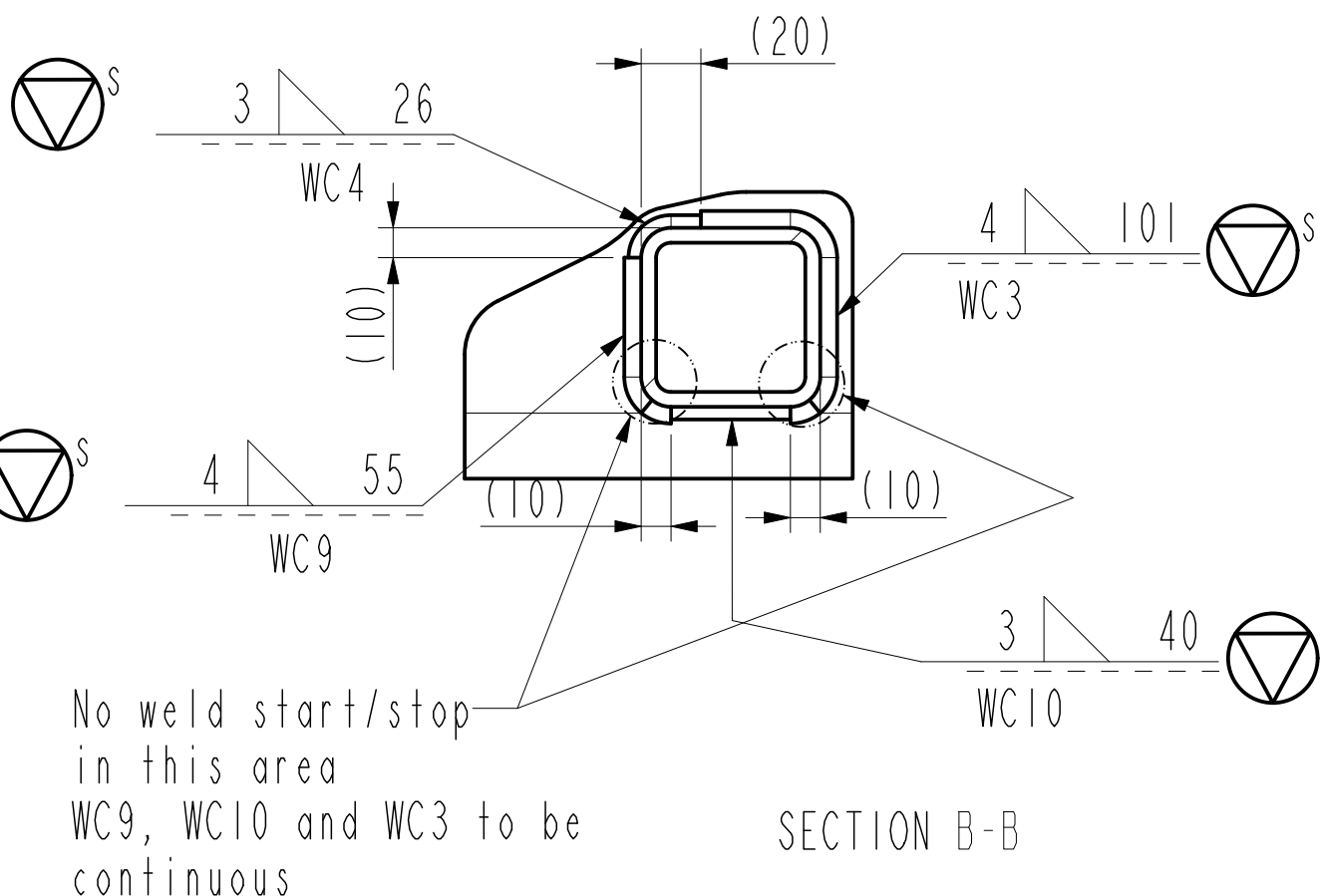
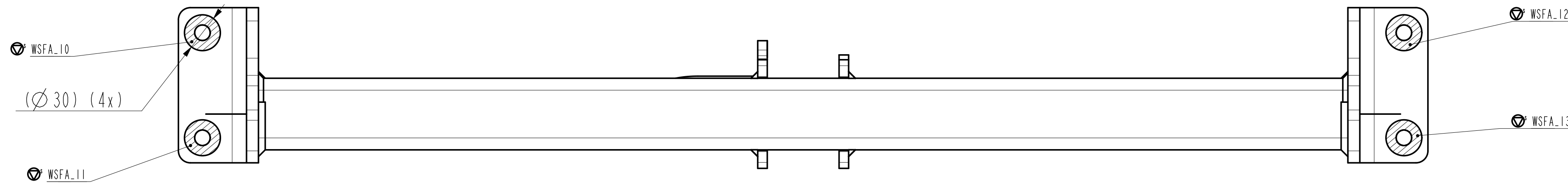
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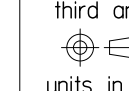
Sheet 2 : Welding

 S = Critical Characteristic

Welding standard: BN1-011
Welding process: MAG
Welding material: EN-ISO 14341 G2Si or G3Si
Weldings without tolerance = +/- 5 mm

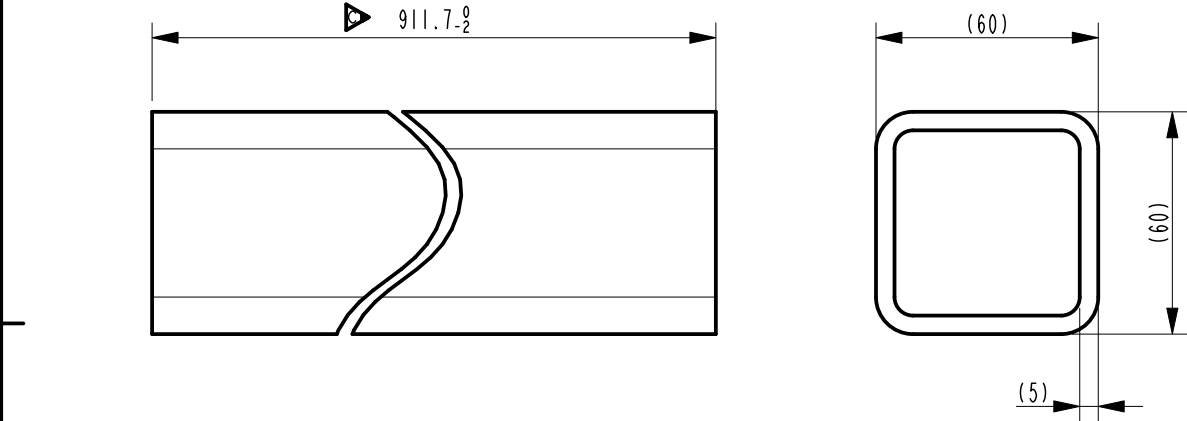
WSFA = Weld Spatter free area



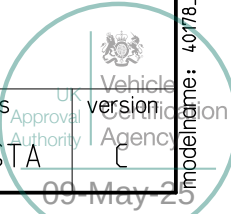
Tolerances unless otherwise specified	hole tolerance	created by:	BR	material description:	-
		creation date:	08-02-22	material dimension:	-
± 1 mm	JS14	mass:	12.062 kg	last changed by:	Robert Koetsier
		part nr.:	-	last change date:	07-04-2025 14:49
± 1 mm	JS14	approval date:	07-Apr-2025	approved by:	Emiel van de Wetering
		name:	PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Rot Tonguy ZAC les Naux 54450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa	name:	Weld Assembly
size	third angle	scale	sheet	drawing number	release status
A1	 units in mm	2:5	2 of 2	40178_10	Prerelease/STA



Tolerances unless otherwise specified ± 1 mm ± 1 °		hole tolerance JS14		created by: RK		material description: S275J0H  EN10219-2	
				creation date: 27-07-23		material dimension: 60x60x5  EN10219-1	
				mass: 7.374 kg		last changed by: Robert Koetsier	
				part nr.: -		last change date: 18-10-2024 15:57	
				approval date: 29-Nov-2024		approved by: Emiel van de Wetering	
Brink Group				PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Roi Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa name Crosstube			
size A4	third angle  units in mm	scale 1:2	sheet 1 of 1	drawing number 40178_11	release status Prerelease/STA	version C	 UK Approval Authority Vehicle Essential Agency



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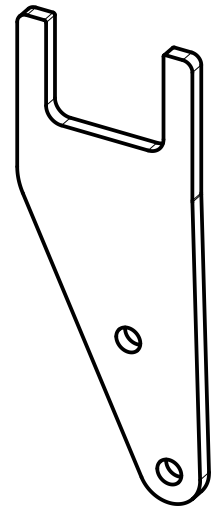
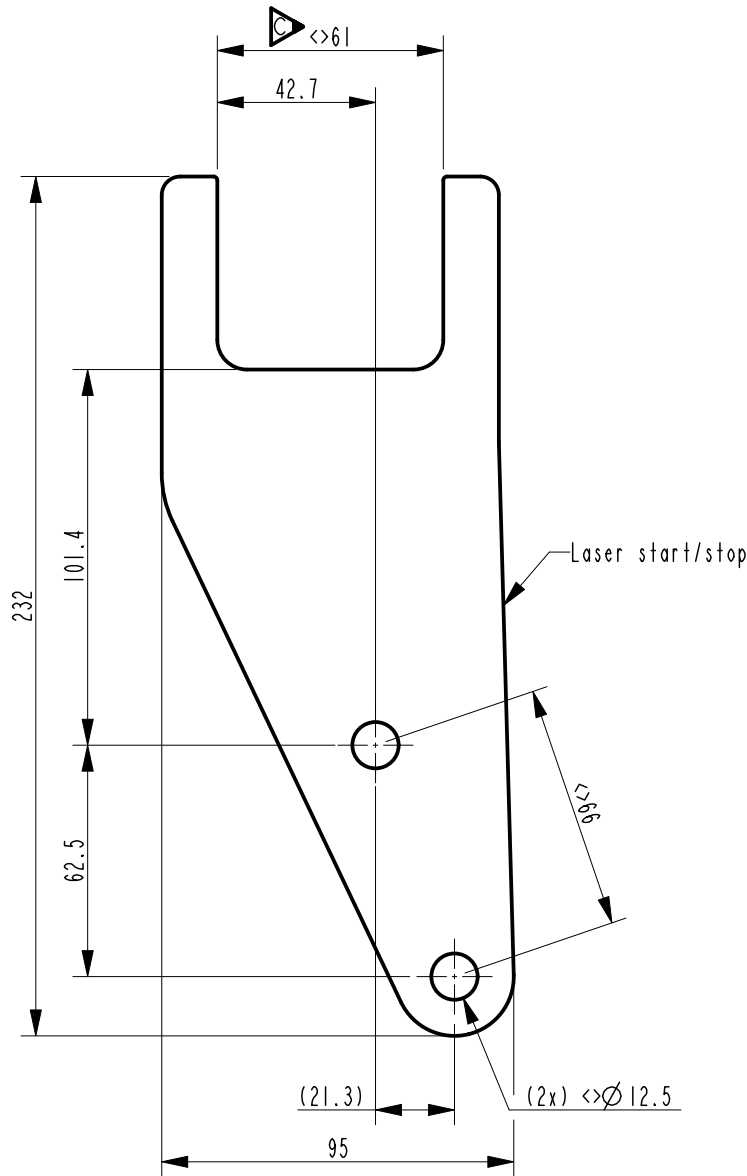


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		creation date: 27-07-23		material dimension: PL. 8mm  EN 10051	
$\pm 1 \text{ mm} / \pm 1^\circ$ Tolerances flat views: ISO 9013:2017 table 6		mass: 0.811 kg		last changed by: Robert Koetsier	
		part nr.:  8723267		last change date: 26-11-2024 11:18	
		approval date: 29-Nov-2024		approved by: Emiel van de Wetering	
		PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Roi Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa		name	
				Ballplate RHS	
size A4	third angle  units in mm	scale 1:2	sheet 1 of 2	drawing number 40178_12	release status Prerelease/STA

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		part nr.:  8723267		last change date: 26-11-2024 11:18	
		approval date: 29-Nov-2024		approved by: Emiel van de Wetering	
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				Ballplate RHS	
size A4	third angle  units in mm	scale 1:2	sheet 1 of 2	drawing number 40178_12	release status Prerelease/STA

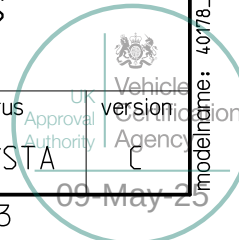


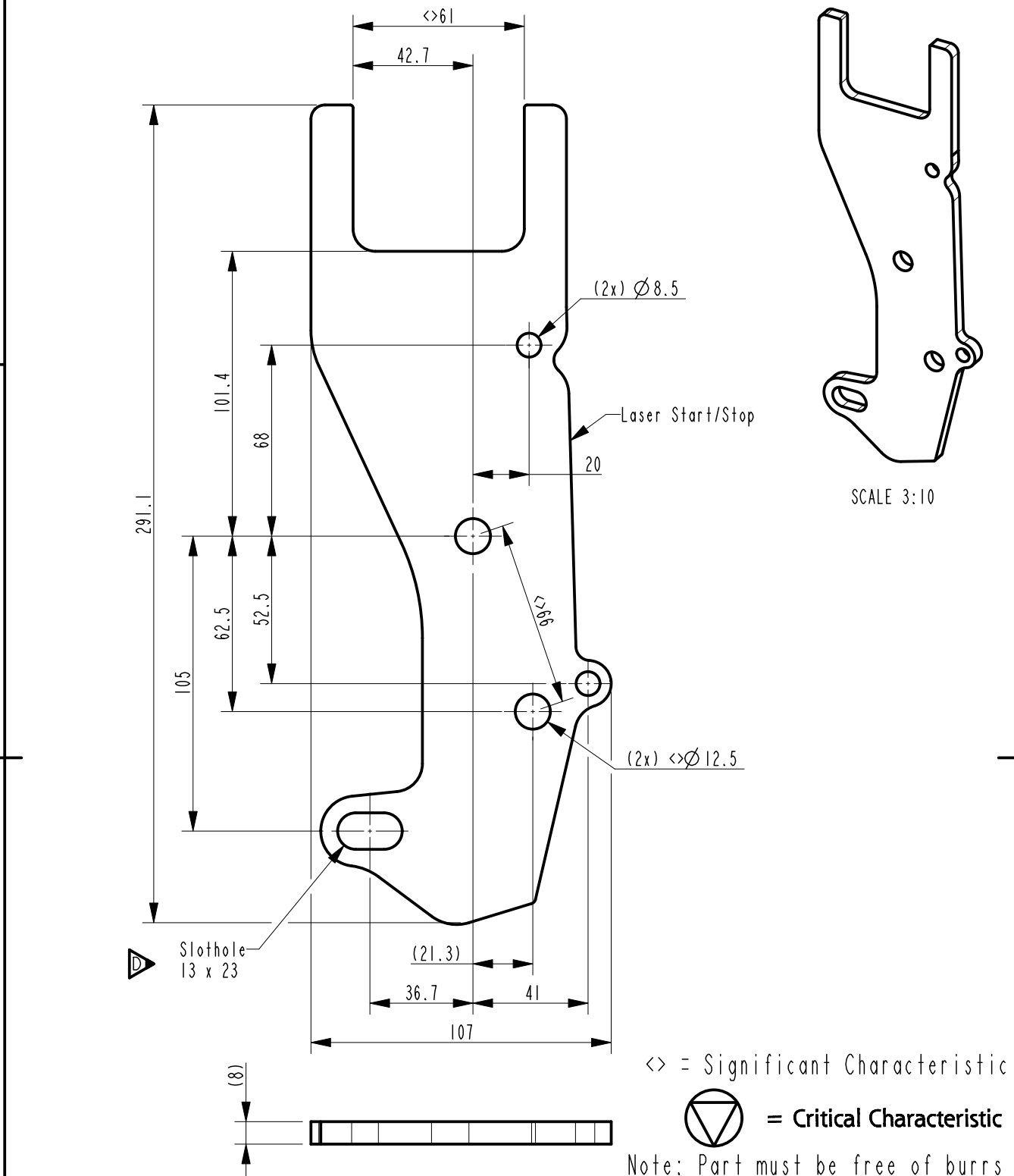
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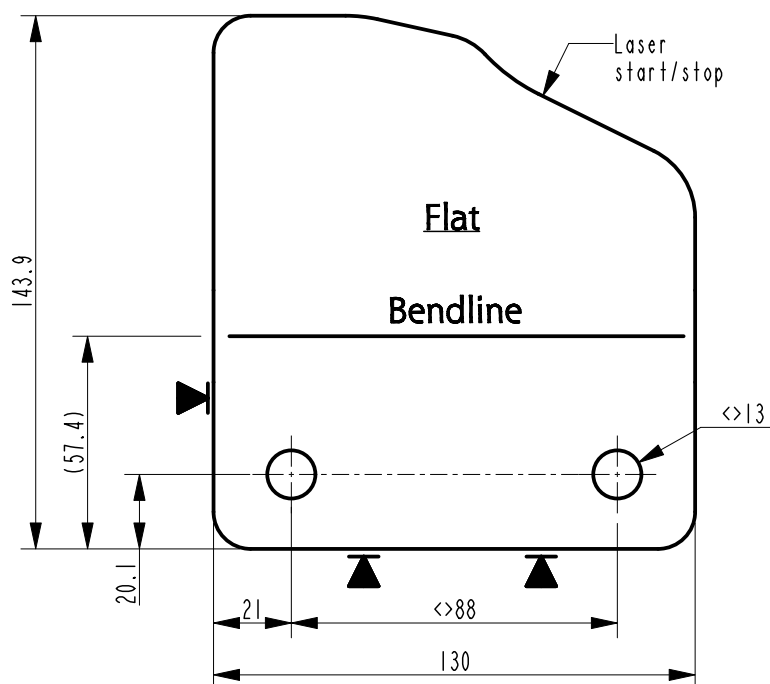
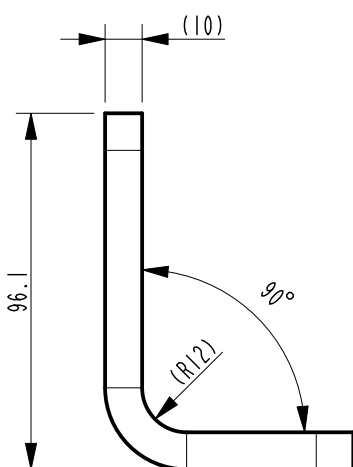
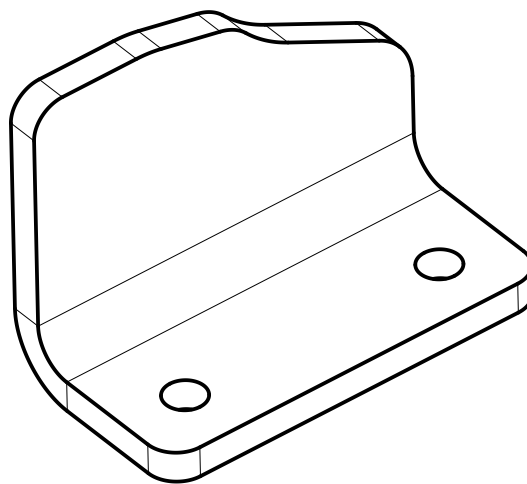
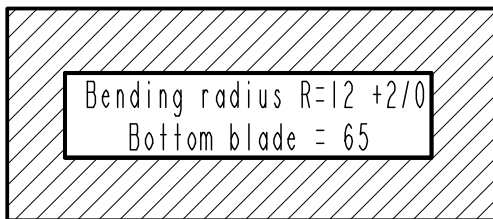
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Note: Part must be free of burrs





Tolerances unless otherwise specified: ± 1 mm / ± 1° Tolerances flat views: ISO 9013:2017 table 6		created by: RT		material description: S420MC-BM  EN 10149-2	
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		mass: 1.085 kg		last changed by: Robert Koetsier	
		part nr.:  8723571		last change date: 07-04-2025 09:24	
		approval date: 07-Apr-2025		approved by: Emiel van de Wetering	
size A4		third angle  units in mm		scale 1:2	
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				release status Prerelease/STA	
				name Ballplate LHS	
				version D	



 > = Significant Characteristic

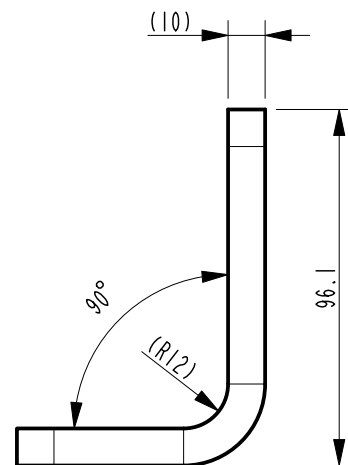
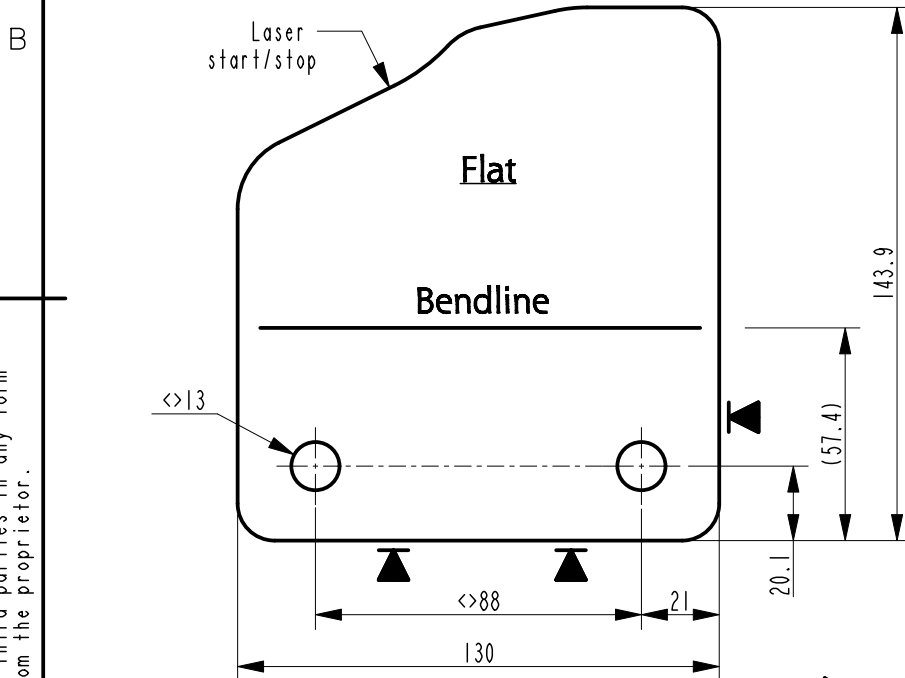
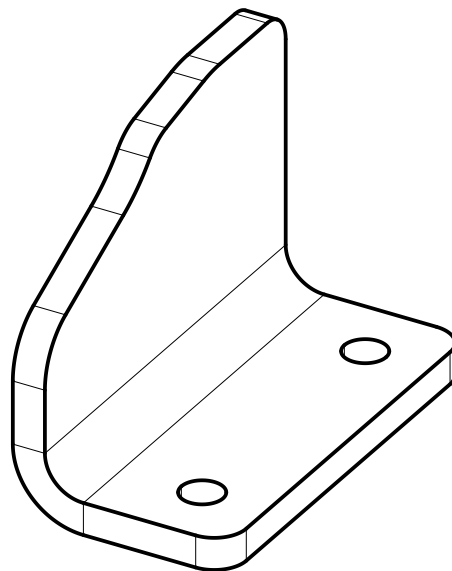
 = Critical Characteristic

Note: Part must be free of burrs

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		creation date: 27-07-23		material dimension: PL. 10mm  EN 10051	
		mass: 1.320 kg		last changed by: Robert Koetsier	
		part nr.: 8722249		last change date: 29-11-2024 15:04	
		approval date: 29-Nov-2024		approved by: Emiel van de Wetering	
		PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Roi Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa		name Connection plate RHS	
size A4	third angle  units in mm	scale 1:2	sheet 1 of 2	drawing number 40178_14	release status Prerelease/STA

type: PART
modelname: 40178_14
version: B
date: 09-May-25

Bending radius $R=12 \pm 2/0$
Bottom blade = 65



$\triangleleft \rangle$ = Significant Characteristic

∇ = Critical Characteristic

Note: Part must be free of burrs

Tolerances unless otherwise specified: $\pm 1 \text{ mm} / \pm 1^\circ$ Tolerances flat views: ISO 9013:2017 table 6		created by: RT		material description: S420MC-BM ∇^S EN 10149-2	
		creation date: 31-08-2023		material dimension: PL. 10mm ∇^S EN 10051	
Brink Group		mass: 1.339 kg		last changed by: Robert Koetsier	
		part nr.: 8722249		last change date: 29-11-2024 15:04	
		approval date: 29-Nov-2024		approved by: Emiel van de Wetering	
		PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Rol Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa		name Connection plate LHS	
size A4	third angle  units in mm	scale 1:2	sheet 1 of 1	drawing number 40178_24	release status Prerelease/STA

Company confidential

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type: PART
modelname: 40178_24
version: B
date: 09-May-25

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whatsoever is not permitted without written authority from the proprietor.

A

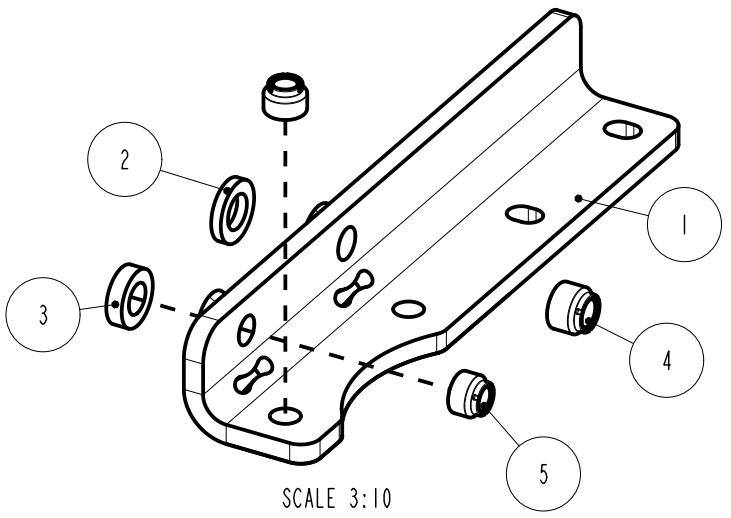
B

A

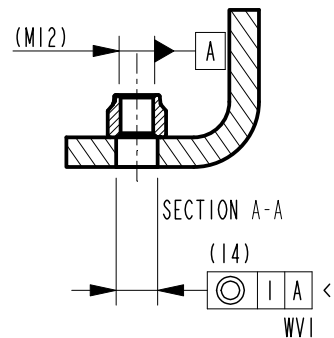
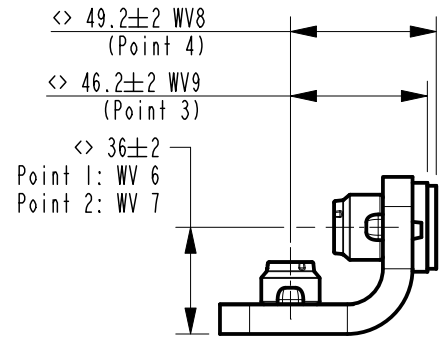
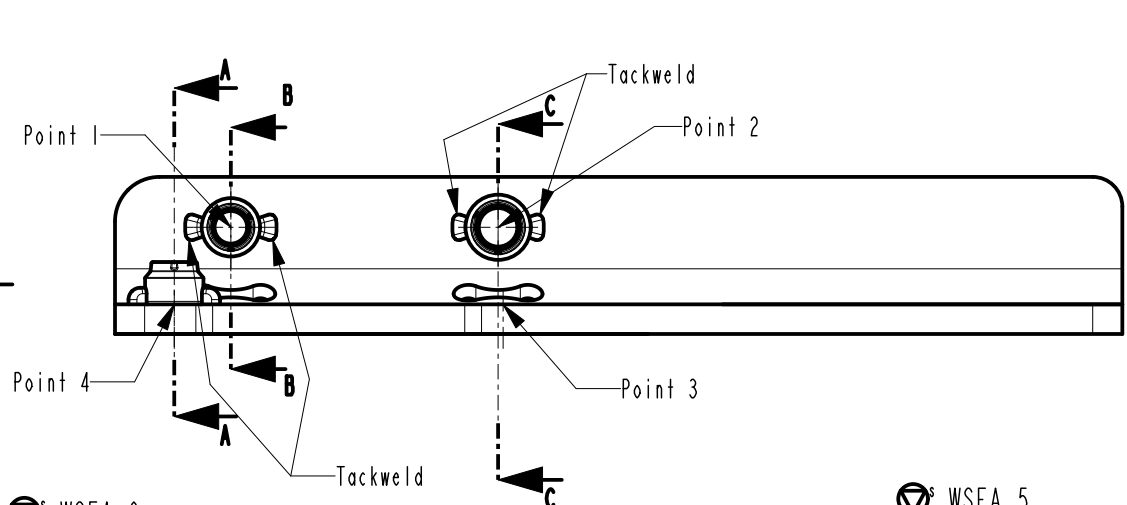
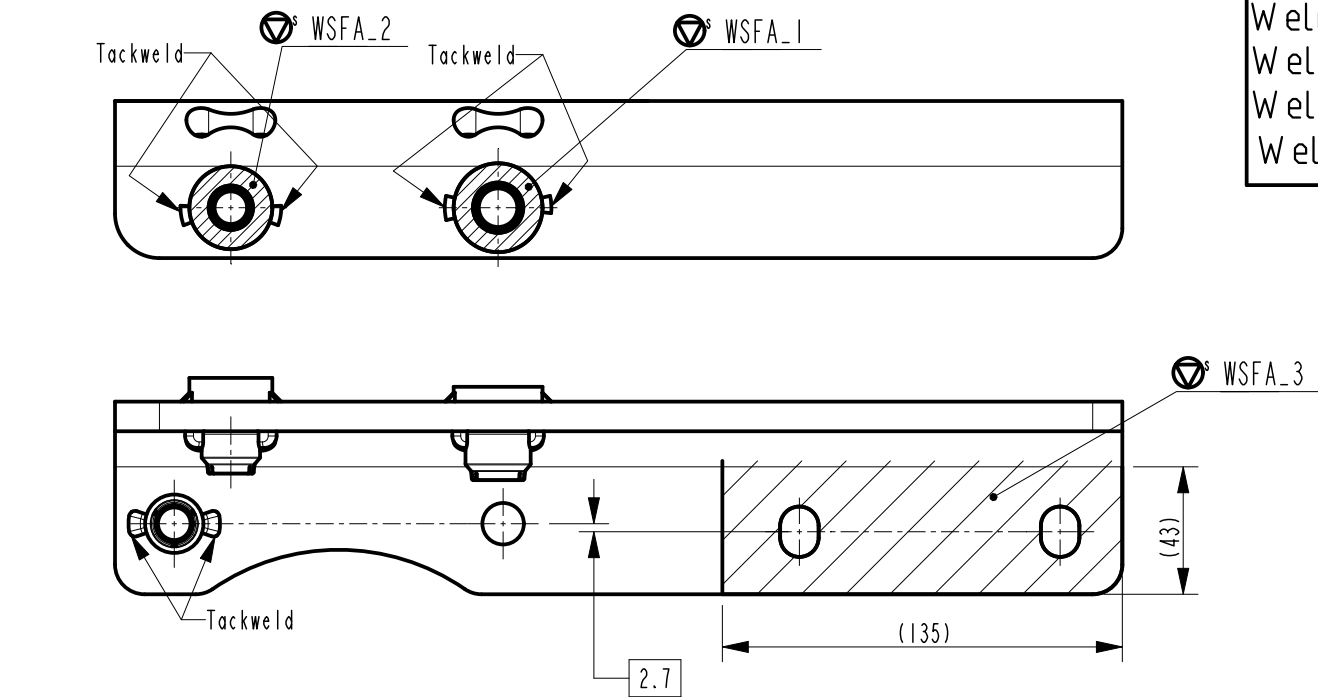
B

C

Welding standard: BN1-011
Weldingprocess: MAG
Weldingmaterial: EN-ISO 14341 G2Si or G3Si1
Weldings without tolerance = +/- 5 mm



SCALE 3:10



- Notes:
- Part must be free of burrs
 - Coating according BNI-006 C03
 - Nut thread free of weld spatter
 - WFSA = Weld Spatter Free Area

<> = Significant Characteristic

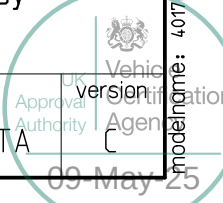
= Critical Characteristic

5	2	9420744	Weldnut M12 19,7x14,3 -	10	Ø 19.7mm / M12x1.75 --
4	1	9420750	Weldnut M14 22x16,5 -	10	Ø 22.0mm / M14x2.0 --
3	1	40178_23	Spacer	E235-C	28x6.5 - EN10305-2
2	1	40178_22	Spacer	E235-C	30X6.5 - EN10305-2
1	1	40178_21	Side Arm RHS	S420MC-BM	Pl. 10mm - EN 10051
pos	qty	number	name	material	material dimension

Tolerances unless other- wise specified ± 1 mm ± 1 ° JS14	hole tolerance	created by:	RKo	material description:	-
		creation date:	14-07-23	material dimension:	-
		mass:	2.599 kg	last changed by:	Robert Koetsier
		part nr.:	-	last change date:	29-11-2024 15:04
		approval date:	29-Nov-2024	approved by:	Emiel van de Wetering

Brink Group		PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Rol Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa		name Side Arm RHS Assy	
		size A3	third angle units in mm	scale 2:5	sheet 1 of 1
		drawing number 40178_20	release status Prerelease/STA	version C	

type: ASSEM
modelname: 40178_20



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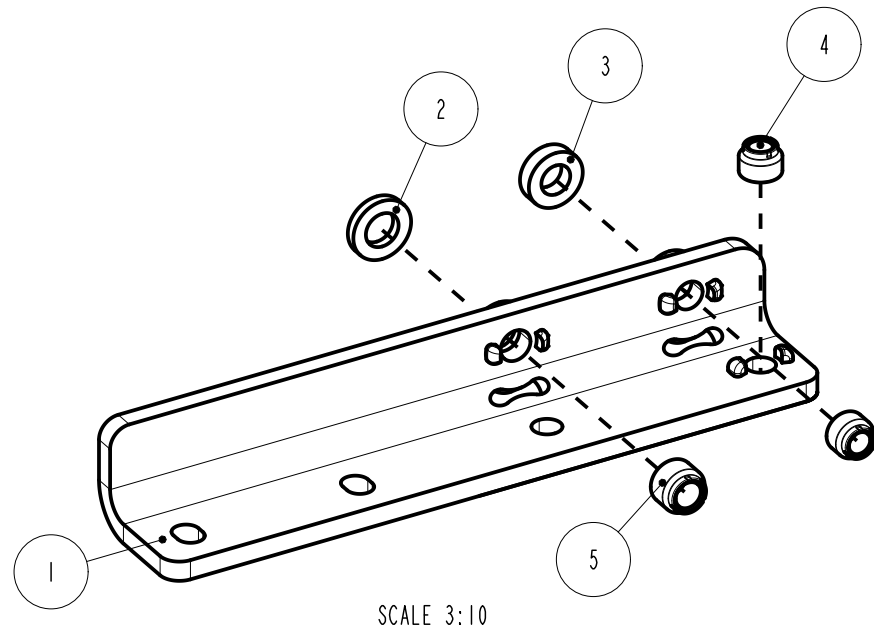
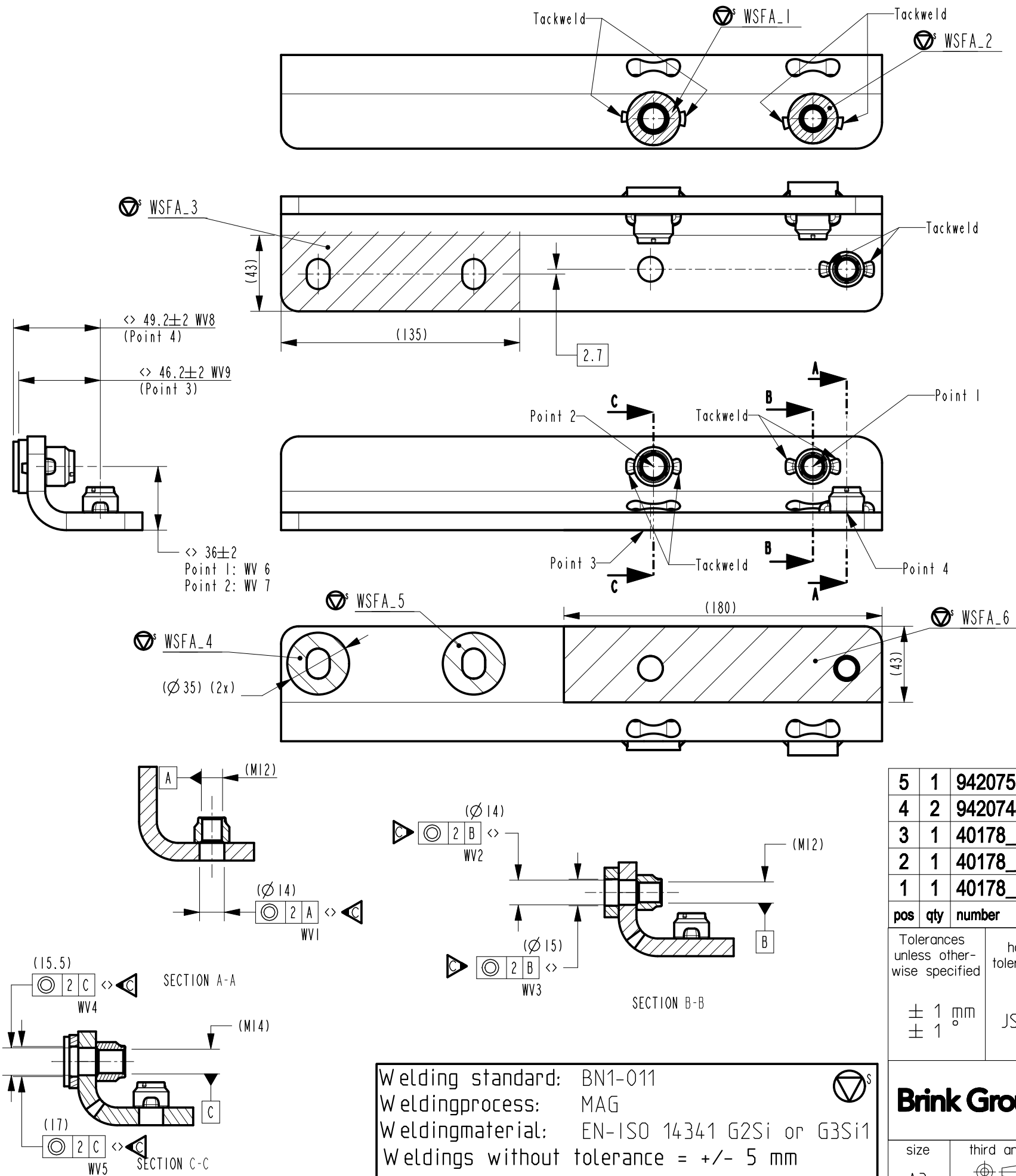
A

B

A

B

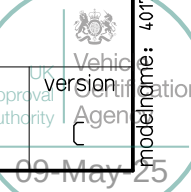
C

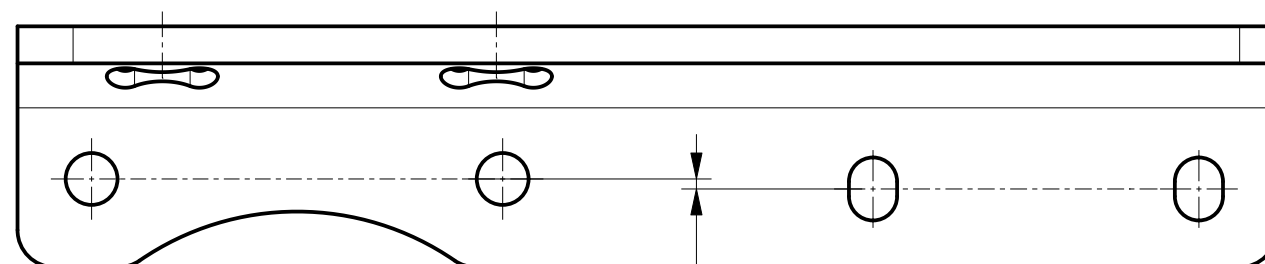


- Notes:
- Part must be free of burrs
 - Coating according BNI-006 C03
 - Nut thread free of weld spatter
 - WFS = Weld Spatter Free Area
 - <> = Significant Characteristic
 - Critical Characteristic

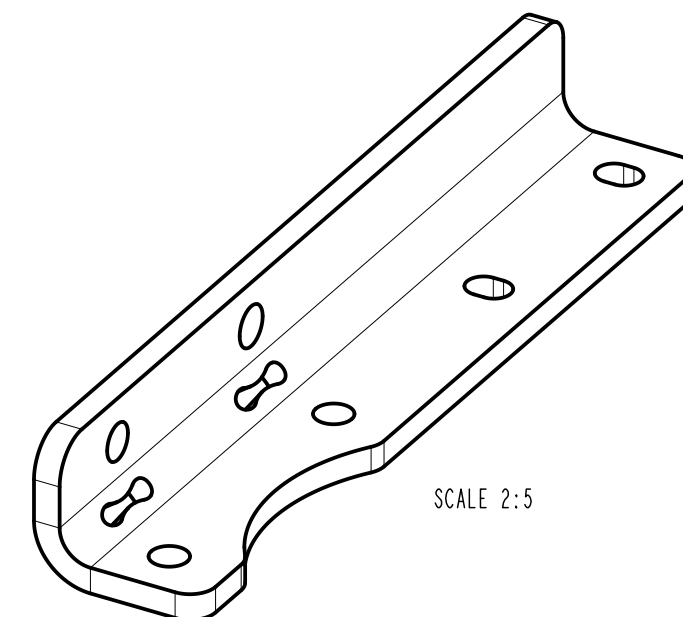
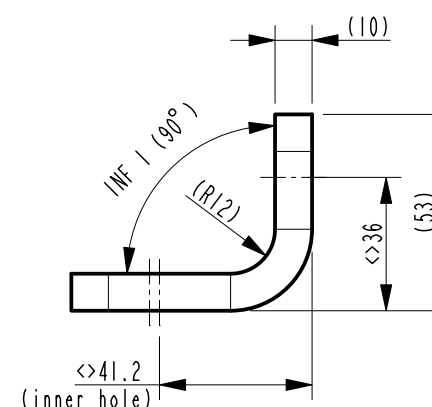
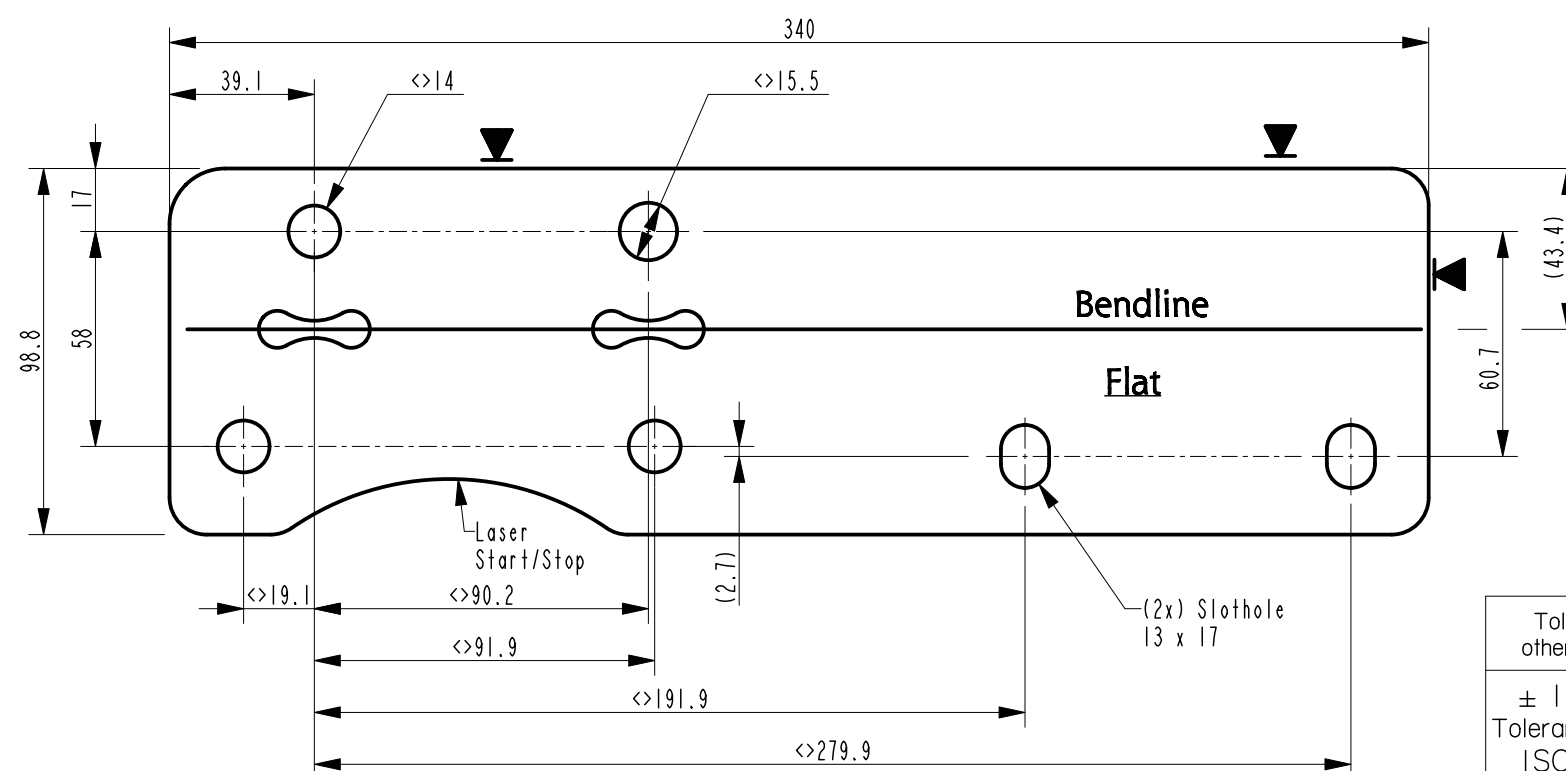
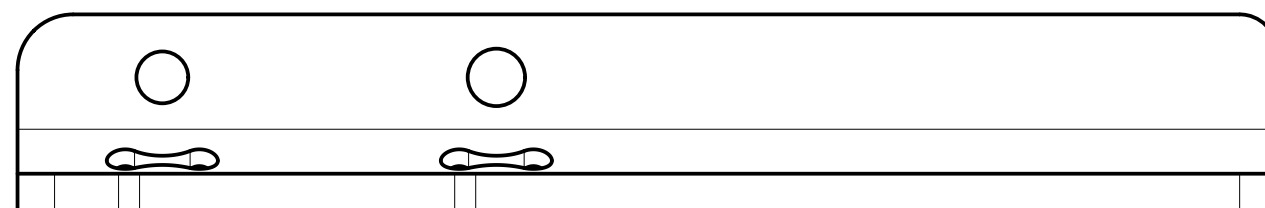
5	1	9420750	Weldnut M14 22x16,5 -	10	Ø 22.0mm / M14x2.0 - -
4	2	9420744	Weldnut M12 19,7x14,3 -	10	Ø 19.7mm / M12x1.75 - -
3	1	40178_23	Spacer	E235-C	28x6.5 - EN10305-2
2	1	40178_22	Spacer	E235-C	30x6.5 - EN10305-2
1	1	40178_31	Side Arm LHS	S420MC-BM	Pl. 10mm - EN 10051
pos	qty	number	name	material	material dimension
Tolerances unless other- wise specified			created by:	RT	material description: -
			creation date:	01-09-23	material dimension: -
			mass:	2.671 kg	last changed by: Robert Koetsier
			part nr.:	-	last change date: 29-11-2024 15:04
			approval date:	29-Nov-2024	approved by: Emiel van de Wetering
Brink Group			Side Arm LHS Assy		
			name		
size	third angle	scale	sheet	drawing number	release status
A3	units in mm	2:5	1 of 1	40178_30	Prerelease/STA

type: ASSEM
modelname: 40178_30
version: 09 May 25





2.7



SCALE 2:5

<> = Significant Characteristic



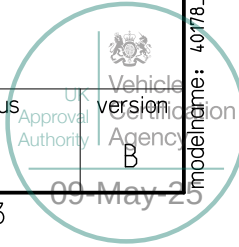
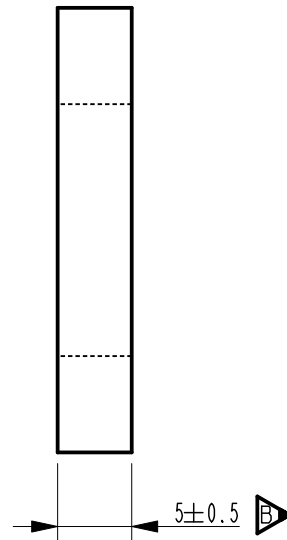
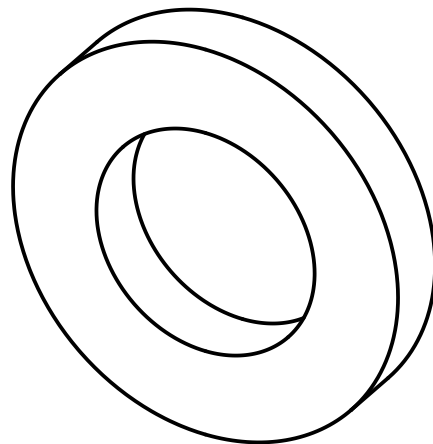
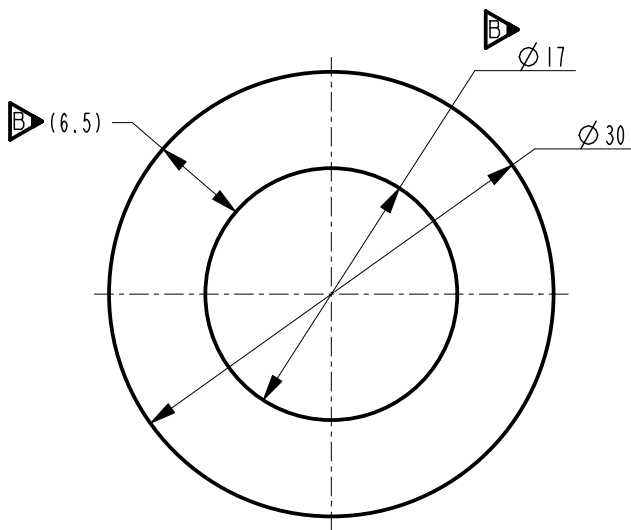
= Critical Characteristic

Note: Part must be free of burrs

Tolerances unless otherwise specified:		created by: RKo		material description: S420MC-BM  EN 10149-2	
± 1 mm / ± 1° Tolerances flat views: ISO 9013:2017 table 6		creation date: 14-07-23		material dimension: PL. 10mm  EN 10051	
		mass: 2.477 kg		last changed by: Robert Koetsier	
		part nr.: 8722250		last change date: 17-12-2024 10:17	
		approval date: 17-Dec-2024		approved by: Janco van Buiten	
		PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Rol Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa		name Side Arm RHS	
size A3	third angle  units in mm	scale 1:2	sheet 1 of 2	drawing number 40178_21	release status Prerelease/STA
				version Approved Authority 	

Tolerances unless otherwise specified ISO 2768-mK		hole tolerance -	created by: RT		material description: E235-C EN10305-1	
			creation date: 31-08-2023		material dimension: 30X6.5  EN10305-2	
			mass: 0.019 kg		last changed by: Robert Koetsier	
			part nr.: 9483144 		last change date: 08-10-2024 09:06	
			approval date: 08-Oct-2024		approved by: Janco van Buiten	
Brink Group			PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Rol Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa		name	
					Spacer	
size A4	third angle  units in mm	scale 2:1	sheet 1 of 1	drawing number 40178_22	release status Released	version B

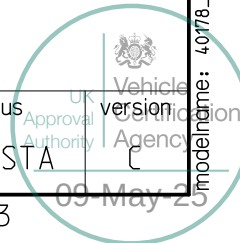
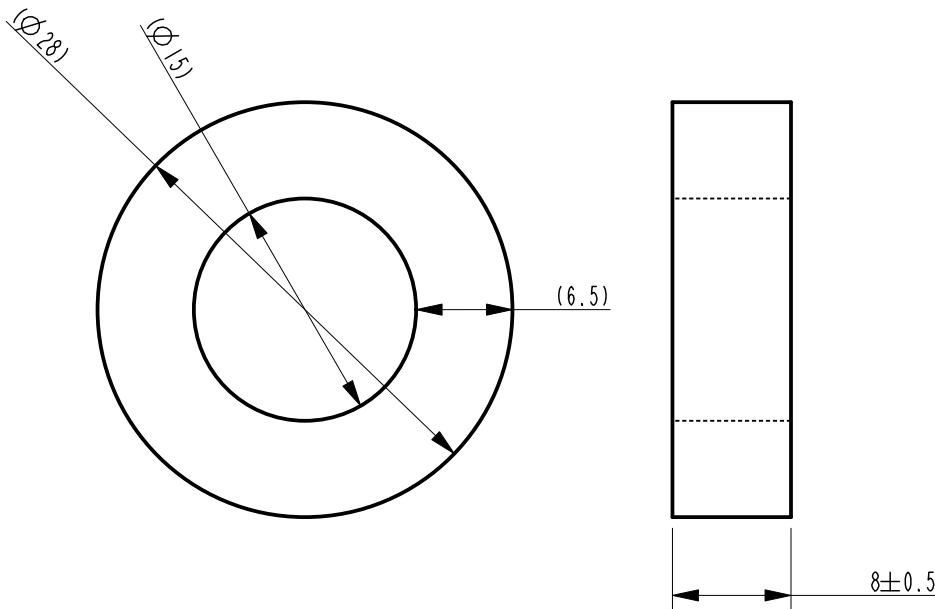
Note: Part must be free of burrs

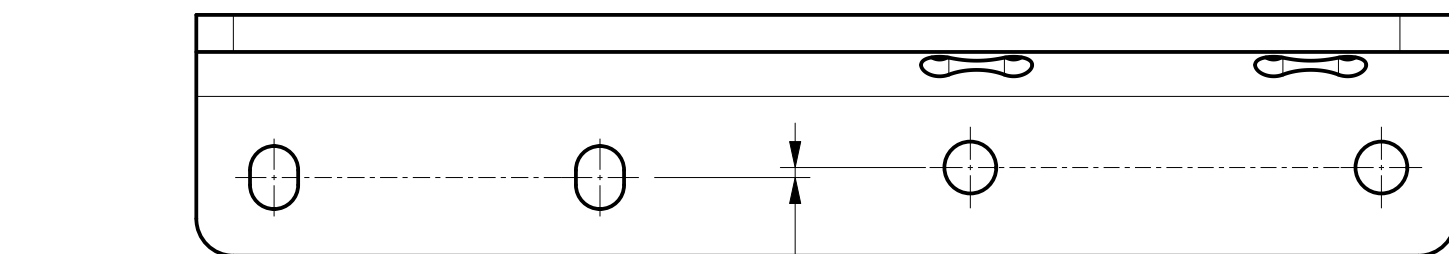


Tolerances unless other- wise specified ISO 2768-mK		hole tolerance -	created by: RKo		material description: E235-C EN10305-1	
			creation date: 31-05-23		material dimension: 28x6.5 EN10305-2	
			mass: 0.027 kg		last changed by: Robert Koetsier	
			part nr.: 9483143		last change date: 29-11-2024 15:04	
			approval date: 29-Nov-2024		approved by: Emiel van de Wetering	
Brink Group			PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Roi Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa		name Spacer	
size A4	third angle  units in mm	scale 2:1	sheet 1 of 1	drawing number 40178_23	release status Prerelease/STA	version C

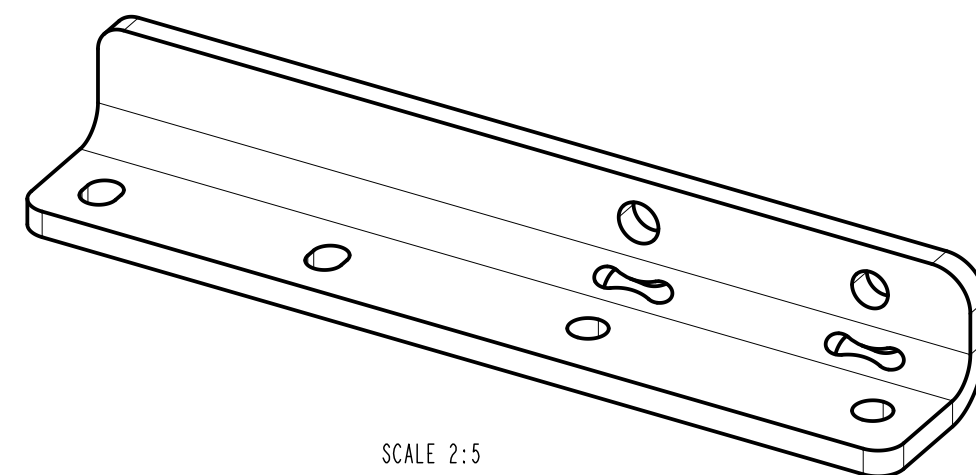
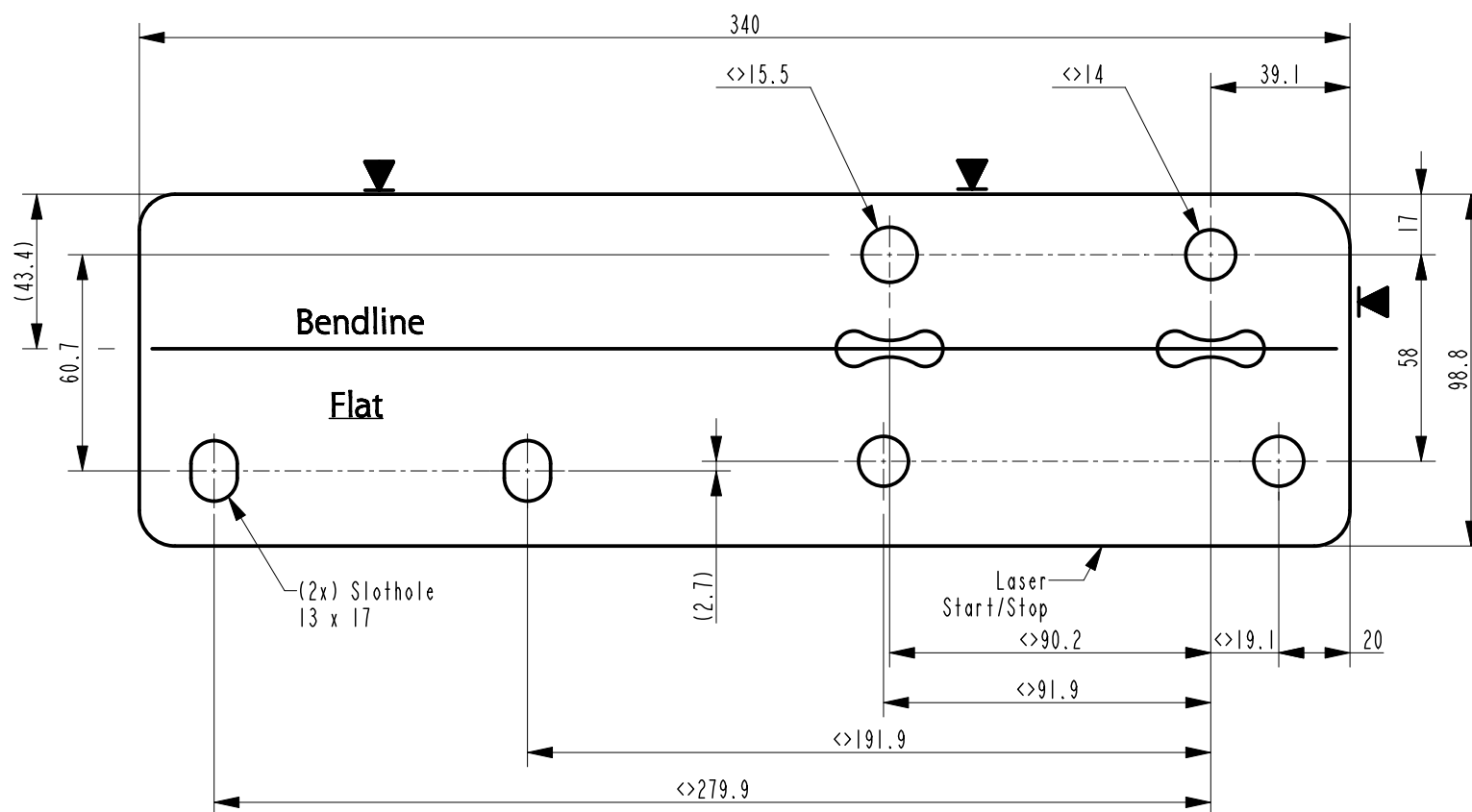
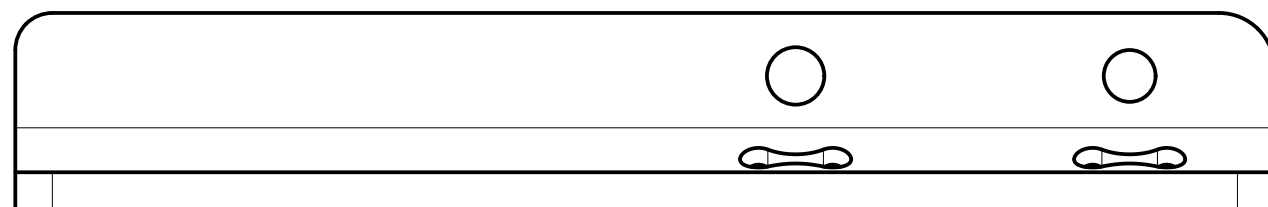
Tolerances unless other- wise specified ISO 2768-mK		hole tolerance -	created by: RKo		material description: E235-C EN10305-1	
			creation date: 31-05-23		material dimension: 28x6.5 EN10305-2	
			mass: 0.027 kg		last changed by: Robert Koetsier	
			part nr.: 9483143		last change date: 29-11-2024 15:04	
			approval date: 29-Nov-2024		approved by: Emiel van de Wetering	
Brink Group			PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Roi Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa		name Spacer	
size A4	third angle  units in mm	scale 2:1	sheet 1 of 1	drawing number 40178_23	release status Prerelease/STA	version C

► Note: Part must be free of burrs

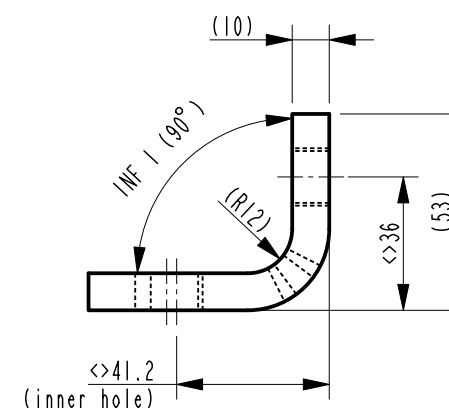




2.7



SCALE 2:5



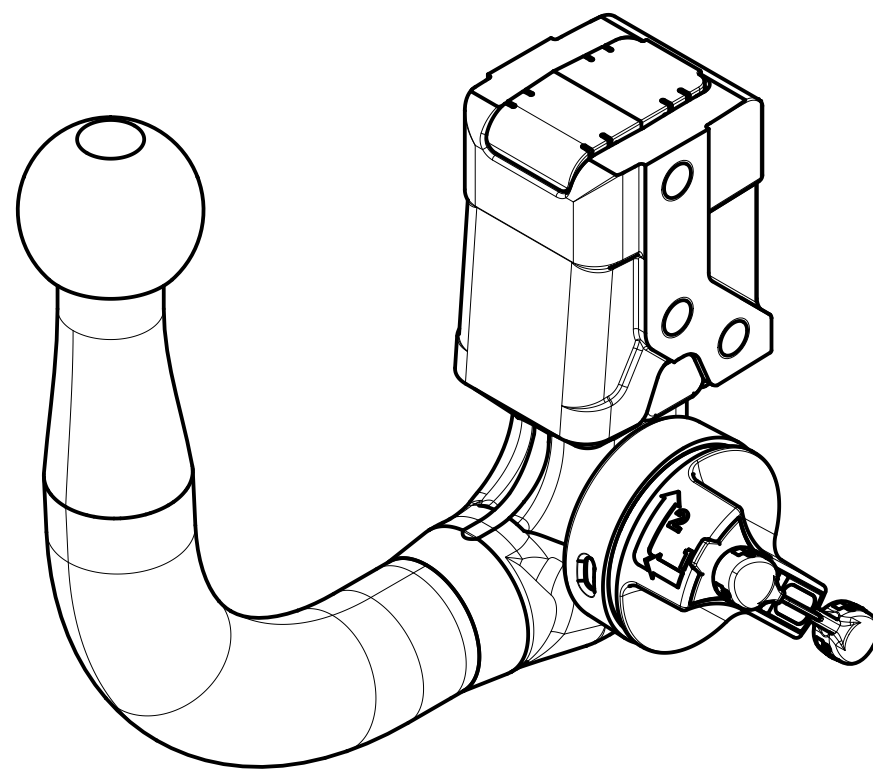
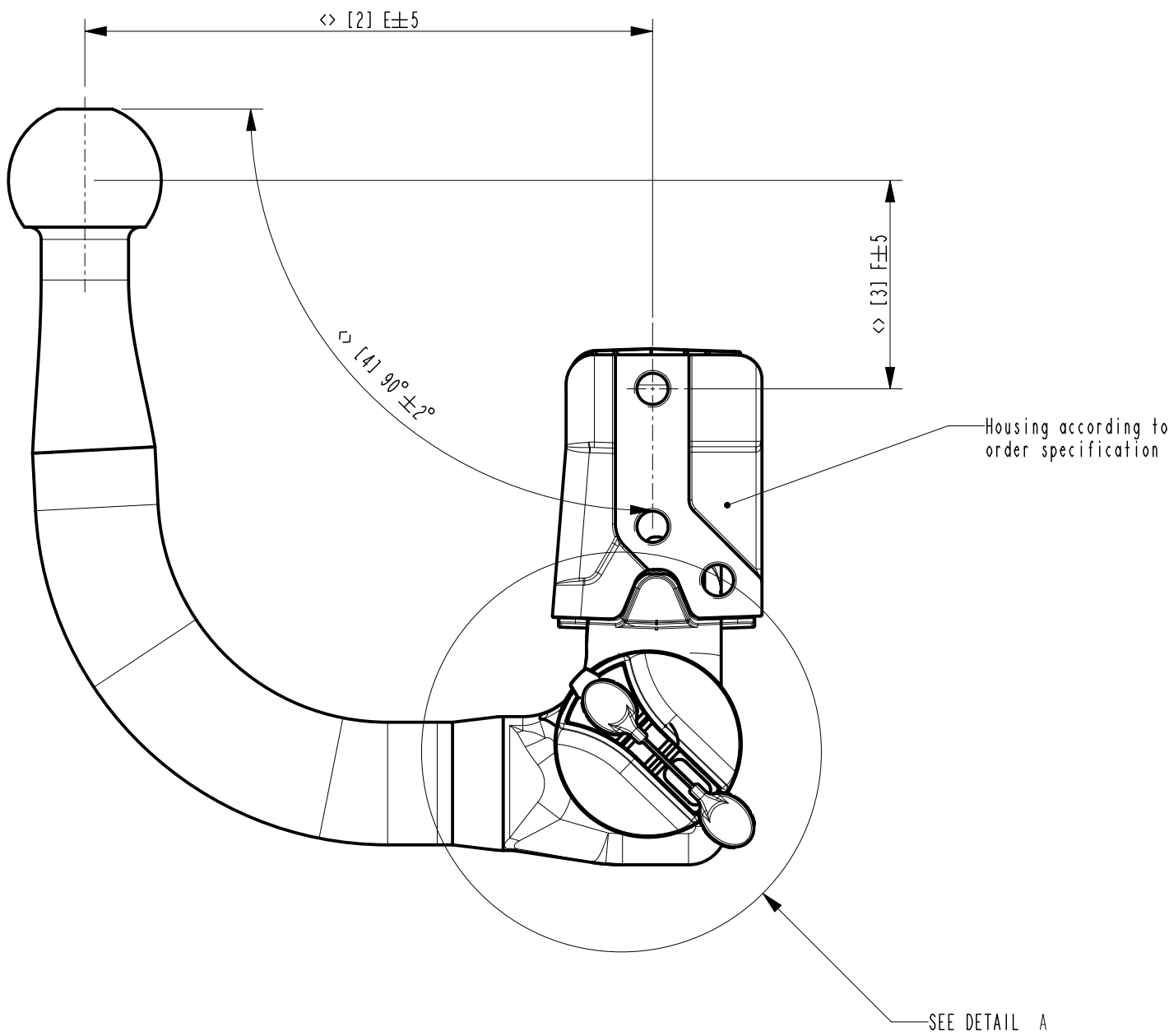
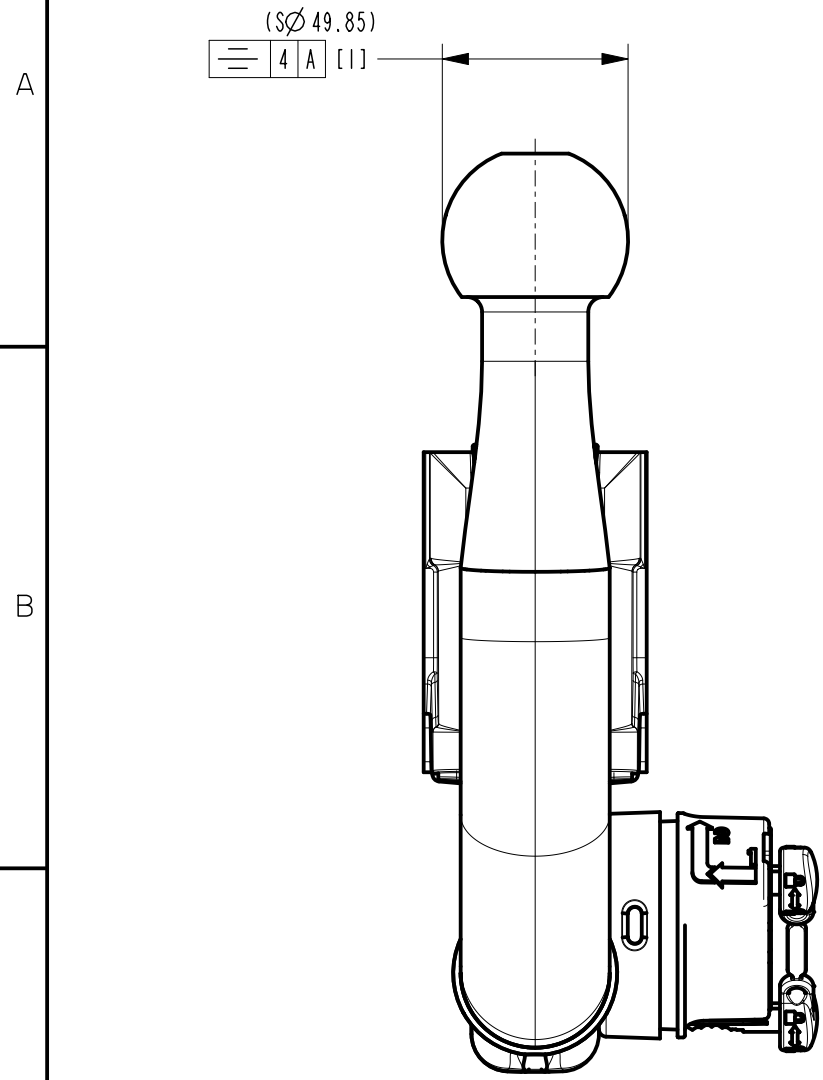
<> = Significant Characteristic



= Critical Characteristic

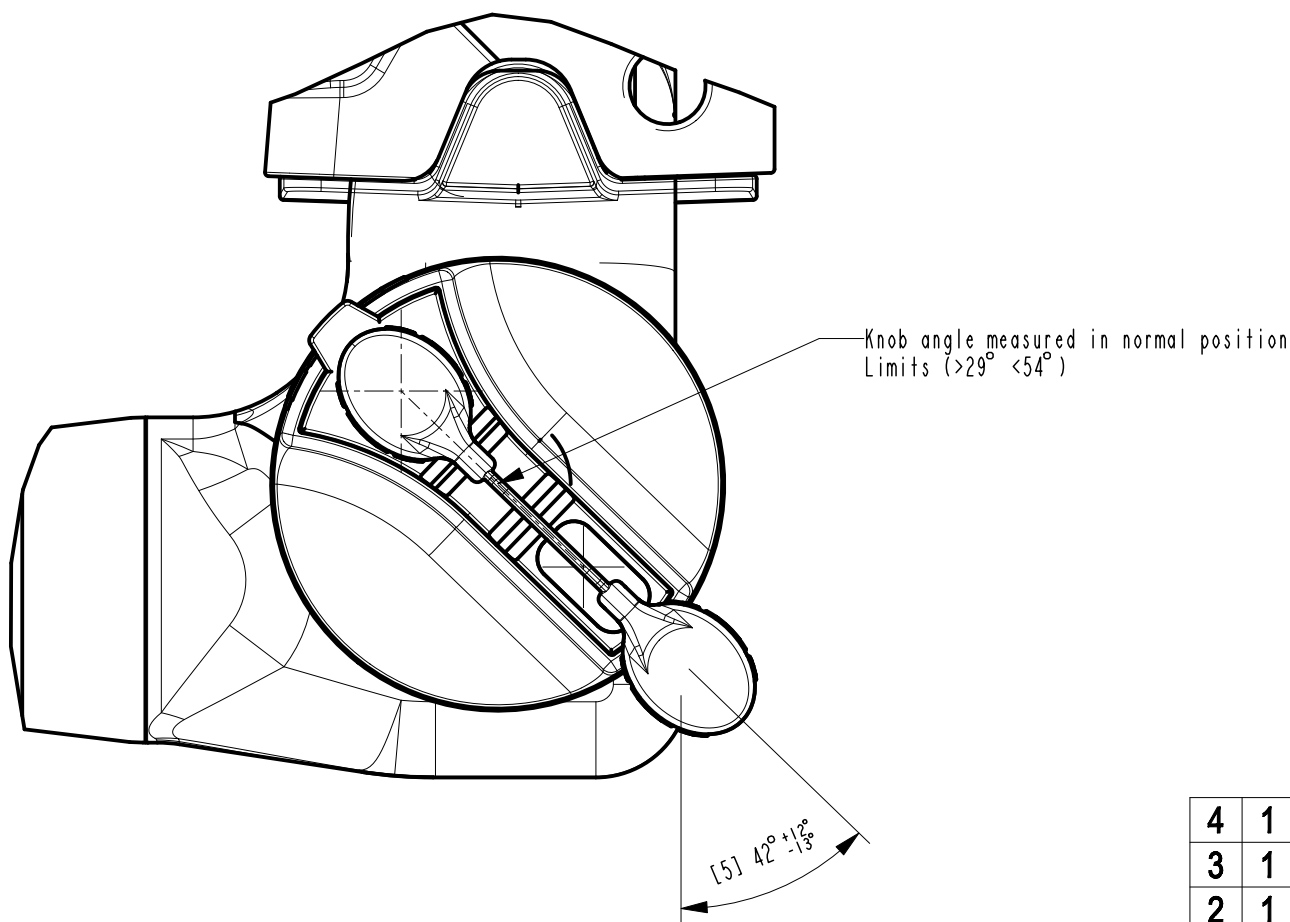
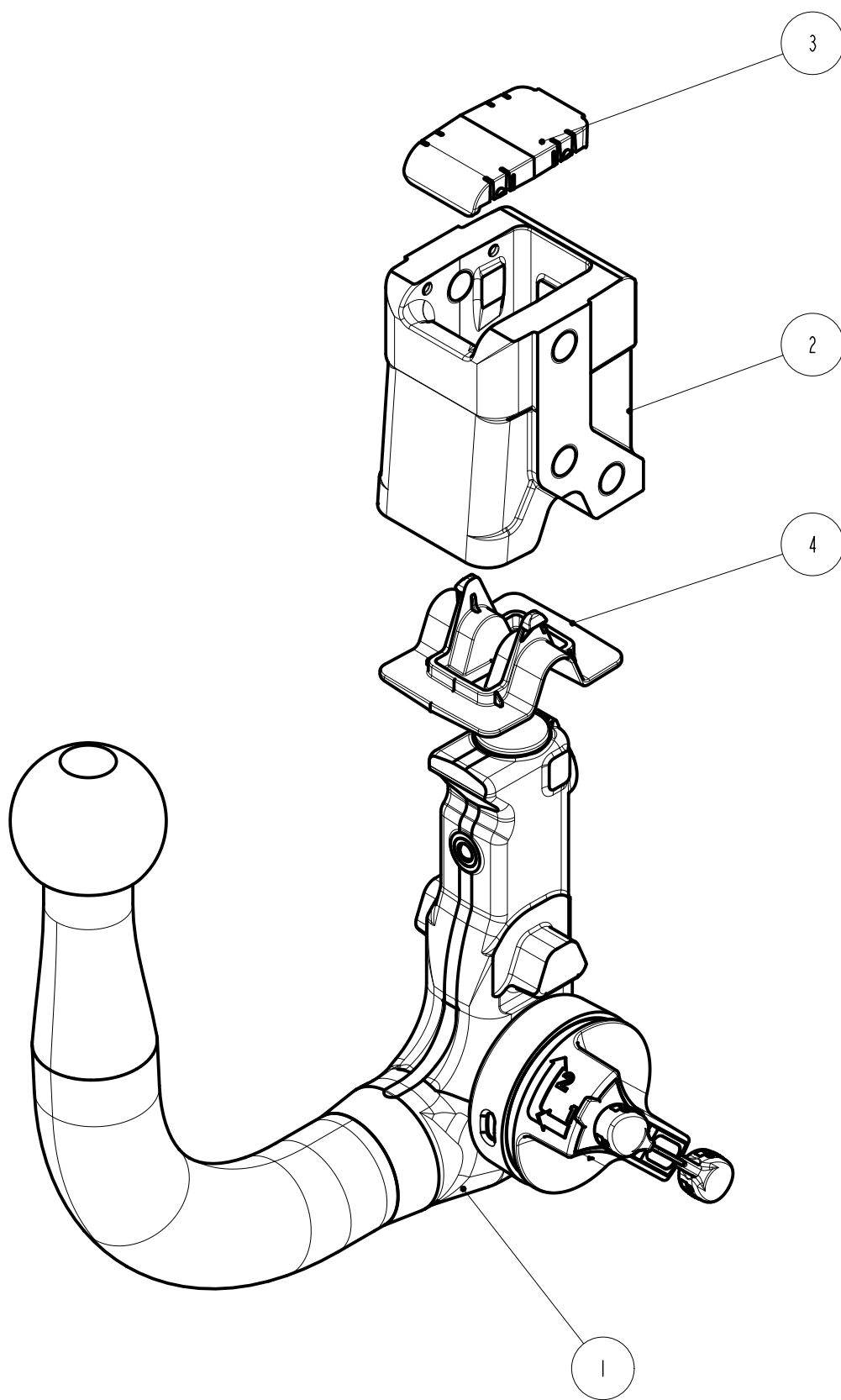
Note: Part must be free of burrs

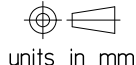
Tolerances unless otherwise specified:		created by: RT		material description: S420MC-BM  EN 10149-2	
± 1 mm / ± 1° Tolerances flat views: ISO 9013:2017 table 6		creation date: 31-08-2023		material dimension: PL. 10mm  EN 10051	
		mass: 2.549 kg		last changed by: Robert Koetsier	
		part nr.: 8722251		last change date: 17-12-2024 10:17	
		approval date: 17-Dec-2024		approved by: Janco van Buiten	
		PO Box 24, 7950 AA Staphorst The Netherlands 7, rue Rol Tanguy Zac les Naux 51450 Betheny France 14 Old Field Road, Shortts Retreat Pietermaritzburg, KwaZulu Natal, South Africa		name Side Arm LHS	
size A3	third angle  units in mm	scale 1:2	sheet 1 of 2	drawing number 40178_31	release status Prerelease/STA

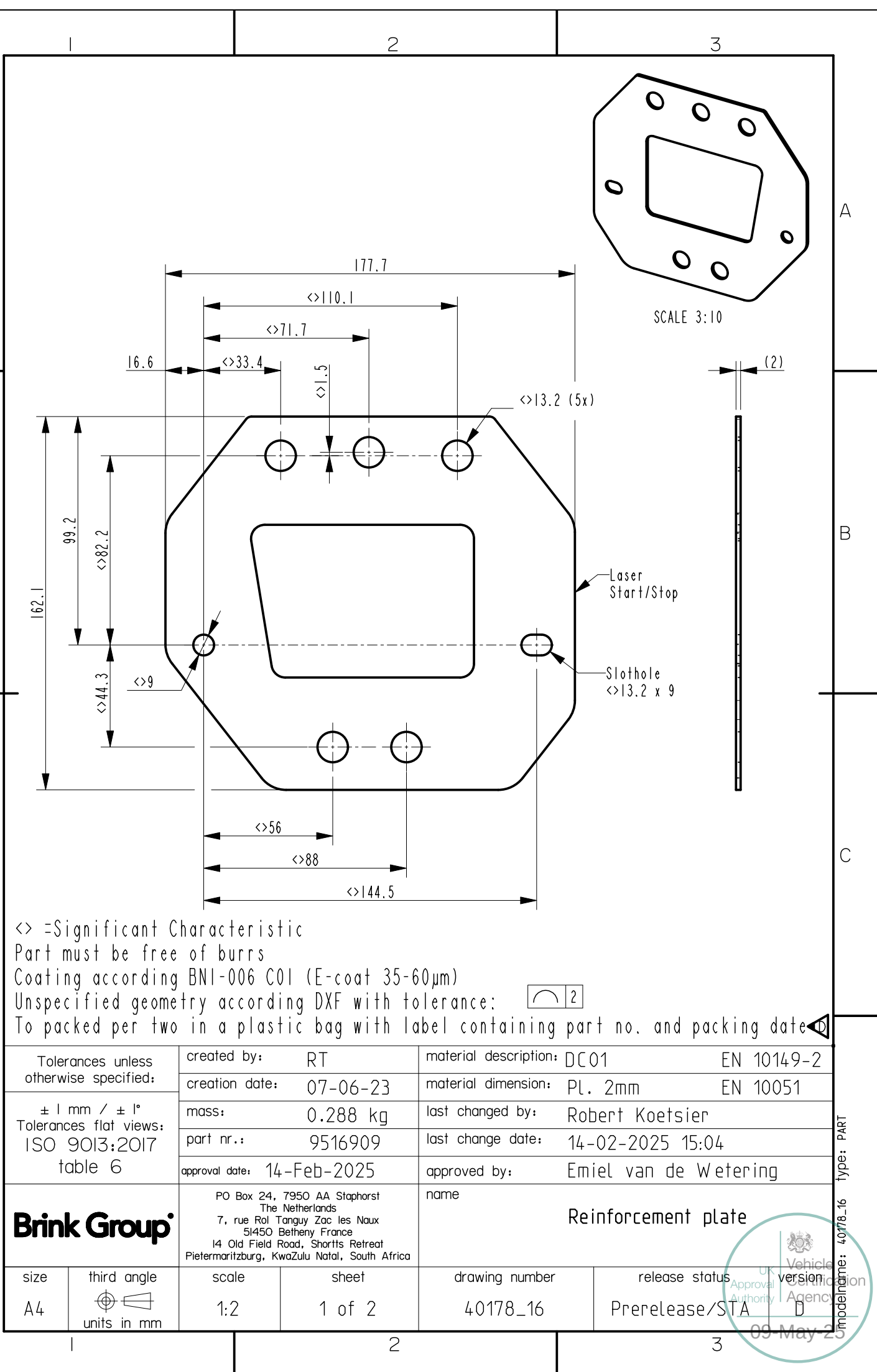


BMU SYSTEM 1 BEND			
# SYSTEM	E	F	MASS [kg]
60_6500_85	185.20	68.00	6.19
60_6501_85	210.20	68.00	6.44
60_6503_85	190.20	48.00	6.13
60_6506_85	170.20	28.00	5.65
60_6507_85	210.20	28.00	6.04
60_6509_85	250.20	28.00	6.44
60_6510_85	290.20	28.00	6.83
60_6511_85	190.20	8.00	5.74
60_6512_85	200.20	53.00	6.19
60_6513_85	230.20	8.00	6.13
60_6514_85	270.20	8.00	6.44
60_6515_85	170.20	-12.00	5.34
60_6516_85	210.20	-12.00	5.74
60_6517_85	250.20	-12.00	6.13
60_6518_85	290.20	-12.00	6.52
60_6519_85	190.20	-32.00	5.35
60_6520_85	230.20	-32.00	5.74
60_6521_85	270.20	-32.00	6.13
60_6522_85	200.20	77.00	6.43
60_6523_85	190.20	-12.00	5.54
60_6524_85	230.20	-2.00	6.03
60_6527_85	170.20	48.00	5.93
60_6531_85	171.70	8.00	5.58
60_6533_85	210.00	52.50	6.37
60_6540_85	200.00	-56.89	5.20
60_6541_85	190.00	-56.89	5.08
60_6542_85	240.00	-56.89	5.57
60_6543_85	300.00	-40.50	6.37
60_6546_85	210.00	-32.00	5.54
60_6550_85	195.20	68.00	6.29

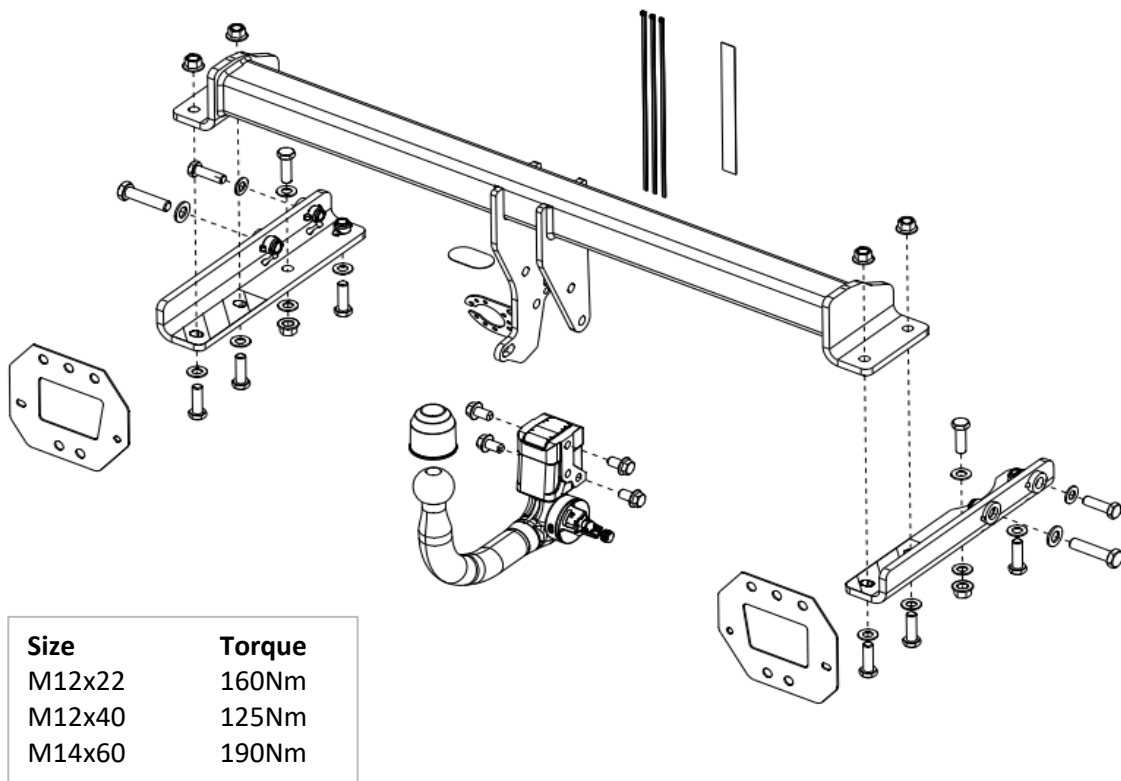
BMU SYSTEM 2 BEND			
# SYSTEM	E	F	MASS [kg]
60_6502_85	235.20	68.00	6.50
60_6504_85	230.20	48.00	6.33
60_6508_85	270.20	48.00	6.51



4	1	67_007_003	Cover front V4 -	PA_6	---
3	1	67_004_004	Cover rear	PA_66	---
2	1	67_007_015	Housing V4 -	EN-GJS-500-7	--
1	1	60_6500_80	6500 BMU ball assy V5 SL		---
pos	qty	number	name	material	material dimension
Tolerances unless otherwise specified		hole tolerance	created by:	CB	
			creation date:	16-12-21	
			mass:		
			part nr.:	-	
			approval date:	03-Jun-2022	
			approved by:	Patrick Segeren	
			name	BMU system V5 SL 65xx	
size	third angle	scale	sheet	drawing number	release status
A2	 units in mm	1:2	1 of 1	60_65XX_85	Released



Type: **40178**
GVW: **2400** kg
GTW: **975** kg
D-value: **6,93** kN
S-value: **75** kg
Approval Sign: **E11 55R-02 12313**
Coupling Class: **A50-X**

**Installation:**

1. Remove the bumper and crashbeam (if applicable)
2. Fit the towbar according to diagram
3. Fit the bumper to the vehicle
4. Mount the ball on the towbar



Prüfbericht
Test report

Nr. / No.: 25-00149-CX-GBM-00

Prüfung eines Bauteiltyps
in Bezug auf die Richtlinie / Verordnung (EG/EU) / Regelung Nr. **ECE-R55**
in der Fassung der Änderung Nr. **02, Ergänzung 02**
Genehmigungsgegenstand: **Mechanische Verbindungseinrichtungen**

Test of a component type
*with regard to Directive / Regulation (EC/EU) / Regulation No. **ECE-R55***
*taking into consideration amendment No. **02, supplement 02***
*Approval subject: **Mechanical coupling components***

Genehmigungsstand / Approval status		
☒	Erteilung einer Typgenehmigung <i>Granting of a type approval</i>	E11*55R02/02*12313*00
☐	Nachtrag/Änderung zur Typgenehmigung Nr. <i>Extension/correction to type approval no.</i>	--

Gründe des Nachtrags / Reasons for extension

- entfällt
- *not applicable*





0. **Allgemeine Angaben**
General

- 0.1. Fabrikmarke : Brink
(Firmenname des Herstellers)
Make (trade name of manufacturer)
- 0.2. Typ und Bauart der : 40178
Verbindungseinrichtung nicht genormte Kupplungskugel 50, abnehmbar
Type of the coupling device non standard coupling ball 50, detachable
- 0.3. Klasse der Verbindungseinrichtung : A50-X
Class of the coupling device
- 0.4. Name und Anschrift des : Brink Towing Systems B.V.
Herstellers Industrieweg 5
Manufacturer's name and address NL - 7951 CX Staphorst
- 0.5. Beschreibungsbogen
Information document
- Nr. : 40178
No.
- Ausgabedatum : 14.04.2025
Date of issue
- 0.6. Kennwerte : D/D_c = 6,93 kN
Characteristic values S = 75 kg
- Alternative Werte : entfällt
Alternative values *not applicable*





1. **Prüfgegenstand**
Testobject

- 1.1. Beschreibung : nicht genormte Kupplungskugel 50, abnehmbar
Description non standard coupling ball 50, detachable
- 1.2. Kennzeichnung : 40178-0-45-23
Marking
- 1.3. Bemerkungen : Dynamische Prüfung:
Remarks Da die dynamische Prüfung an dem Typ 40178 durchgeführt wurde, ist eine Worst-Case Betrachtung nicht erforderlich.
Statische Prüfung:
Die statische Prüfung wurde an der gleichwertigen Hilfskupplung (Test.-Nr. 2nd_coupling_TRI_0006_00) durchgeführt. Die Prüfergebnisse sind auf den Typ 40178 übertragbar, da der Worst-Case (Materialdicke) geprüft wurde.
Dynamic test:
Because the dynamic test was performed on the type 40178, a worst-case consideration is not required.
Static test:
The static test has been performed on the quite similar secondary coupling device (test-no 2nd_coupling_TRI_0006_00).
The test results can be transferred to the type 40178 because the worst case of material thickness was tested
- 1.4. Worst-Case-Auswahl : Die Prüfung wurde auf Grund folgender Worst-
Worst-case selection Case- Kriterien durchgeführt:
 - Gewichtsangaben nach 9.3. der ECE R 55.02, Anhang 1
 - Kugelkopfposition
 - Ausführung (starr, abnehmbar oder schwenkbar)
 - Fahrzeugseitige Befestigung*The test was carried out based on the following worst-case criteria:*
 - Weight data according 9.3. of ECE-R 55.02, Annex 1
 - Coupling ball position
 - Difference in design (fixed, detachable or swiveling)
 - Vehicle-side attachment



2. Prüfprotokoll Test record

2.1 **Prüfbedingungen** **Test conditions**

- 2.1.1 Meß- und Prüfeinrichtungen : Hydropulsanlage
Equipment for measuring and testing Nr. 01 (Serien-Nr. 4780, Kalib.-Datum 13.07.2022)
Hydropulse test bench
Nr. 01 (Serial no 4780, calibration date 13.07.22)
- 2.1.2 Prüfparameter : Resultierende Prüfkraft (Wechselast): $\pm 4,16$ kN
Parameter of the test *Test load F (alternating load):*
Errechneter D-Wert: 6,93 kN
Calculated D-value:
Prüfwinkel α : $+15^\circ$
Angle of test load α :
Prüffrequenz: 12 Hz
Frequency:
Lastspielzahl: 2×10^6
Load cycles:
- 2.1.3 Werkstoffprüfungen : wurden nicht durchgeführt
Material tests *not carried out*
- 2.1.4 Statische Prüfung auf zusätzlichen Befestigungspunkt (60 sec.) : Prüfkraft: 15 kN
Static test on secondary coupling (60 sec) *Test load*

2.2. **Prüfergebnisse** **Test Results**

Ergebnis der Untersuchungen : Nach den genannten Prüfungen wurden keine
Result of the tests Brüche, Risse oder übermäßigen Verformungen festgestellt (Farbeindringprüfung).
The test sample withstood the dynamic fatigue test and the static test without cracks checked by penetrating means.

Montage- und Betriebsanleitung : Die Montage- und Betriebsanleitung enthält
Installation and operating instructions ausreichende Informationen zur Montage und zum ordnungsgemäßen Betrieb.
The installation and operating instructions contain sufficient information for mounting and duly operation.

2.3. Allgemeine Angaben General information

Datum der Prüfung : Nov. 2023 (dynamisch / dynamic)
Date of testing 16.12.2022 (statisch / static)

Prüfort : NL - Staphorst
Location of testing

3. Anlagen Appendices

Beschreibungsbogen : 40178 bestehend aus Beschreibungsbogen,
Information document Zeichnungen, Einbauanleitung (20 Seiten).
40178 consisting of Information document,
Drawings, Fitting instructions (20 pages).

4. Schlussbestätigung Statement of conformity

Die erwähnte Beschreibungsmappe und der darin beschriebene Typ entsprechen der genannten Prüfgrundlage. Probenentnahmeplan bzw. -verfahren ergeben sich aus den Vorgaben der Prüfgrundlage. Die ungünstigste Konfiguration wurde entsprechend der Prozessbeschreibung "Anforderungen an Prüfberichte (AS-PB-T-02)" bestimmt. Es gilt die Entscheidungsregel nach ILAC G8:09/2019, 4.2.1: In Bezug auf die Einhaltung der Grenzwerte wurde die Messunsicherheit nicht berücksichtigt.

Der Hersteller trägt die Verantwortung für die zu Verfügung gestellten Informationen (3.) und Prüfmuster. Die Prüfergebnisse beziehen sich auf die erhaltenen und in (2.) genannten Prüfmuster. Diese sind repräsentativ für den in (3.) beschriebenen Typ. Der Prüfbericht darf nur vom Auftraggeber und nur in vollem Wortlaut vervielfältigt und weitergegeben werden. Eine auszugsweise Vervielfältigung und Veröffentlichung des Prüfberichtes ist nur nach schriftlicher Genehmigung zulässig.

The mentioned information folder and the type described therein are in accordance with the test basis mentioned above. Sampling plan or method result from the requirements of the test basis. The worst-case configuration was selected in accordance with process description "Requirements for Test Reports (AS-PB-T-02)". Valid decision rule in accordance with ILAC G8:2019, 4.2.1: in question of meeting the limits the measurement uncertainty was ignored.

The manufacturer is responsible for the information (3.) and the test specimens provided by him. The test results relate only to the test specimens as received and mentioned (2.). The test specimens are representative for the type described (3.).

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Dieser Prüfbericht umfasst die Seiten 1 bis 6.
The Test Report comprises of pages 1 to 6.

München, 16.04.2025
Munich,

B.Eng. Johannes Meindl

