

Highway Surfer

HAN | AUTOMOTIVE
RESEARCH



“An autonomous lane changing system for highways”

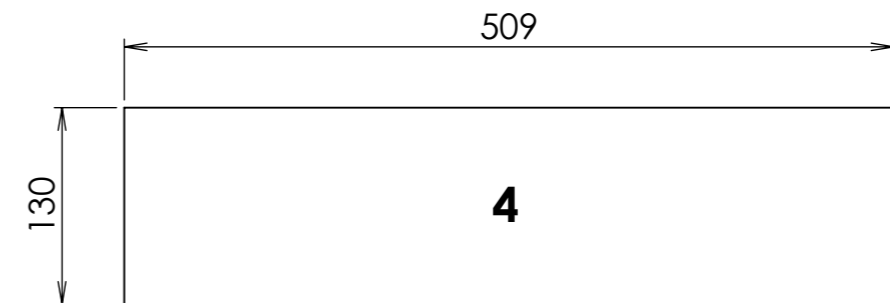
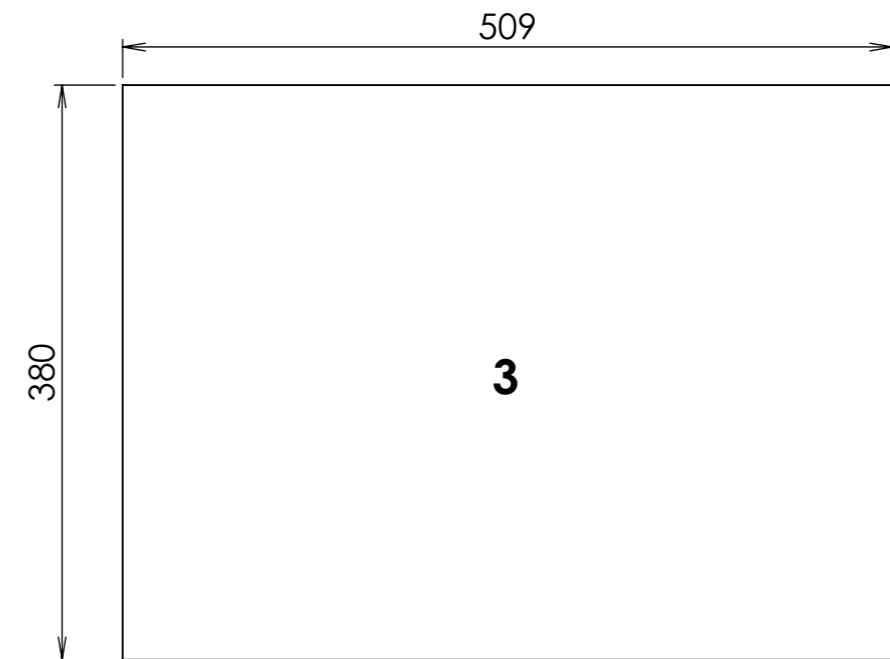
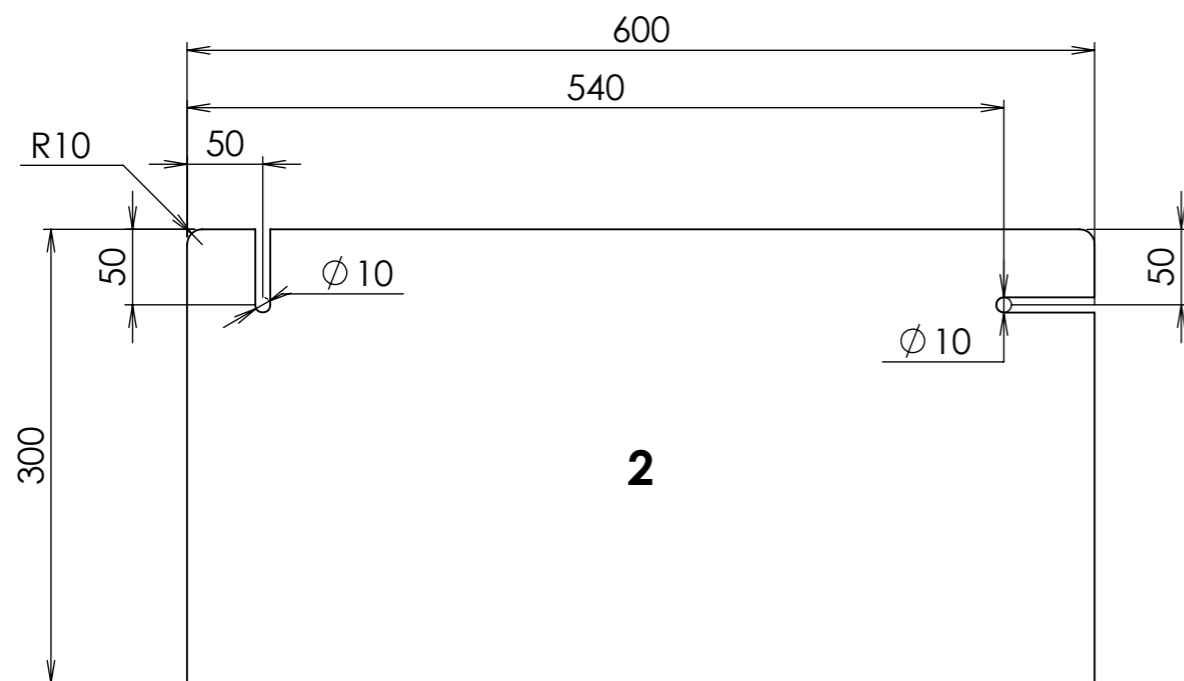
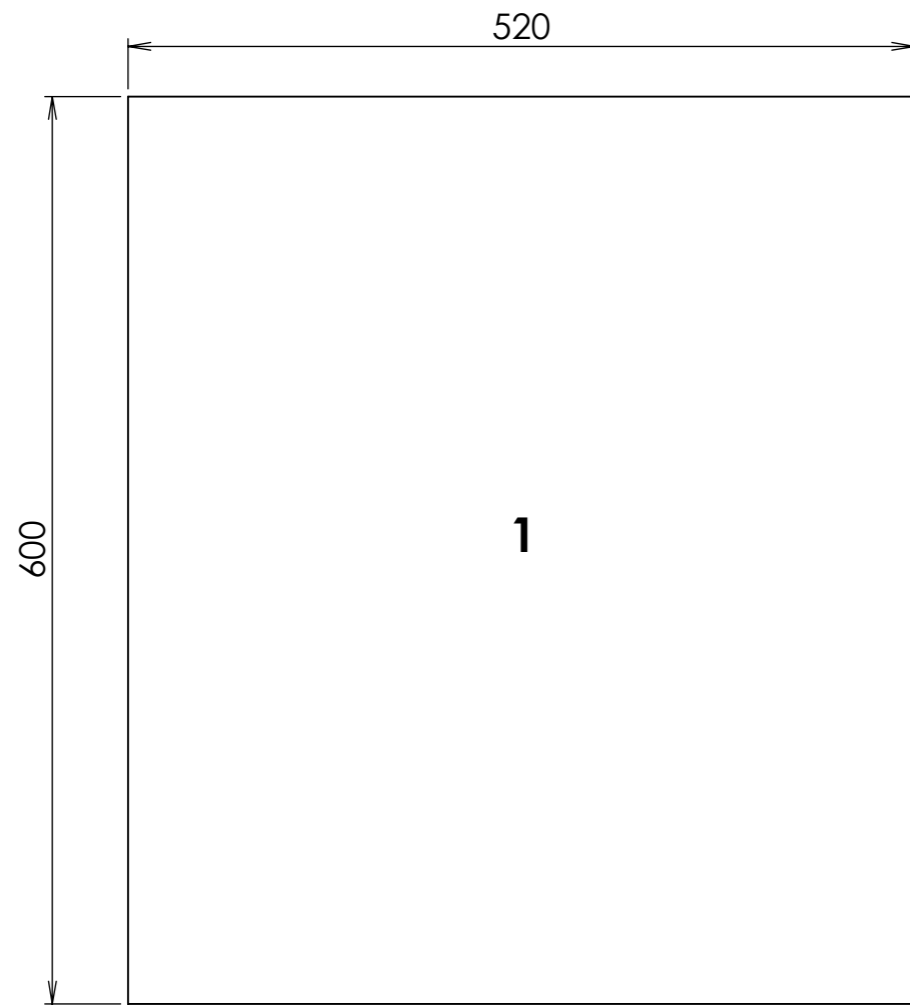
2D CAD Drawings



Drawings:

- Pieces Conveyer belt
- Pieces Bridge
- Mounting plate ultrasonic sensors
- Bearing block sensor ring
- Bearing block (only bearing)
- Bearing block (powered side)
- Speedsensor attacher
- Mounting electric motor conveyer belt
- Bushing potentiometer
- Bushing powered side
- Bushing stepper motor

All pieces are made from 5.5 mm plywood

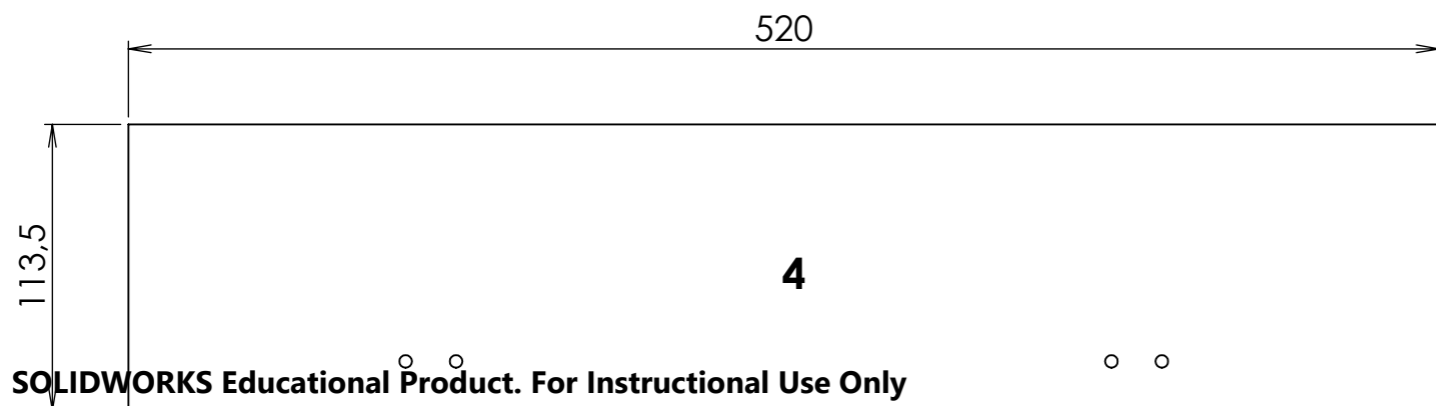
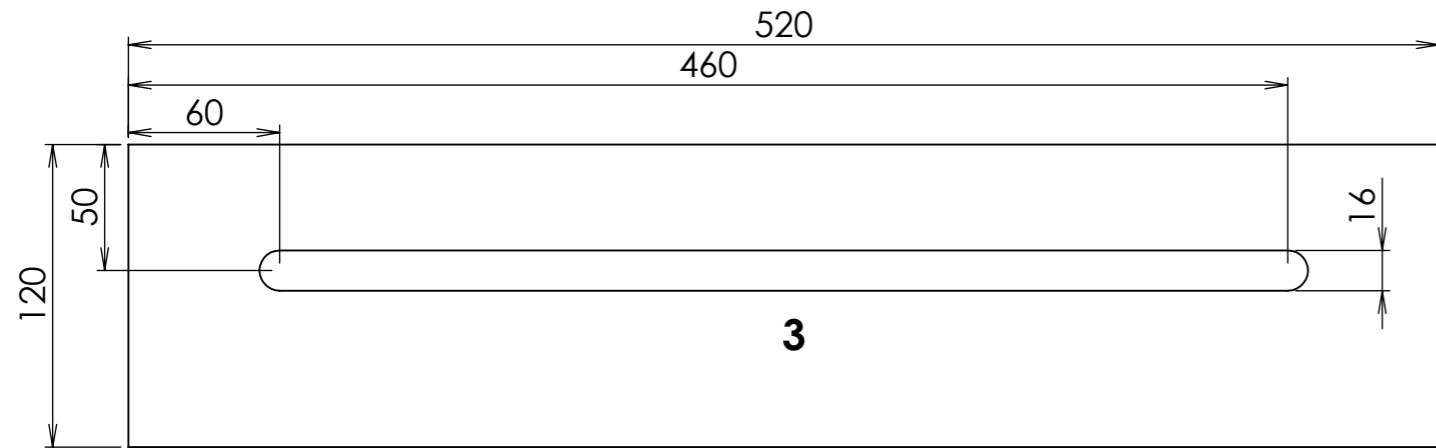
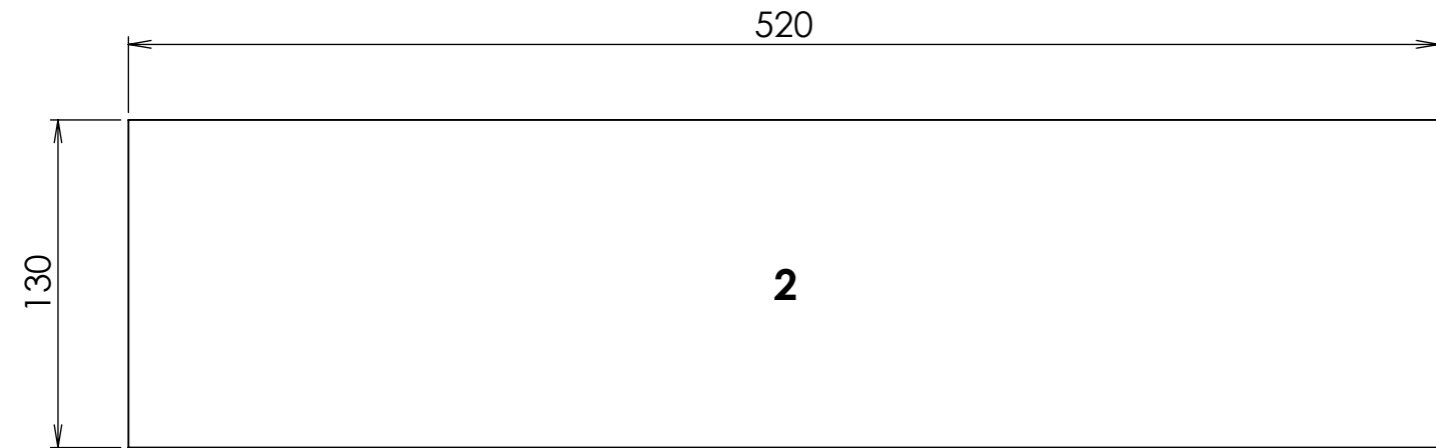
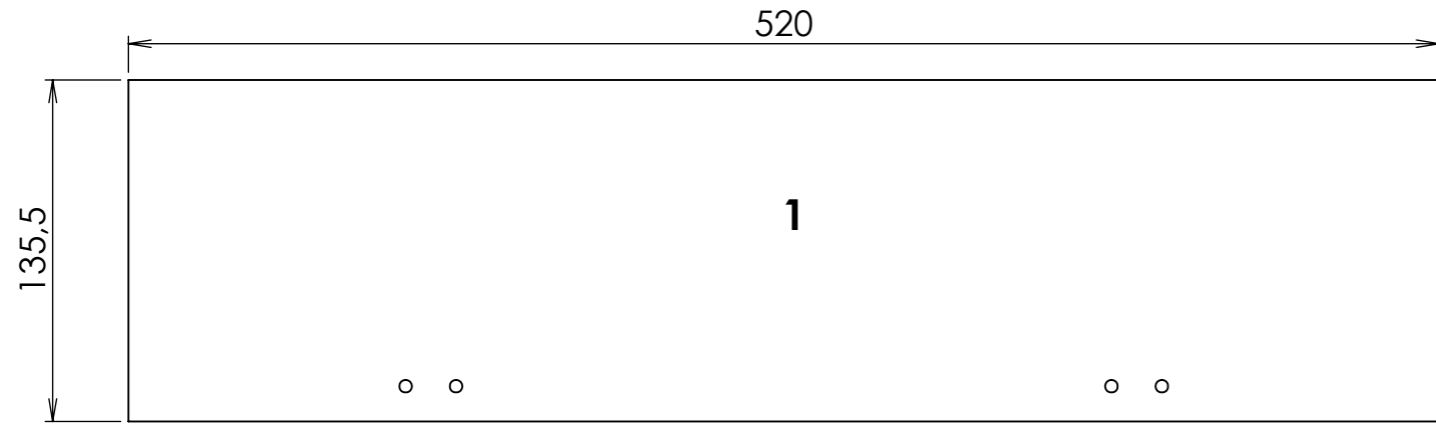


NO.	Discription	Pieces needed
1	Ground pannel conveyerbelt	1
2	Side pannel conveyerbelt	2
3	Top pannel conveyerbelt	1
4	Front/back pannel conveyerbelt	2

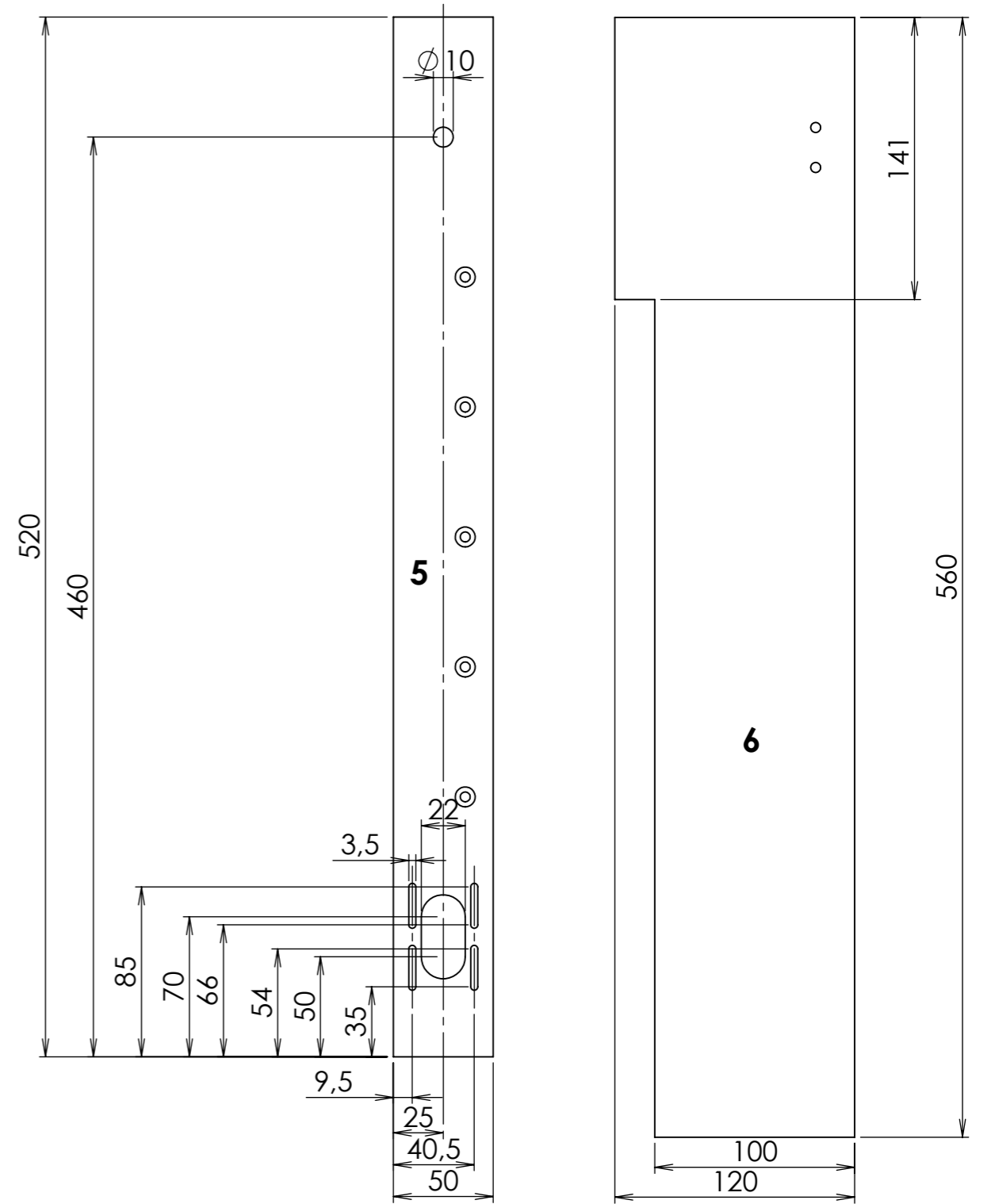
AMERICAN	SCALE: 1:5	DRAWN BY: Lance Tijhuis	REVISION:
	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr
PROJECTION	DATE: 19-4-2017	CHECKED: Y	SAVED: woensdag 3 mei 2017 16:07:52
	NAME: Pieces conveyerbelt	NUMBER:	A3

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All pieces out of 5,5 mm ply wood
 The holes in these plates that have no measurements should be drilled when the assembly is put together

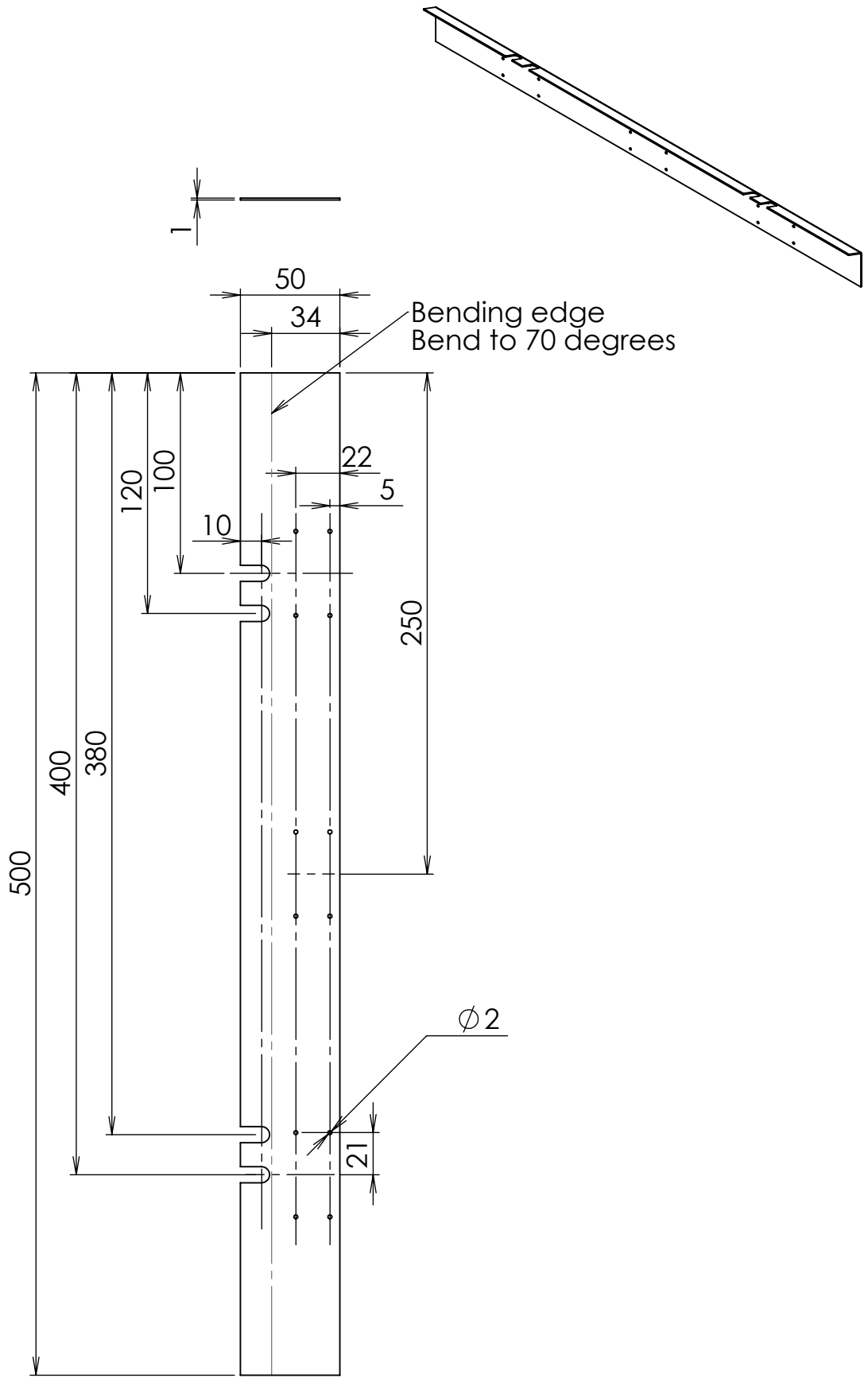


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NO.	Discription	Pieces needed
1	Back plate bridge	1
2	Front plate bridge	1
3	Bottom plate bridge	1
4	Top plate bridge	1
5	LCM attatchment plate	1
6	Side plate bridge	2

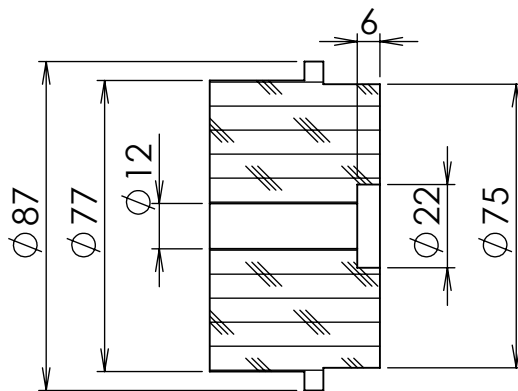
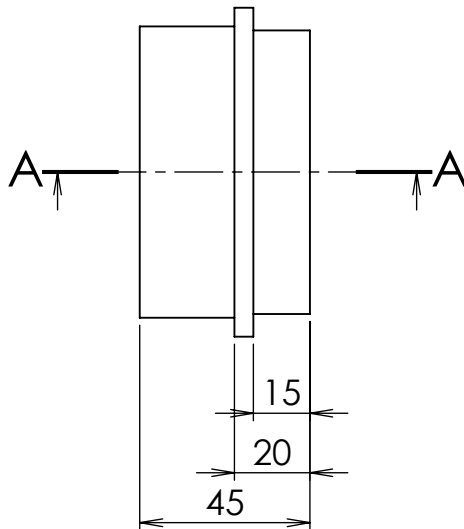
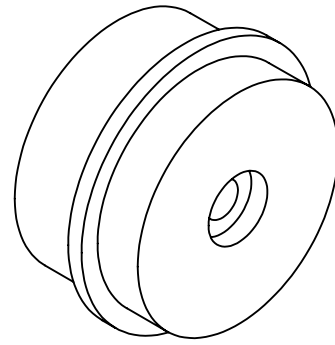
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PROJECTION 	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr		Material : Pine
	DATE: 5-3-2017	CHECKED: Y	SAVED: woensdag 3 mei 2017 16:07:52		Alg. toll.: NEN ISO 2768-1
NAME: Pieces bridge		NUMBER: 1309000	A3		



Bending edge
Bend to 70 degrees

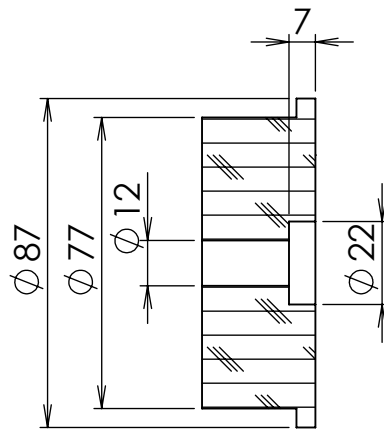
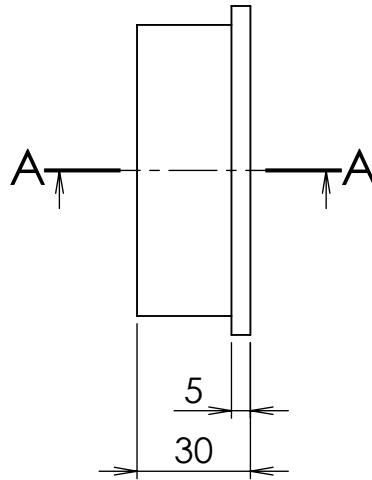
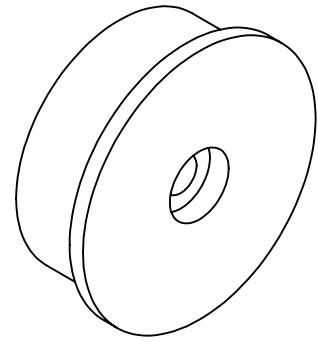
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	SCALE: 1:3	DRAWN BY: Bram Ribbers		REVISION:
	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr	Material: Alloy Steel
	DATE: 17-5-2017	CHECKED: Y	SAVED: woensdag 17 mei 2017 20:06:10	Alg. toll.: NEN ISO 2768-1
	NAME: Mounting plate ultrasonic sensors	NUMBER: 1309000		A4



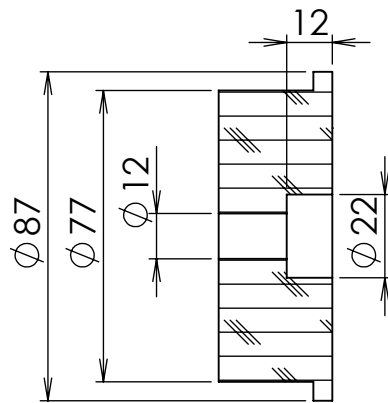
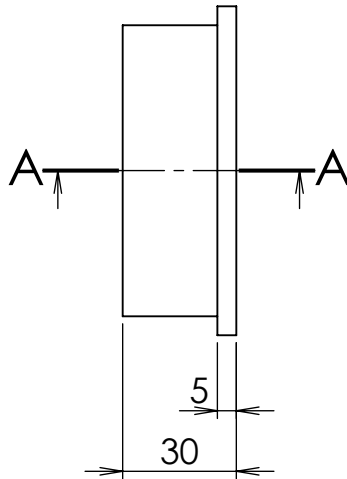
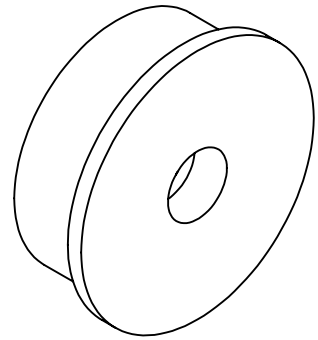
SECTION A-A

	SCALE: 1:2	DRAWN BY: Nieck van Busger op Vollenbroek		REVISION:
	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr	Material: Pine
	DATE: 19-4-2017	CHECKED: Y	SAVED: woensdag 19 april 2017 14:35:12	Alg. toll.: NEN ISO 2768-1
	NAME: Bearing block sensor ring			NUMBER: A4



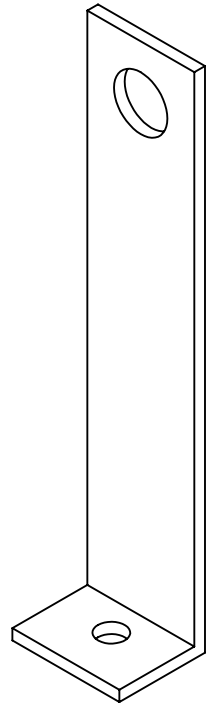
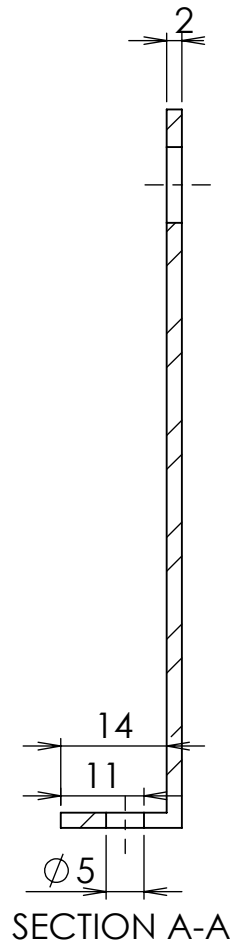
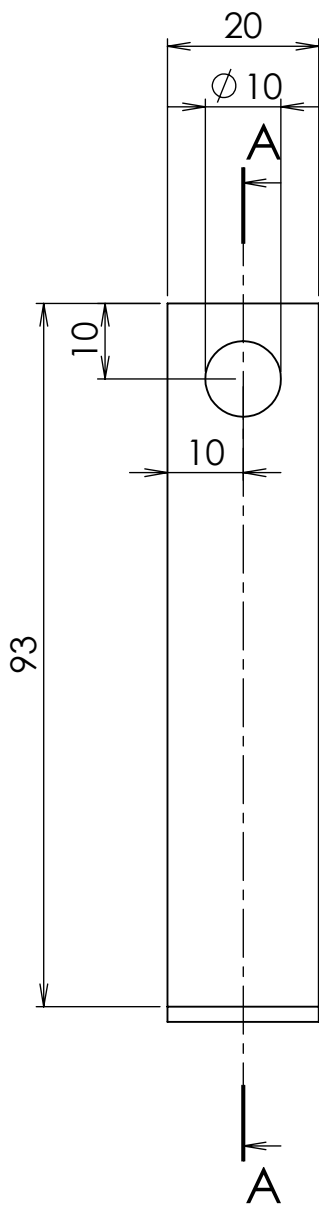
SECTION A-A

 AMERICAN PROJECTION	SCALE: 1:2	DRAWN BY: Bram Ribbers		REVISION:
	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr	Material: Pine
DATE: 19-4-2017		CHECKED: Y	SAVED: woensdag 19 april 2017 14:44:43	Alg. toll.: NEN ISO 2768-1
 HAN AUTOMOTIVE	NAME:	Bearing block(only bearing)		NUMBER: A4

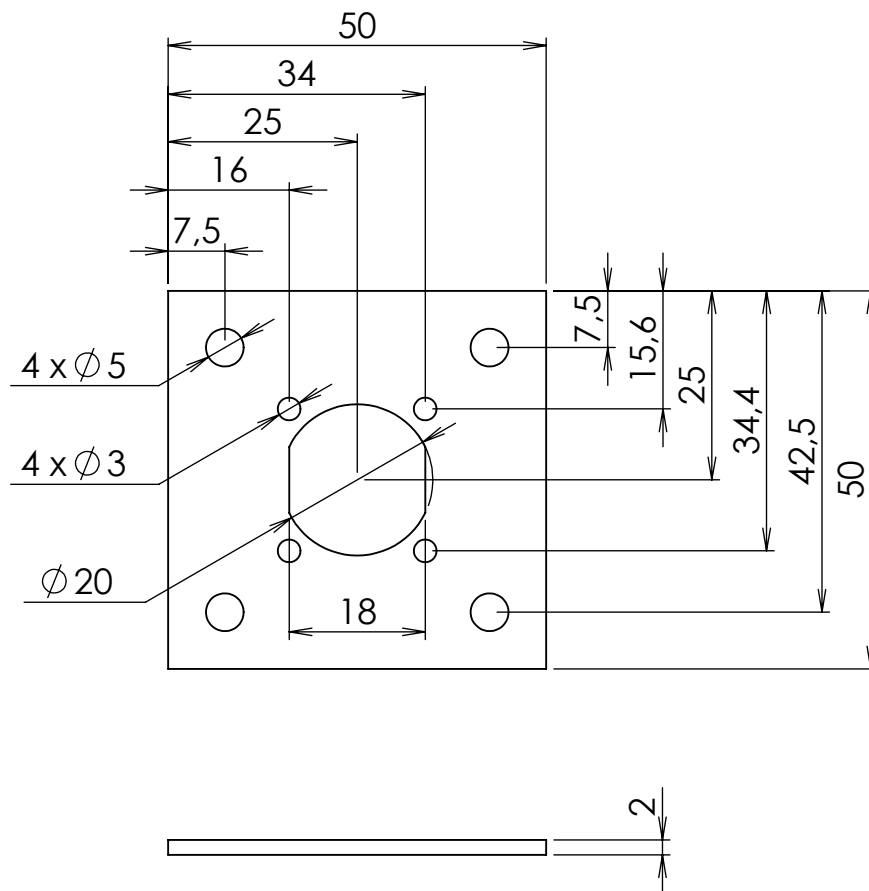
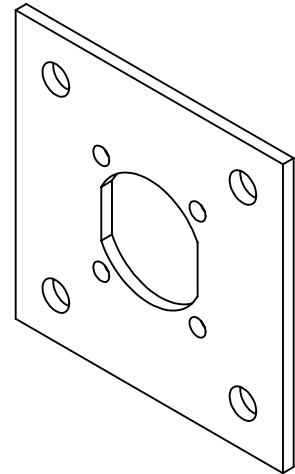


SECTION A-A

	SCALE: 1:2	DRAWN BY: Bram Ribbers		REVISION:
	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr	Material: Pine
	DATE: 19-4-2017	CHECKED: Y	SAVED: woensdag 19 april 2017 14:51:33	Alg. toll.: NEN ISO 2768-1
		NAME: Bearing block(powerd side)		NUMBER: A4

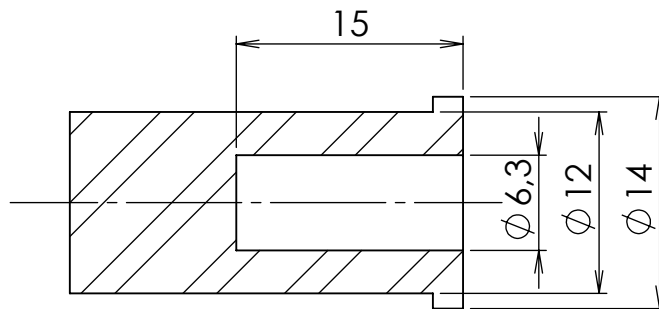
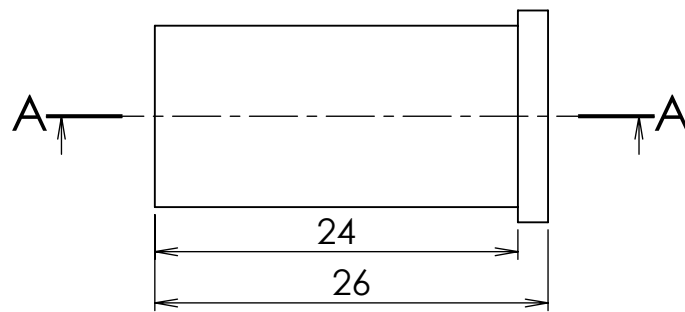
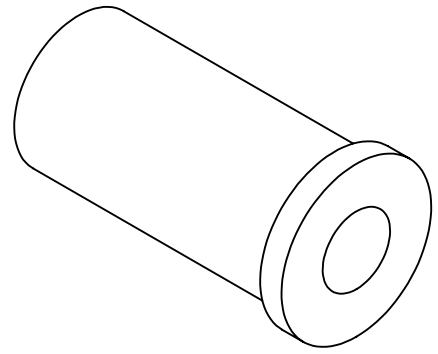


 AMERICAN PROJECTION	SCALE: 1:1	DRAWN BY: Nieck Busger op Vollenbroek		REVISION:
	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr	Material: Alloy Steel
DATE: 5-3-2017		CHECKED: Y	SAVED: woensdag 10 mei 2017 14:04:52	Alg. toll.: NEN ISO 2768-1
 HAN AUTOMOTIVE	NAME: Speedsensor attacher	NUMBER:	A4	



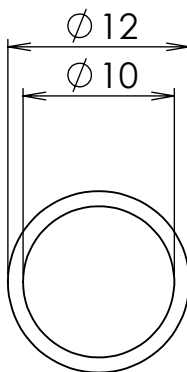
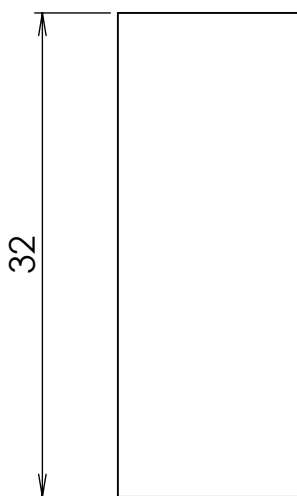
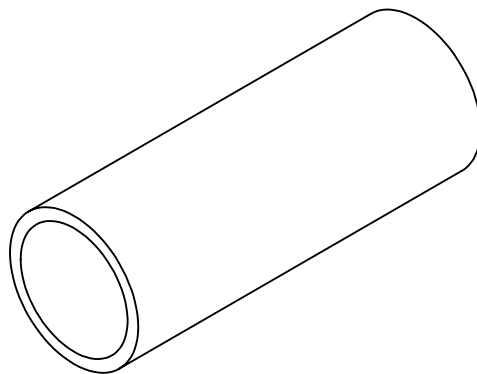
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	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr	Material: 1060-H16
DATE: 19-4-2017		CHECKED:	SAVED: donderdag 20 april 2017 18:21:24	Alg. toll.: NEN ISO 2768-1
 HAN AUTOMOTIVE	NAME:	Mounting electric motor conveyerbelt		NUMBER: A4

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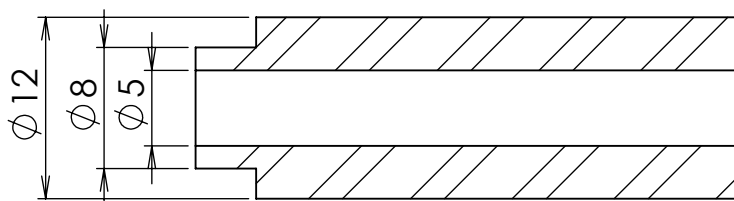
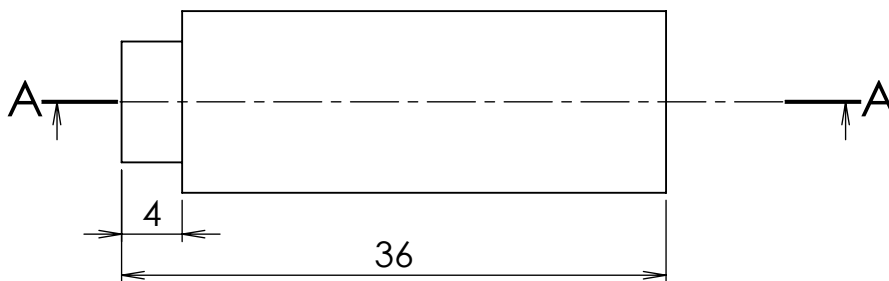
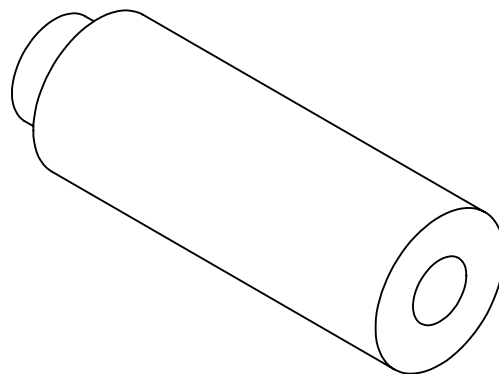
SECTION A-A

AMERICAN PROJECTION	SCALE: 2:1	DRAWN BY: Bram Ribbers		REVISION:
	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr	Material: Alloy Steel
DATE: 19-4-2017		CHECKED: Y	SAVED: vrijdag 5 mei 2017 11:29:48	Alg. toll.: NEN ISO 2768-1
HAN AUTOMOTIVE	NAME: Bushing potentiometer			NUMBER: A4




	SCALE: 2:1	DRAWN BY: Bram Ribbers		REVISION:
	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr	Material: Alloy Steel
DATE: 24-5-2017 SOLIDWORKS Educational Product. For Instructional Use Only		CHECKED: Y	SAVED: woensdag 24 mei 2017 10:51:09	Alg. toll.: NEN ISO 2768-1
	NAME:	Bushing powerd side		NUMBER: A4

Filename 2D Drawing: C:\Users\bramr\Dropbox\HAN project cb6\CAD mechanical design\2D Drawings\CAD\Bushing powerd side
 Filename 3D model: C:\Users\bramr\Dropbox\HAN project cb6\CAD mechanical design\End assembly\Bushing powerd side



SECTION A-A

AMERICAN  PROJECTION	SCALE: 2:1	DRAWN BY: Bram Ribbers		REVISION:
	UNIT OF MEASURE: mm	CLASS: CB6-B	SAVED AT: bramr	Material: Alloy Steel
DATE: 19-4-2017		CHECKED:	SAVED: vrijdag 5 mei 2017 11:33:16	Alg. toll.: NEN ISO 2768-1
	NAME: Bushing stepper motor			NUMBER: A4