

PRAVEGA RACING

Cost Report Supporting Document

FORMULA STUDENT GERMANY 2019

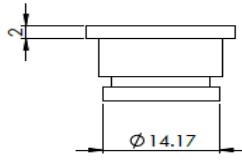
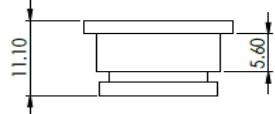
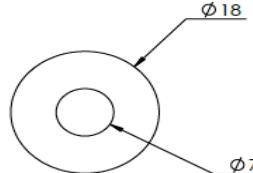
CAR #254, VIT VELLORE



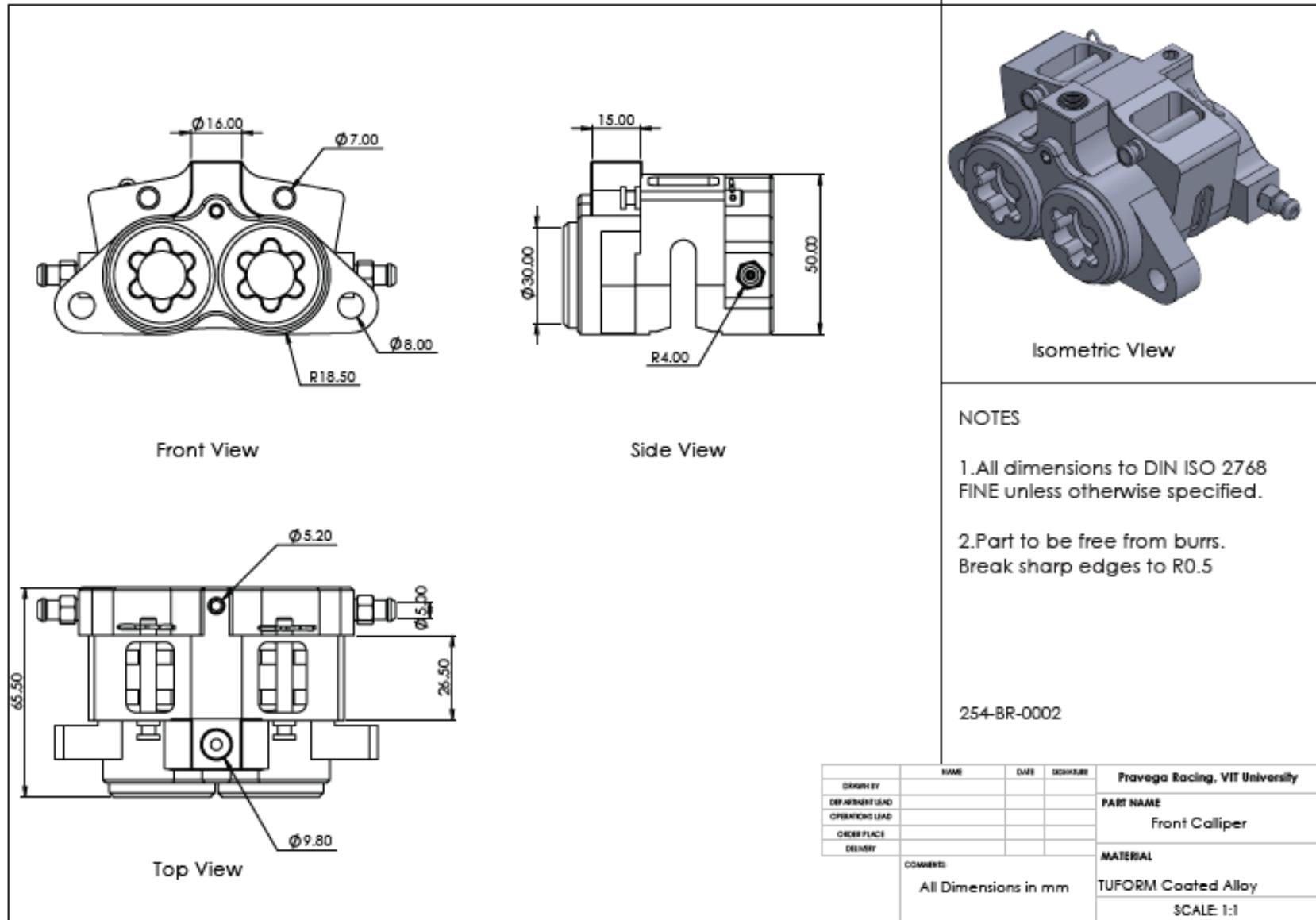
BRAKE SYSTEM (BR)

Assembly – Brake System Front (254-BR-A001)

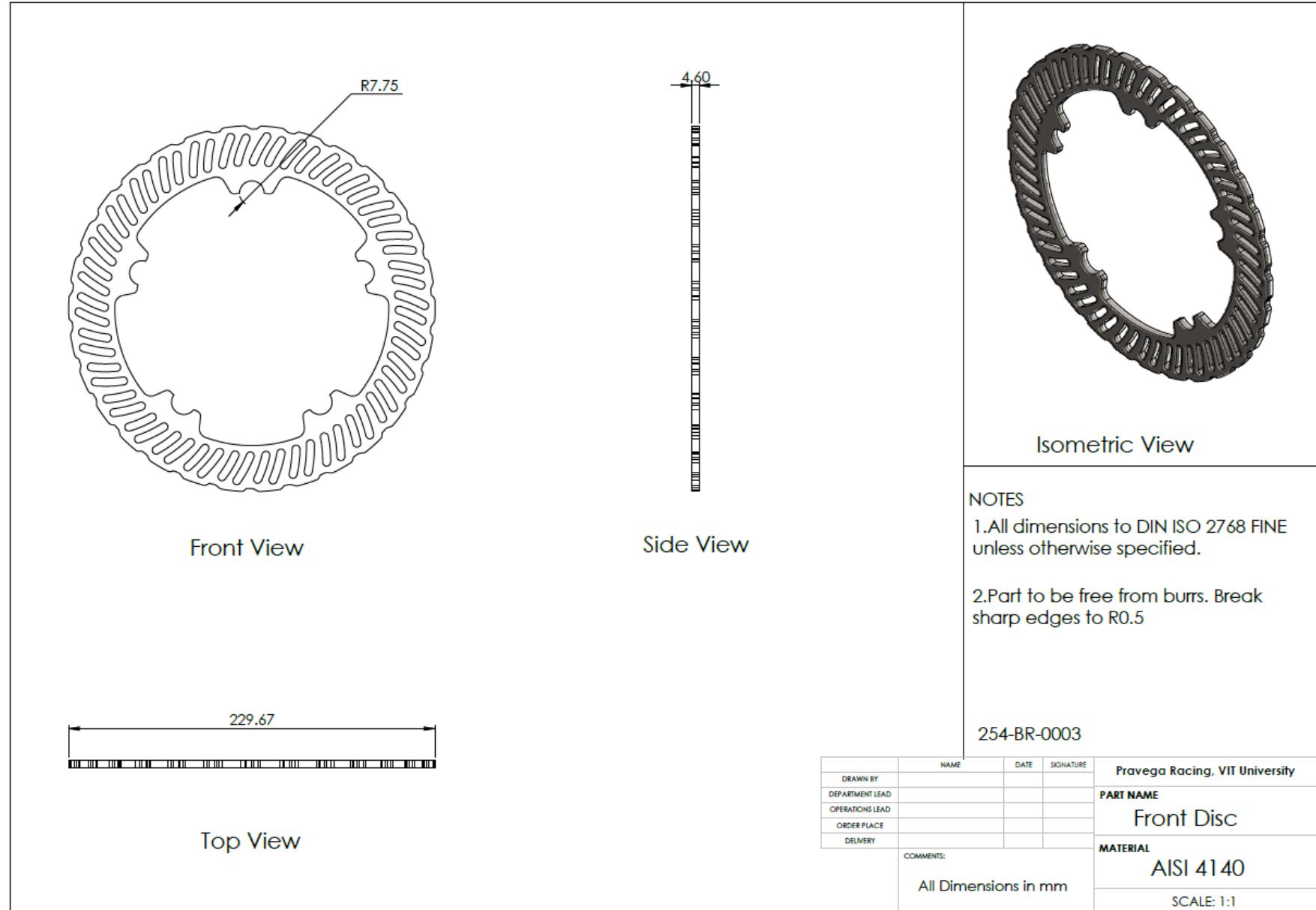
1. Front Bobbins (254-BR-0001, Quantity - 10)

																																					
Front View	Side View	Isometric View																																			
		NOTES																																			
Top View	<p>1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.</p> <p>2. Part to be free from burrs. Break sharp edges to R0.5</p>																																				
254-BR-0001																																					
<table border="1"><tr><td>DRAWN BY</td><td>NAME</td><td>DATE</td><td>SIGNATURE</td></tr><tr><td>DEPARTMENT LEAD</td><td></td><td></td><td></td></tr><tr><td>OPERATIONS LEAD</td><td></td><td></td><td></td></tr><tr><td>ORDER PLACE</td><td></td><td></td><td></td></tr><tr><td>DELIVERY</td><td></td><td></td><td></td></tr><tr><td colspan="2">COMMENTS:</td><td colspan="2">Pravega Racing, VIT University</td></tr><tr><td colspan="2">All Dimensions in mm</td><td colspan="2">PART NAME Front Bobbins</td></tr><tr><td colspan="2"></td><td colspan="2">MATERIAL AL 7075 T6</td></tr><tr><td colspan="2"></td><td colspan="2">SCALE 1:1</td></tr></table>		DRAWN BY	NAME	DATE	SIGNATURE	DEPARTMENT LEAD				OPERATIONS LEAD				ORDER PLACE				DELIVERY				COMMENTS:		Pravega Racing, VIT University		All Dimensions in mm		PART NAME Front Bobbins				MATERIAL AL 7075 T6				SCALE 1:1	
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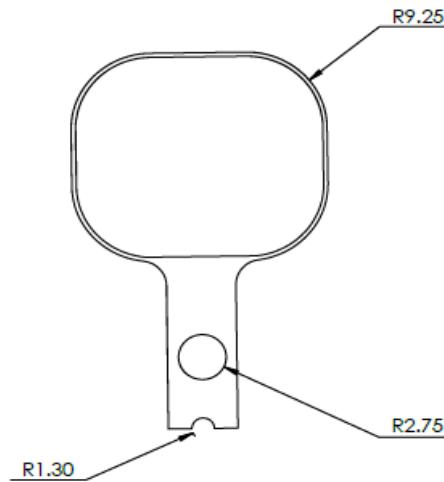
2. Front Brake Calliper(254-BR-0002, Quantity – 2, ISR 22-048 OC)



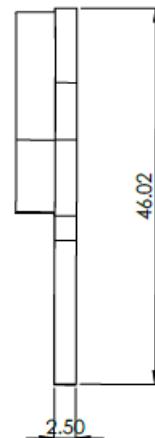
3. Front Brake Disc(254-BR-0003, Quantity – 2)



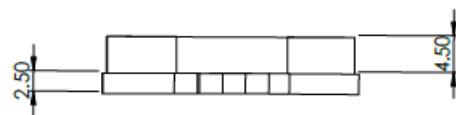
4. Front brake pads(254-BR-0004, Quantity – 2, ISR29-002NA)



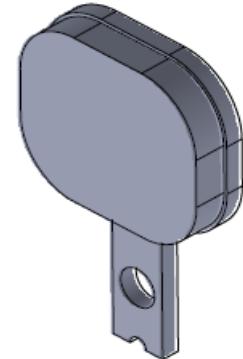
Front View



Side View



Top View

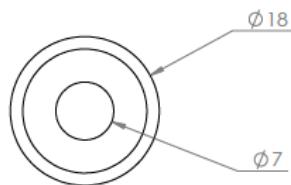


Isometric View

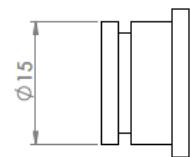
254-BR-0004

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Brake Pad Front
ORDER PLACE				MATERIAL
DELIVERY				Asbestos based compound
COMMENTS:				
All Dimensions in mm				
SCALE: 1:1				

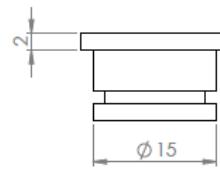
5. Rear bobbins (254-BR-0005, Quantity -8)



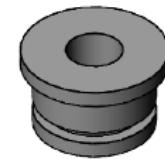
Front View



Side View



Top View



Isometric View

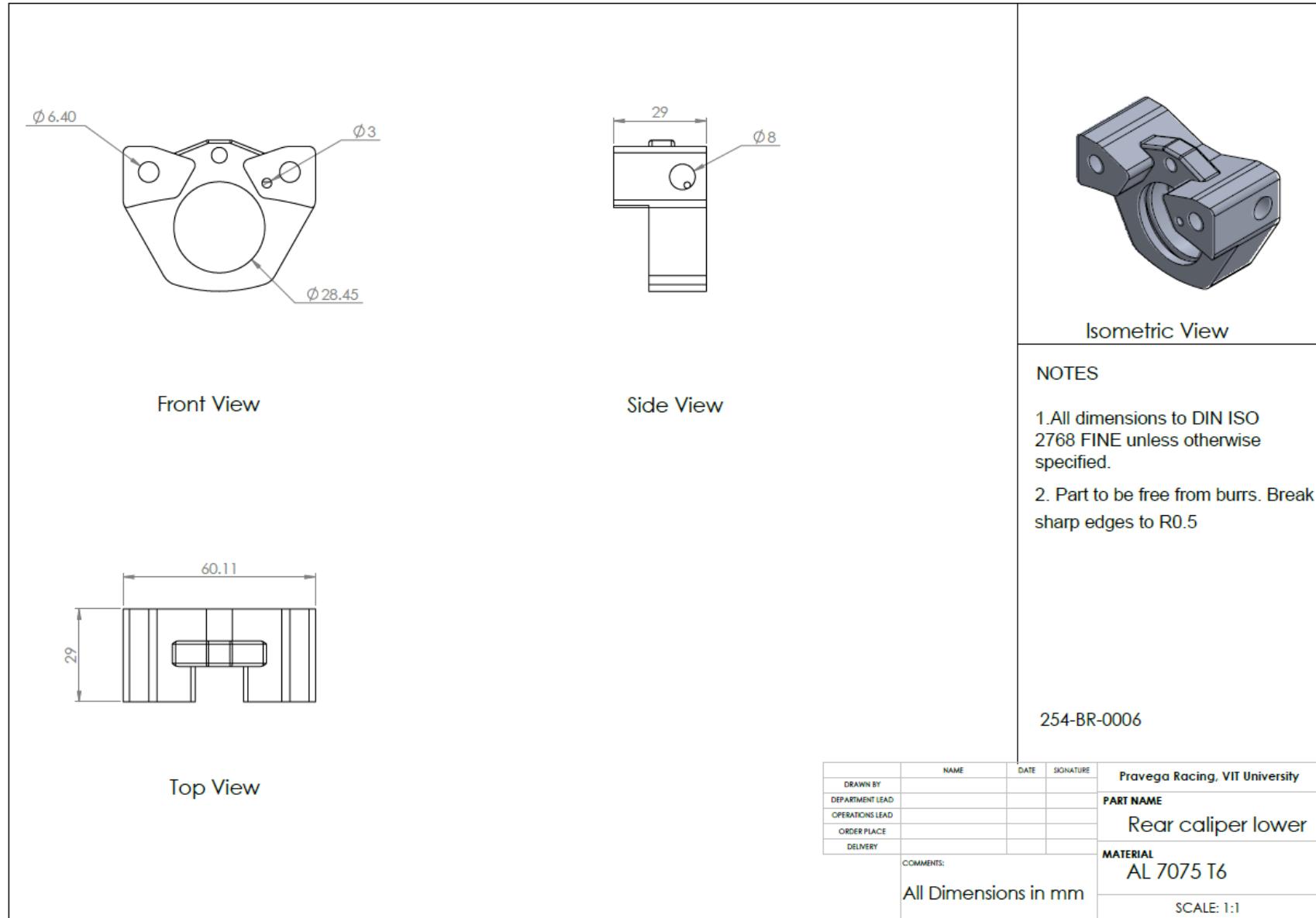
NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

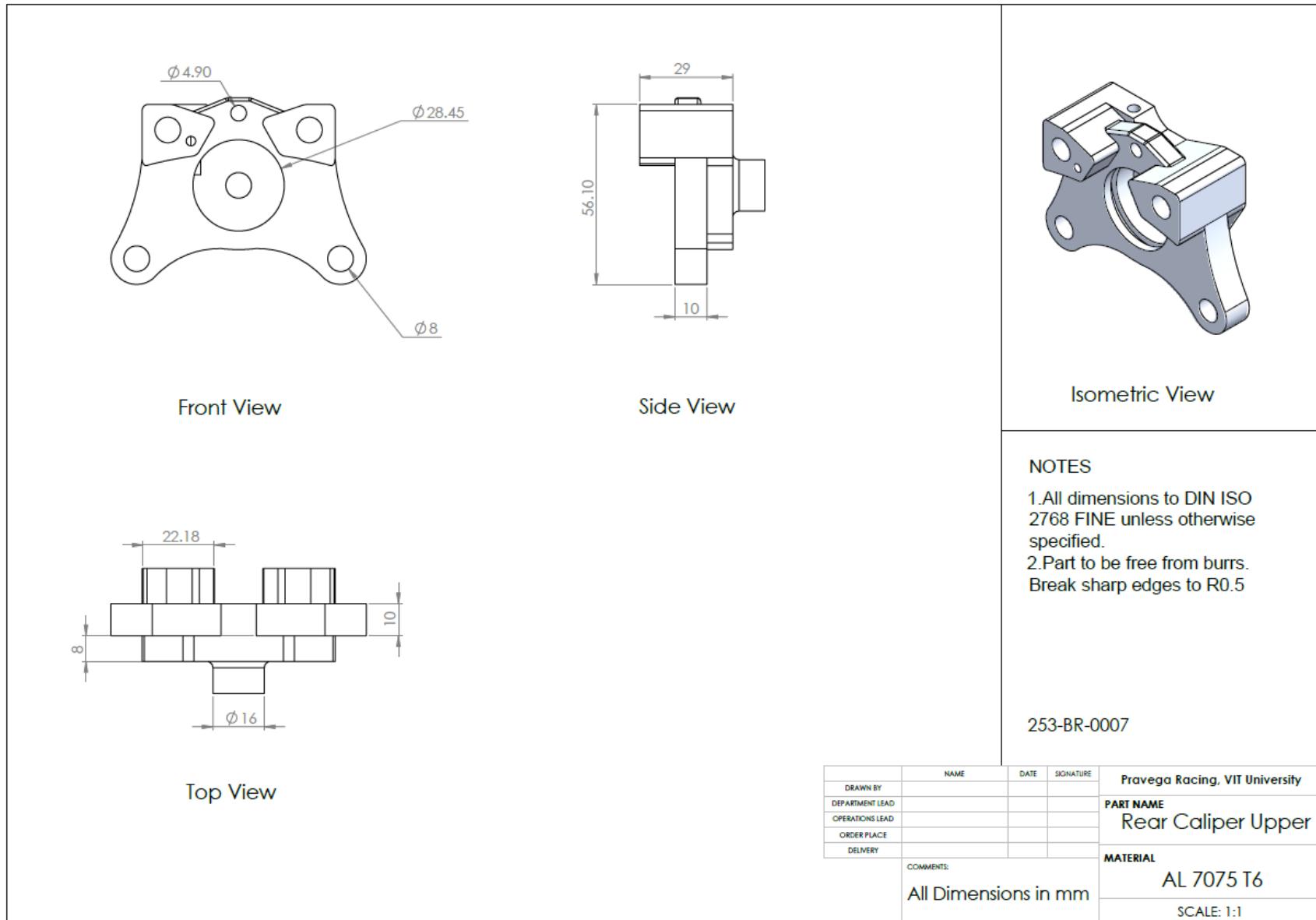
254-BR-0005

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Rear Bobbin
ORDER PLACE				MATERIAL
DELIVERY				AL 7075 T6
COMMENTS:				SCALE: 1:1
All Dimensions in mm				

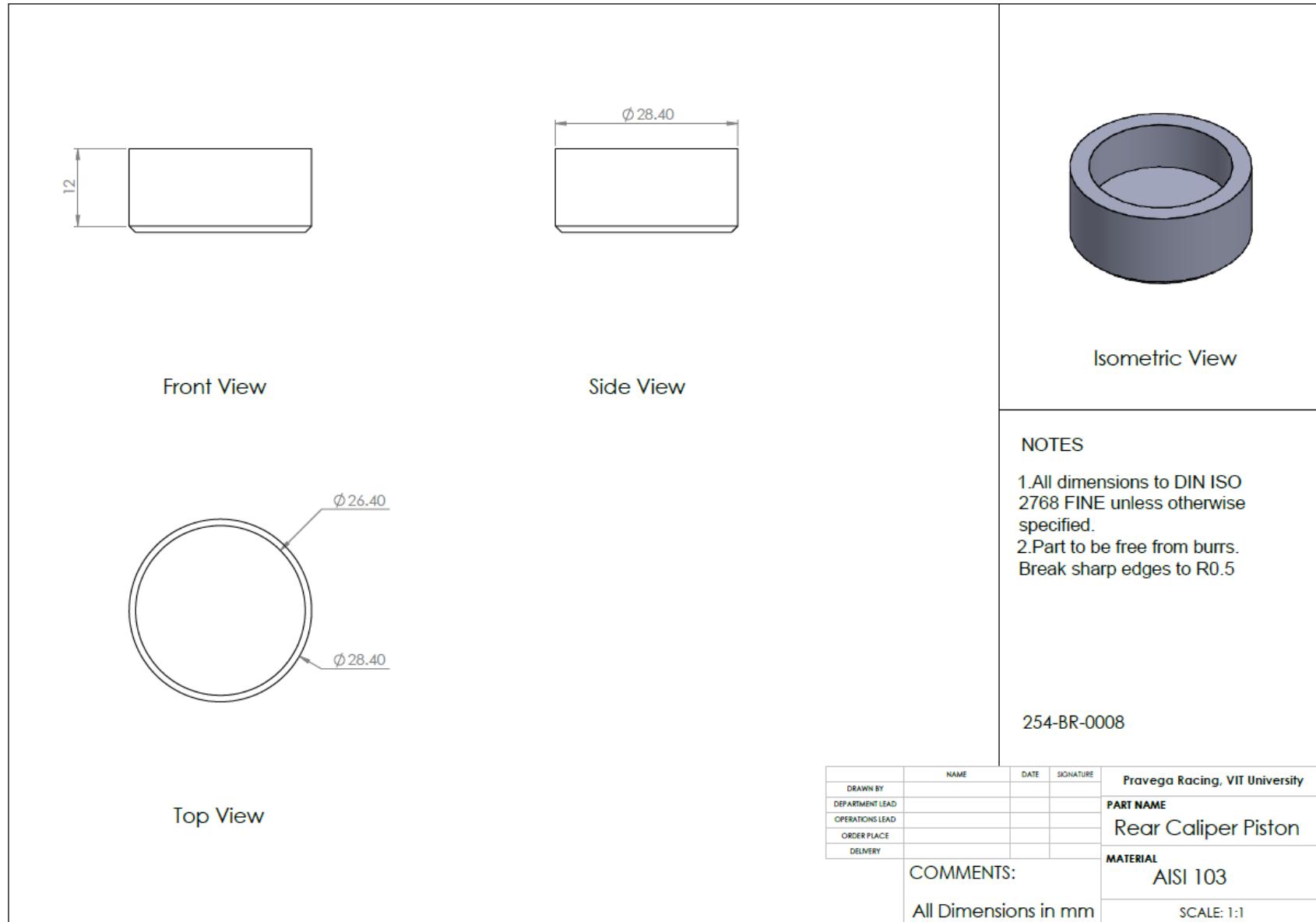
6. Rear caliper upper(254-BR-0006, Quantity – 2)



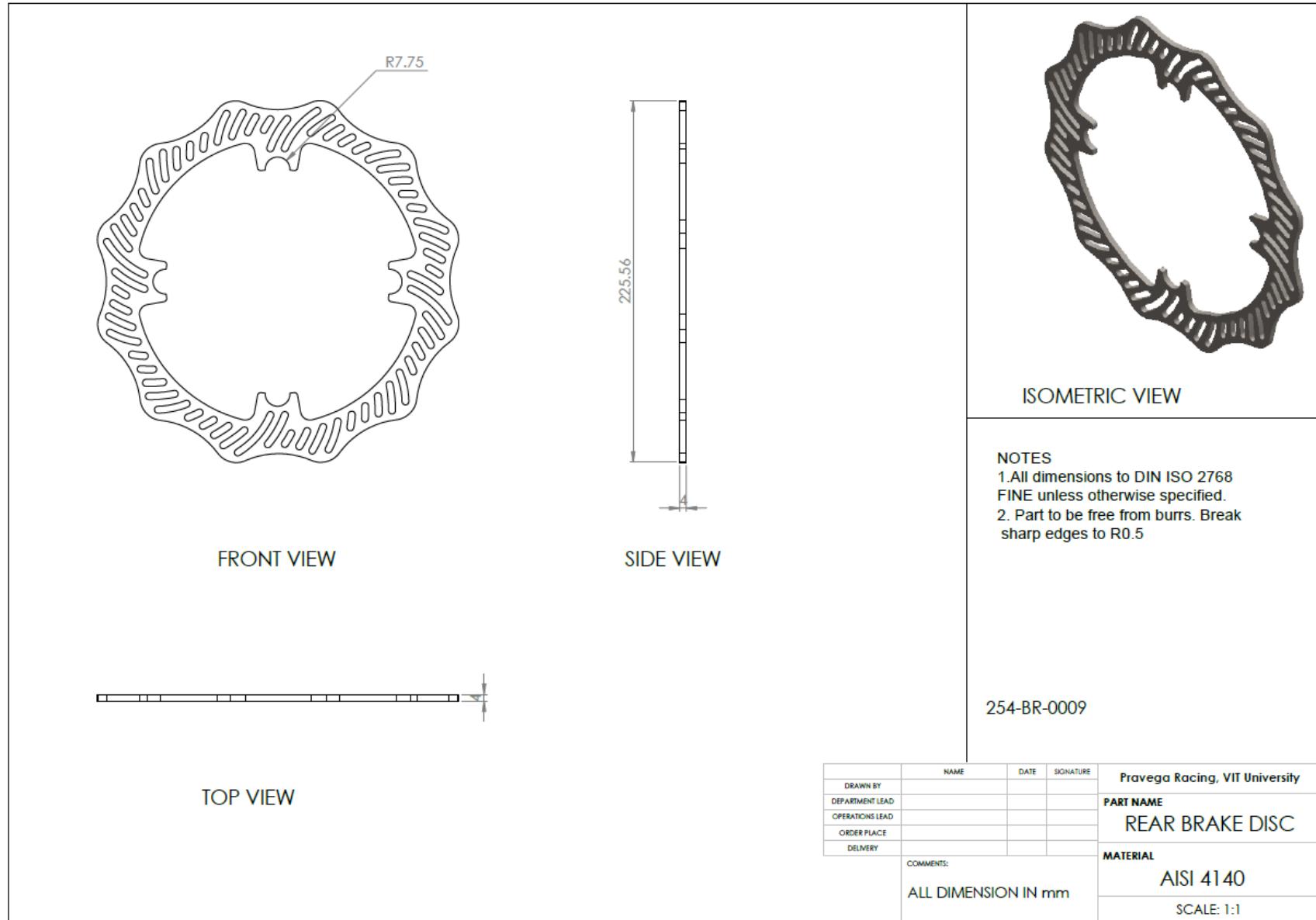
7. Rear caliper lower (254-BR-0007, Quantity – 2)



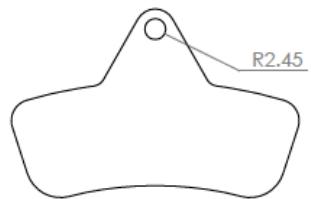
8. Rear caliper piston(254-BR-0008, Quantity – 2)



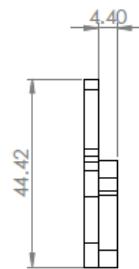
9. Rear brake disc (254-BR-0009, Quantity – 2)



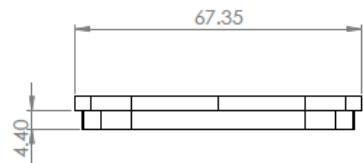
10. Rear brake pads(254-BR-0010, Quantity – 4, Willwood PS1)



FRONT VIEW



SIDE VIEW



TOP VIEW

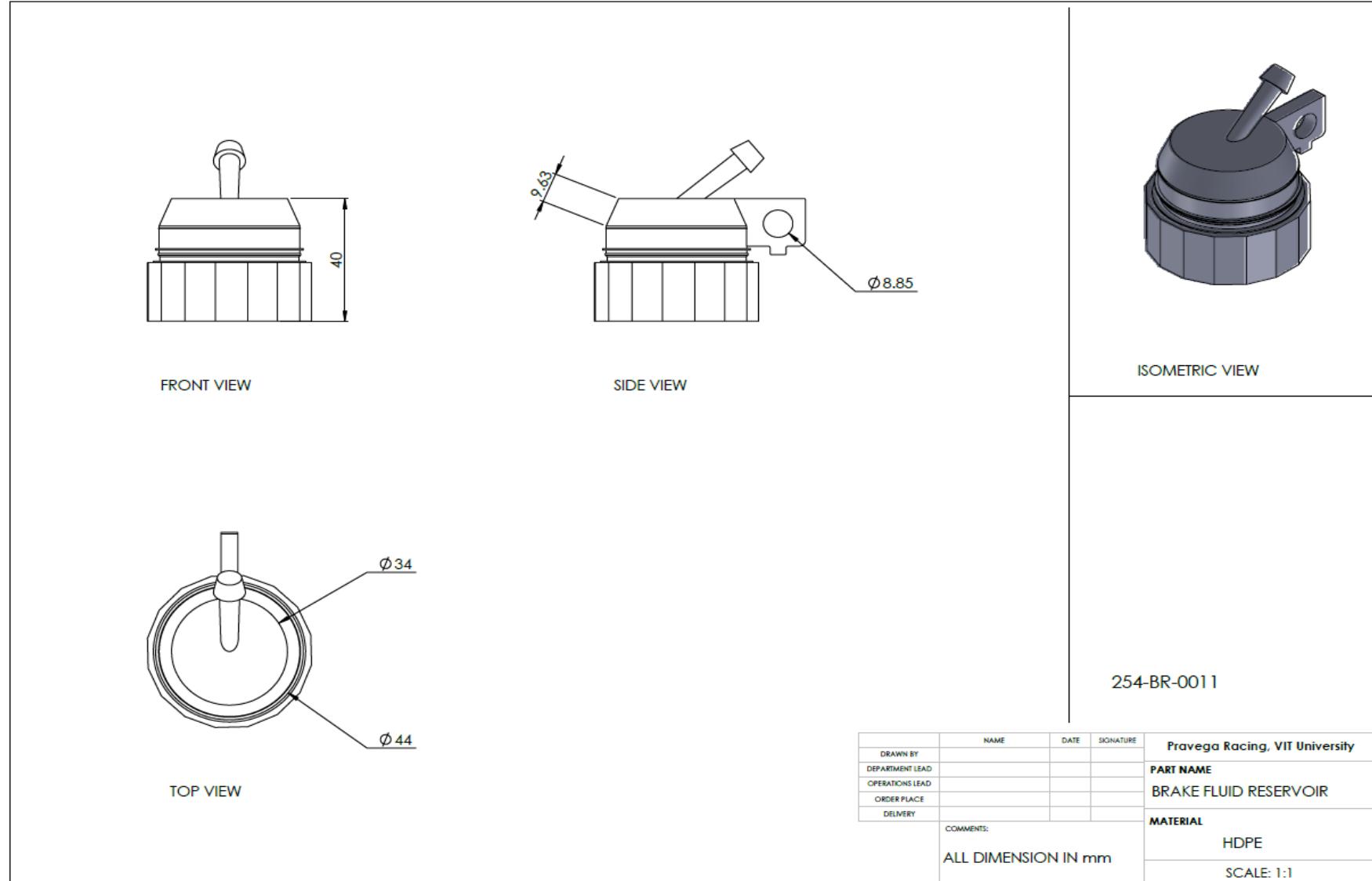


ISOMETRIC VIEW

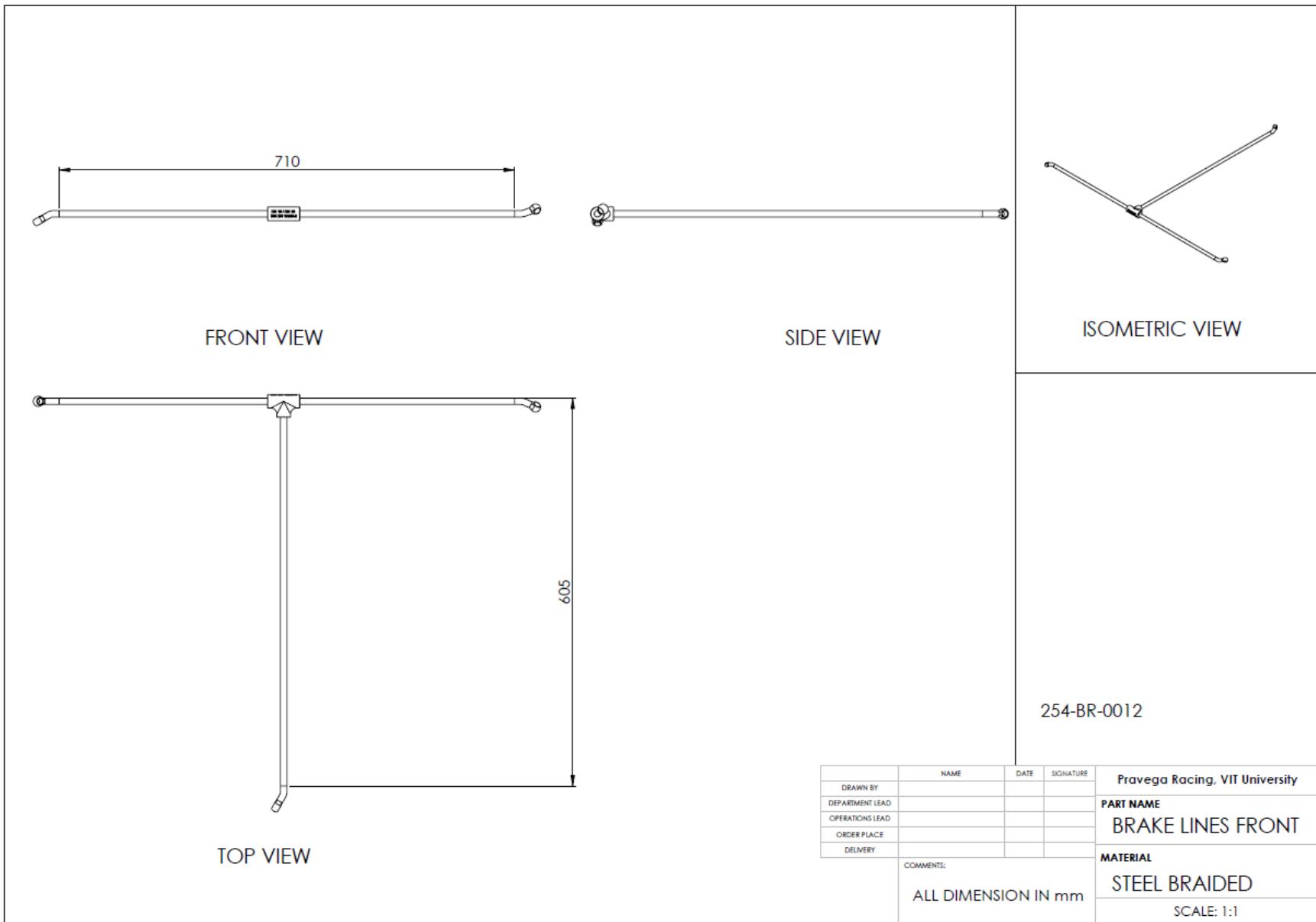
254-BR-0010

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				BRAKE-PAD
ORDER PLACE				MATERIAL
DELIVERY				ASBESTOS BASED COMPOUND
COMMENTS:				
ALL DIMESION IN mm				
SCALE: 1:1				

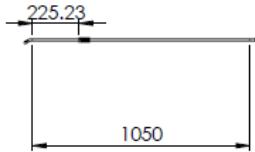
11. Brake fluid reservoir (254-BR-0011, Quantity – 1)



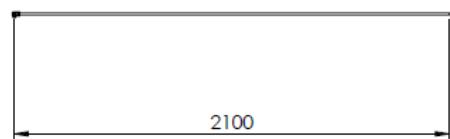
12. Brake lines Front (254-BR-00012, Quantity – 1)



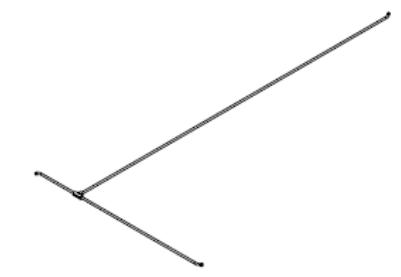
13.Brake lines Rear (254-BR-00013, Quantity – 1)



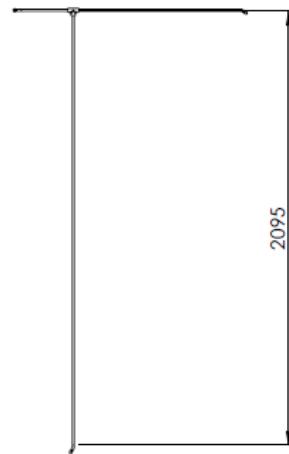
FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

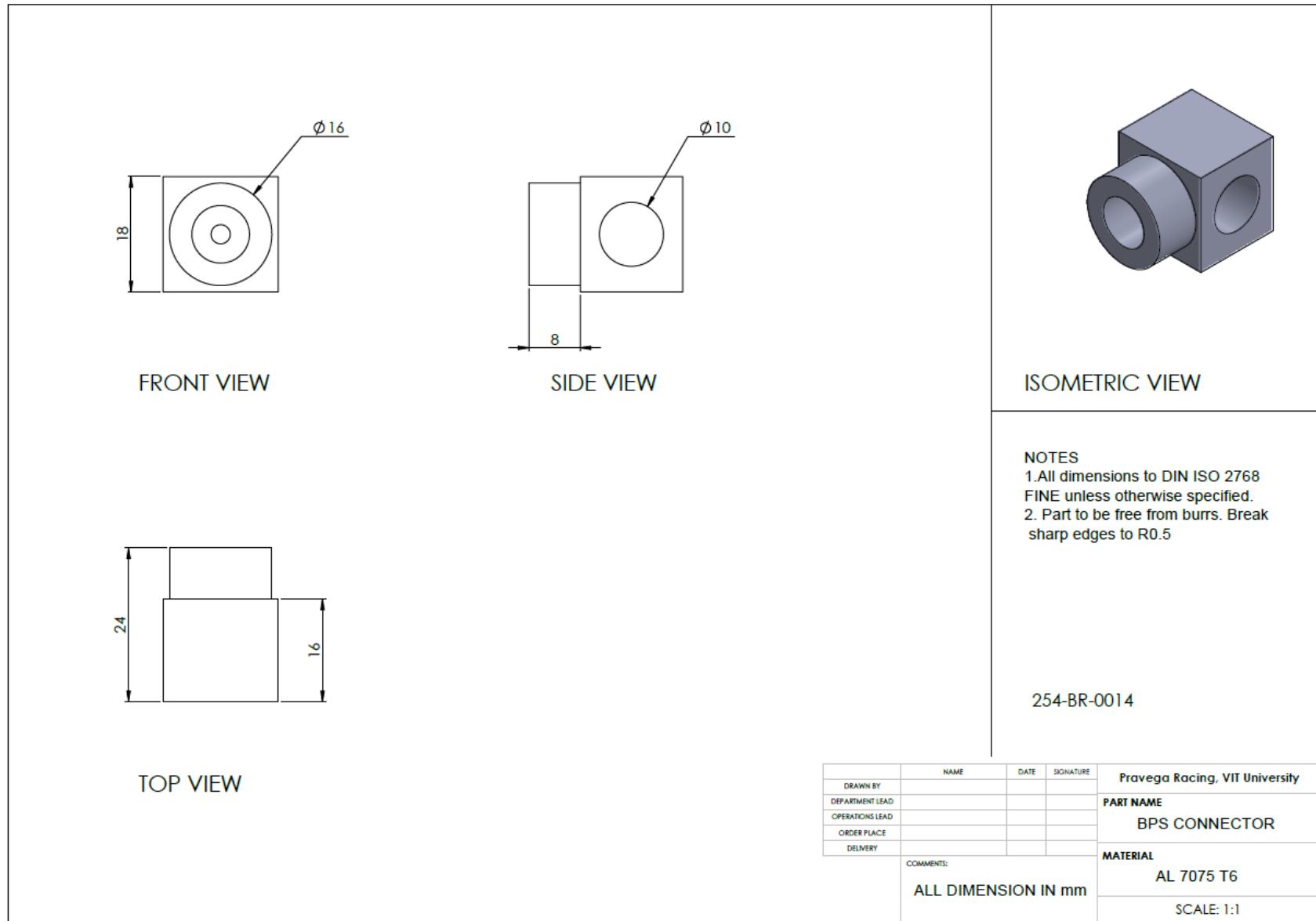


TOP VIEW

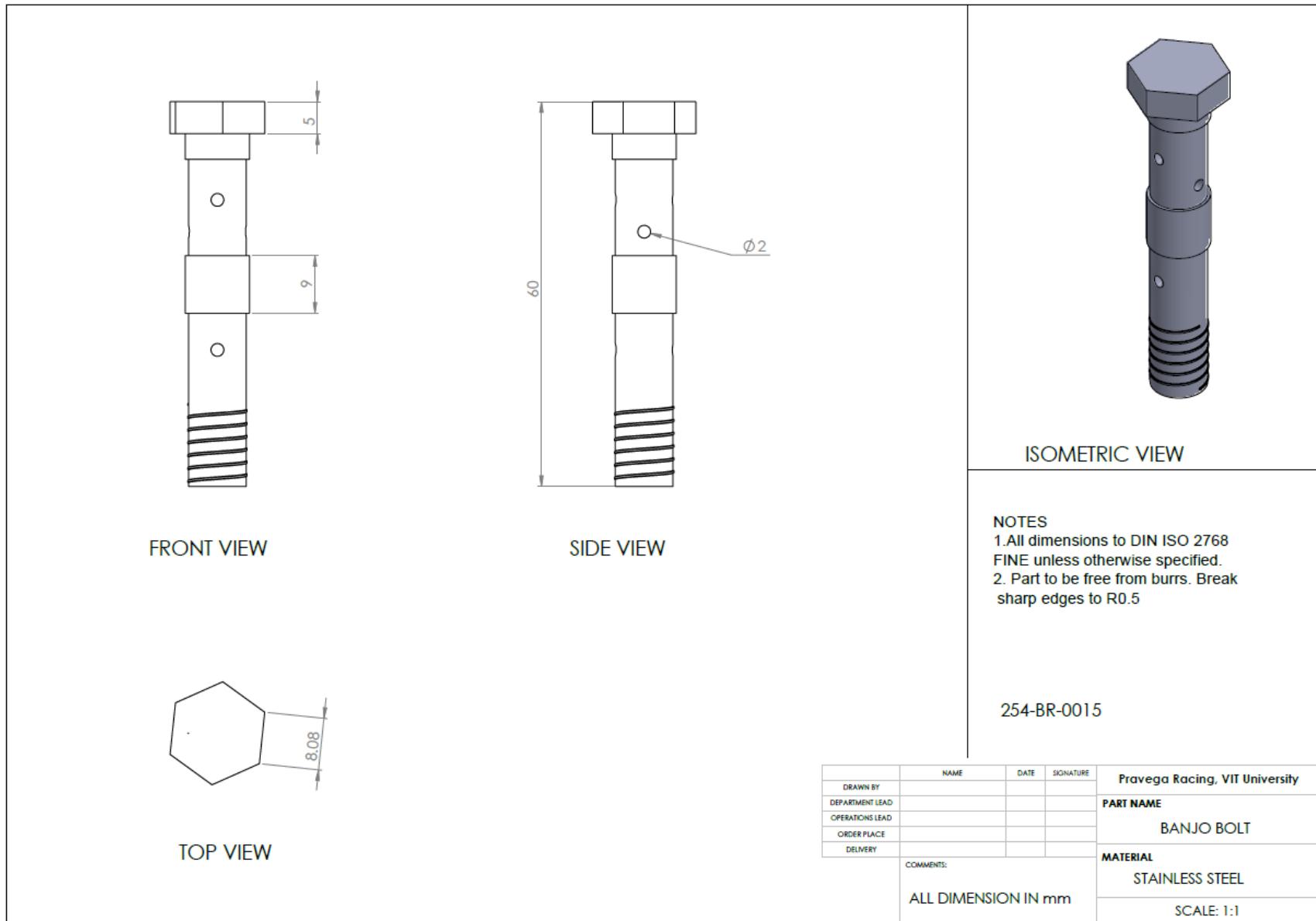
254-BR-0013

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				BRAKE LINES REAR
ORDER PLACE				MATERIAL
DELIVERY				STEEL BRAIDED
COMMENTS:	ALL DIMENSION IN mm			SCALE: 1:1

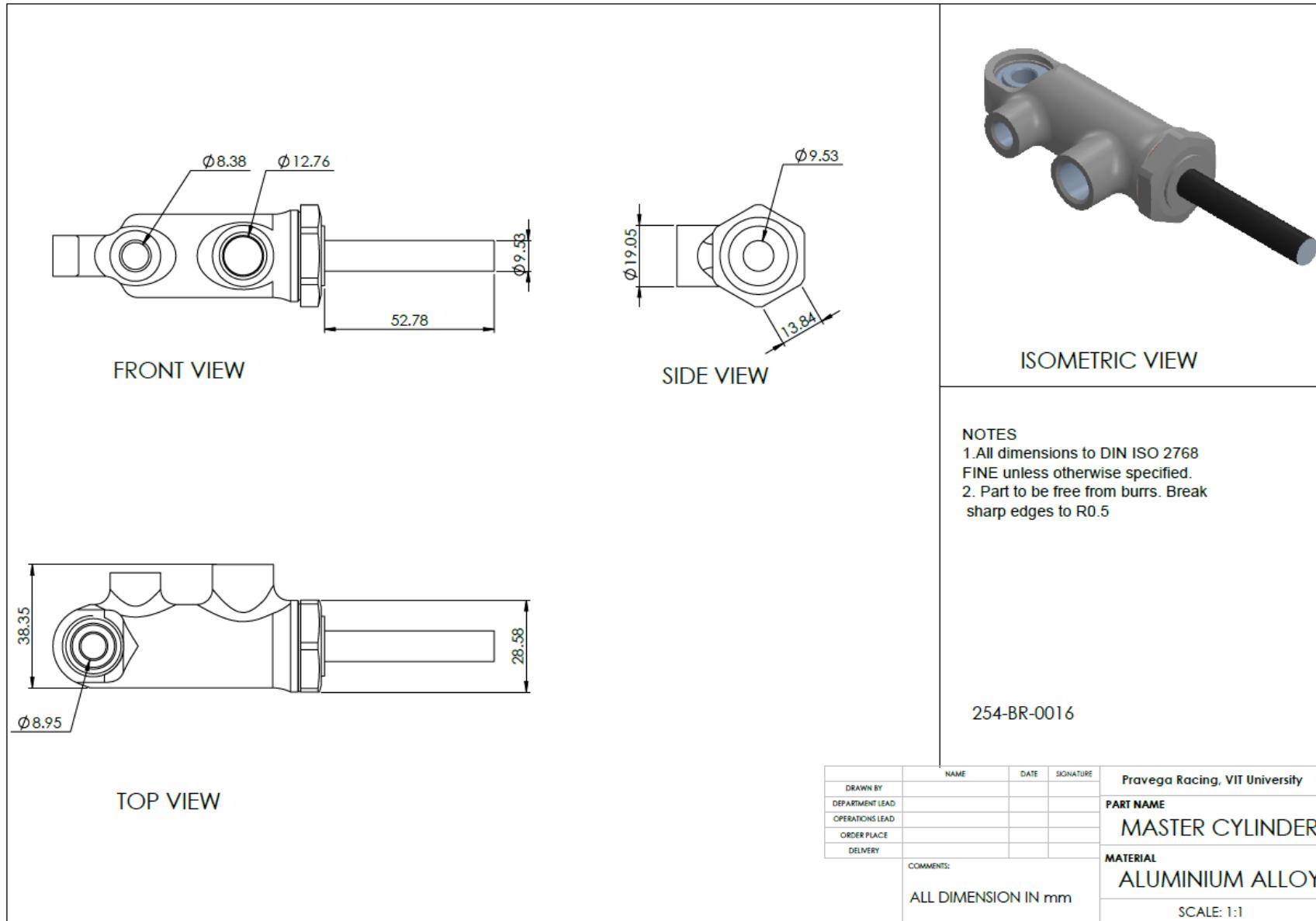
14. BPS connector(254-BR-0014, Quantity – 2)



15.Banjo Bolt (254-BR-0015, Quantity – 8)



16.Master cylinder (254-BR-0016, Quantity – 2, Tilton 600 series)



ELECTRICAL SYSTEM (EL)

CIRCUIT BOARDS

Aligned with the overall design and layout for this season, different circuit boards has been finalised considering the wiring of the different sensors and loads employed in the car. With the help of Ki-Cad software, we design the schematic of all the circuitries involved and finalise the PCB layout for each circuit board. Once the PCB's were made, manufacturing process has been outsourced by our sponsors.

CALCULATION OF PCB TRACE WIDTH

The screenshot shows the PCB Calculator application interface. The top menu bar includes 'PCB Calculator', 'Regulators', 'Track Width', 'Electrical Spacing', 'TransLine', 'RF Attenuators', 'Color Code', and 'Board Classes'. The 'Track Width' tab is selected.

Parameters:

- Current: **10** A
- Temperature rise: **60** deg C
- Conductor length: **200** mm
- Resistivity: **1.72e-8** Ohm-meter

If you specify the maximum current, then the trace widths will be calculated to suit. If you specify one of the trace widths, the maximum current it can handle will be calculated. The width for the other trace to also handle this current will then be calculated. The controlling value is shown in bold.

The calculations are valid for currents up to 35A (external) or 17.5A (internal), temperature rises up to 100 deg C, and widths of up to 400mil (10mm). The formula, from IPC 2221, is

$$I = K * dT^{0.44} * (W \cdot H)^{0.725}$$

where:
I = maximum current in amps
dT = temperature rise above ambient in deg C
W,H = width and thickness in mils
K = 0.024 for internal traces or 0.048 for external traces

External layer traces:

Trace width:	2.42512	mm
Trace thickness:	0.035	mm
Cross-section area:	0.0848792	mm x mm
Resistance:	0.0405282	Ω
Voltage drop:	0.405282	Volt
Power loss:	4.05282	Watt

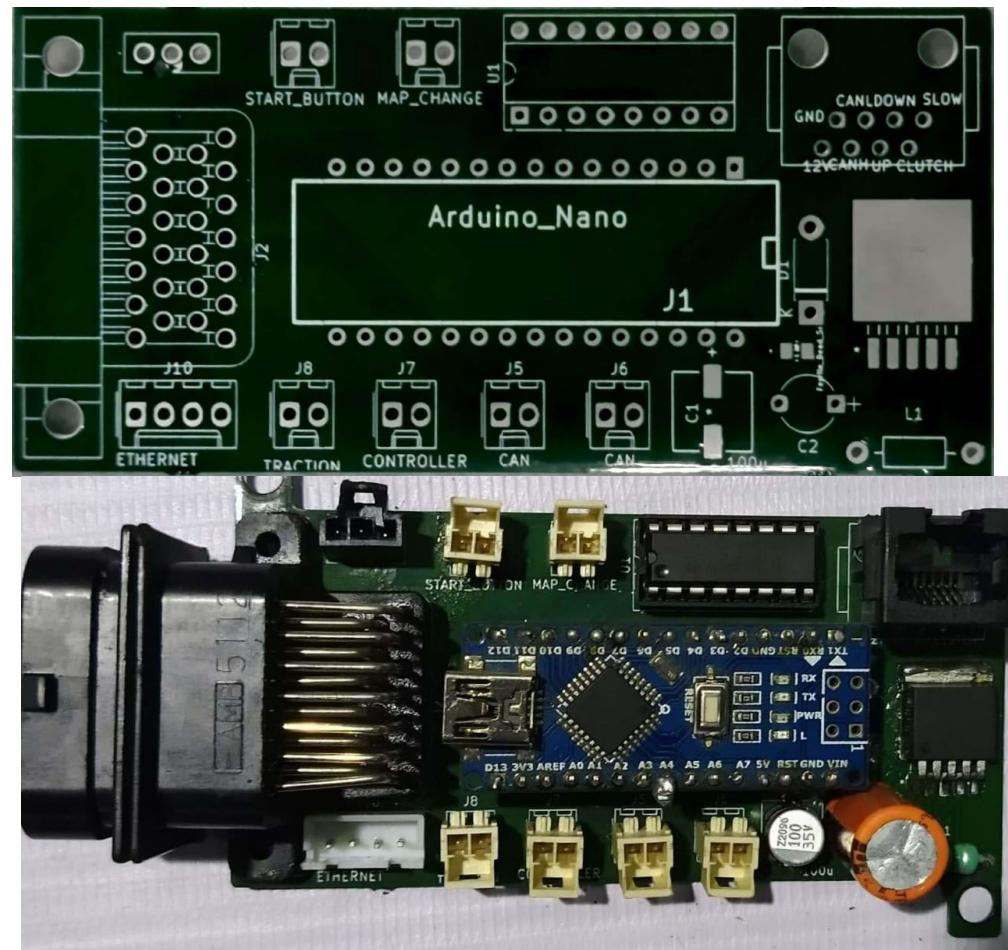
Internal layer traces:

Trace width:	6.30881	mm
Trace thickness:	0.035	mm
Cross-section area:	0.220808	mm x mm
Resistance:	0.0155791	Ω
Voltage drop:	0.155791	Volt
Power loss:	1.55791	Watt

	Clearance	Track Width	Via Dia	Via Drill	µVia Dia	µVia Drill	Diff Pair Width	Diff Pair Gap
Default	0.2	1	0.4	0.3	0.2	0.1	0.2	0.25
12	0.2	2.5	0.8	0.55	0.2	0.1	0.2	0.25
5V	0.2	1.3	0.4	0.3	0.2	0.1	0.2	0.25
GNDD	0.2	2.5	0.8	0.55	0.2	0.1	0.2	0.25
SIGNAL	0.2	1	0.4	0.3	0.2	0.1	0.2	0.25

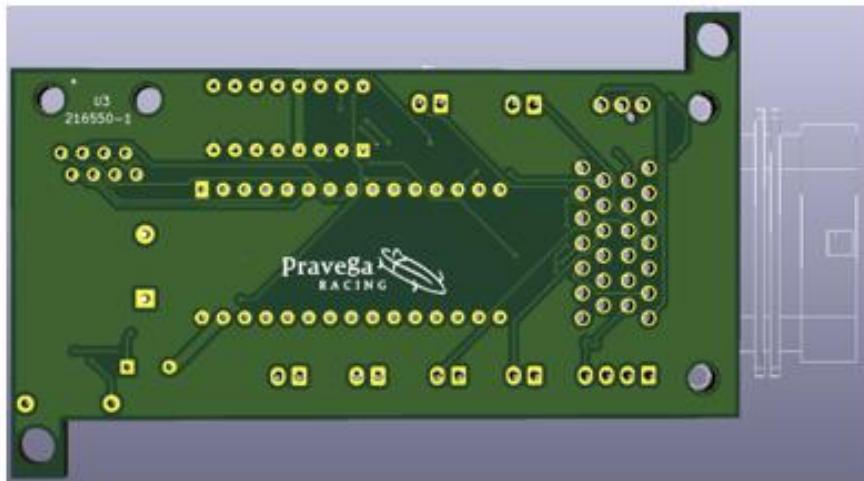
DASHBOARD

DASHBOARD PCB

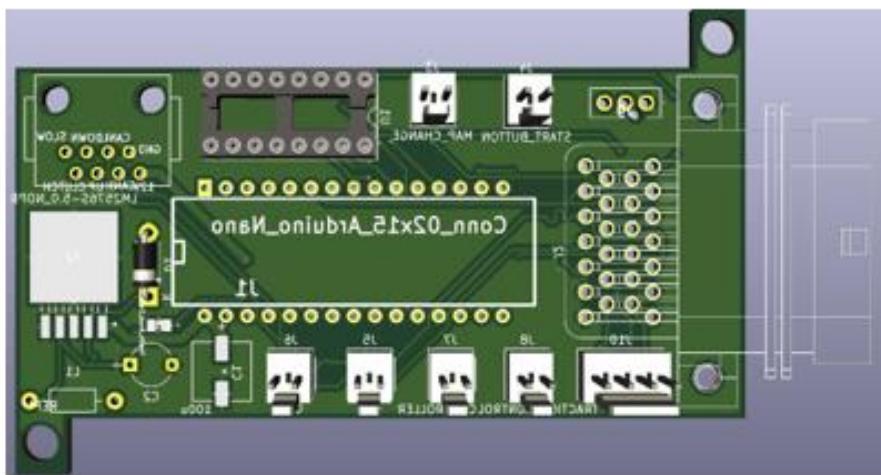


DASHBOARD SOLDERED

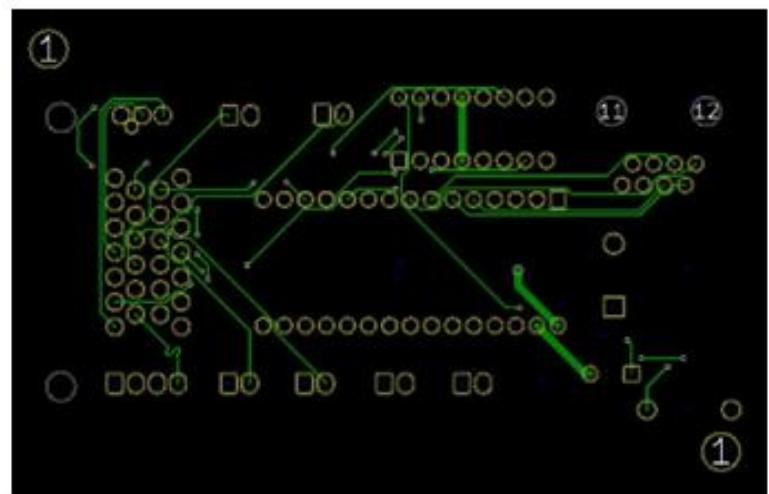
3-D REAR DASHBOARD



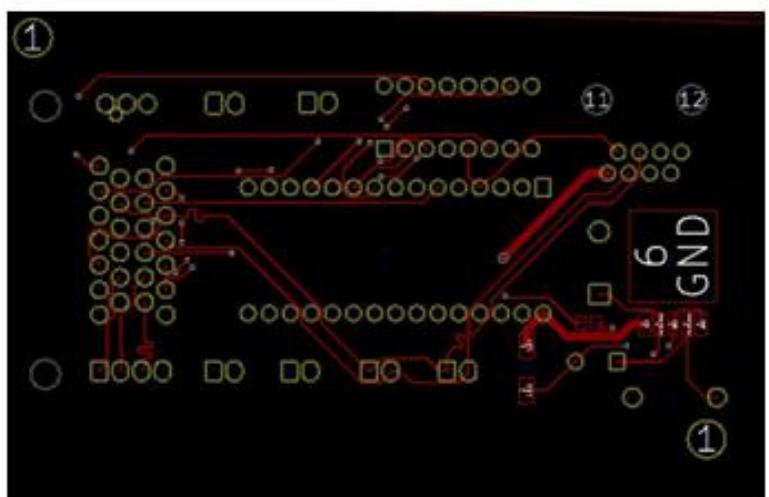
3-D FRONT DASHBOARD



REAR CU TRACES

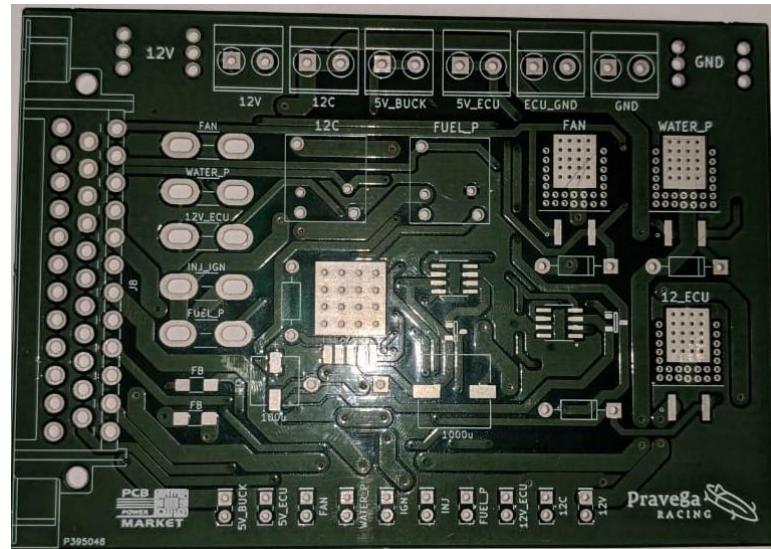


FRONT CU TRACES



POWER CONTROL MODULE

POWER CONTROL BOARD FRONT

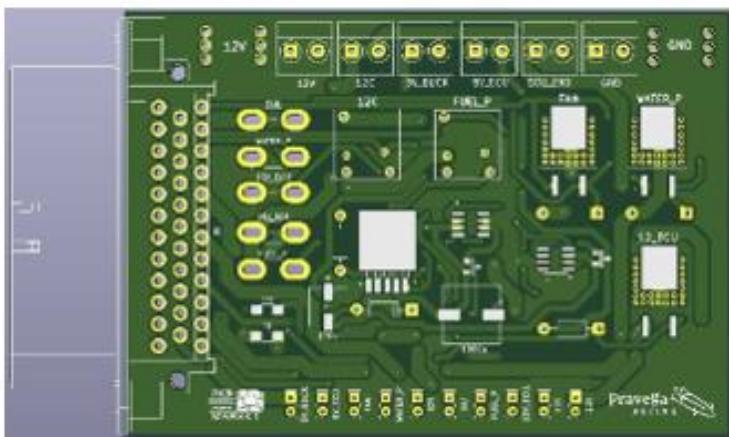


POWER CONTROL BOARD SOLDERED

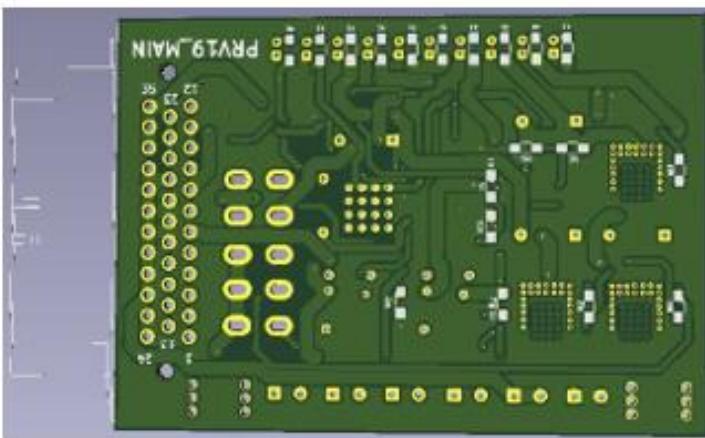


SOLDERED

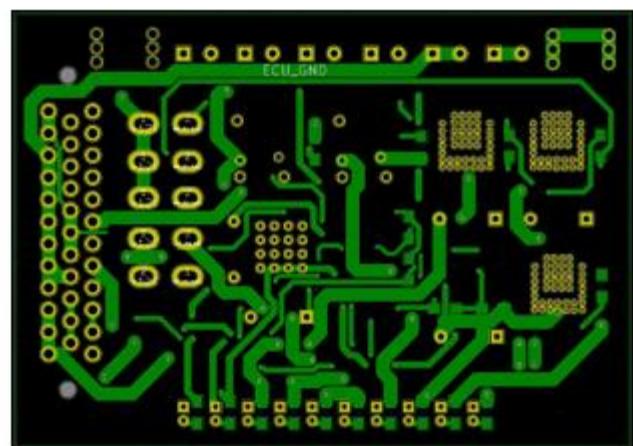
3-D REAR POWER CONTROL BOARD



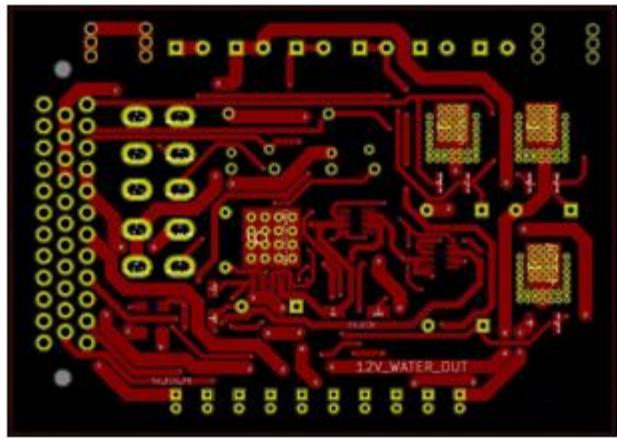
3-D FRONT POWER CONTROL BOARD



REAR CU TRACES

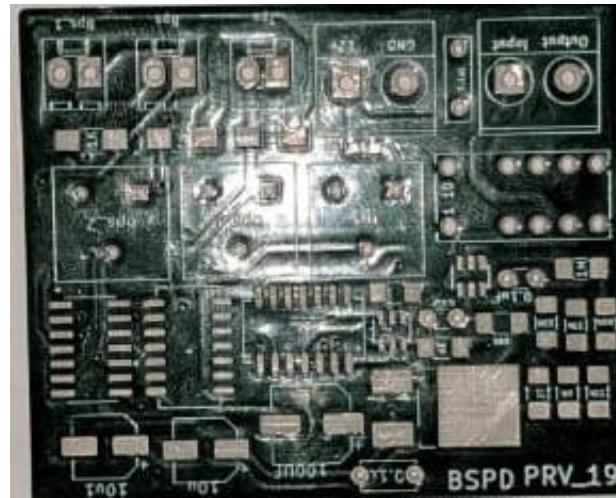


FRONT CU TRACES

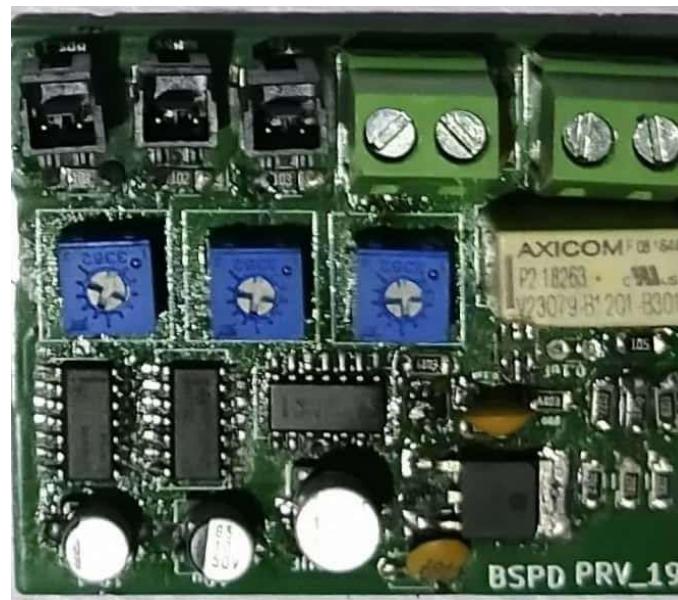


BSPD

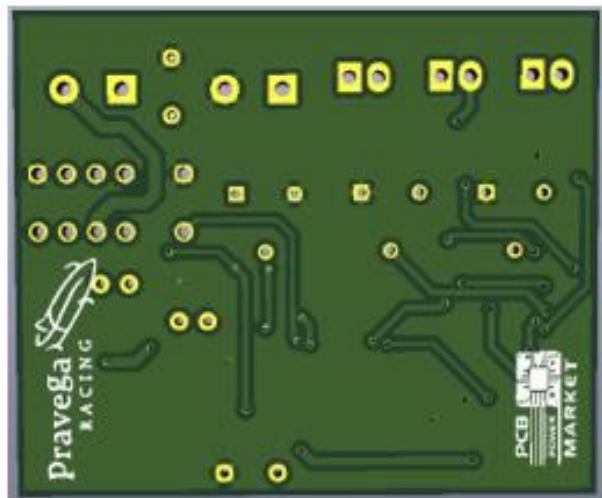
BSPD FRONT



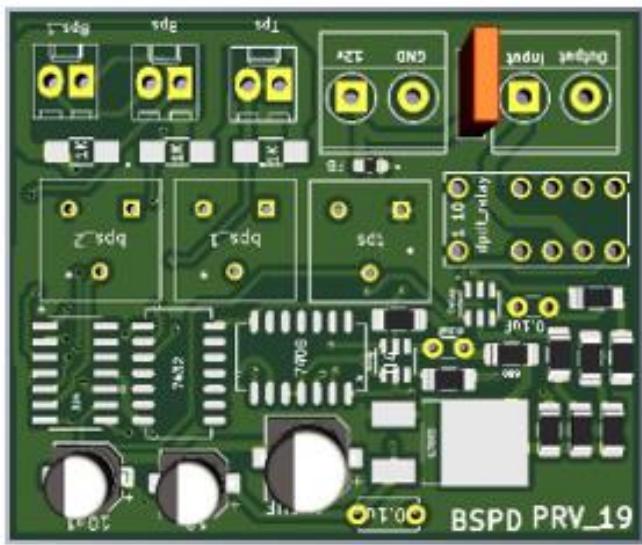
BSPD SOLDERED



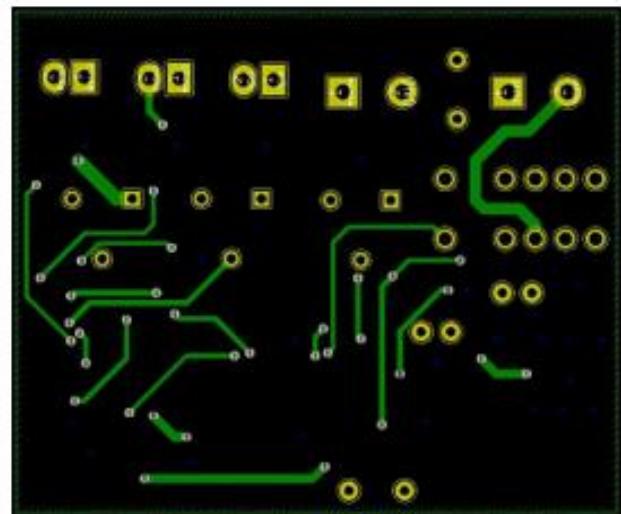
3-D REAR BSPD



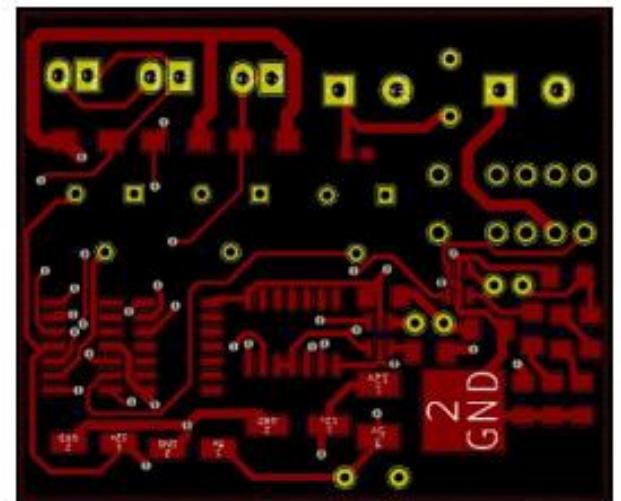
3-D FRONT BSPD



REAR CU TRACES

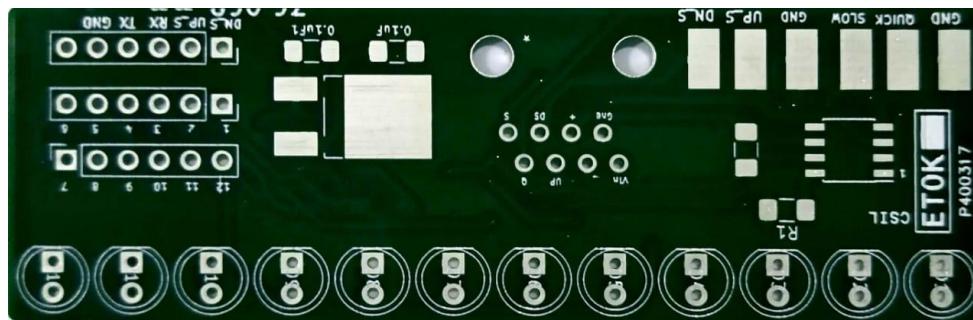


FRONT CU TRACES



STEERING BOARD

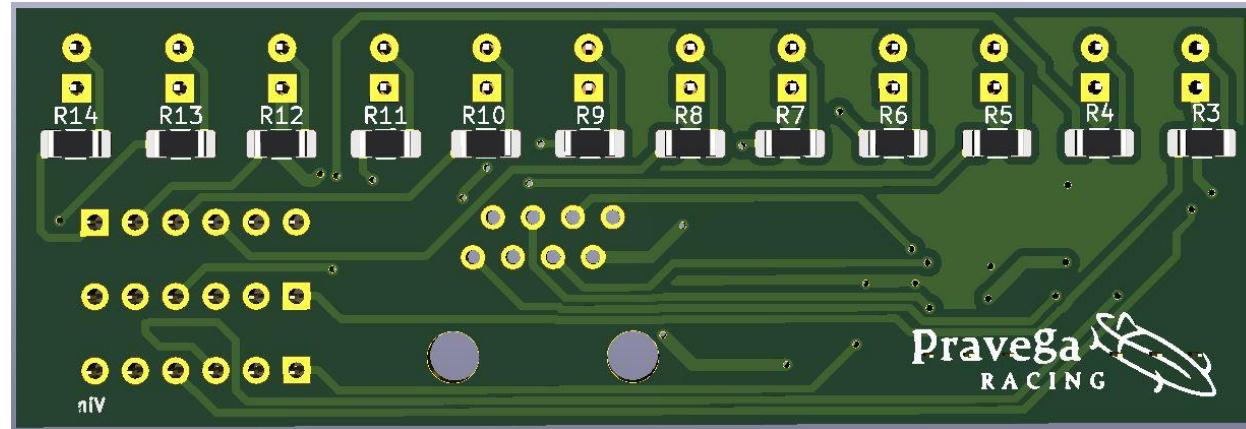
STEERING BOARD FRONT



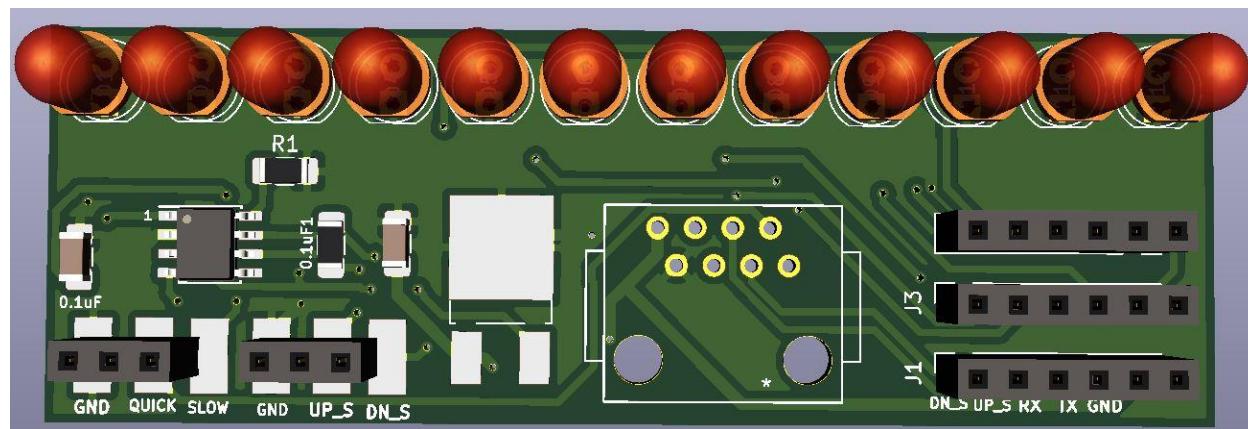
STEERING BOARD SOLDERED



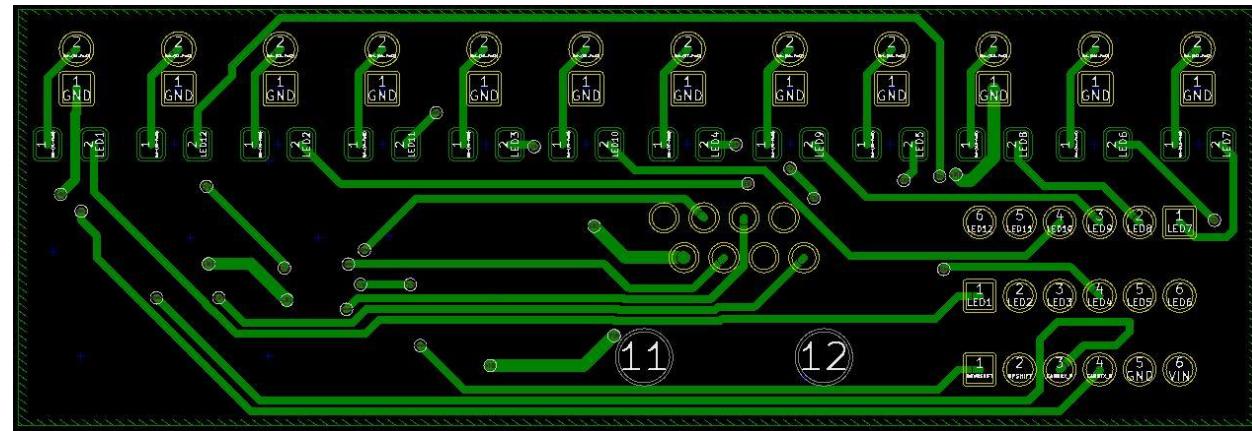
3-D REAR STEERING



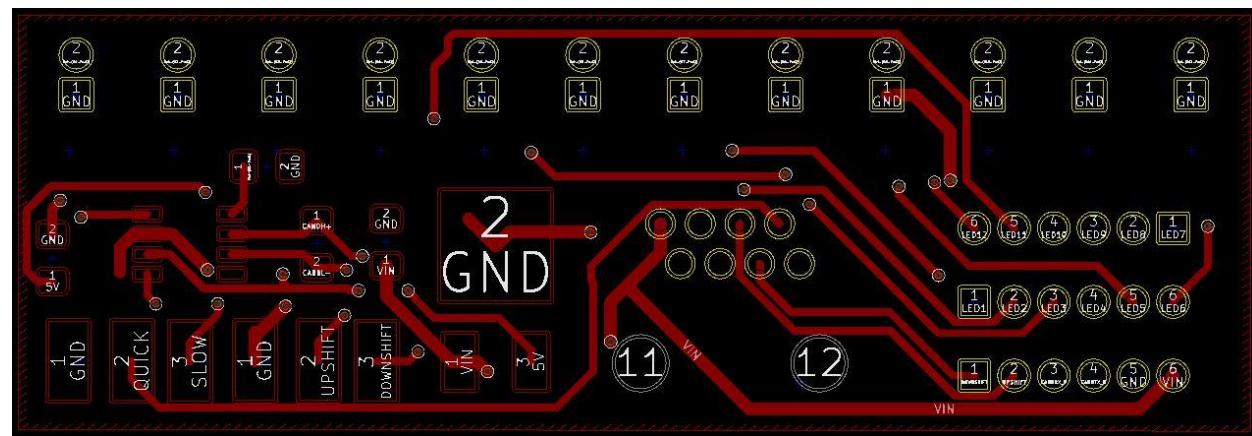
3-D FRONT STEERING



REAR CU TRACES



FRONT CU TRACES

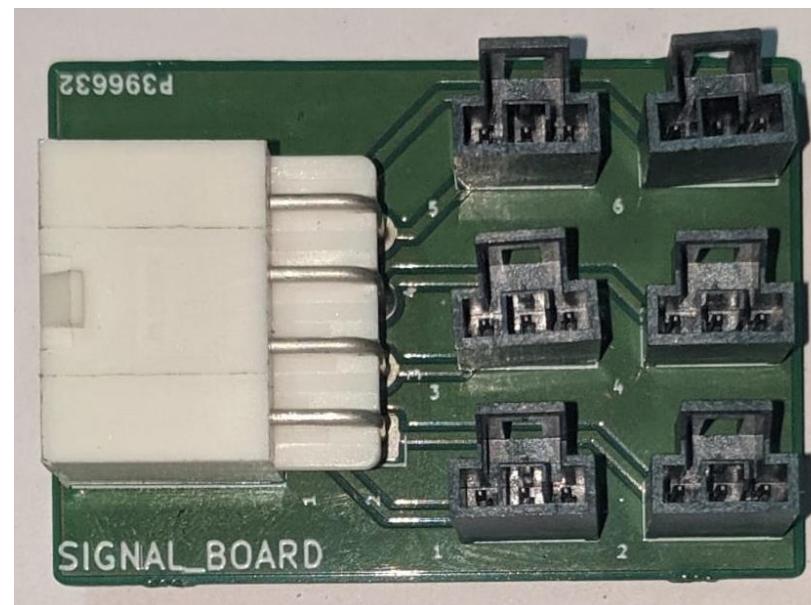


SENSORS BOARD

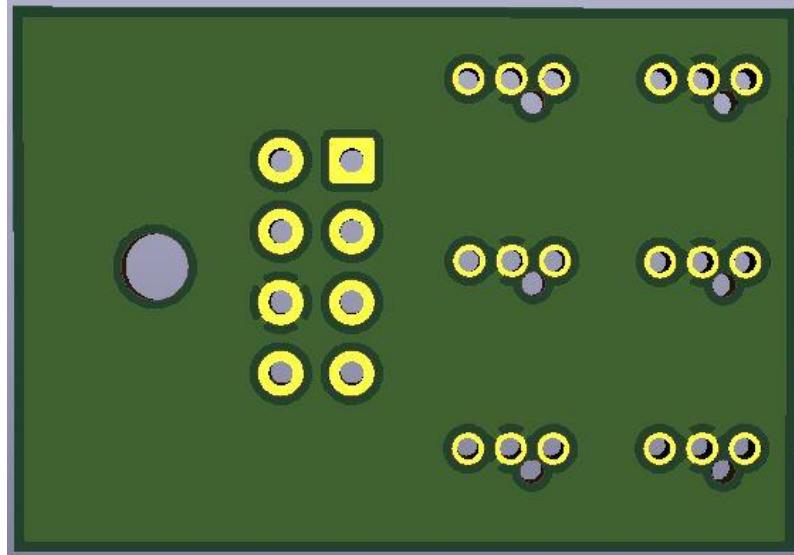
SENSORS BOARD FRONT



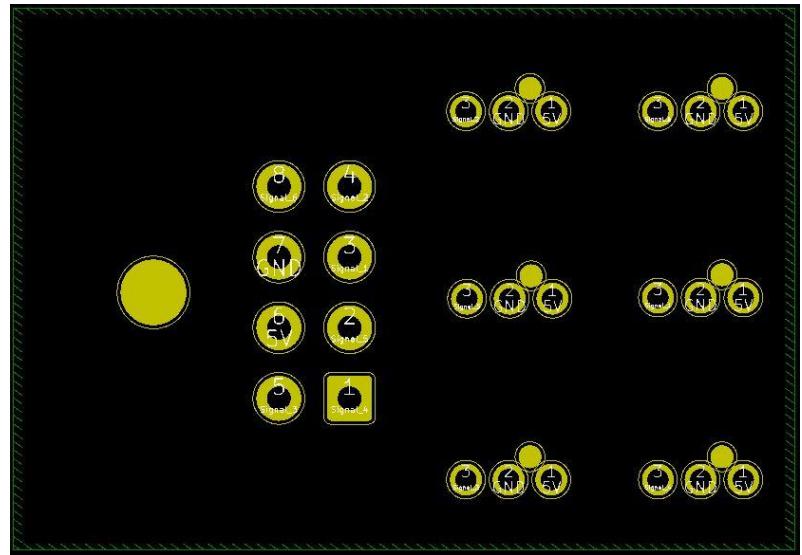
SENSORS BOARD SOLDERED



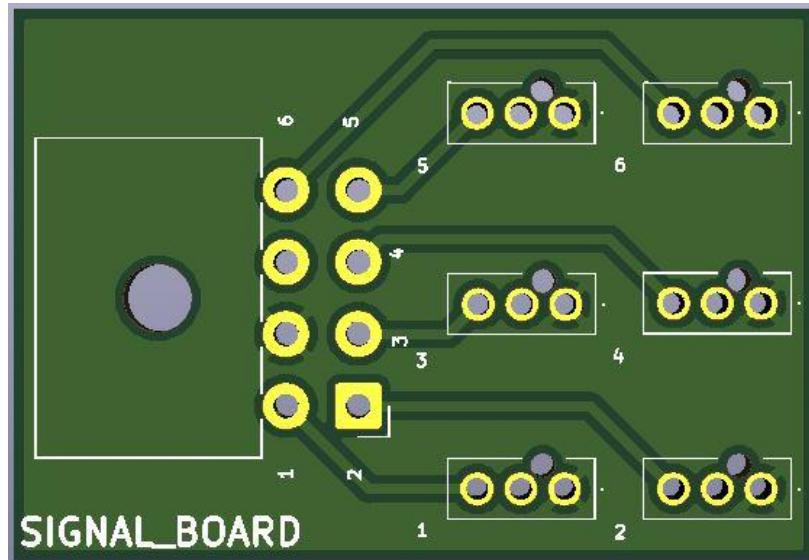
3-D REAR SENSORS BOARD



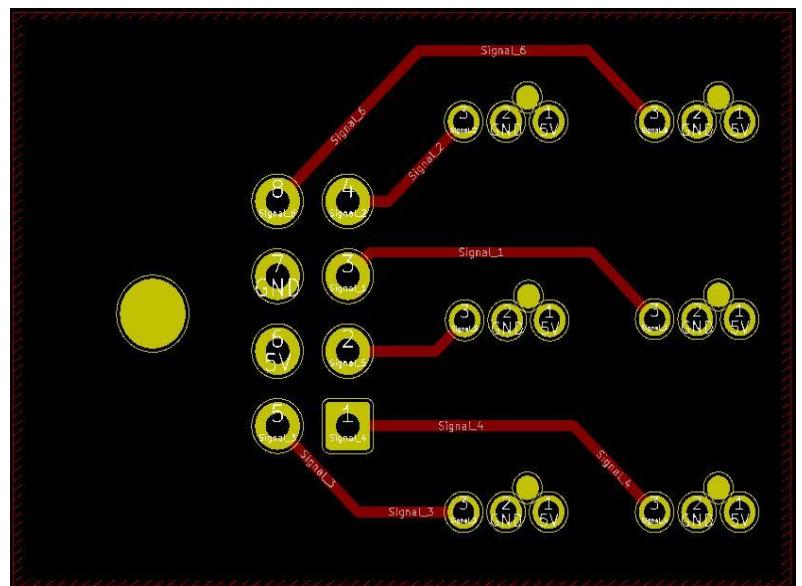
REAR CU TRACES



3-D FRONT SENSORS BOARD



FRONT CU TRACES



SIGNAL_BOARD

WIRING HARNESS

A wiring harness in a car can be defined as a set of organized wires, connectors, and terminals which run all over the vehicle for relaying power and information.

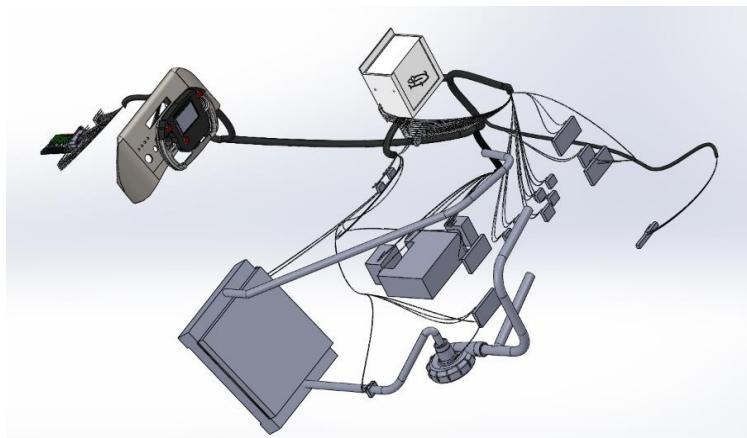
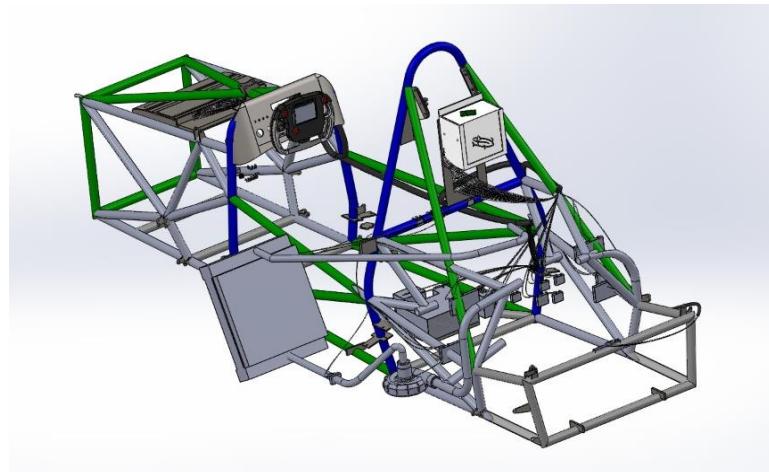
DETERMINATION O WIRING GAUGE

Through data received from current sensor ACS712, current requirements for different loads having their respective lengths were calculated following which the wire gauges were determined as given in the table below

LOAD	CURRENT DRAWN (in Amps)	WIRE GAUGE
FAN	<=7	18
FUEL/WATERPUMP	<=7	18
FUELPUMP	<=7	18
INJECTORS/IGNITION COILS	<=5	20
SIGNALS	Few mAmps	24
STARTER MOTOR/ENGINE GROUND/BATTERY SUPPLY	<=30	12

3-D HARNESS

The development of 2-D harness gave the idea of the necessary connections required and the layout of the wiring assembly. Following this, the 3-D harness was then designed keeping in mind the shortest and the safest path for the wires as shown:



3-D Harness designed in SolidWorks

MOCK HARNESS

Following the development of the 3-D harness (designed on Solid Works), a Mock Harness was laid out taking measurements from the links of the actual chassis as shown:

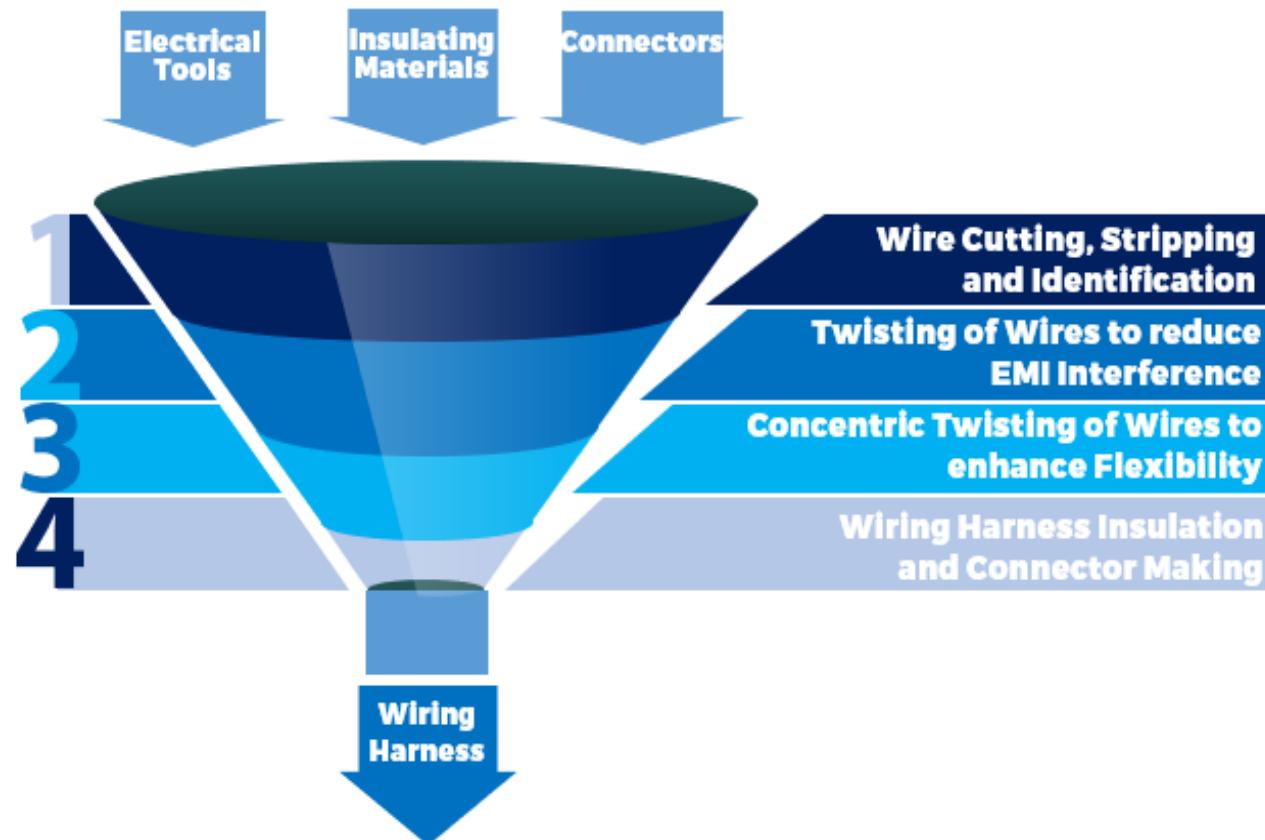


Mock Harness

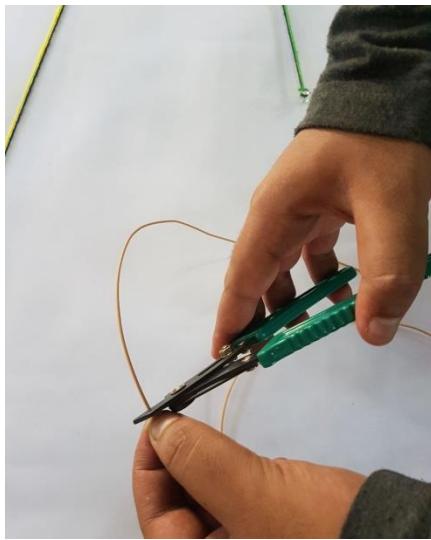
MANUFACTURING:

The development of the Mock Harness assisted in the manufacturing of the Wiring Harness since the lengths of different wires could now be directly taken from the Mock Harness.

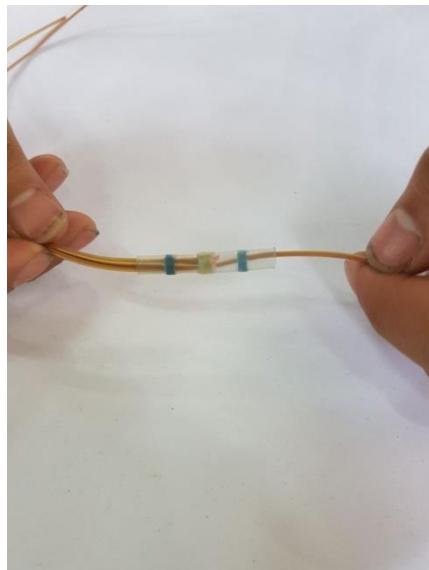
The methodology for manufacturing of the wiring harness for this season was as shown:



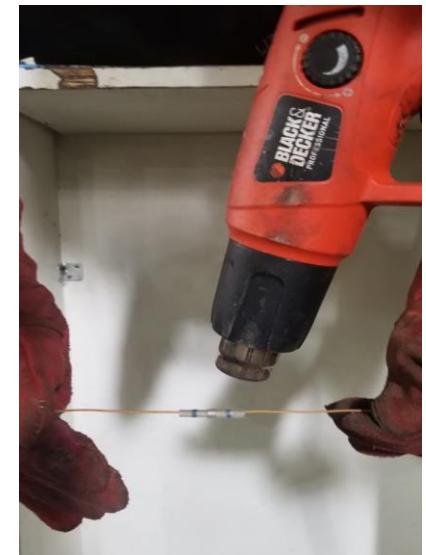
The various processes involved the manufacture of the wiring harness are shown:



Wire cutting



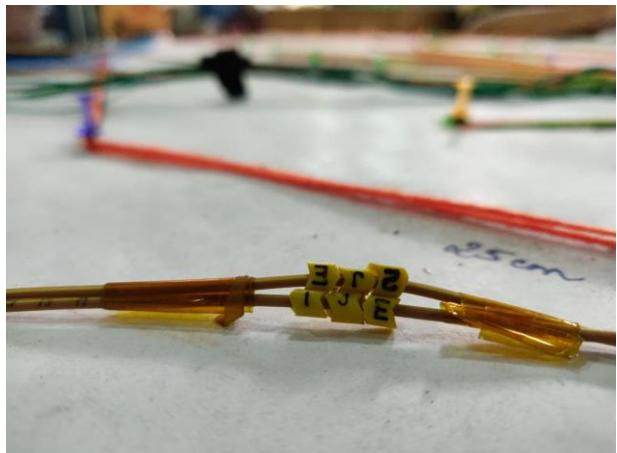
Joining of Multiple Wires using Solder



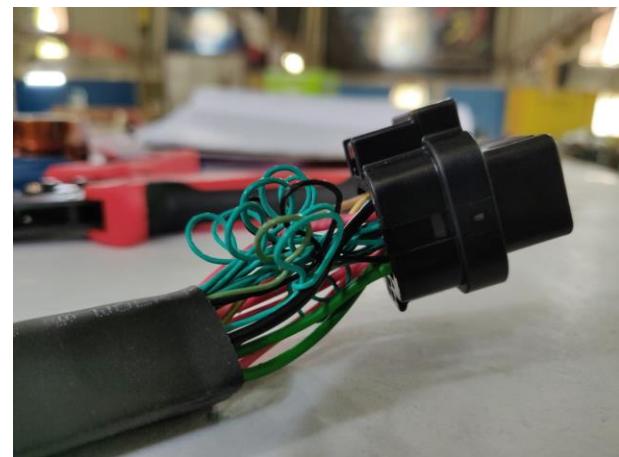
Twisting of Wires



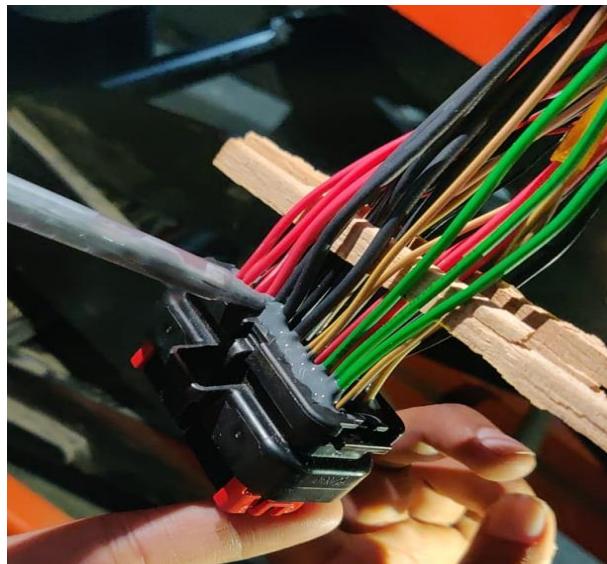
Concentric Twisting of Wires



Cable Tags for Identification of Wires



Rolling of Wires at ends to reduce tension

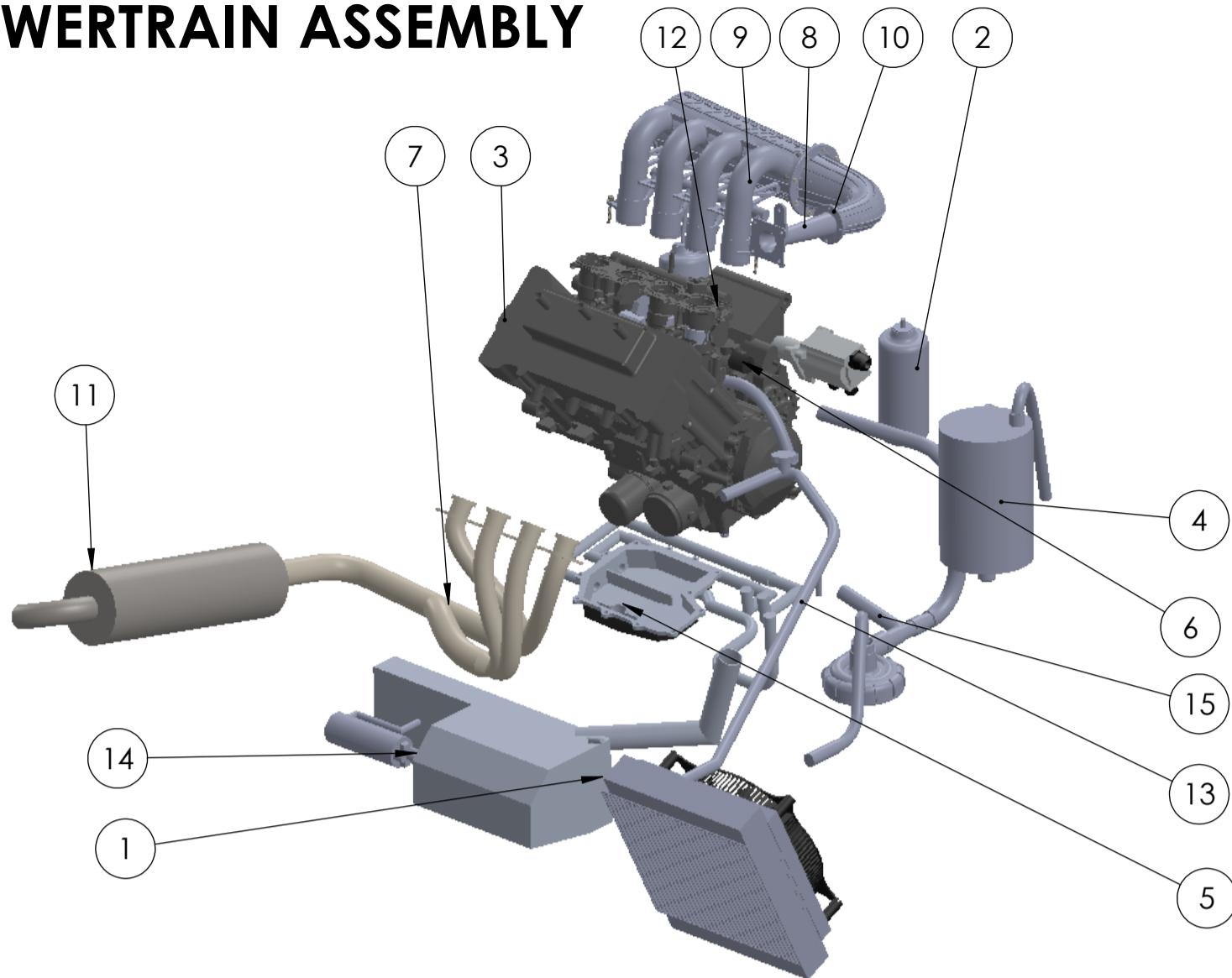


Sealing of Connectors using Liquid



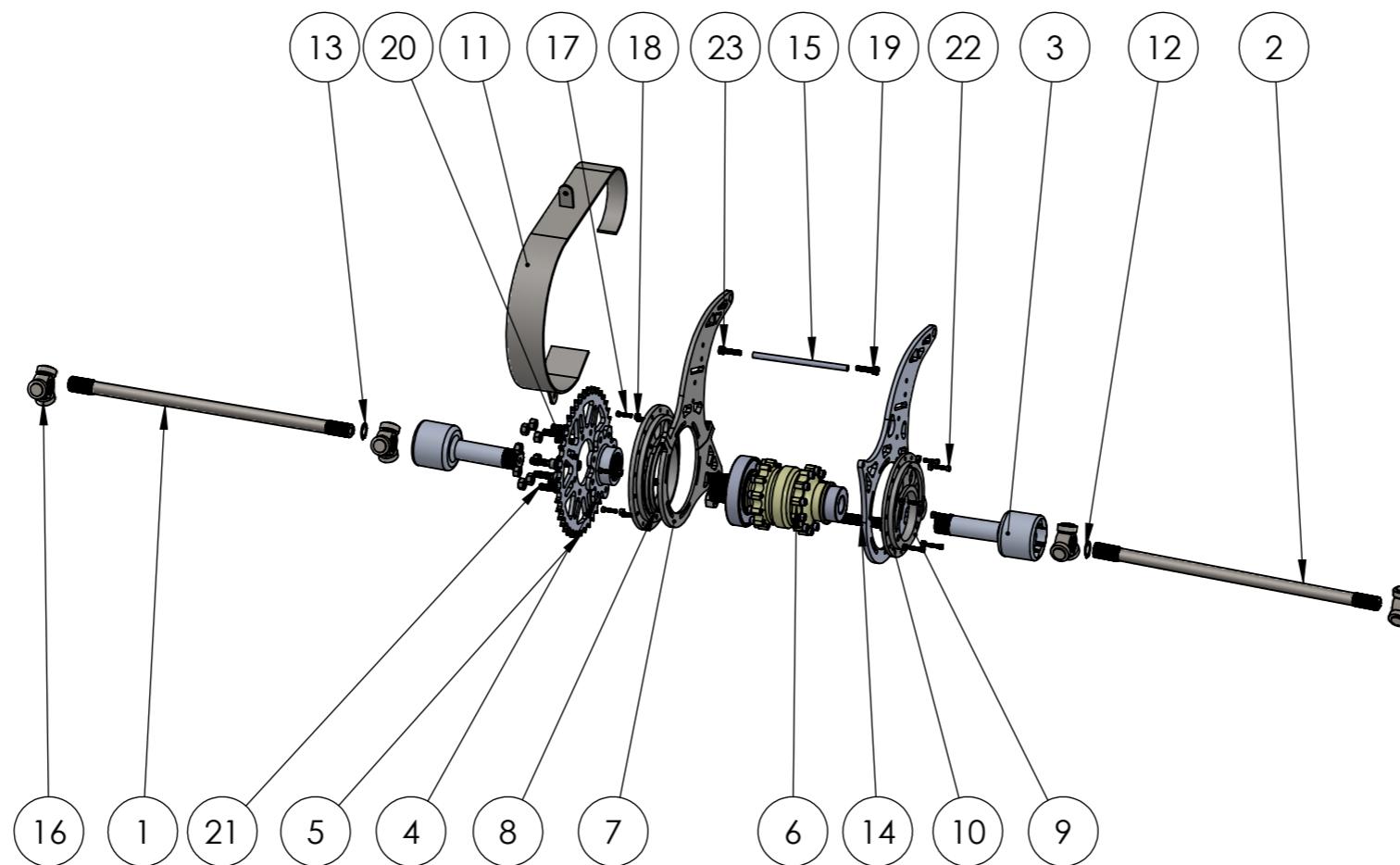
Manufactured Wiring Harness

7. POWERTRAIN ASSEMBLY



SERIAL NO.	PART NUMBER	PART NAME	MATERIAL	QTY.
1	254-EN-00122	Radiator	AI-7075 T6	1
2	254-EN-00121	Catch Can	BOUGHT	2
3	254-EN-00031	Engine	BOUGHT	1
4	254-EN-00087	Reservoir Tank	AL-6061 T6	1
5	254-EN-00086	Sump pan	AL-6061 T6	1
6	254-EN-00034	Engine Spacer(Rear)	Poly Carbonate	2
7	254-EN-00038	Exhaust tubes	AISI 1020	1
8	254-EN-00060	Diffuser	PA-12	1
9	254-EN-00061	Plenum and Runner	PA-12	1
10	254-EN-00126	Restrictor	PA-12	1
11	254-EN-00063	Muffler outer housing	AISI 1020	1
12	254-EN-00050	Fuel Rail	BOUGHT	1
13	254-EN-00006	Radiator Inlet	AL-6061 T6	1
14	254-EN-00054	Fuel Tank	AL 7075	1
15	254-EN-00010	Inlet T Connector	AL 7075	1

8. Drivetrain Assembly

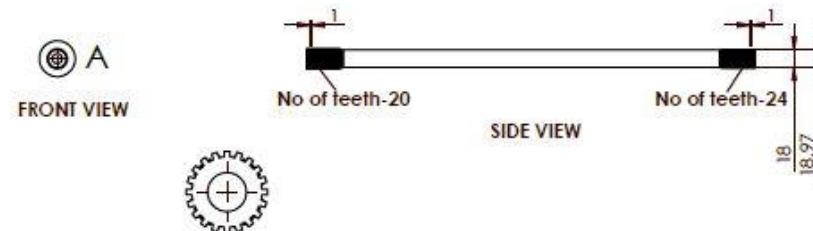


SERIAL NO.	PART NUMBER	PART NAME	MATERIAL	QTY.
1	254-EN-00002	Half Shaft left	AISI 4140 (EN 19)	1
2	254-EN-00003	Half Shaft Right	AISI 4140 (EN 19)	1
3	254-EN-00020	Tripod Casing	AISI 4140 (EN 19)	2
4	254-EN-00129	Sprocket Adaptor	AL 7075 T6	1
5	254-EN-00128	Diffrential Sprocket	AL 7075 T6	1
6	254-EN-00023	Diffrential	BOUGHT	1
7	254-EN-00027	Diffrential Mount Left	AL 7075 T6	1
8	254-EN-00029	Eccentric Left	AL 7075 T6	1
9	254-EN-00030	Eccentric Right	AL 7075 T6	1
10	254-EN-00028	Diffrential Mount Right	AL 7075 T6	1
11	254-EN-00127	Scatter Shield	AISI 1020	1
12		Retaining Ring,External	AISI 1020	4
13		Retaining Ring,External	AISI 1020	4
14	254-EN-00035	Engine Mount	AISI 1020	1
15		Mount	AISI 1020	1
16	254-EN-00018	Tripod Bearings	BOUGHT	4
17		M5 Bolt	AISI 1020	8
18		M5 Nut	AISI 1020	8
19		M6 Bolt	AISI 1020	2
20		M10 Bolt	AISI 1020	10
21		M8 Nut	AISI 1020	8
22		M5 Washer	AISI 1020	16
23		M6 Washer	AISI 1020	4

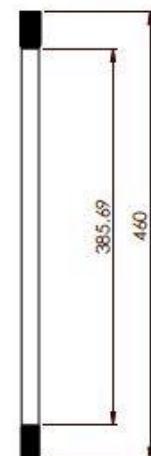
ENGINE AND DRIVETRAIN (EN)

Assembly-Axles(254-EN-A002)

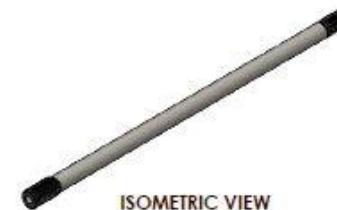
1.Halfshaft Left (254-EN-00002, Quantity-1)



DETAIL A
SCALE 1 : 1



TOP VIEW



ISOMETRIC VIEW

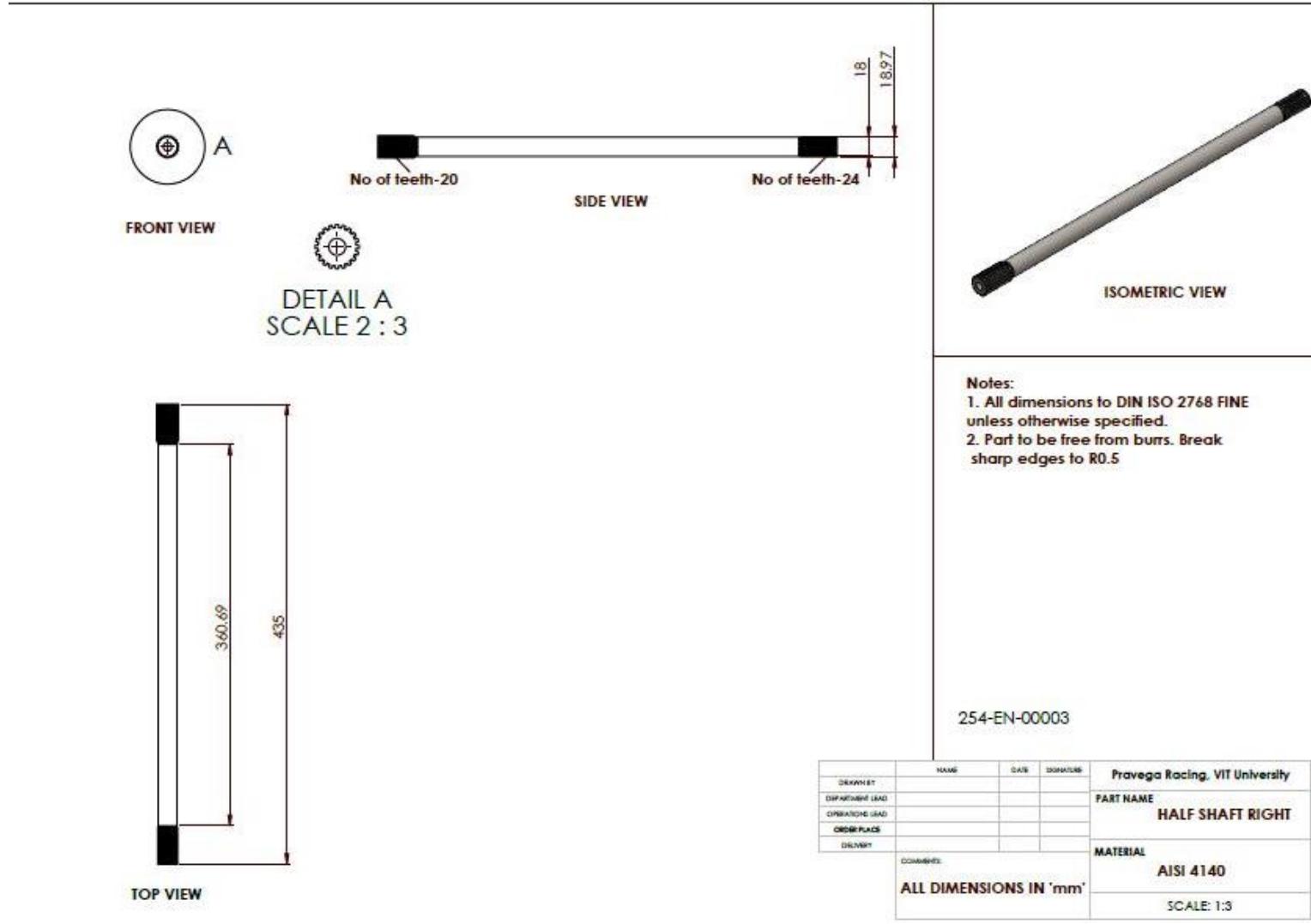
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00002

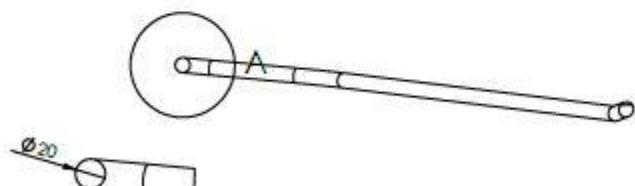
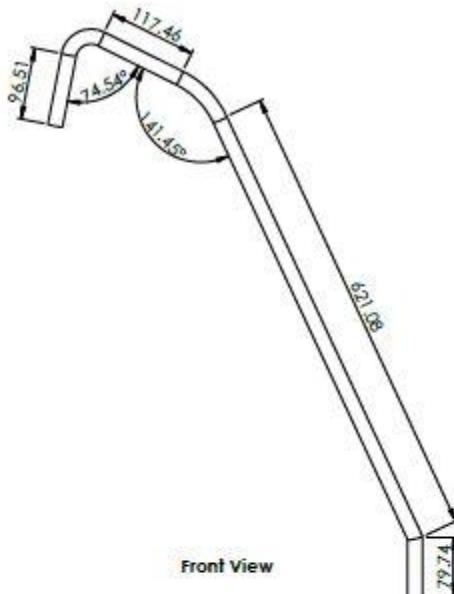
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				HALF SHAFT LEFT
ORDER PLACE				MATERIAL
DELIVERY				AISI 4140
COMMENTS:				
All DIMENSIONS IN 'mm'				
SCALE: 1:4				

2. Halfshaft Right (254-EN-00002, Quantity-1)



Assembly-Coolant Lines(254-EN-A005)

1.Radiator Inlet (254-EN-00006, Quantity-1)



DETAIL A
SCALE 2 : 5

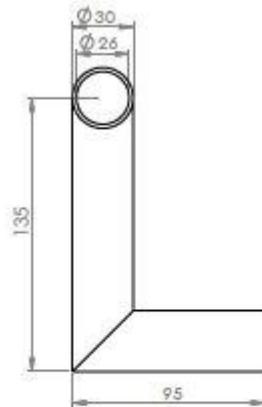


Isometric View

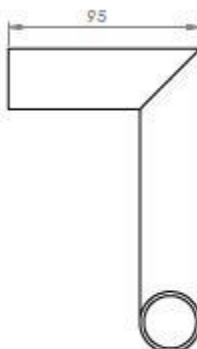
254-EN-00006

DRAWN BY	NAME	DATE	SIGNATURE
DEPARTMENT HEAD			
OPERATIONS HEAD			
CHEIEPLACE			
DELIVERY			
COMMENTS:			
All Dimensions in mm			
MATERIAL			
SCALE	1:5		

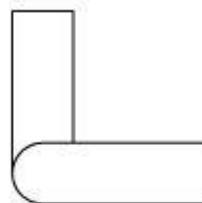
2.Radiator Outlet (254-EN-00007, Quantity-1)



FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

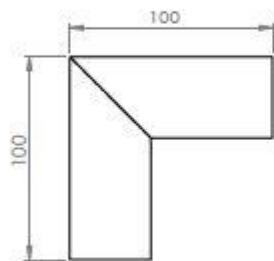
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00007

DESIGNER	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DIMENSIONAL LEAD				PART NAME
OPERATIONS LEAD				RADIATOR OUTLET
CROSS PLACE				MATERIAL
DRAWN BY				Al 6061
COMMENTS				SCALE: 1:2
ALL DIMENSIONS IN 'mm'				

3.Water Pump Connector (254-EN-00008, Quantity-1)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

Notes:

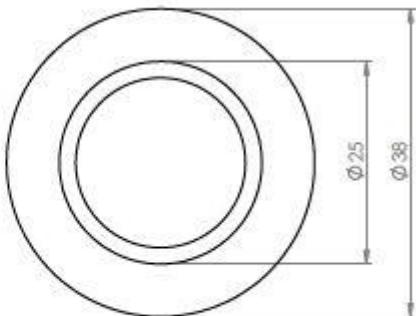
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

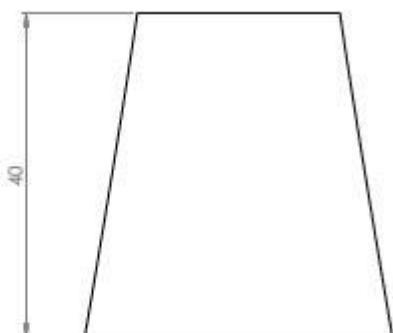
254-EN-00008

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				WATER PUMP CONNECTOR
DESIGN PLACE				MATERIAL
DELIVERY				Al 7075-T6
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 1:2				

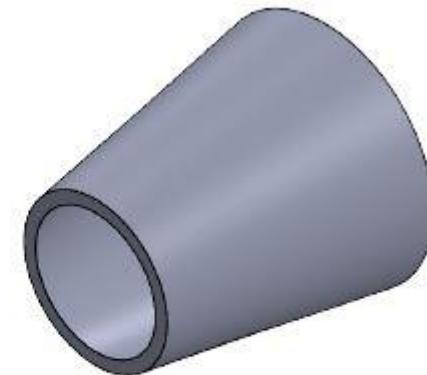
4.Water Pump Outlet (254-EN-00009, Quantity-1)



Front View



Top View



Isometric View

NOTES

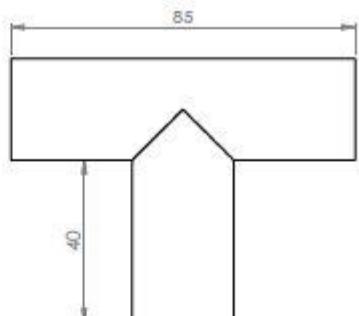
1. All dimensions to DIN ISO 2768
FINE unless otherwise specified.

2. Part to be free from burrs. Break
sharp edges to R0.5

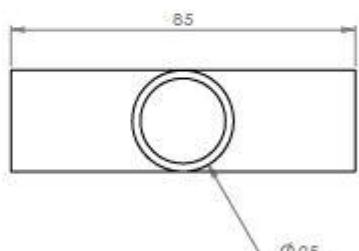
254-EN-00009

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Water pump Outlet
CORPORATE PLACE				MATERIAL
DELIVERY				Aluminium 6061
COMMENTS:				
All Dimensions in mm				
SCALE: 2:1				

5.Inlet T connector (254-EN-00010, Quantity-1)



Front View



Bottom View



Isometric View

NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5.

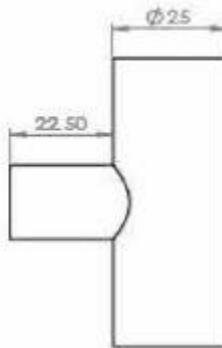
254-EN-00010

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT USED				PART NAME
OPERATIONS USED				Inlet T Connector
ORDER PLACE				MATERIAL
DRAWSNIT				Aluminium 6061
COMMENTS:				
All Dimensions in mm				
SCALE: 1:1				

6.T connector CTS (254-EN-00011, Quantity-1)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

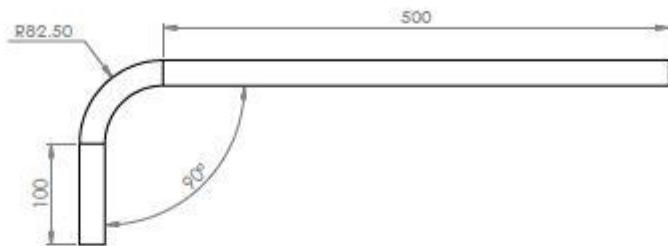
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00011

Design By	Name	Date	Comments	Pravega Racing, VIT, Vellore
Supervised By				PART NAME
Reviewed By				T CONNECTOR CTS
Other Block				MATERIAL
Owner				Al 6061
ALL DIMENSIONS IN 'mm'				
SCALE 1:1				

7. Coolant line connector (254-EN-00012, Quantity-1)



Front View



Top View



Isometric View

NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

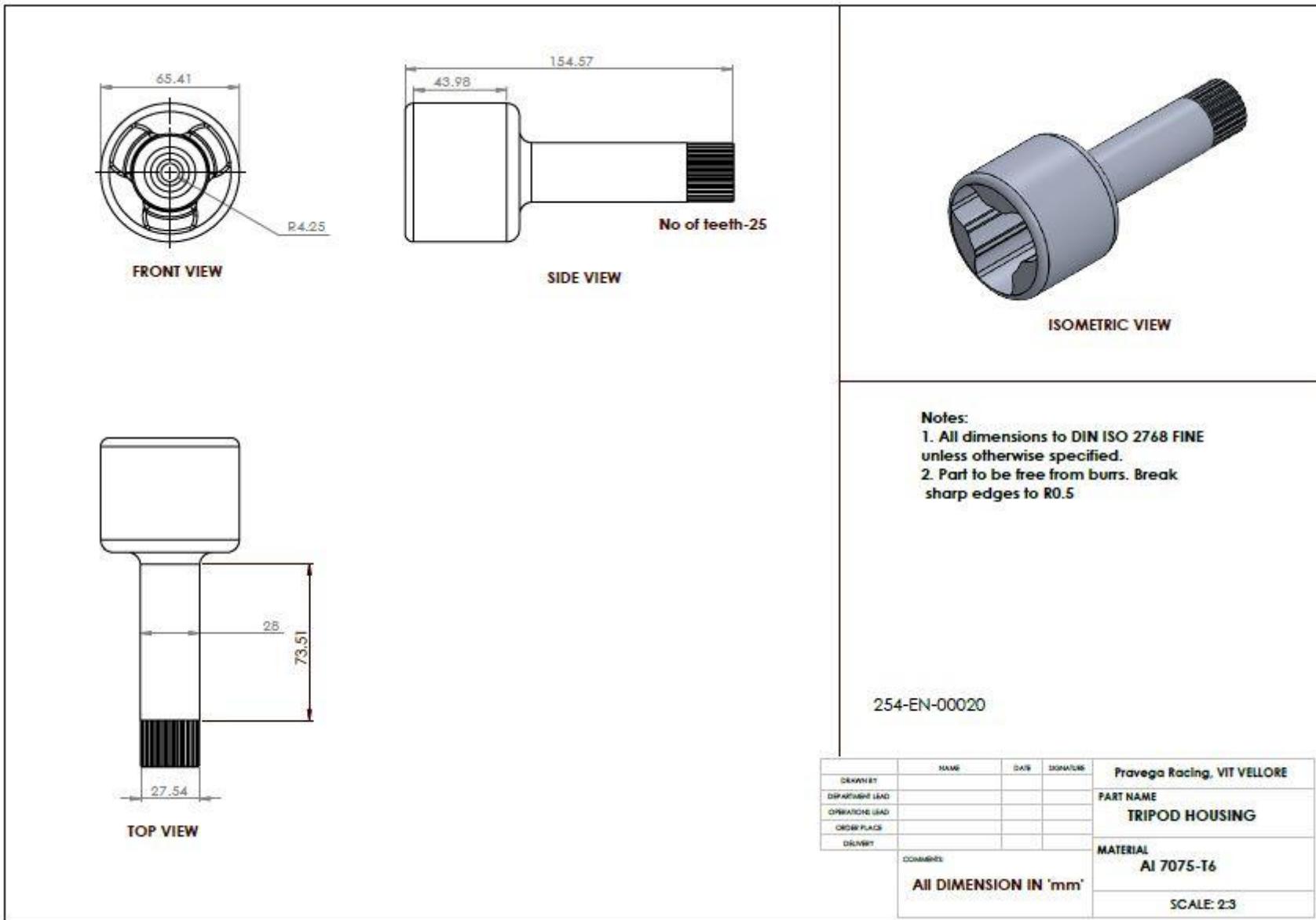
2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00012

DRAWN BY	NAME	DATE	SIGNATURE
DEPARTMENT LEAD			
OPERATIONS LEAD			
ORDER PLACE			
DRAFTER			
COMMENTS:			
All Dimensions in mm			
MATERIAL	Aluminium 6061		
SCALE:	1:4		

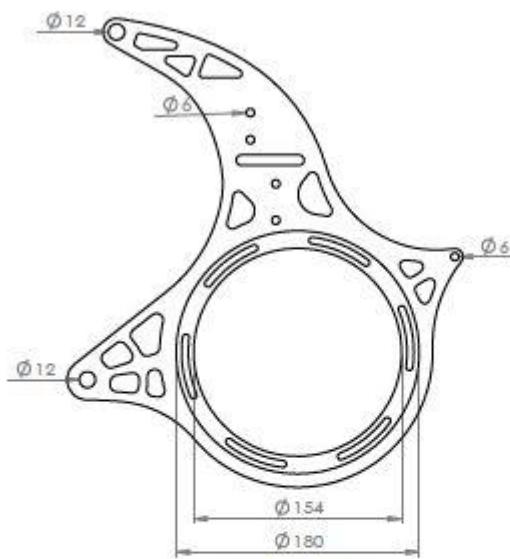
Assembly-Joints(254-EN-A006)

1.Tripod Housing (254-EN-00020, Quantity-2)

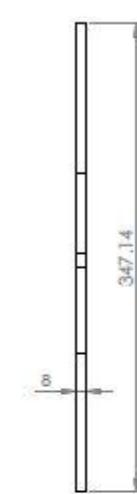


Assembly-Differential Mounts(254-EN-A009)

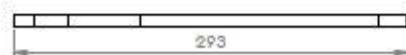
1.Differential Mount Left (254-EN-00027, Quantity - 1)



FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

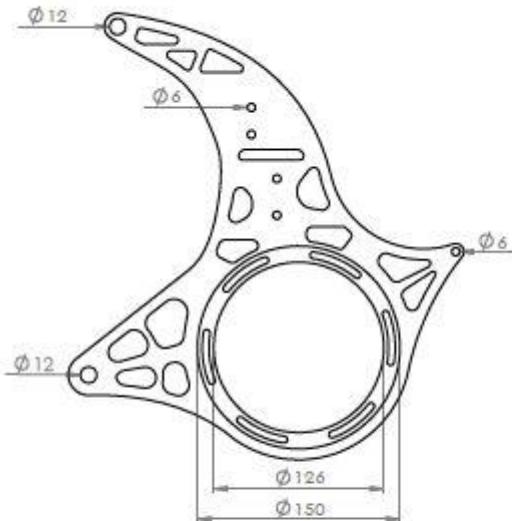
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00027

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
DISPATCHER LEAD				DIFFERENTIAL MOUNT LEFT
OPERATIONS LEAD				
ORDER PLACER				MATERIAL
DRIVER				Al 7075-T6
COMMENTS		ALL DIMENSIONS IN 'mm'		
		SCALE: 1:2		

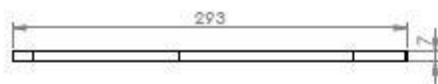
2.Differential Mount Right (254-EN-00028, Quantity-1)



FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

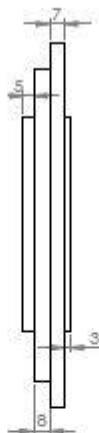
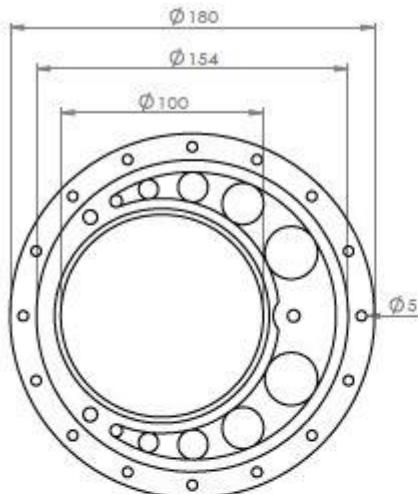
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00028

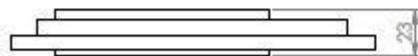
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DRAFTSMAN LEAD				PART NAME
OPERATIONS LEAD				DIFFERENTIAL MOUNT RIGHT
ORDER PLACE				MATERIAL
DRWMT				Al 7075-T6
COMMENTS: ALL DIMENSIONS IN 'mm'				
SCALE: 1:2				

3.Eccentric Left (254-EN-00029, Quantity-1)



Notes:

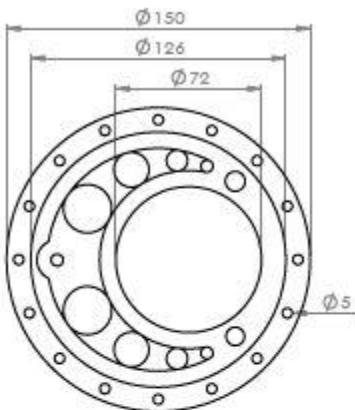
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5



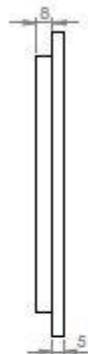
254-EN-00029

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT,Vellore
DIMENSION UNITS				PART NAME
OPERATING LOAD				ECCENTRIC LEFT
ORDER PLACE				MATERIAL
DELIVERY				Al 6061
COMMENTS: ALL DIMENSIONS IN 'mm'				
SCALE: 1:2				

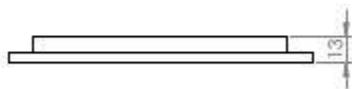
4. Eccentric Right (254-FN-00030, Quantity-1)



FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

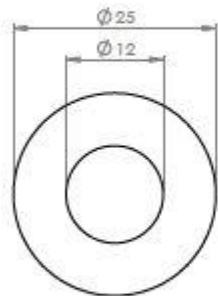
2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00030

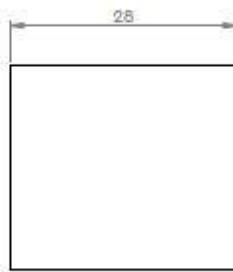
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT,Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				ECCENTRIC RIGHT
ORDER PLACE				MATERIAL
DRIVER				Al 6061
COMMENTS:				ALL DIMENSIONS IN 'mm'
				SCALE: 1:2

Assembly-Exhaust Manifold(254-EN-A013)

1.Port Tube (254-EN-00037, Quantity-4)



FRONT VIEW



SIDE VIEW

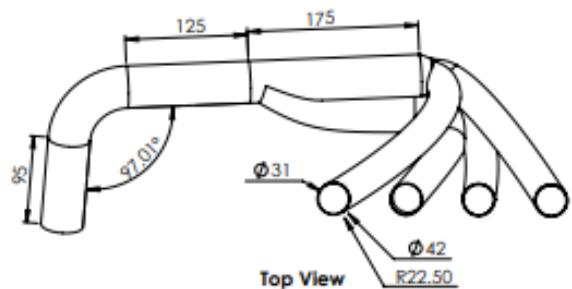
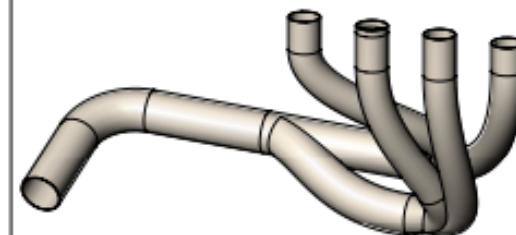
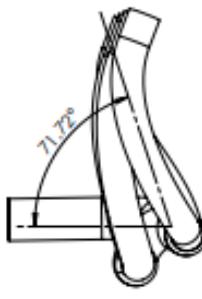
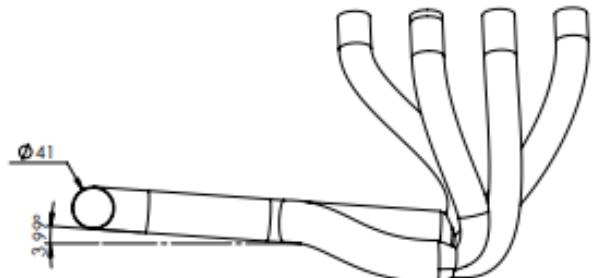


ISOMETRIC VIEW

254-EN-00034

DESIGNER	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DRAFTSMAN LEAD				PART NAME
OPERATIONS LEAD				ENGINE SPACER
ORDER PLACE				MATERIAL
DRIVER				POLYURETHANE
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 2:1				

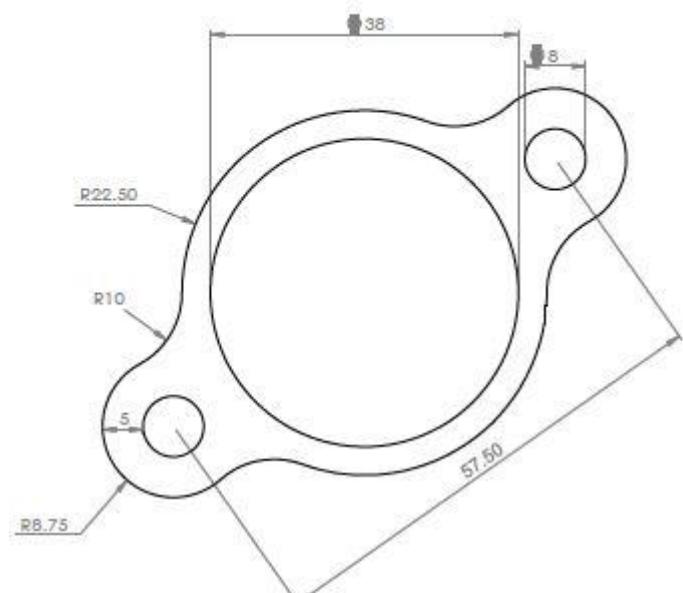
2.Exhaust Tubes (254-EN- 00038, Quantity-7)



Notes:
 1. All dimensions to DIN ISO 2768
FINE
 unless otherwise specified.
 2. Part to be free from burrs. Break sharp edges to R0.5

DRAWN BY	NAME	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Exhaust tubes
ORDER PLACE				MATERIAL
DELIVERY				AISI 1020
COMMENTS:				
All Dimensions in mm				
SCALE: 1:4				

3.Exhaust Flanges (254-EN-00039, Quantity-4)



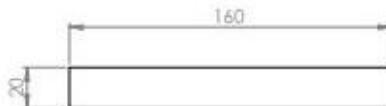
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00039

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS USED				EXHAUST FLANGE
ORDER PLACE				
DRAWN BY				MATERIAL
				AISI1020
	COMMENTS: ALL DIMENSIONS IN 'mm'			SCALE: 2:1

4. Supporting Strips (254-EN-00040, Quantity-3)



Front View



Top View



Isometric View

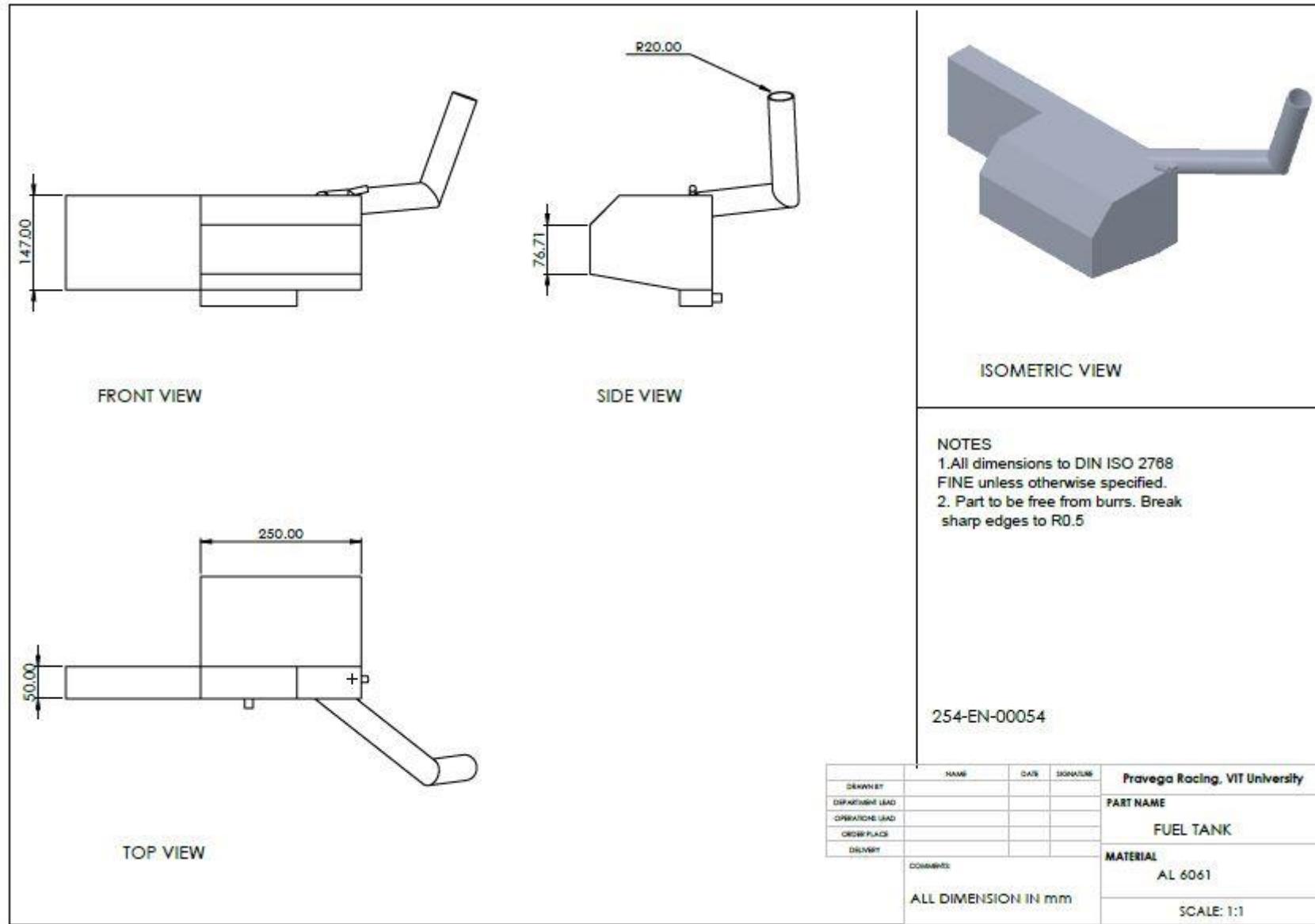
NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs.
Break
sharp edges to R0.5

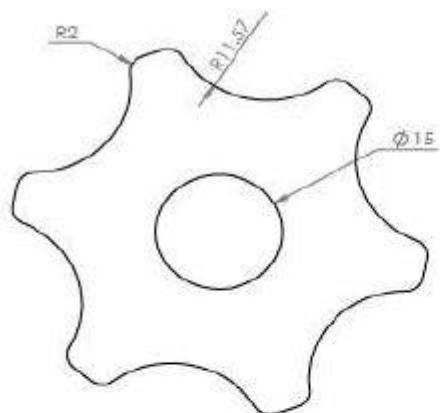
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				
OPERATING LEAD				
ORDER PLACE				
COLLATOR				
COMMENTS:				
All Dimensions in mm				
SCALE: 1:2				

Assembly-Fuel Tank(254-EN-A019)

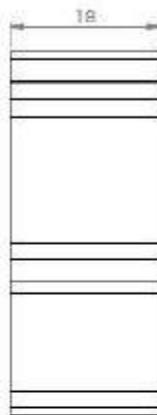
1.Fuel Tank (254-EN-00054, Quantity-1)



2.Fuel Filler Cap (254-EN-00058, Quantity-1)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

Notes:

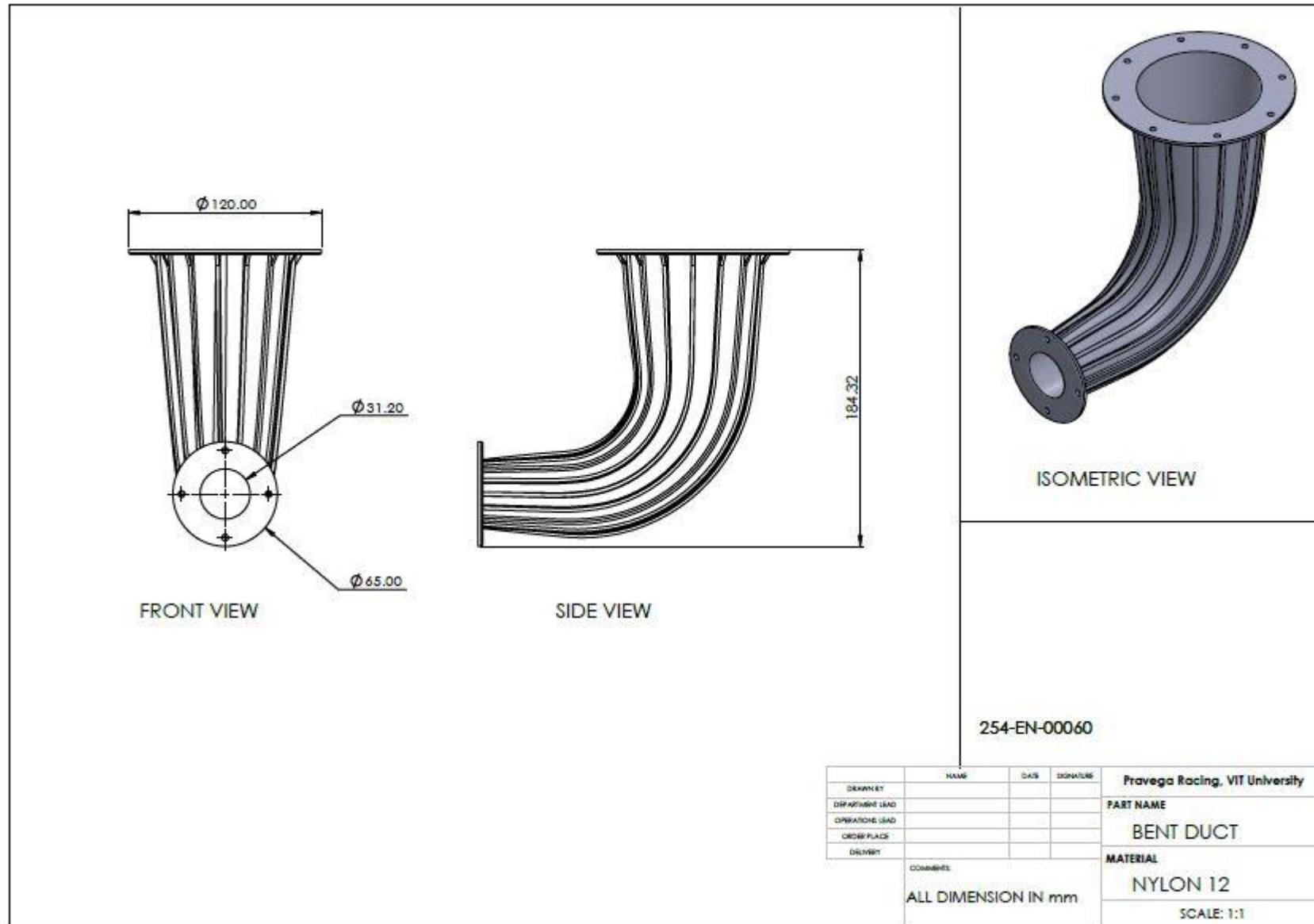
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00058

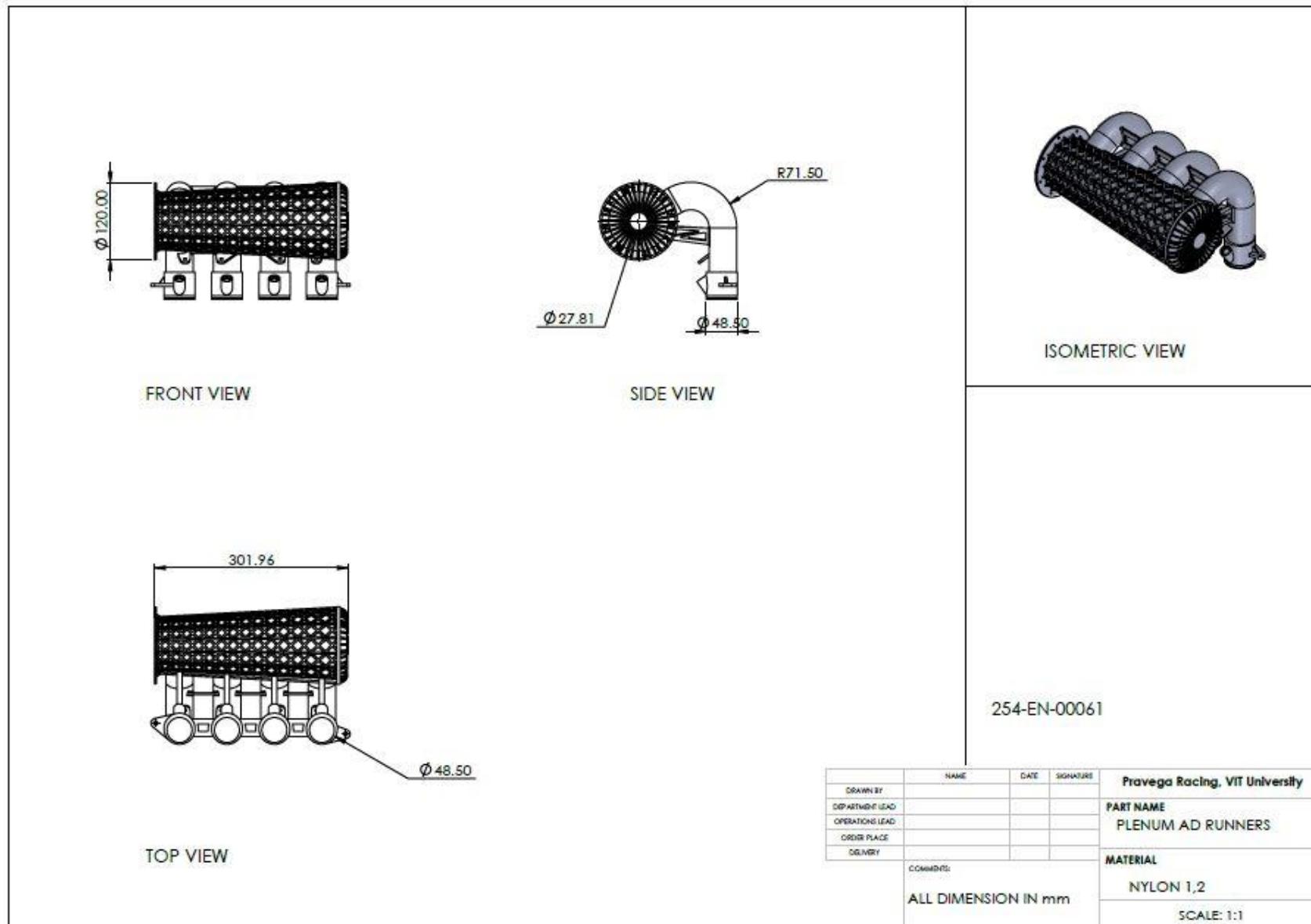
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT/LEAD				PART NAME
OPERATIONS/LEAD				FUEL FILLER CAP
ORDER PLACE				MATERIAL
GEOMETRY				Al 6061
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 2:1				

Assembly- Intake Manifold(254-EN-A020)

1.Difuser (254-EN-00060, Quantity-1)

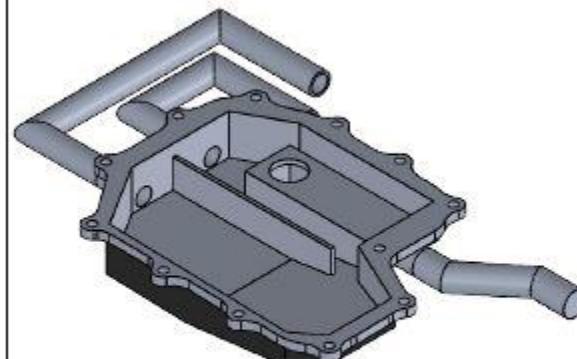
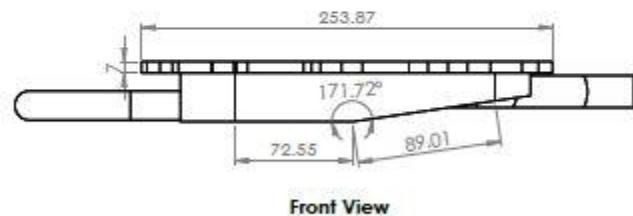
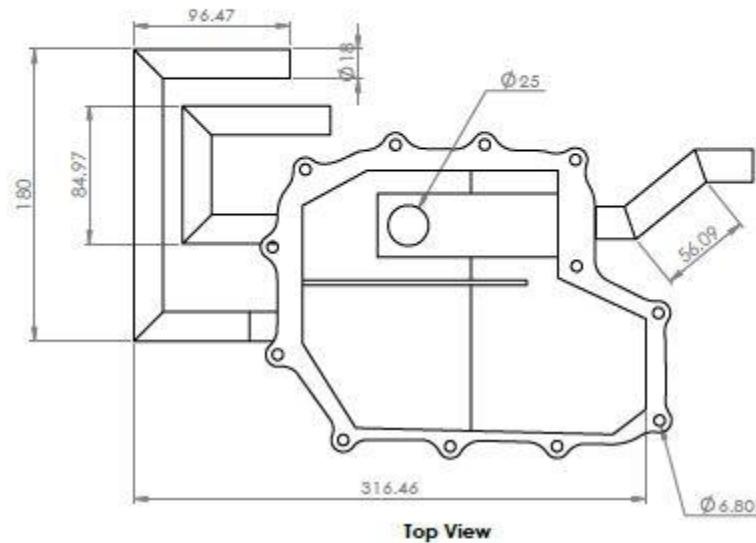


2.Plenum and Runners (254-EN-00061, Quantity-1)



Assembly- Lubrication Assembly(254-EN-A023)

1.Sump Pan (254-EN-00086, Quantity-1)

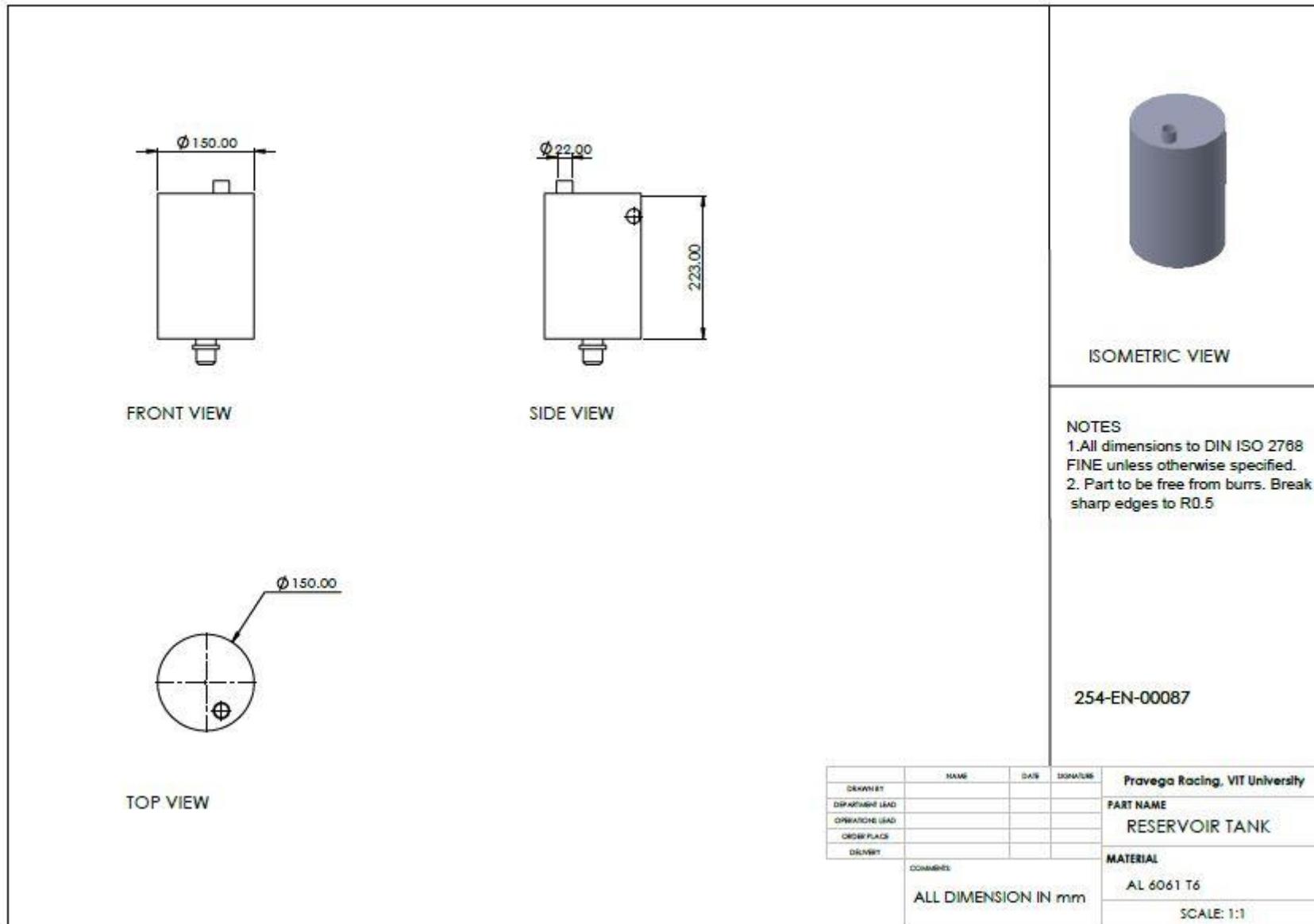


Isometric View

254-EN-00086

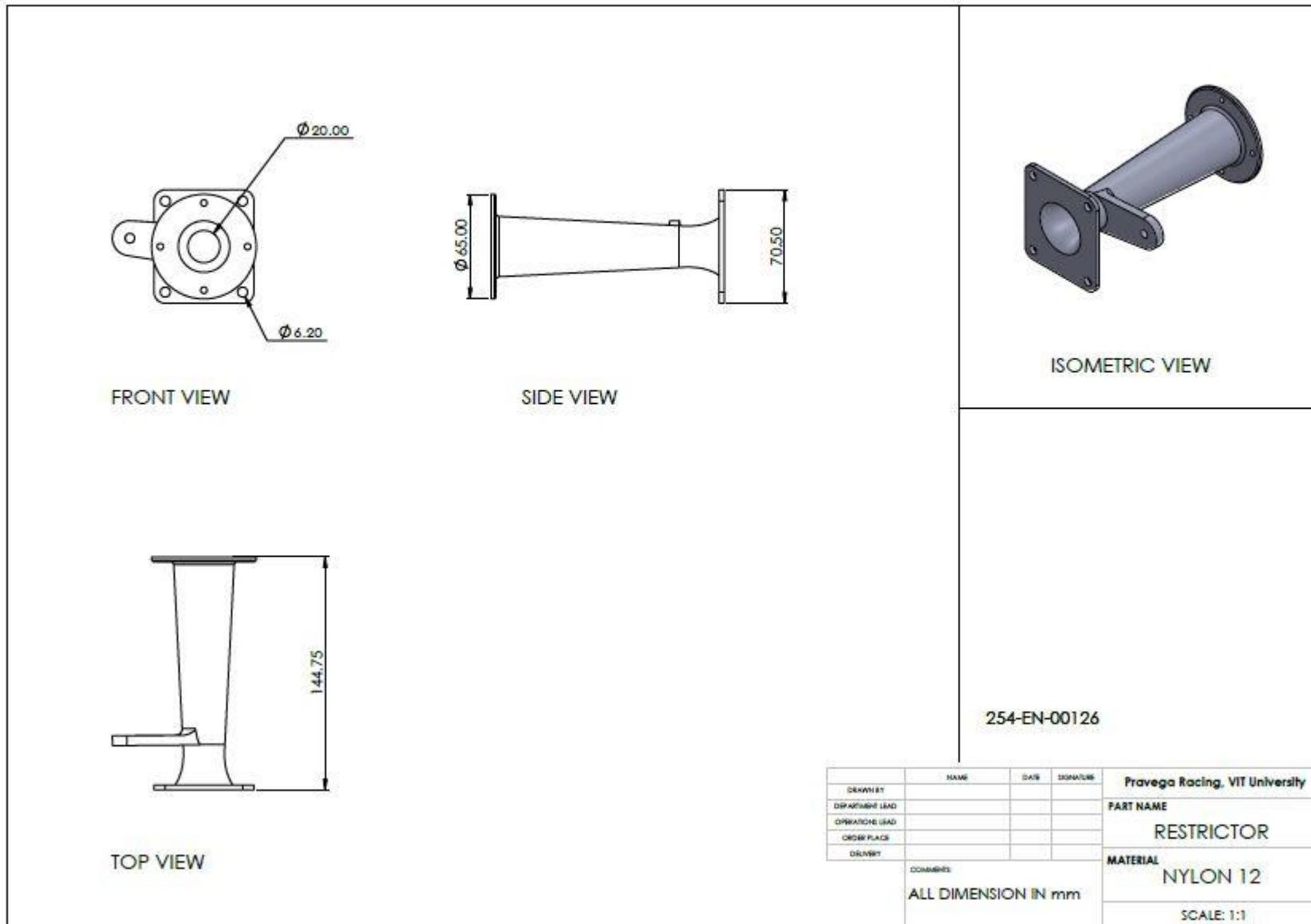
DRAWN BY	NAME	DATE	SIGNATURE
DEPARTMENT LEAD			
OPERATIONS LEAD			
CROSS PLATE			
DELIVERY			
COMBINE:	All Dimensions in mm		
		Pravega Racing, VIT ,Vellore	
PART NAME	Dry Sump		
MATERIAL	Al -6061		
SCALE:	1:2.5		

2.Reservoir Tank (254-EN-00087, Quantity-1)



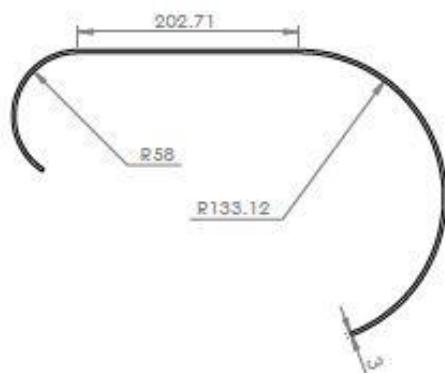
Assembly- Restrictor(254-EN-A030)

1. Restrictor (254-EN-00126, Quantity-1)



Assembly-Shields(254-EN-A031)

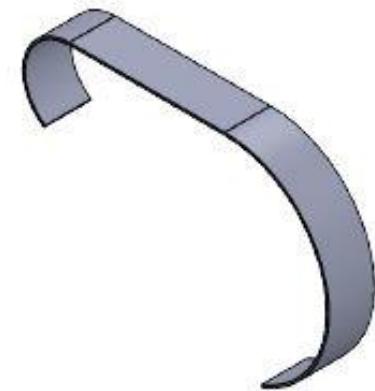
1.Scatter Shield (254-EN-00127, Quantity-1)



Front View



Top View



Isometric View

NOTES

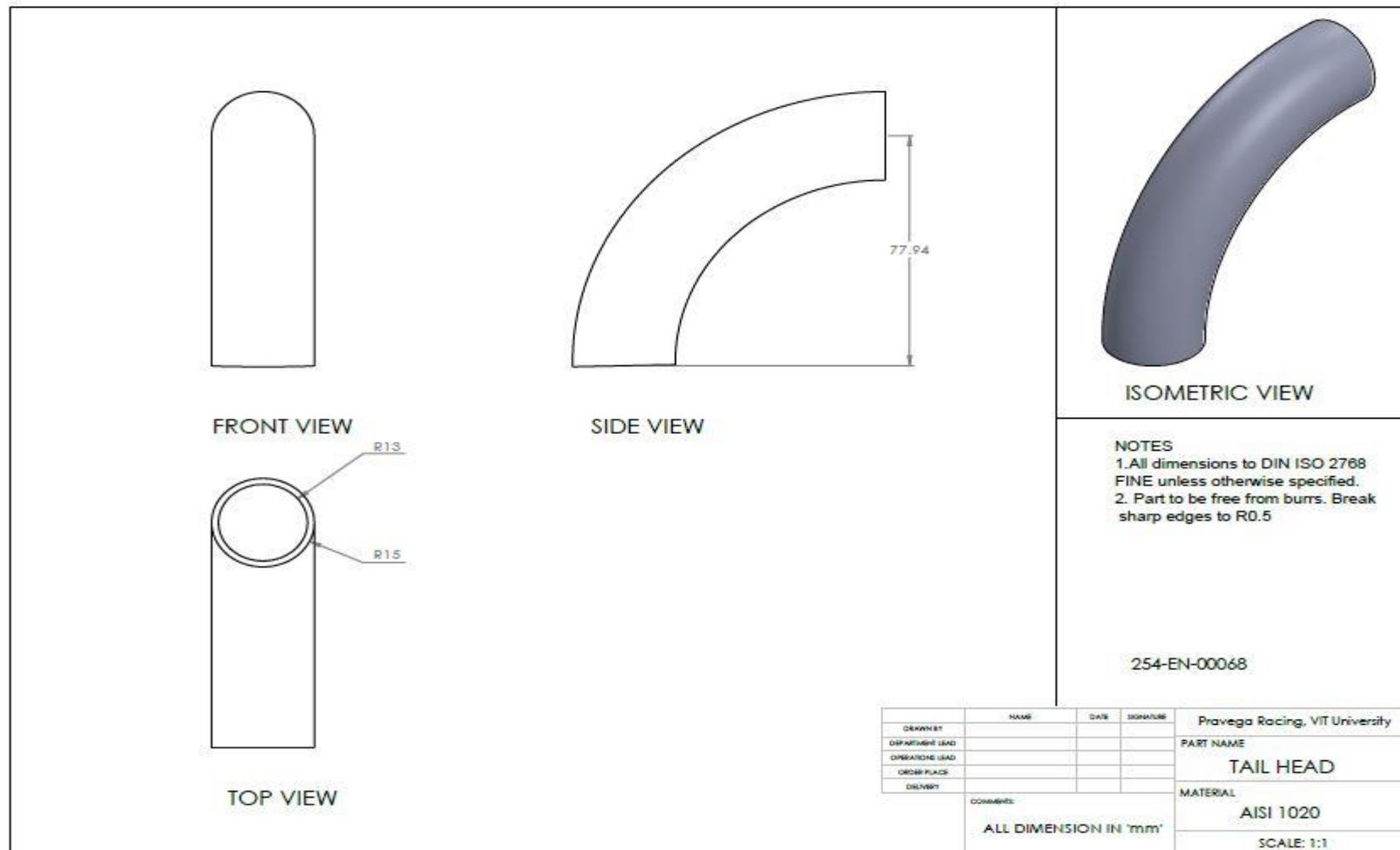
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00127

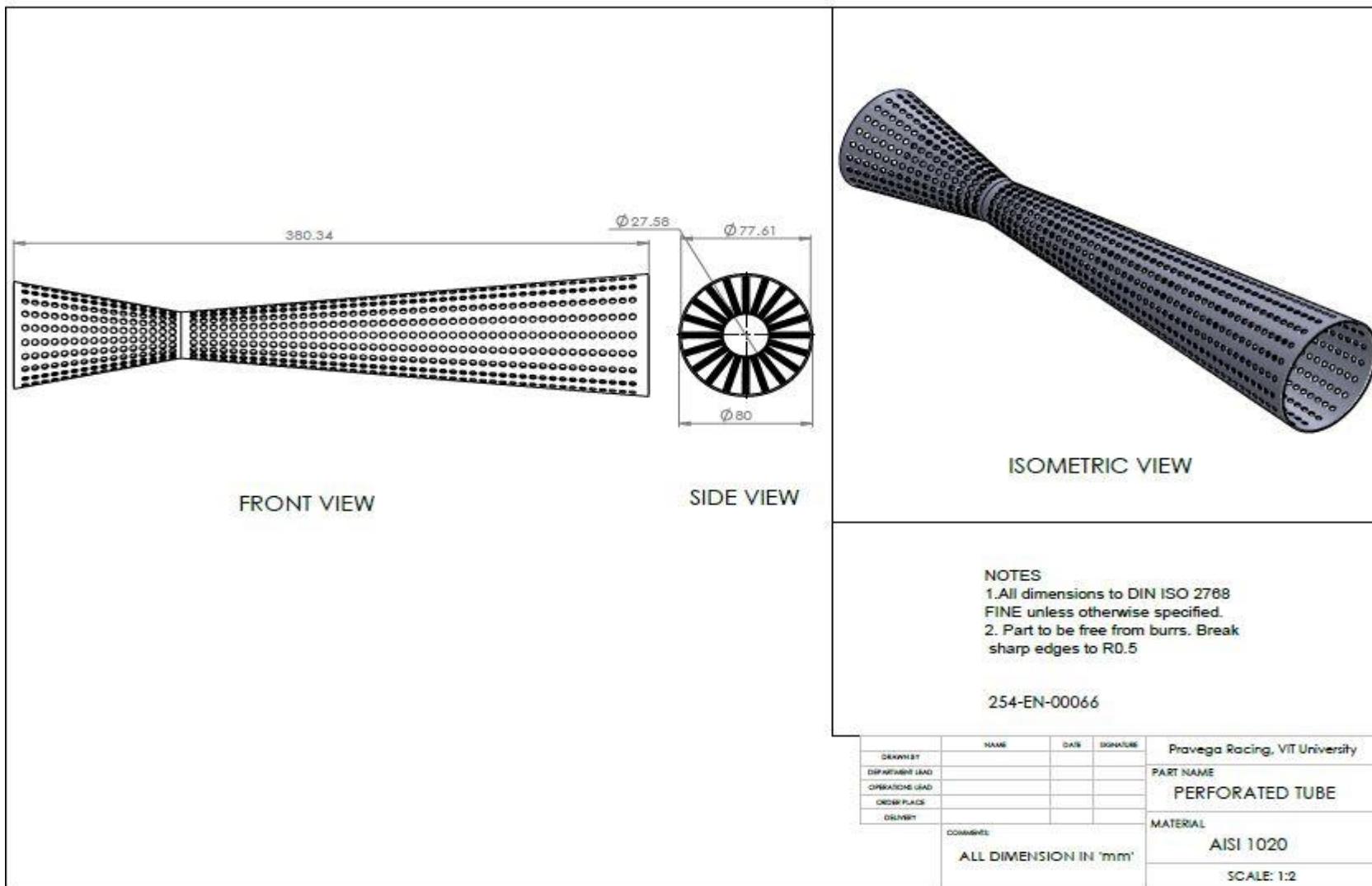
DEAWHIT	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DISPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Scatter Shield
ORDER PLACE				MATERIAL
DRIVER				AISI 1020
COMMENTS:				
All Dimensions in mm				
SCALE: 1:4				

Assembly- Muffler(254-EN-A021)

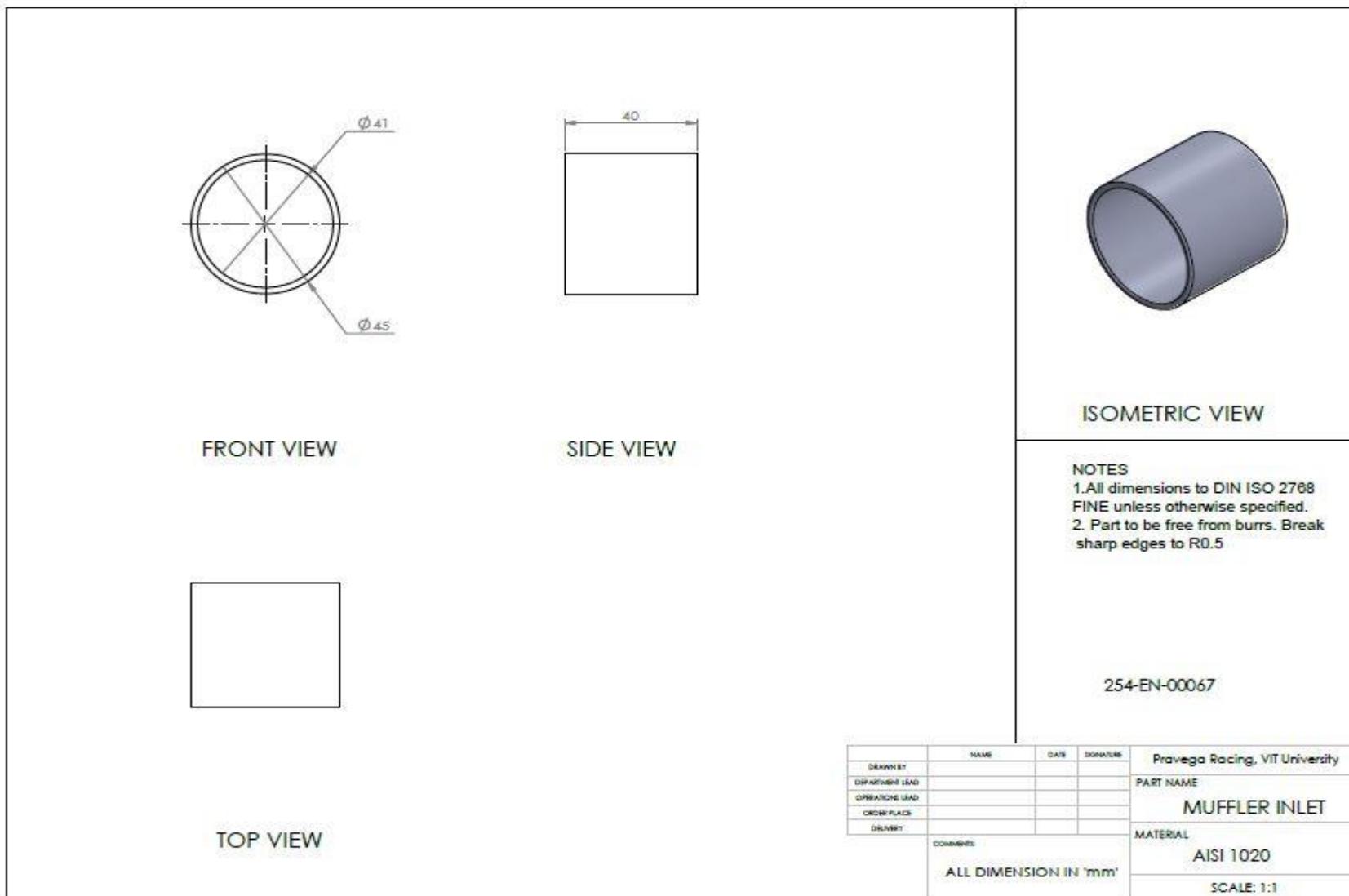
1. Tail Pipe (254-EN-00068, Quantity-1)



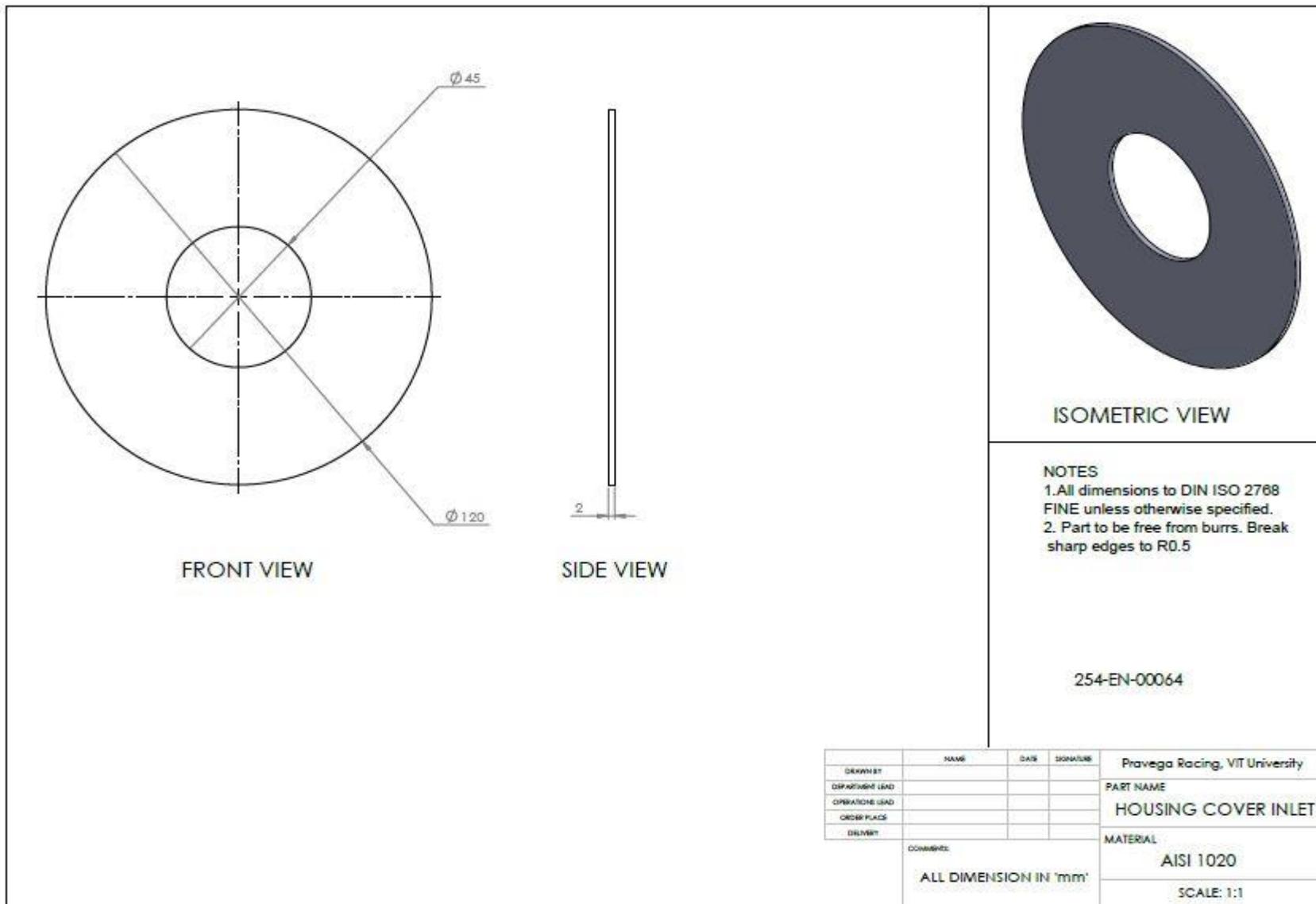
2.Perforated Tube (254-EN-00066, Quantity-1)



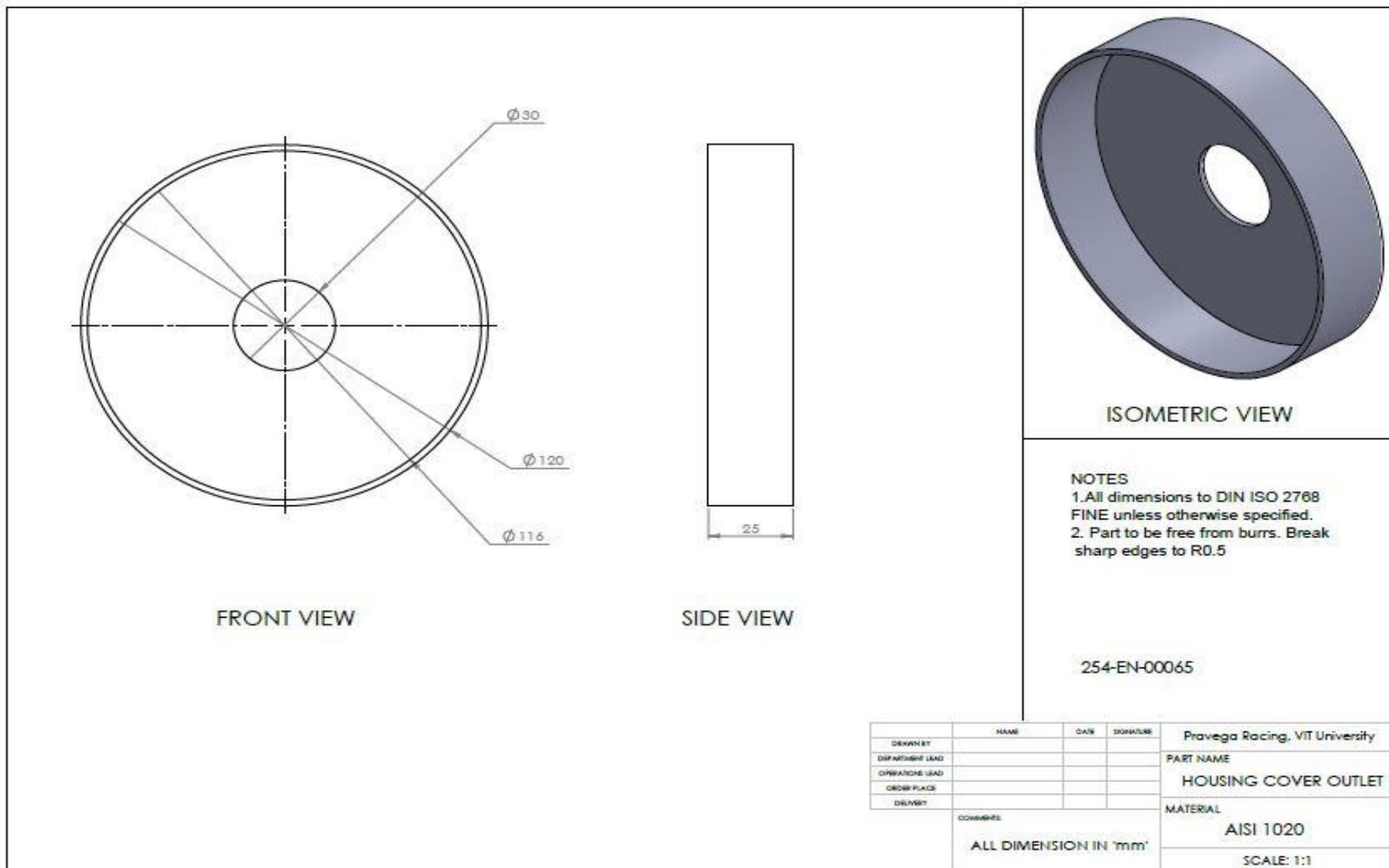
3. Muffler Inlet (254-EN-00067, Quantity-1)



4. Housing Cover Inlet (254-EN-00064, Quantity-1)



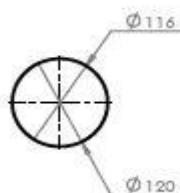
5. Housing Cover Outlet (254-EN-00065, Quantity-1)



6. Outer Housing (254-EN-00063, Quantity-1)



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

NOTES

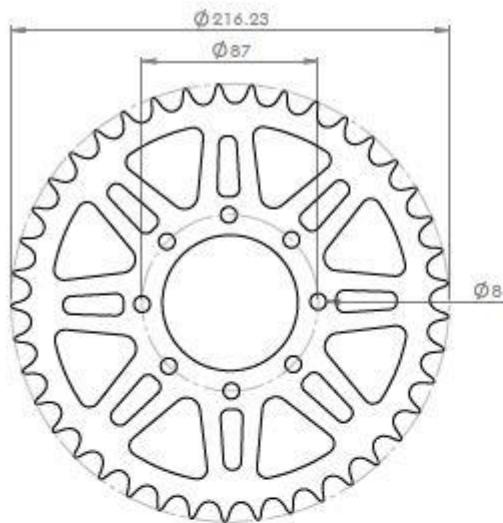
1. All dimensions to DIN ISO 2788 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00063

DEPARTMENT	NAME	DATE	SIGNATURE	Provega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				OUTER HOUSING
ORDER PLACE				MATERIAL
DELIVERY				AISI 1020
COMMENTS:				SCALE: 1:5
ALL DIMENSION IN 'mm'				

Assembly- Sprocket(254-EN-A032)

1.Sprocket (254-EN-00128, Quantity-1)



ISOMETRIC VIEW

Notes:

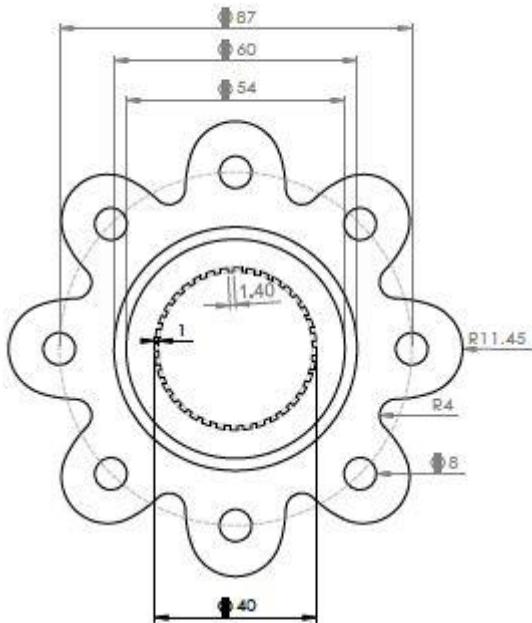
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

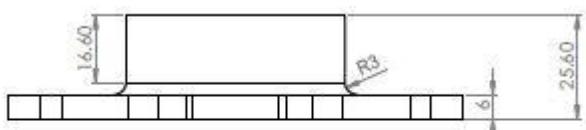
254-EN-00128

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT,Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				DIFFERENTIAL SPROCKET
ORDER PLACE				MATERIAL
DRWNT				AI 7075-T6
COMMENTS:				ALL DIMENSIONS IN 'mm'
				SCALE: 1:2

2.Sprocket Adapter (254-EN-00129, Quantity-1)



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

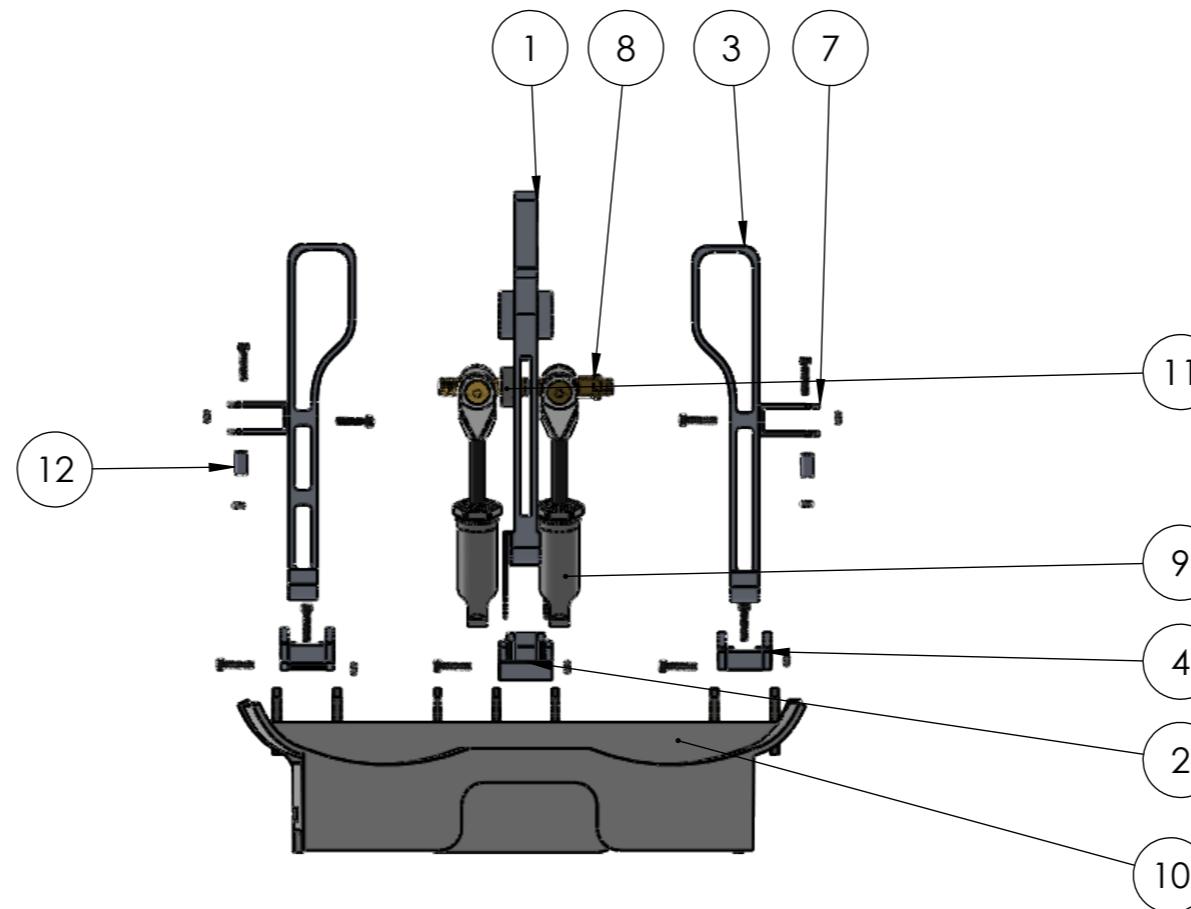
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

254-EN-00129

DEPARTMENT	NAME	SIGNATURE	Pravega Racing, VIT,Vellore
DEPARTMENT LEAD			
OPERATIONS LEAD			
ORDER PLACE			
DRIVER			
COMMENTS:	ALL DIMENSIONS IN 'mm'		
	MATERIAL Al 7075-T6		
	SCALE: 1:1		

1 Pedal Assembly

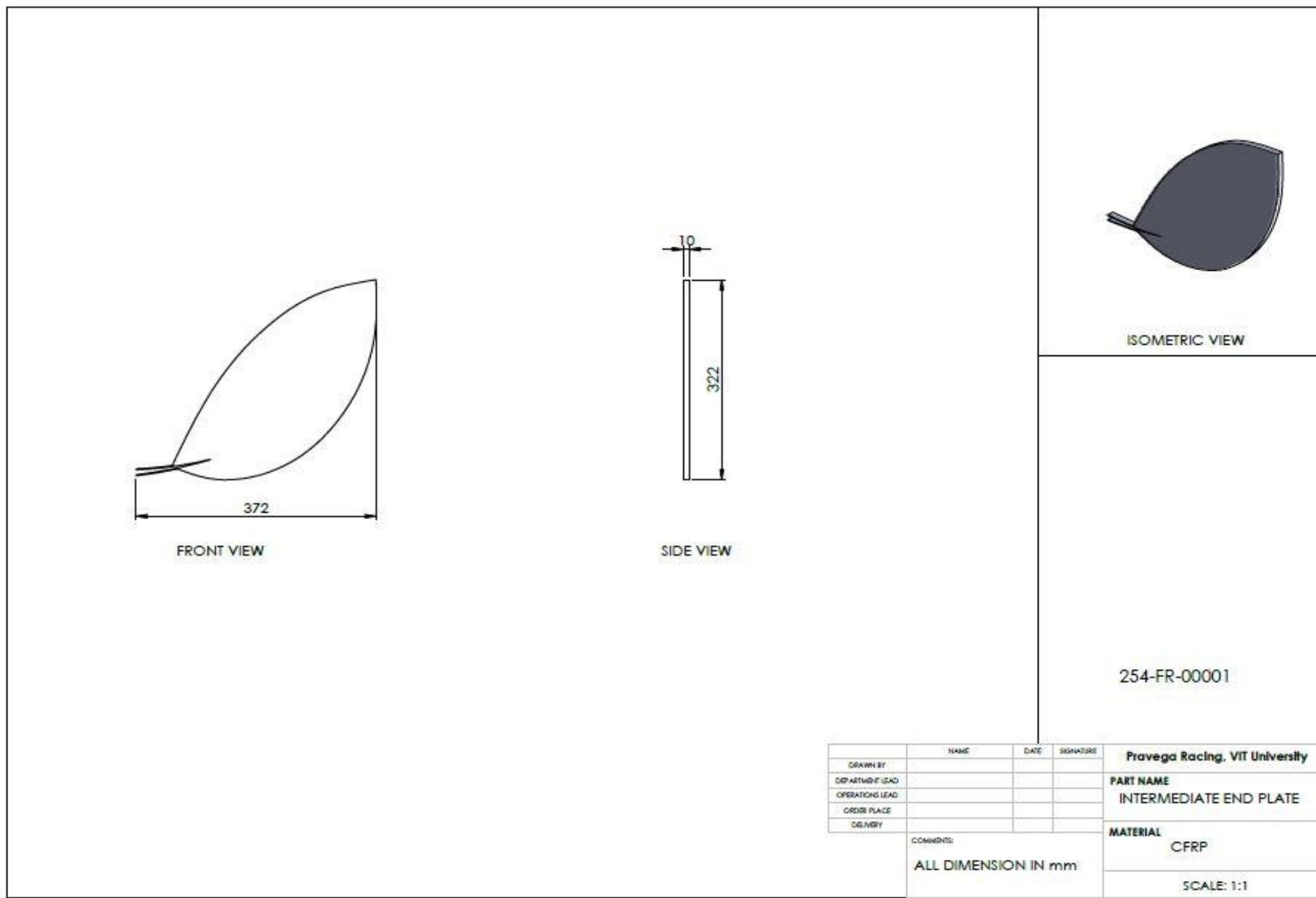


SERIAL NO.	PART NUMBER	PART NAME	MATERIAL	QTY NO.
1	254-FR-00097	Brake Pedal	AL 7075-T6	1
2	254-FR-00098	Brake Pedal Base	AL 7075-T6	1
3	254-FR-00089	Throttle Pedal	AL 7075-T6	1
4	254-FR-00090	Throttle Pedal Base	AL 7075-T6	1
7	254-FR-00049	Pedal Tabs	AISI 1020	12
8		Balance Bar	BOUGHT	1
9	254-BR-00016	Master Cylinder	BOUGHT	2
10		Footrest	AL 6061-T6	1
11	254-FR-00048	BOTS Mount	AISI 1020	1
12	254-FR-00094	Cable Stopper	AISI 1000	2

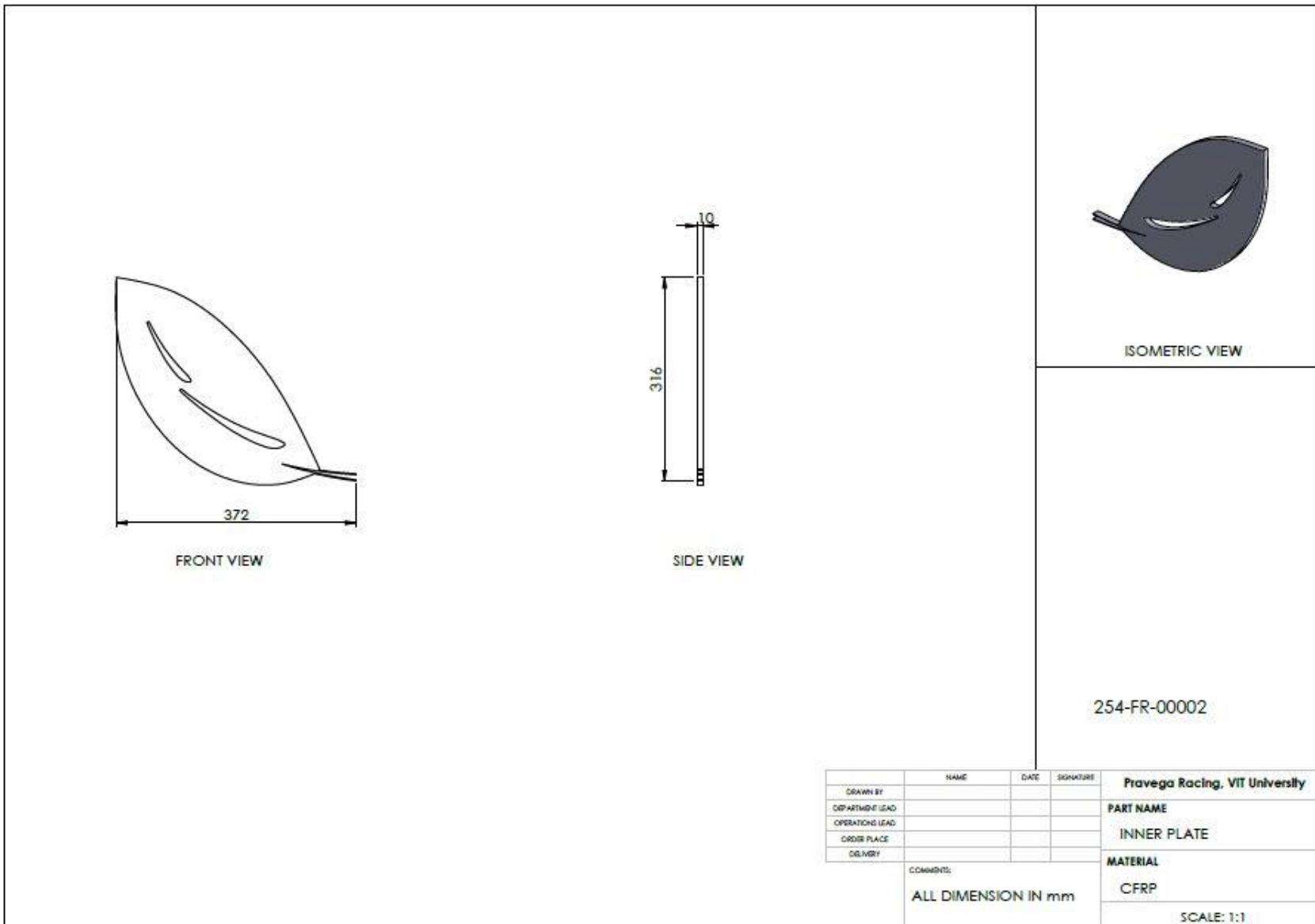
FRAME AND BODY(FR)

Assembly-Aerodynamics Front Wing(254-FR-A001)

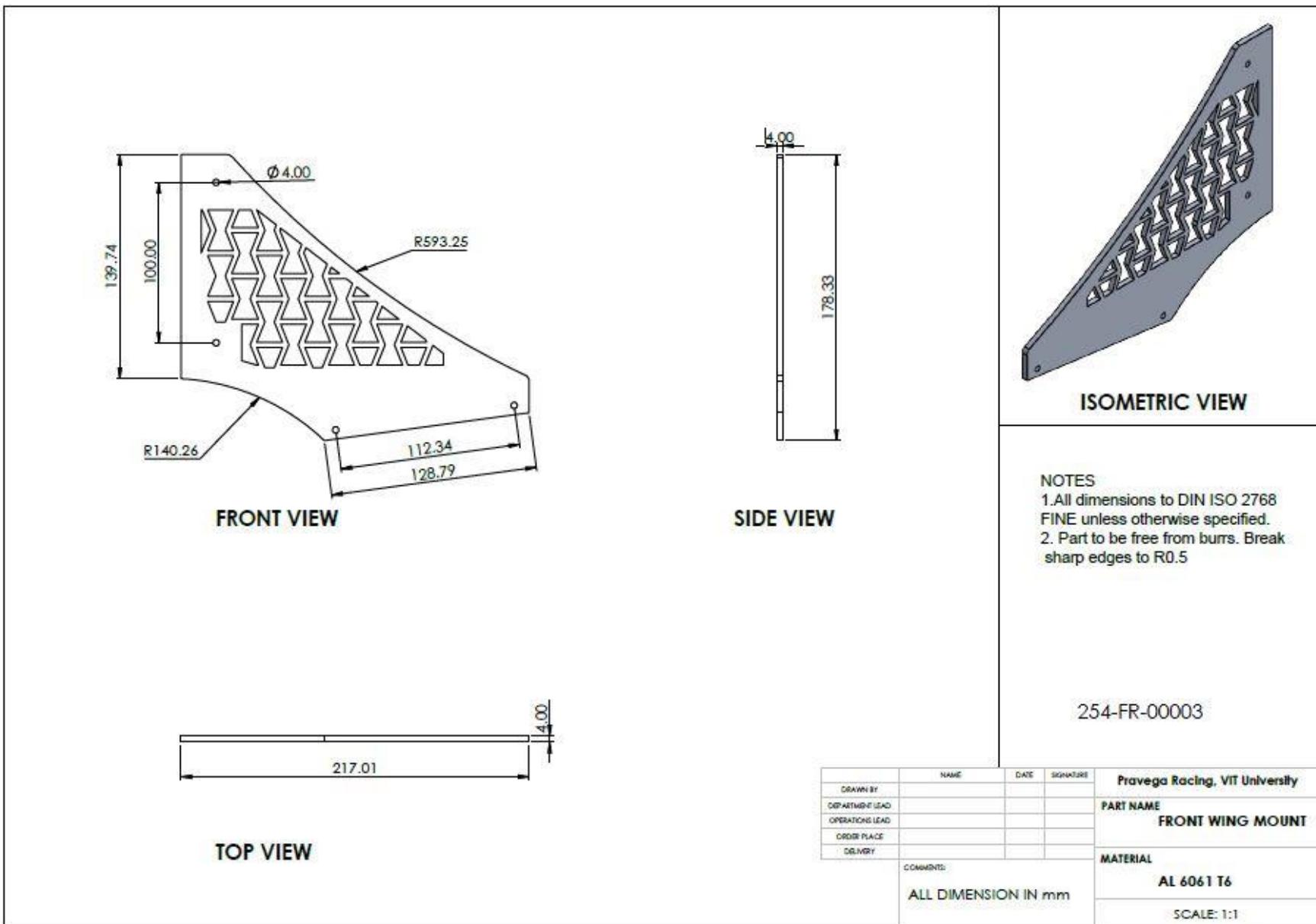
1. Intermediate End Plate(254-FR-00001,Quantity -2)



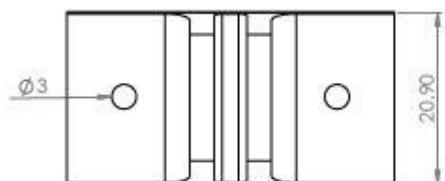
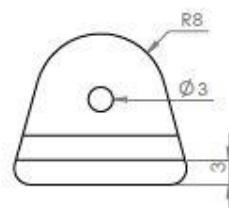
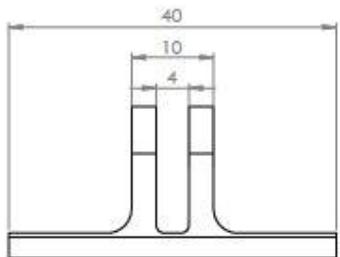
2. Inner End Plate(254-FR-00002,Quantity -2)



3.Mounts(254-FR-00003,Quantity -2)



4. Mounting Brackets (254-FR-00004, Quantity -4)



Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

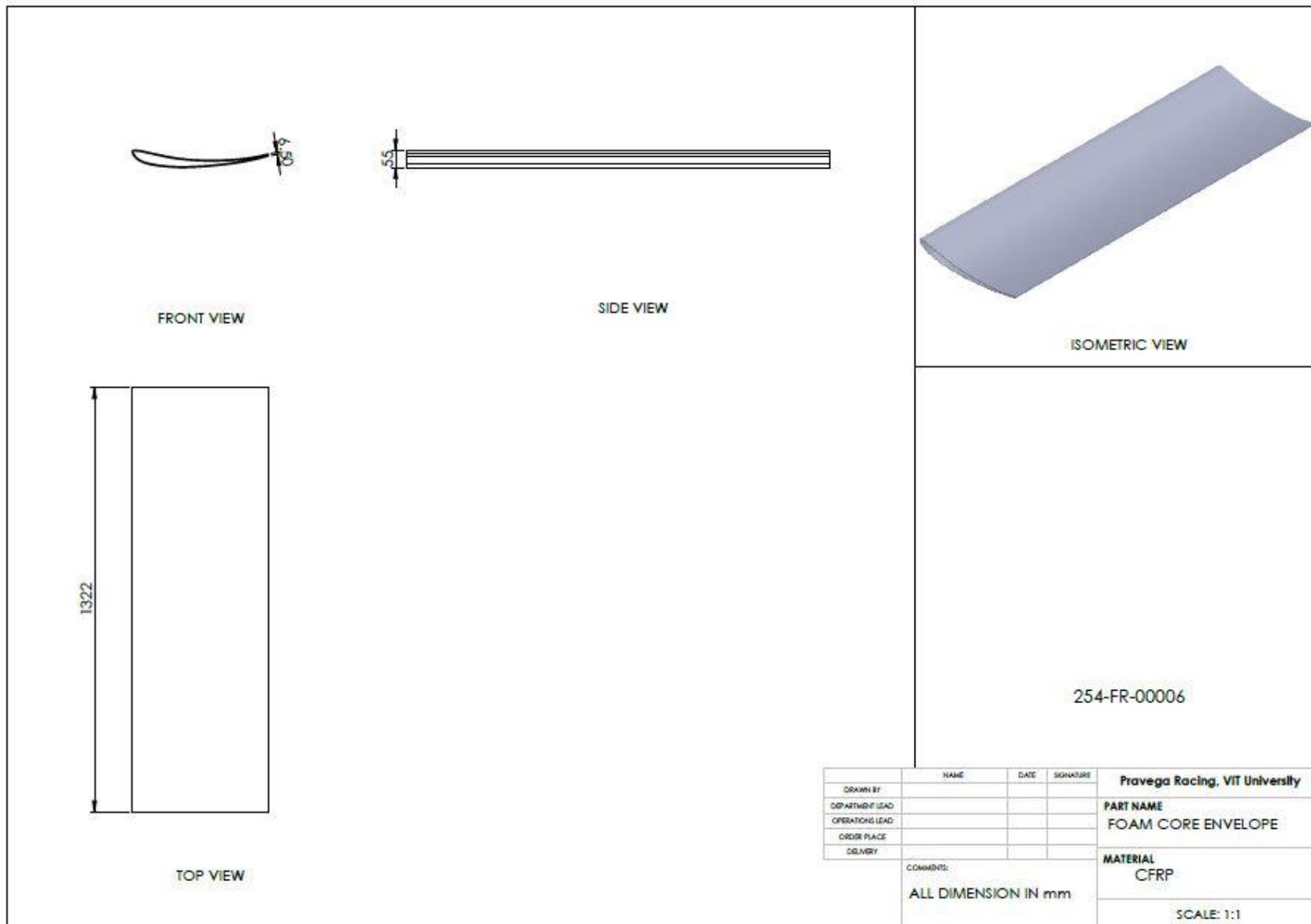
2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00004

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				FRONT WING BRACKET
ORDER PLACE				MATERIAL
DELIVERY				Al 6061
COMMENTS:	ALL DIMENSIONS IN 'mm'			
	SCALE: 2:1			

Assembly- Aerodynamics Front Wing => FW Main Element (254-FR-A002)

1. Foam Core Envelope (254-FR-00006,Quantity -1)

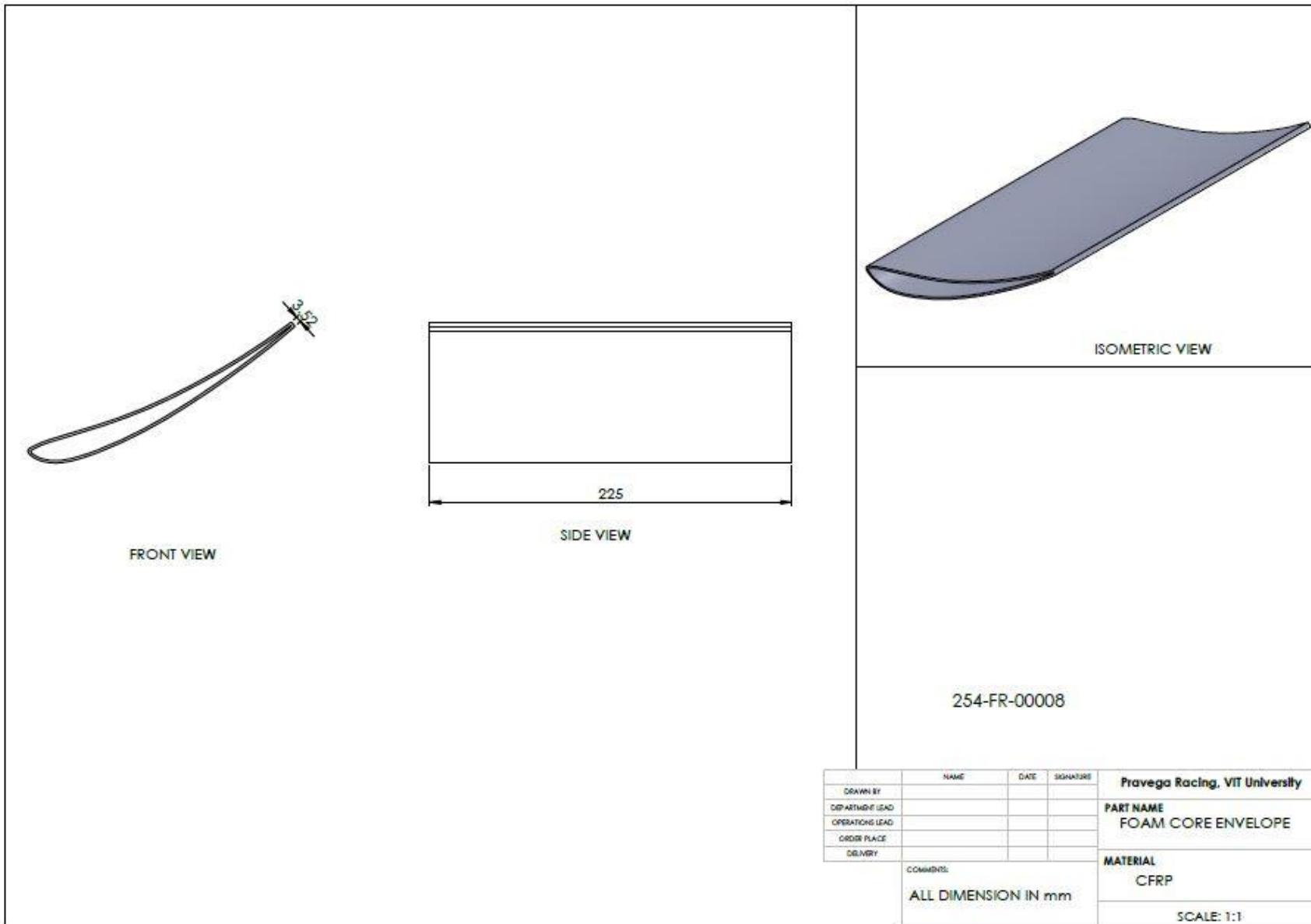


2. Ribs (254-FR-00007,Quantity -2)

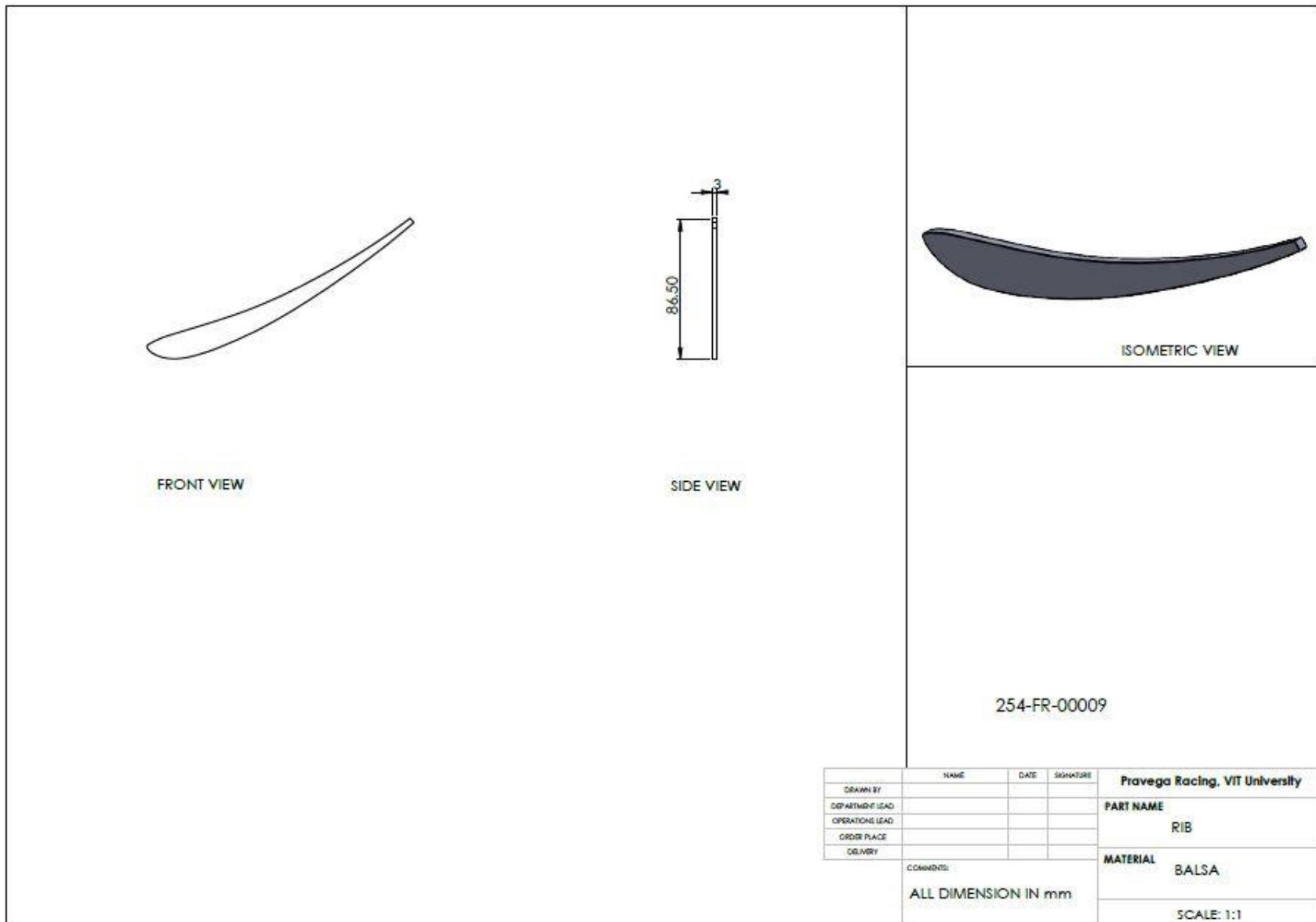
 FRONT VIEW		 ISOMETRIC VIEW																																	
 TOP VIEW		254-FR-00007																																	
		<table border="1"><tr><td>DRAWN BY</td><td>NAME</td><td>DATE</td><td>SIGNATURE</td></tr><tr><td>DEPARTMENT LEAD</td><td></td><td></td><td>Pravega Racing, VIT University</td></tr><tr><td>OPERATIONS LEAD</td><td></td><td></td><td>PART NAME</td></tr><tr><td>ORDER PLACE</td><td></td><td></td><td>RIB</td></tr><tr><td>DELIVERY</td><td></td><td></td><td>MATERIAL</td></tr><tr><td colspan="4">COMMENTS:</td></tr><tr><td colspan="4">ALL DIMENSION IN mm</td></tr><tr><td colspan="4">SCALE: 1:1</td></tr></table>		DRAWN BY	NAME	DATE	SIGNATURE	DEPARTMENT LEAD			Pravega Racing, VIT University	OPERATIONS LEAD			PART NAME	ORDER PLACE			RIB	DELIVERY			MATERIAL	COMMENTS:				ALL DIMENSION IN mm				SCALE: 1:1			
DRAWN BY	NAME	DATE	SIGNATURE																																
DEPARTMENT LEAD			Pravega Racing, VIT University																																
OPERATIONS LEAD			PART NAME																																
ORDER PLACE			RIB																																
DELIVERY			MATERIAL																																
COMMENTS:																																			
ALL DIMENSION IN mm																																			
SCALE: 1:1																																			

Assembly- Aerodynamics Front Wing => FW Multi Element Flap (Large) (254-FR-A003)

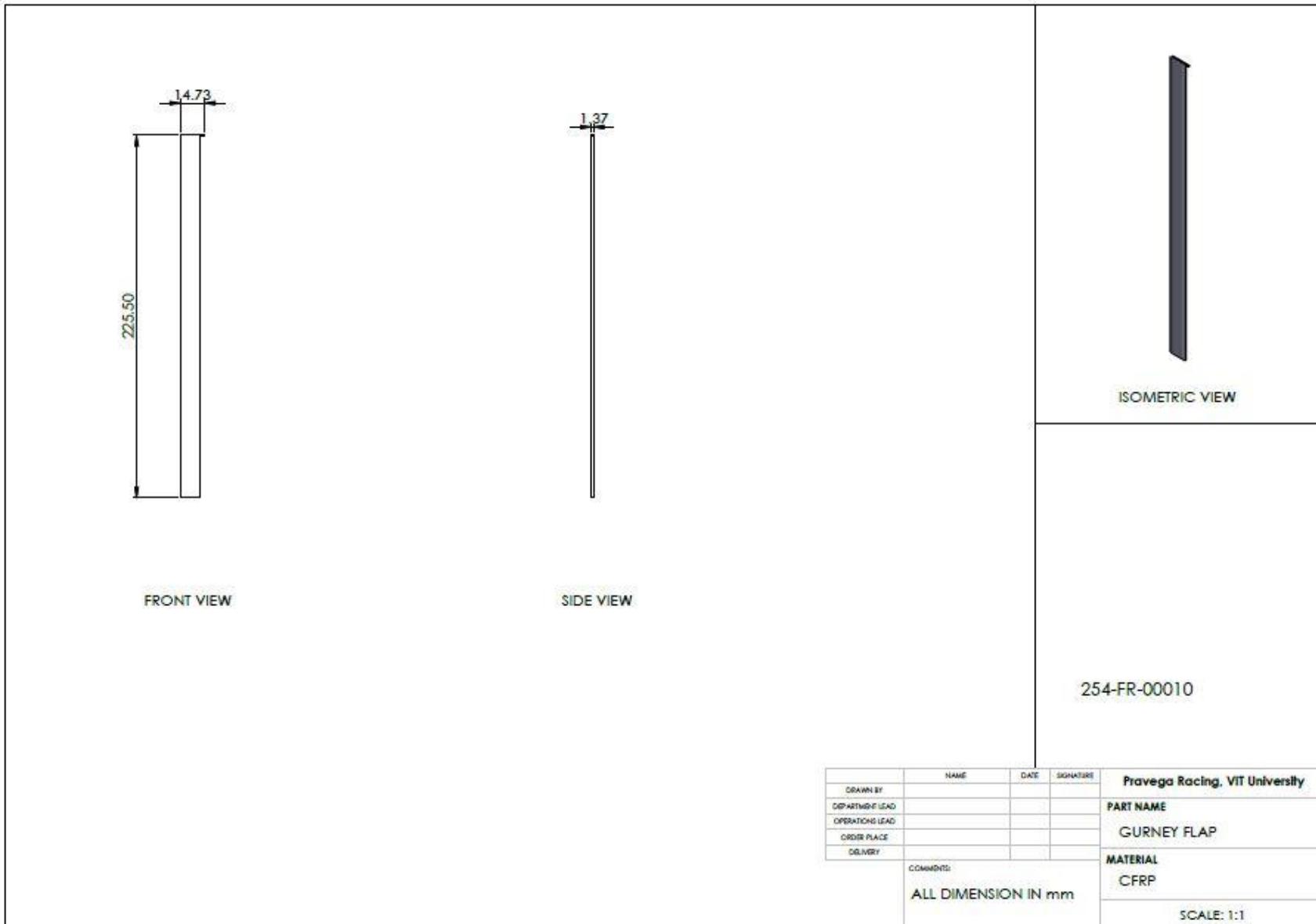
1. Foam Core Envelope (254-FR-00008,Quantity -2)



2. Ribs (254-FR-00009,Quantity -4)

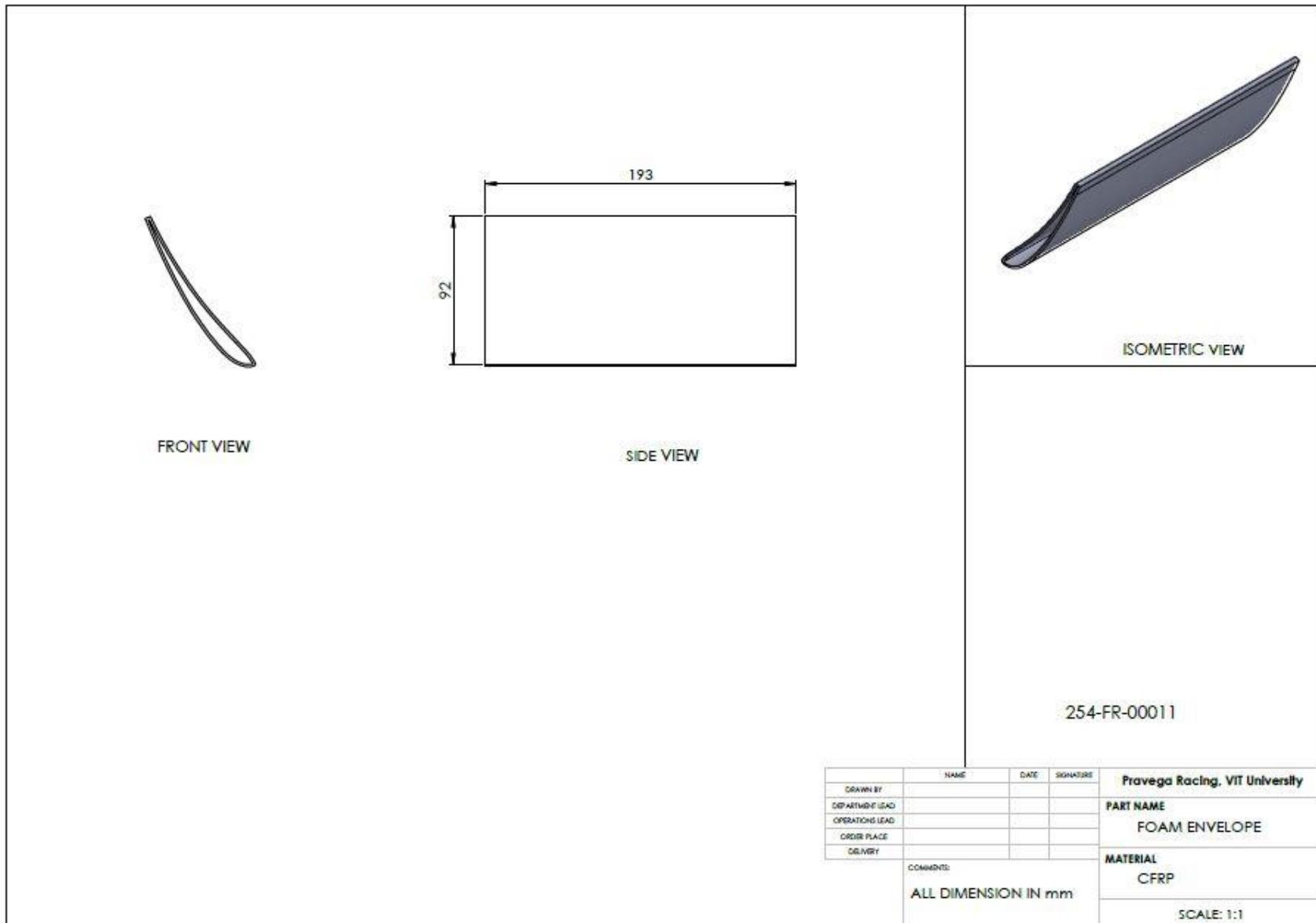


3. Gurney Flap (254-FR-00010,Quantity -2)

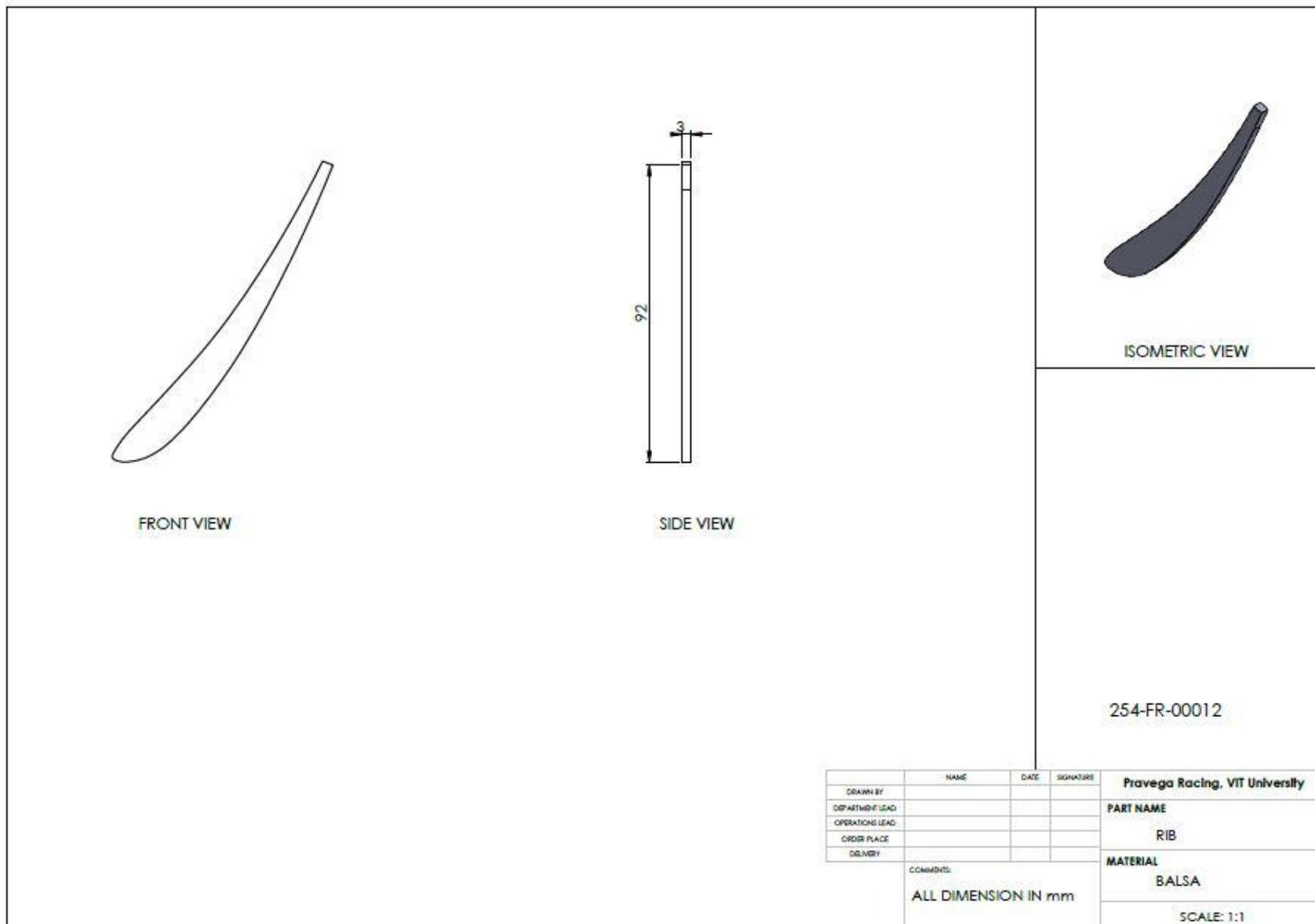


Assembly- Aerodynamics Front Wing => FW Multi Element Flap (Small) (254-FR-A004)

1.Foam Core Envelope (254-FR-00011,Quantity -2)

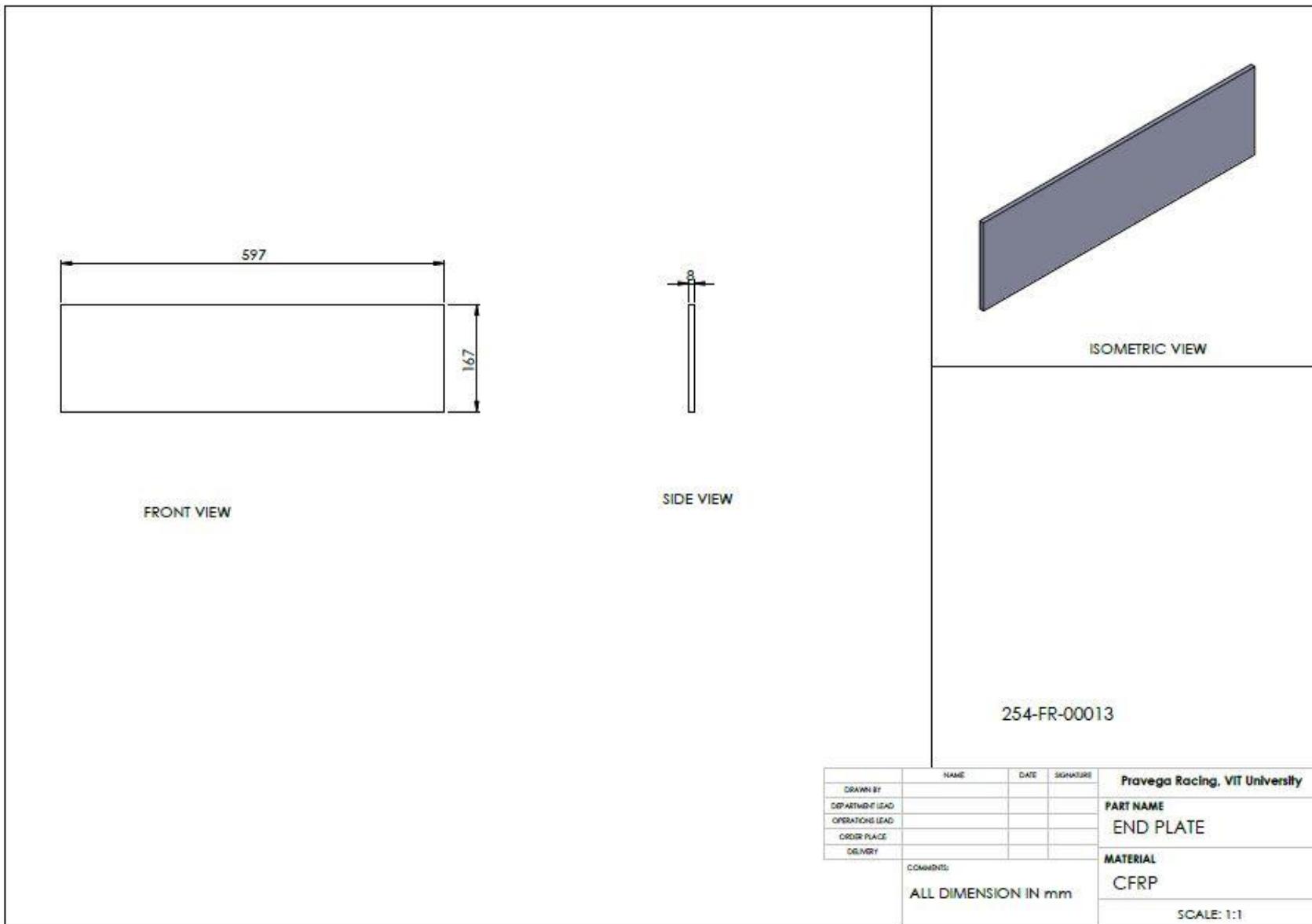


2.Foam Core Envelope (254-FR-00012,Quantity -4)



Assembly- Aerodynamics Front Wing => FW Outer End Plate (254-FR-A005)

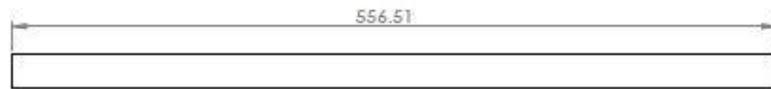
1.Endplate (254-FR-00013,Quantity -2)



2.Foot Plate (254-FR-00014,Quantity -2)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

Notes:

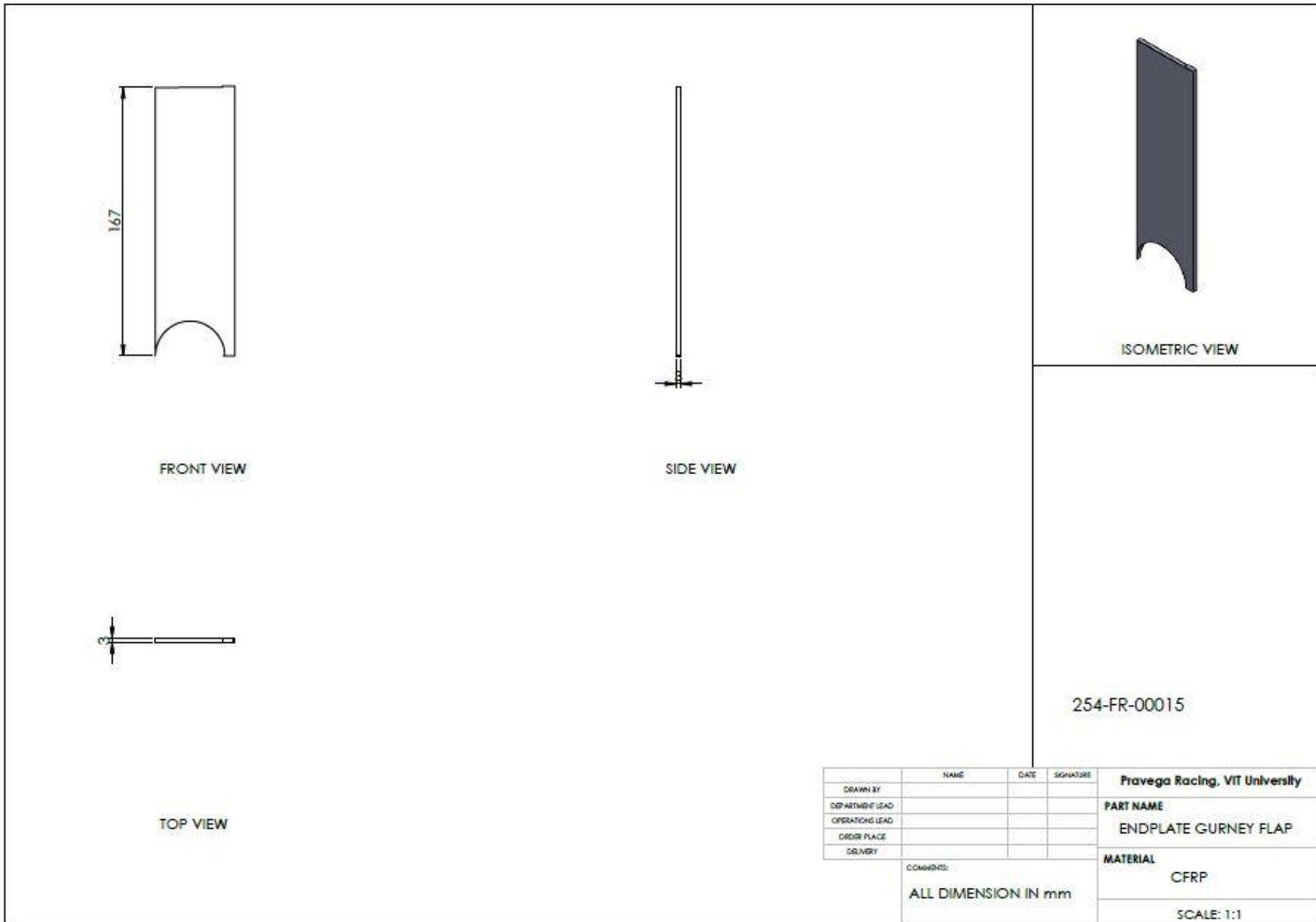
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00014

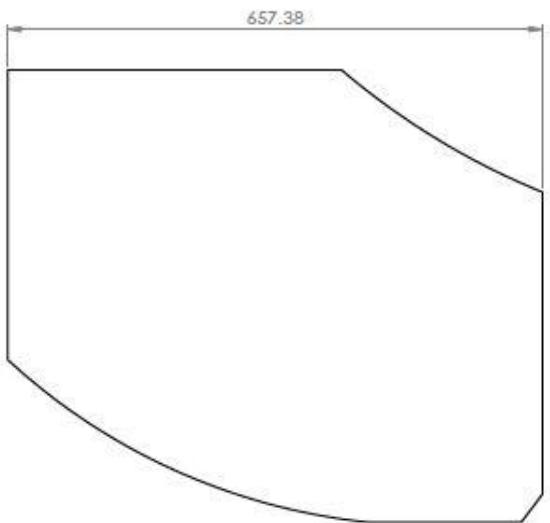
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				FOOTPLATE
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS: ALL DIMENSIONS IN 'mm'				
SCALE: 1:5				

3.End Plate Gurney Flap (254-FR-00015,Quantity -2)



Assembly- Aerodynamics Rear Wing (254-FR-A006)

1.End Plate (254-FR-00016,Quantity -2)



ISOMETRIC VIEW

Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

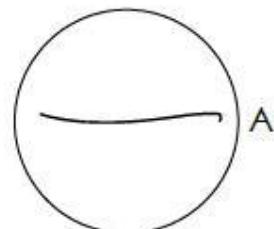
2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00016

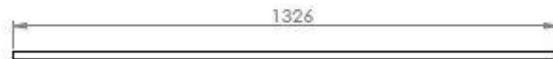
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				END PLATE
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 1:5				

Assembly- Aerodynamics Rear Wing => RW Main Element (254-FR-A007)

1.Upper Half (254-FR-00017,Quantity -1)



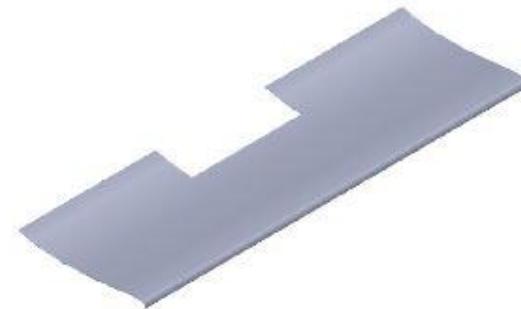
FRONT VIEW



SIDE VIEW



DETAIL A
SCALE 1 : 2



ISOMETRIC VIEW

Notes:

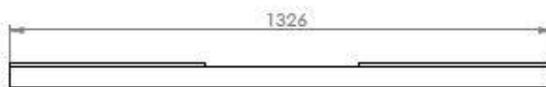
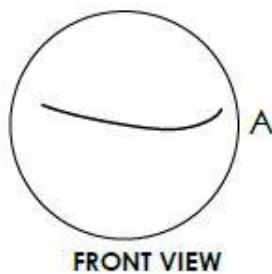
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5.

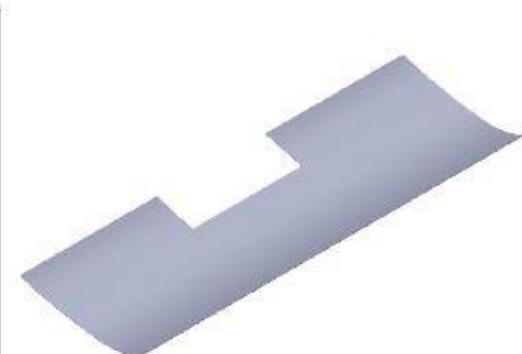
254-FR-00017

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				MAIN ELEMENT UPPER HALF
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 1:10				

2.Lower Half (254-FR-00018,Quantity -1)



DETAIL A
SCALE 1 : 2



ISOMETRIC VIEW

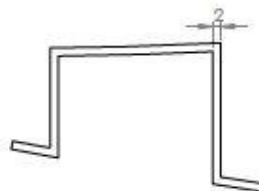
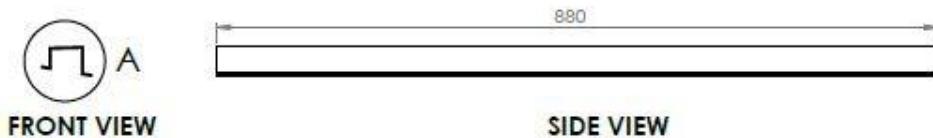
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00018

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				MAIN ELEMENT LOWER HALF
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS: ALL DIMENSIONS IN 'mm'				SCALE: 1:10

3.Spar (254-FR-00019,Quantity -2)



Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00019

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				MAIN ELEMENT SPAR 2
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:				ALL DIMENSIONS IN 'mm'
				SCALE: 1:5

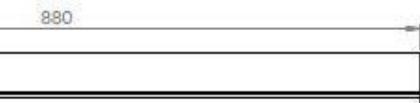
4.Spar (254-FR-00020,Quantity -2)



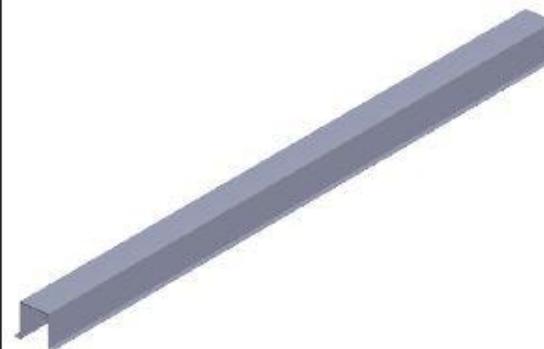
FRONT VIEW



**DETAIL A
SCALE 2 : 5**



SIDE VIEW



ISOMETRIC VIEW

Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

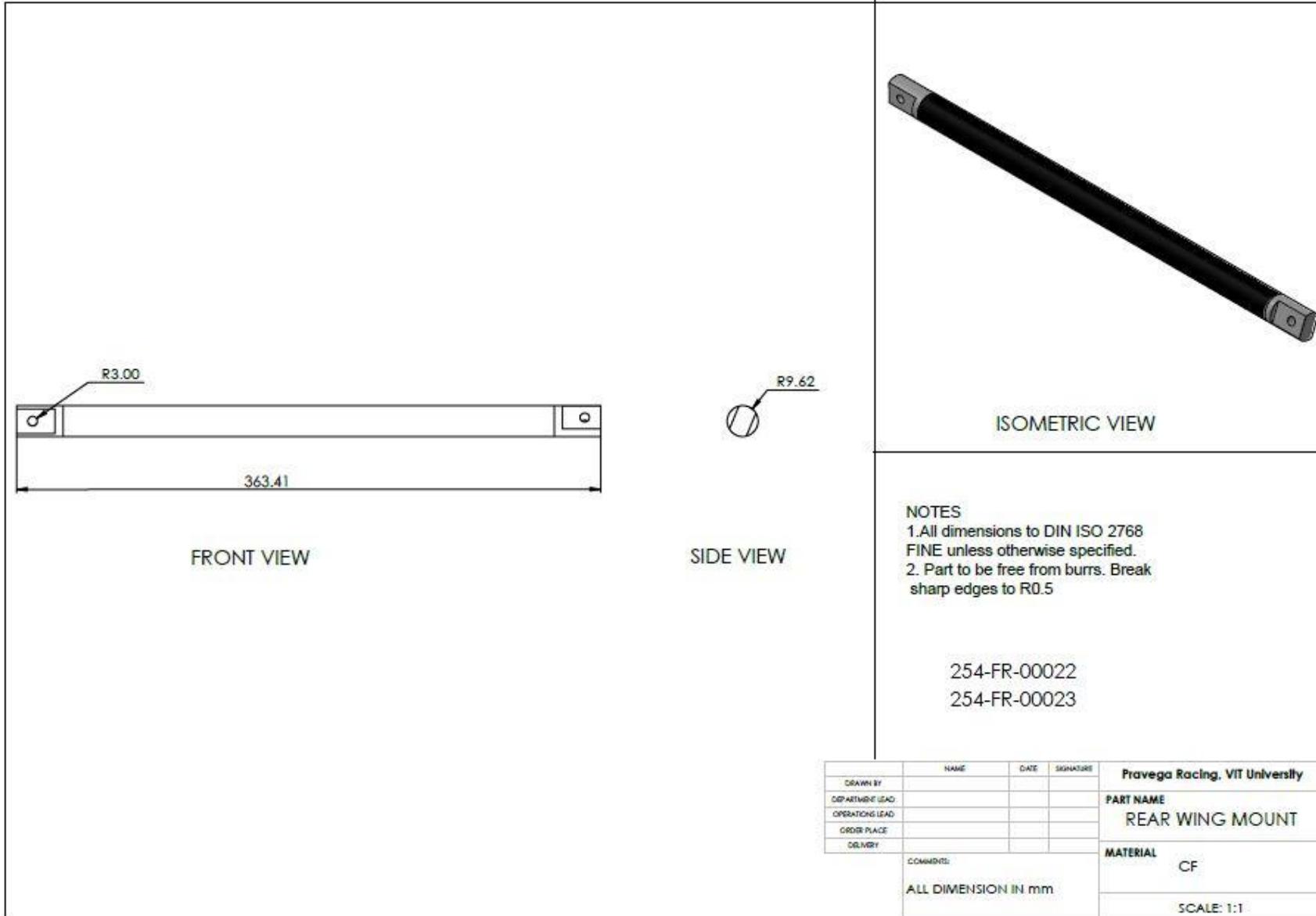
254-FR-00020

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				MAIN ELEMENT SPAR 1
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS: ALL DIMENSIONS IN 'mm'				SCALE: 1:5

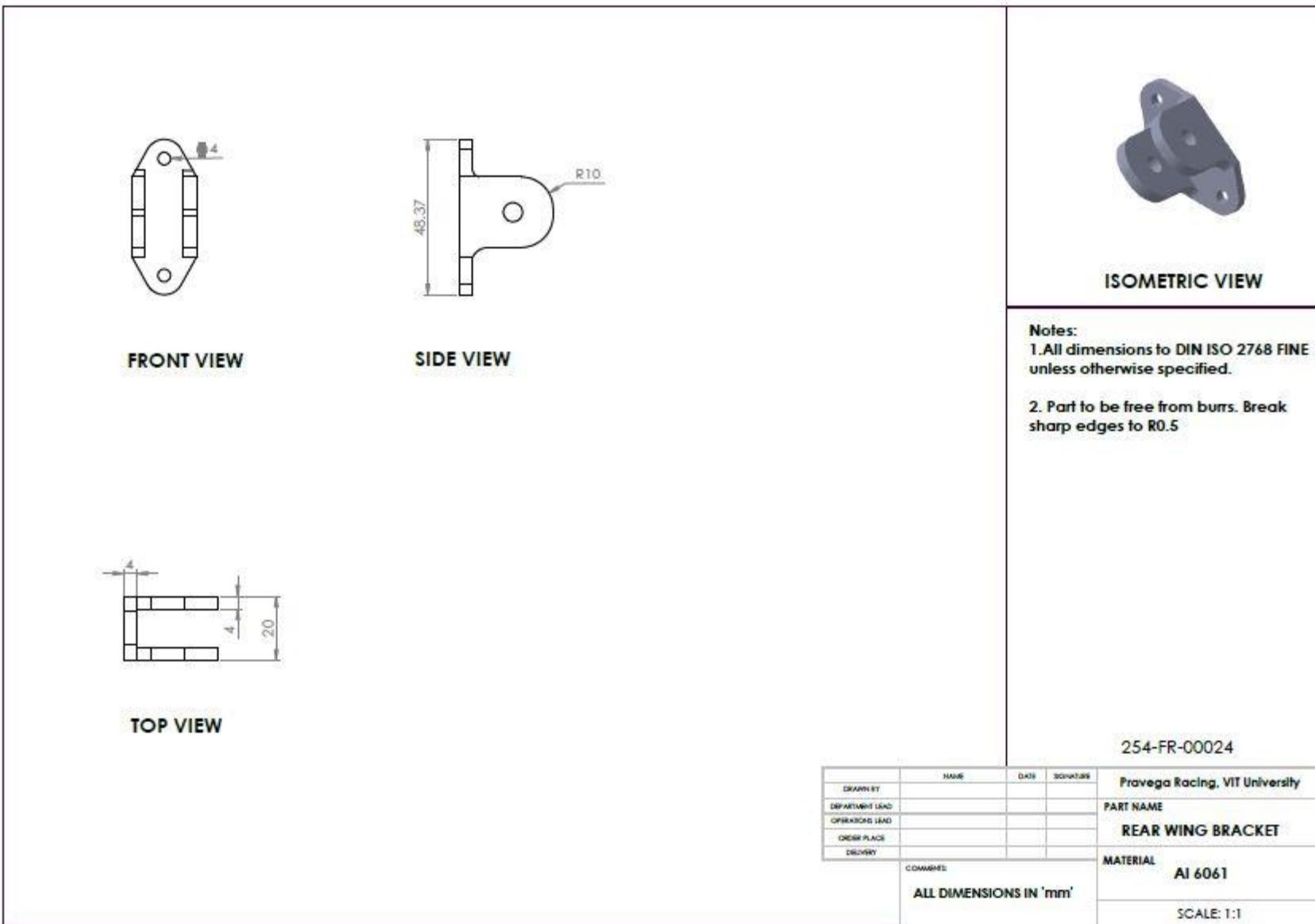
Assembly Aerodynamics Rear Wing => RW Mounting(254-FR-A008)

1. Support Tubes (254-FR-00008,Quantity -5),

2. Tube Inserts (254-FR-00023,Quantity -10)



3.Tube Mounting Brackets (254-FR-00024,Quantity -4)



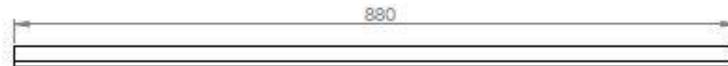
1.Spar (254-FR-00028,Quantity -1), (254-FR-00032,Quantity -1), (254-FR-00036,Quantity -1)



FRONT VIEW



DETAIL A
SCALE 1 : 1



SIDE VIEW



ISOMETRIC VIEW

Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00028

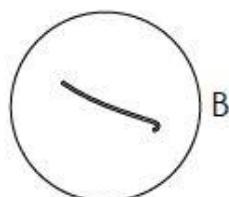
254-FR-00032

254-FR-00036

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				3rd AND 4th ELEMENT SPAR
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 1:5				

Assembly-Aerodynamics Rear Wing => RW Multi Element Flap (Large)(254-FR-A010)

1.Upper Half (254-FR-00029,Quantity -1)



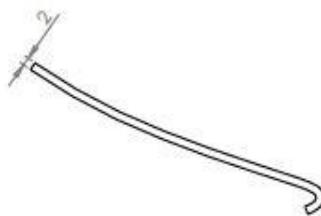
FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW



DETAIL B
SCALE 1 : 1

Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

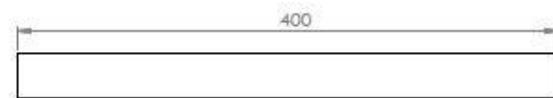
254-FR-00029

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				BIG FLAP UPPER HALF
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:	ALL DIMENSIONS IN 'mm'			
	SCALE: 1:2			

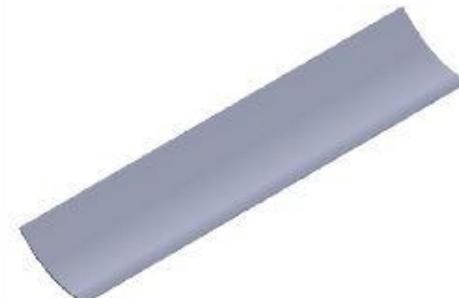
2.Lower Half (254-FR-00030,Quantity -1)



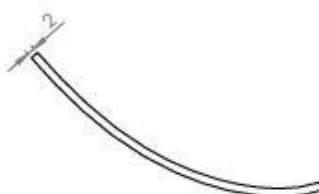
FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW



DETAIL A
SCALE 1 : 1

Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

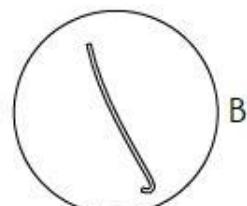
2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00030

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				BIG FLAP LOWER HALF
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS: ALL DIMENSIONS IN 'mm'				SCALE: 1:2

Assembly-Aerodynamics Rear Wing => RW Multi Element Flap (Small)(254-FR-A011)

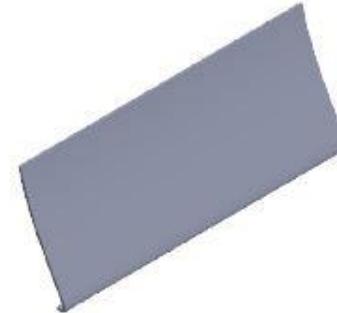
1.Upper Half (254-FR-00033,Quantity -1)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW



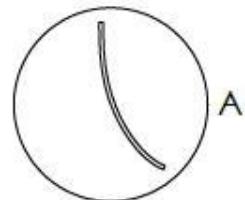
DETAIL B
SCALE 1 : 1

- Notes:**
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
 2. Part to be free from burrs. Break sharp edges to R0.5

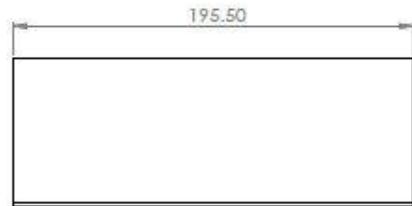
254-FR-00033

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				SMALL FLAP UPPER HALF
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 1:2				

2. Lower Half (254-FR-00034, Quantity -1)



FRONT VIEW



SIDE VIEW



DETAIL A
SCALE 1:1



ISOMETRIC VIEW

Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

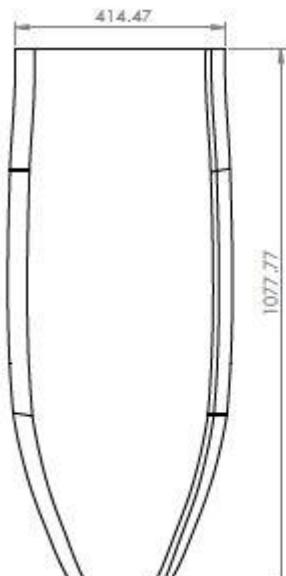
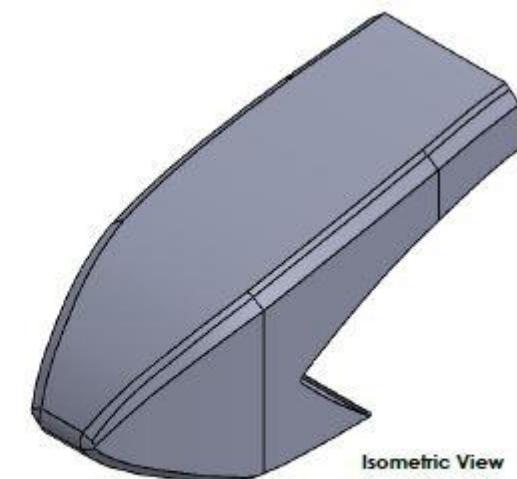
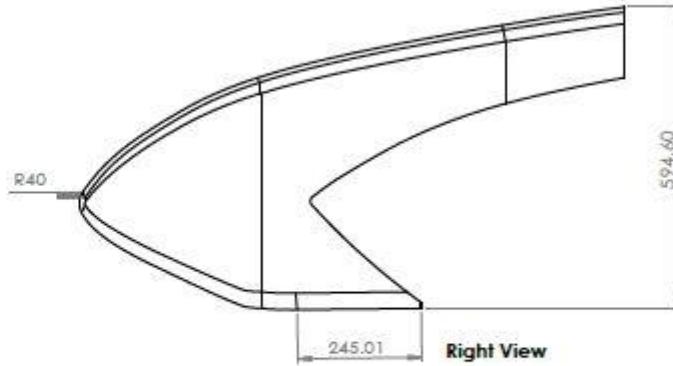
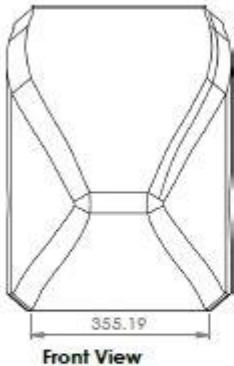
2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00034

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				SMALL FLAP LOWER HALF
ORDER PLACE				
DELIVERY				MATERIAL
				CFRP
COMMENTS:				SCALE: 1:2
ALL DIMENSIONS IN 'mm'				

Assembly-Nose (254-FR-A012)

- 1.Upper Half (254-FR-00037,Quantity -1)
- 2.Lower Half (254-FR-00038,Quantity -1)



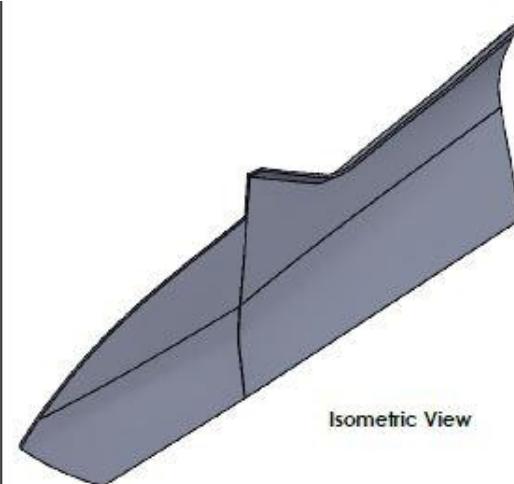
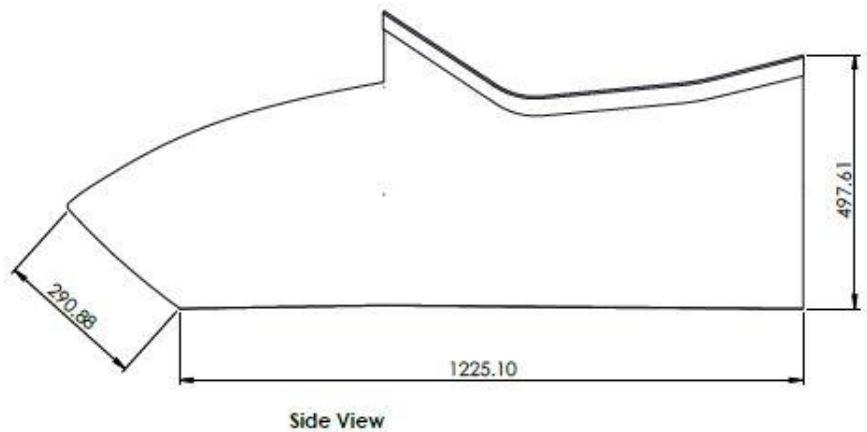
NOTES

- 1.All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00037, 254-FR-00038

DESIGN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
CREATIONS LEAD				Nose
DRIVE PLACES				MATERIAL
DRIVER				CFRP
COMMENTS:				
All Dimensions in mm				
SCALE: 1:8				

1.Side Panel (254-FR-00039,Quantity -1), Side Panel (254-FR-00040,Quantity -1)



Isometric View

NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00039
254-FR-00040

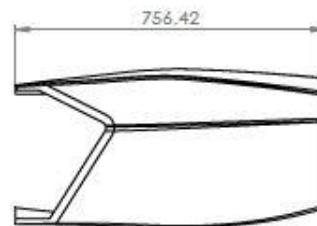
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT,Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Side Panel
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:				
All Dimension in mm				
SCALE: 1:8				

Assembly-Sidepods (254-FR-A014)

1.Left Sidepod (254-FR-00041,Quantity -1)



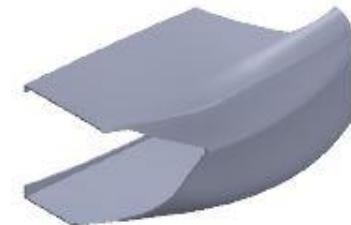
FRONT VIEW



SIDE VIEW



BACK VIEW/.



ISOMETRIC VIEW

Notes:

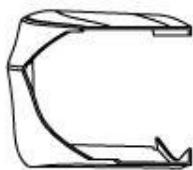
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

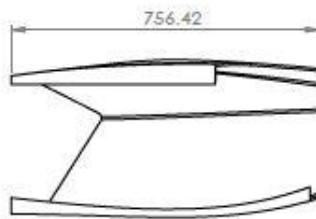
254-FR-00041

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				SIDEPOD LEFT
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 1:10				

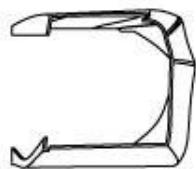
2.Right Sidepod (254-FR-00042,Quantity -1)



FRONT VIEW



SIDE VIEW



BACK VIEW



ISOMETRIC VIEW

Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

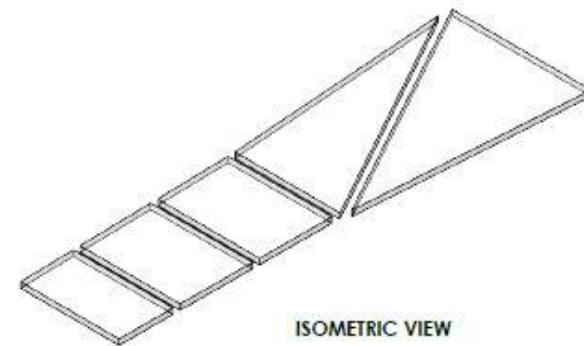
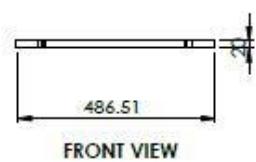
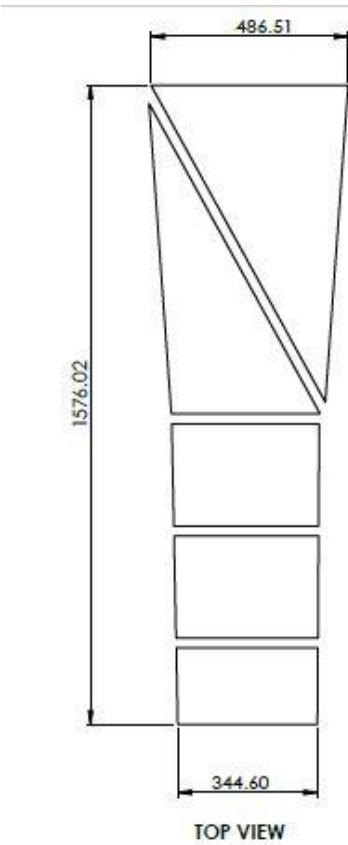
254-FR-00042

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				SIDEPOD RIGHT
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:	ALL DIMENSIONS IN 'mm'			
	SCALE: 1:10			

Assembly-Floor Pan (254-FR-A017)

Base Plate (254-FR-00079,Quantity -1), **Base Plate** (254-FR-00080,Quantity -1)

Base Plate (254-FR-00081,Quantity -1), **Base Plate** (254-FR-0009,Quantity -2)



NOTES

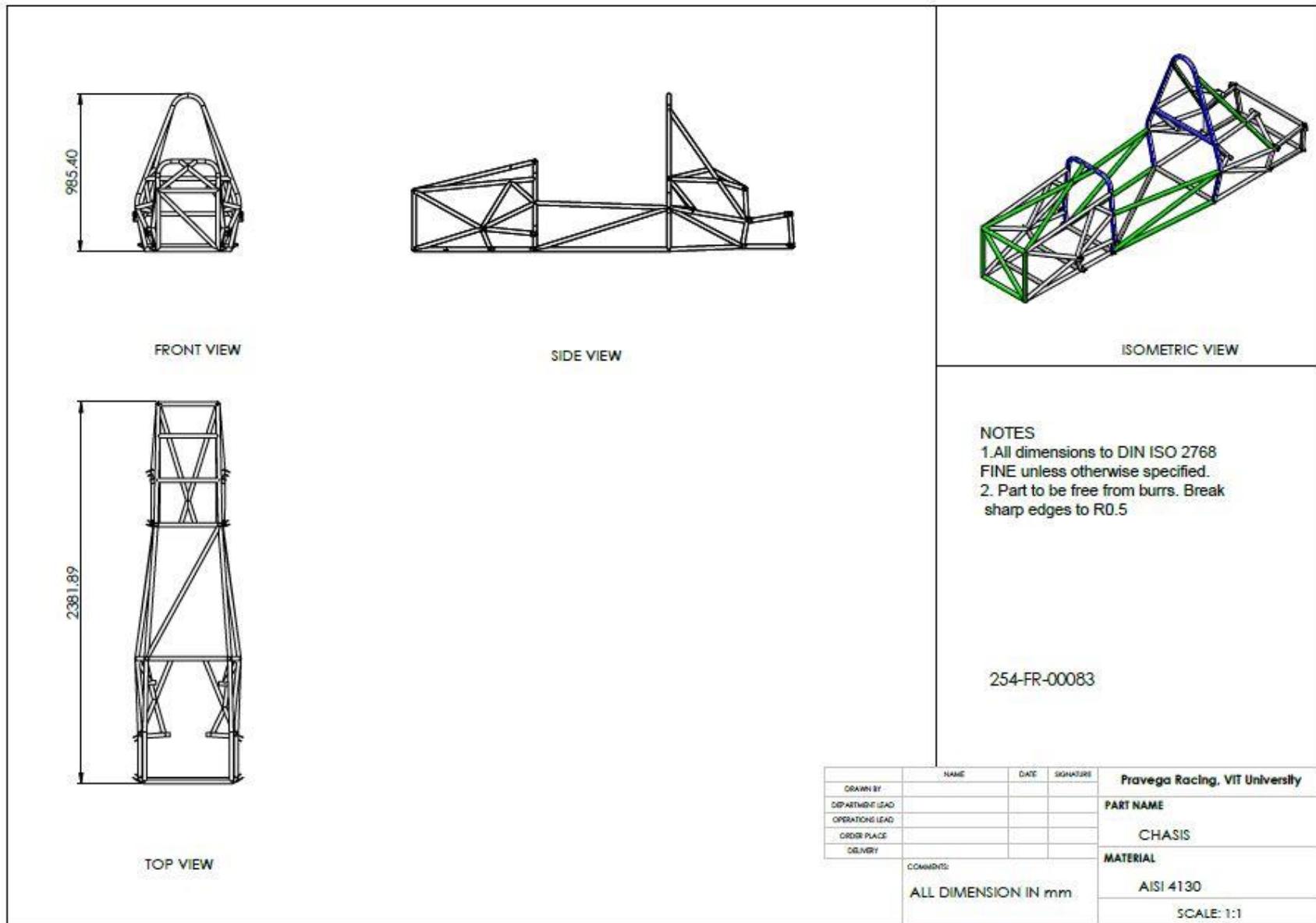
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-FR-00079
254-FR-00080
254-FR-00081
254-FR-00082

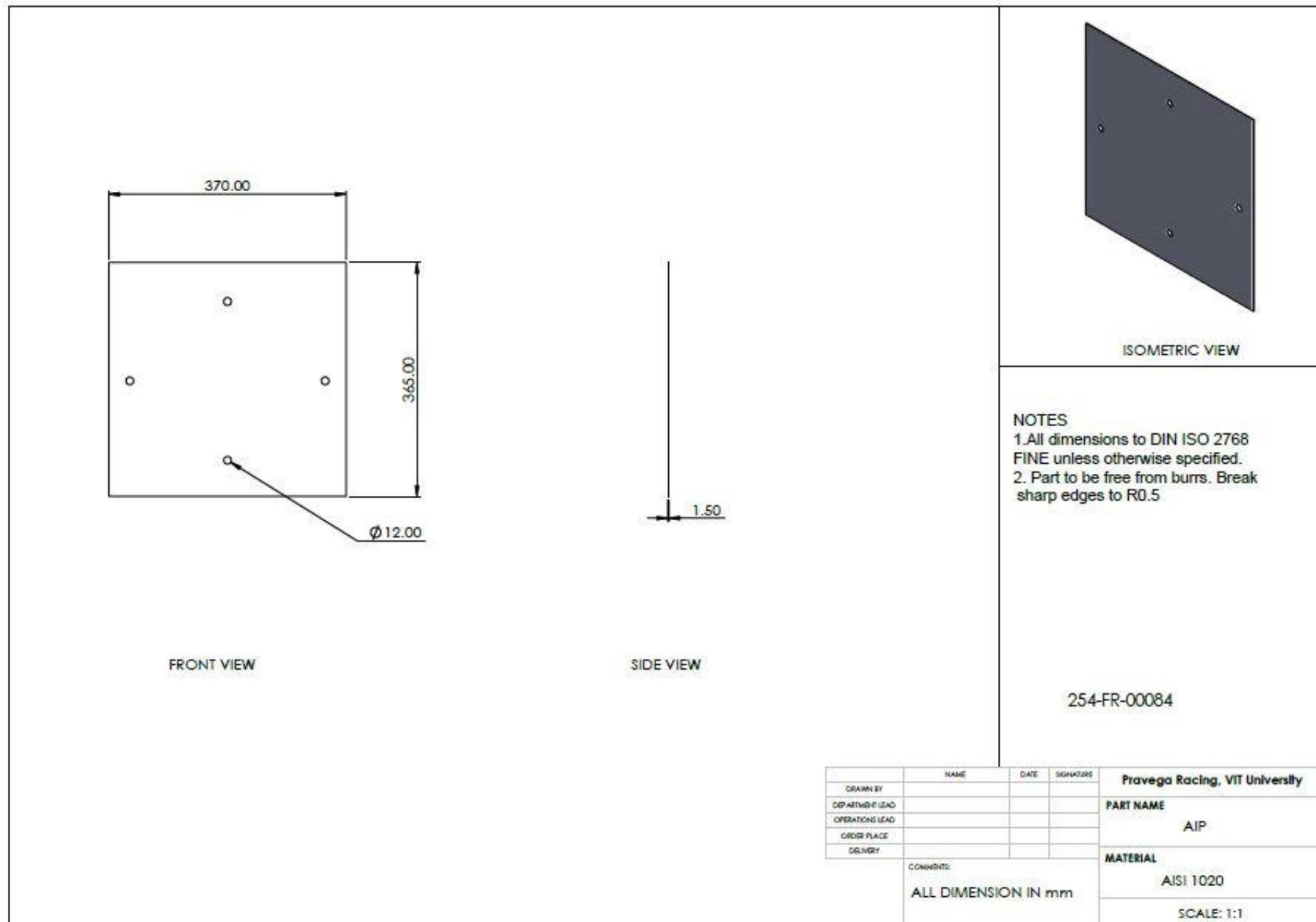
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				BASE PLATE
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:	All Dimensions in mm			

Assembly- Frame Tubes (254-FR-A018)

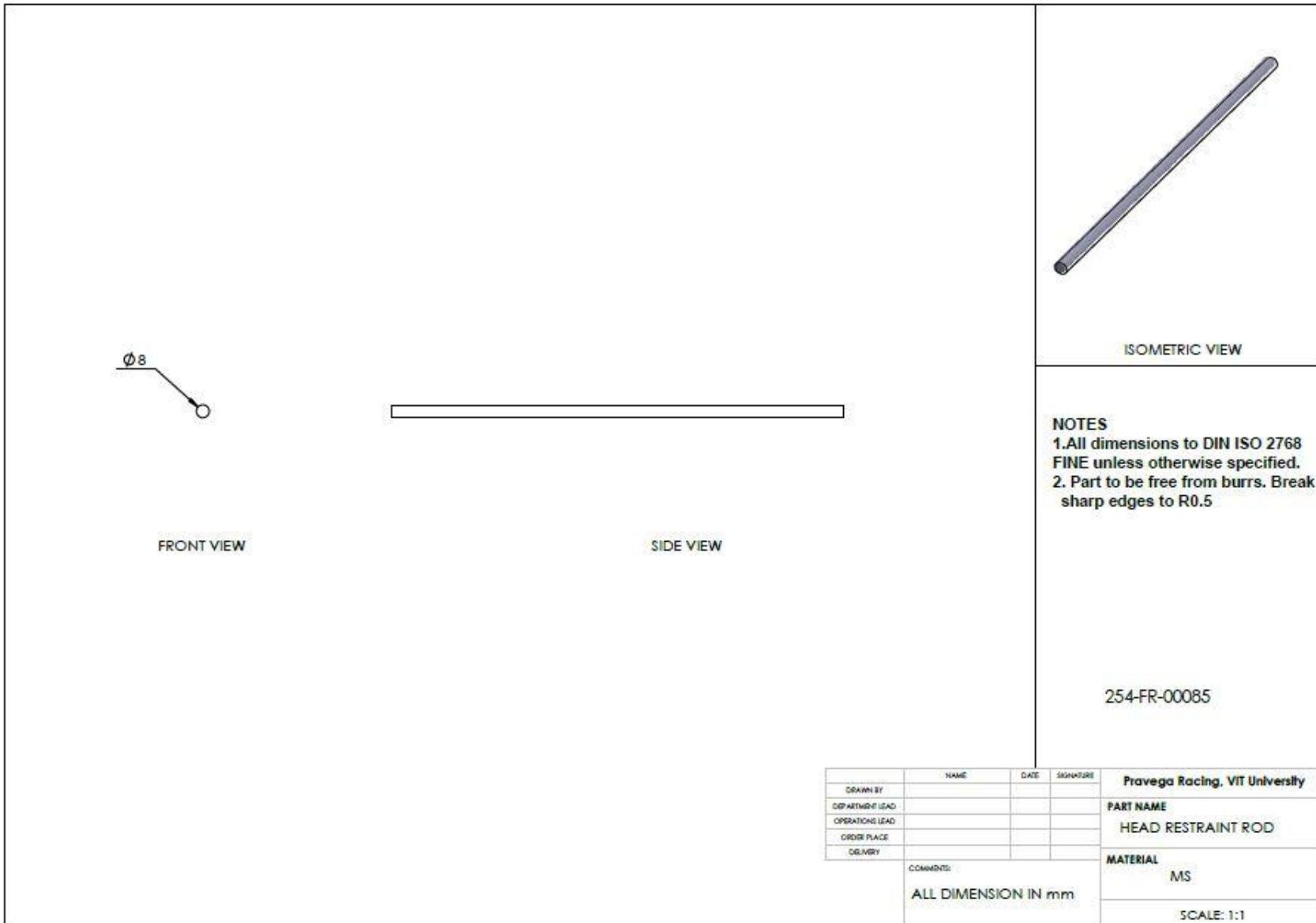
1.Chassis (254-FR-00083,Quantity -1)



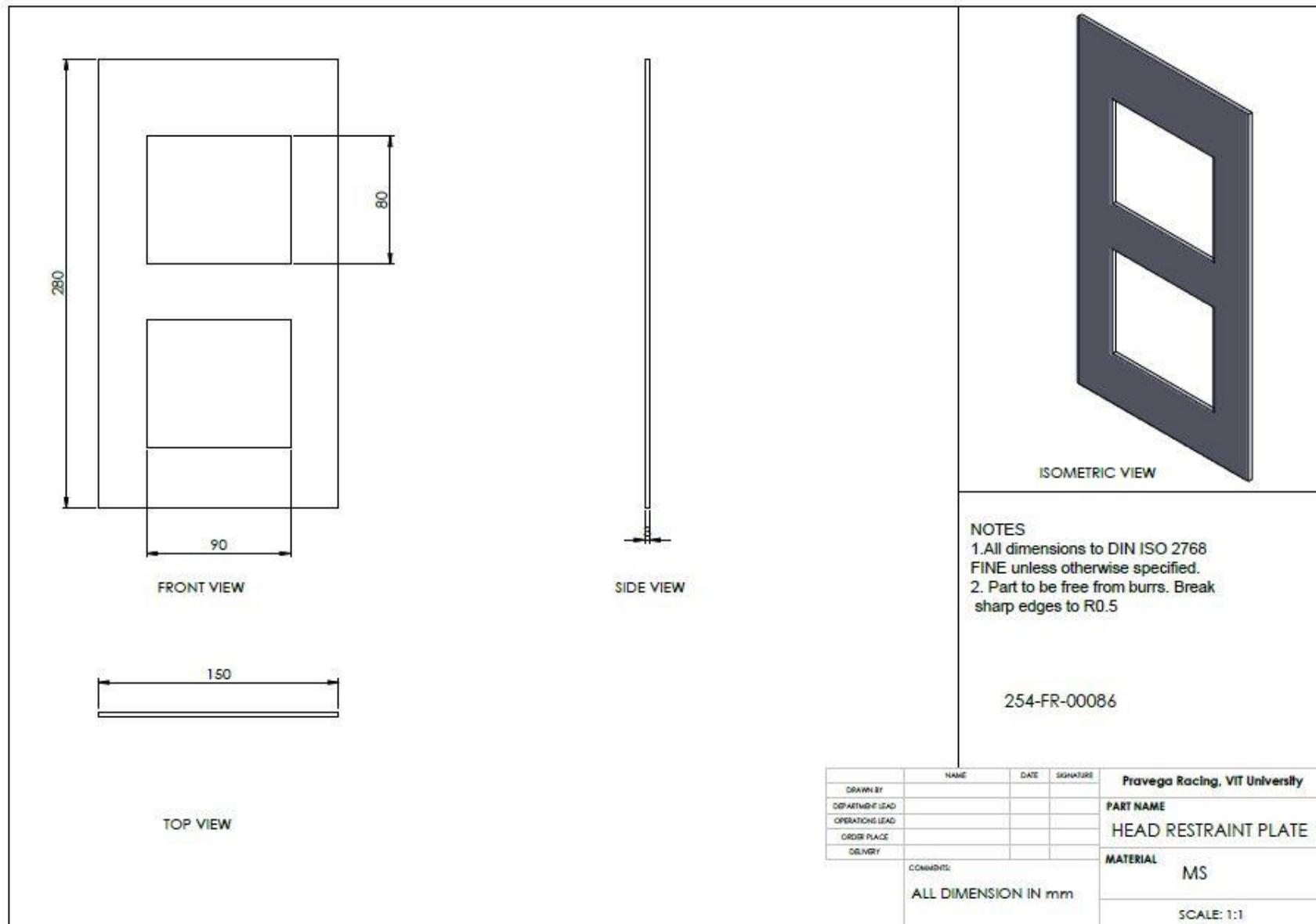
2.Anti Intrusion Plate(254-FR-00084,Quantity -1)



3. Head Restraint Rod (254-FR-00085, Quantity -2)

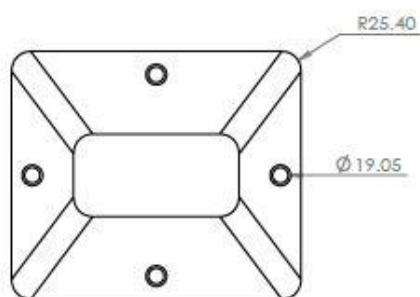


4. Head Restraint Plate (254-FR-00086, Quantity -1)

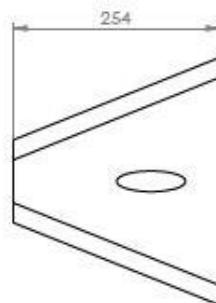


Assembly- Impact Attenuator)(254-FR-A019)

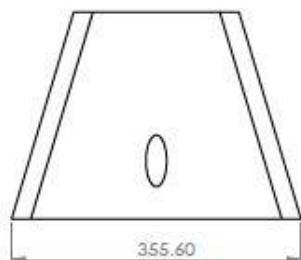
1.Impact Attenuator (254-FR-00087,Quantity -1)



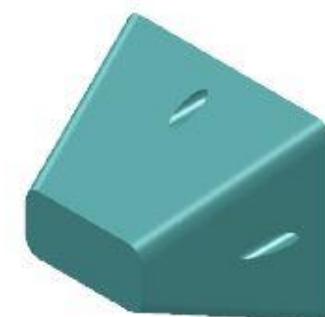
FRONT VIEW



SIDE VIEW



TOP VIEW

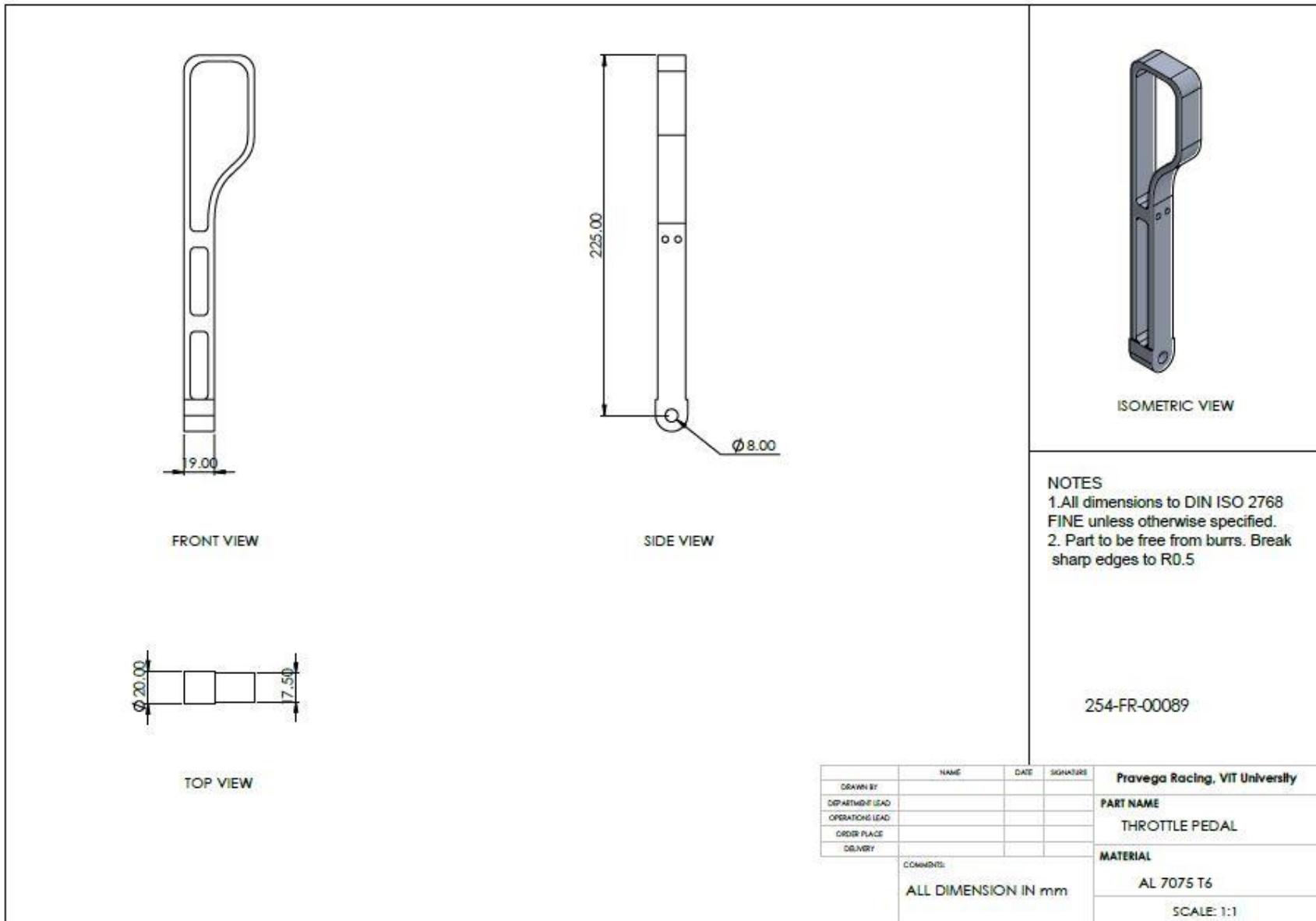


ISOMETRIC VIEW

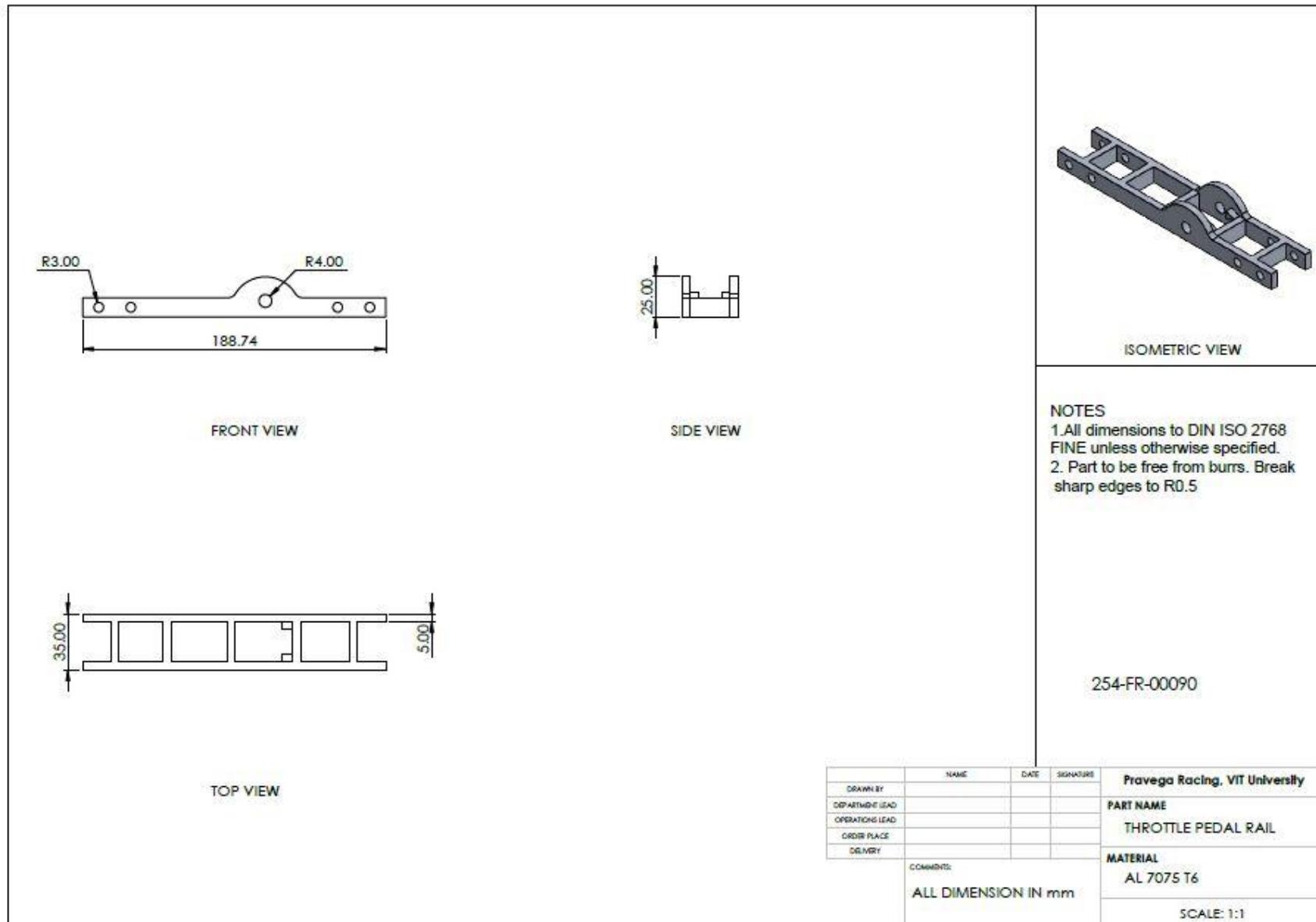
254-FR-00087

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				IMPACT ATTENUATOR
ORDER PLACE				MATERIAL
DELIVERY				STRUCTURAL FOAM
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 1:5				

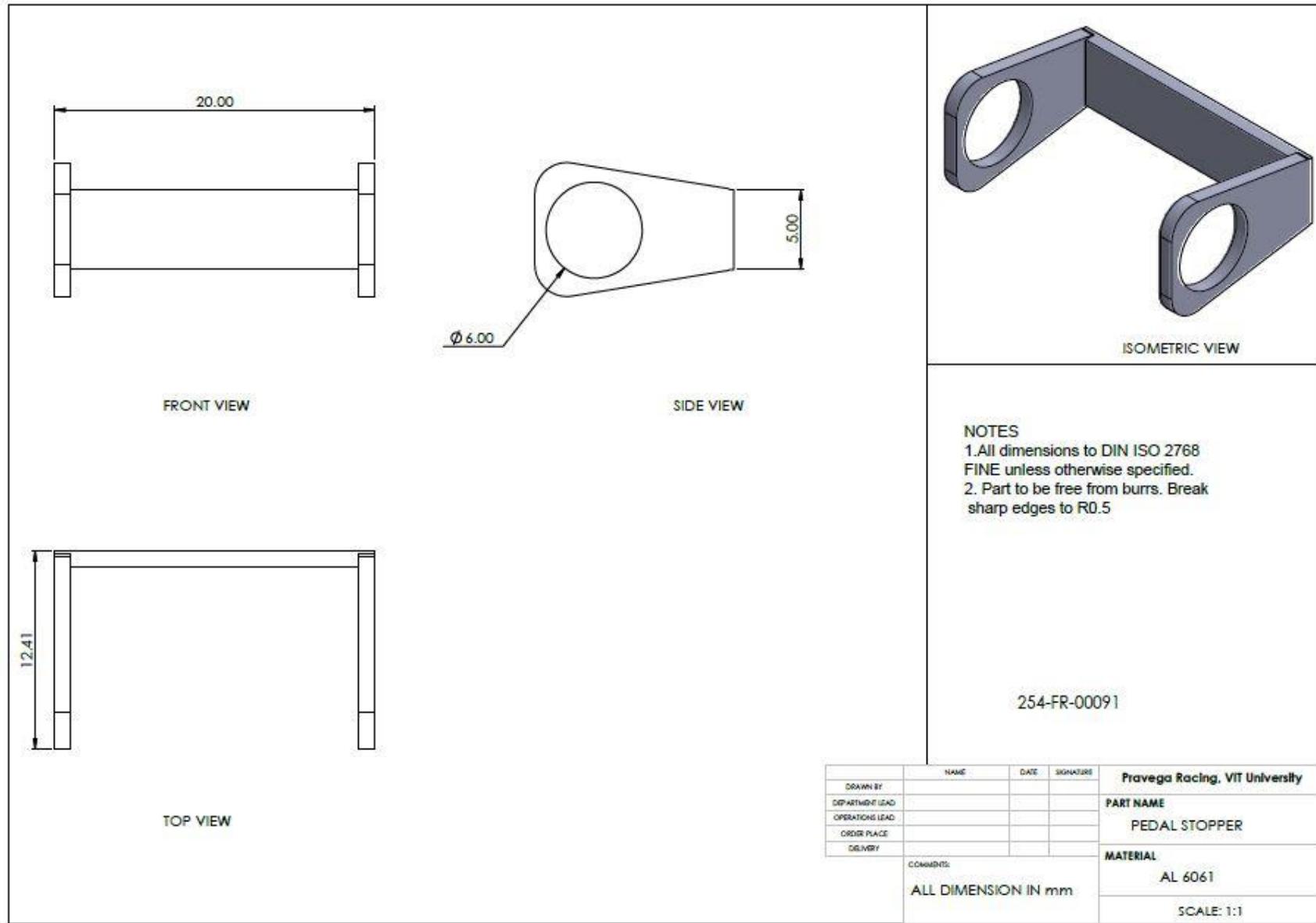
1.Throttle Pedal (254-FR-00089,Quantity -1)



2.Throttle Pedal Rail (254-FR-00090,Quantity -1)

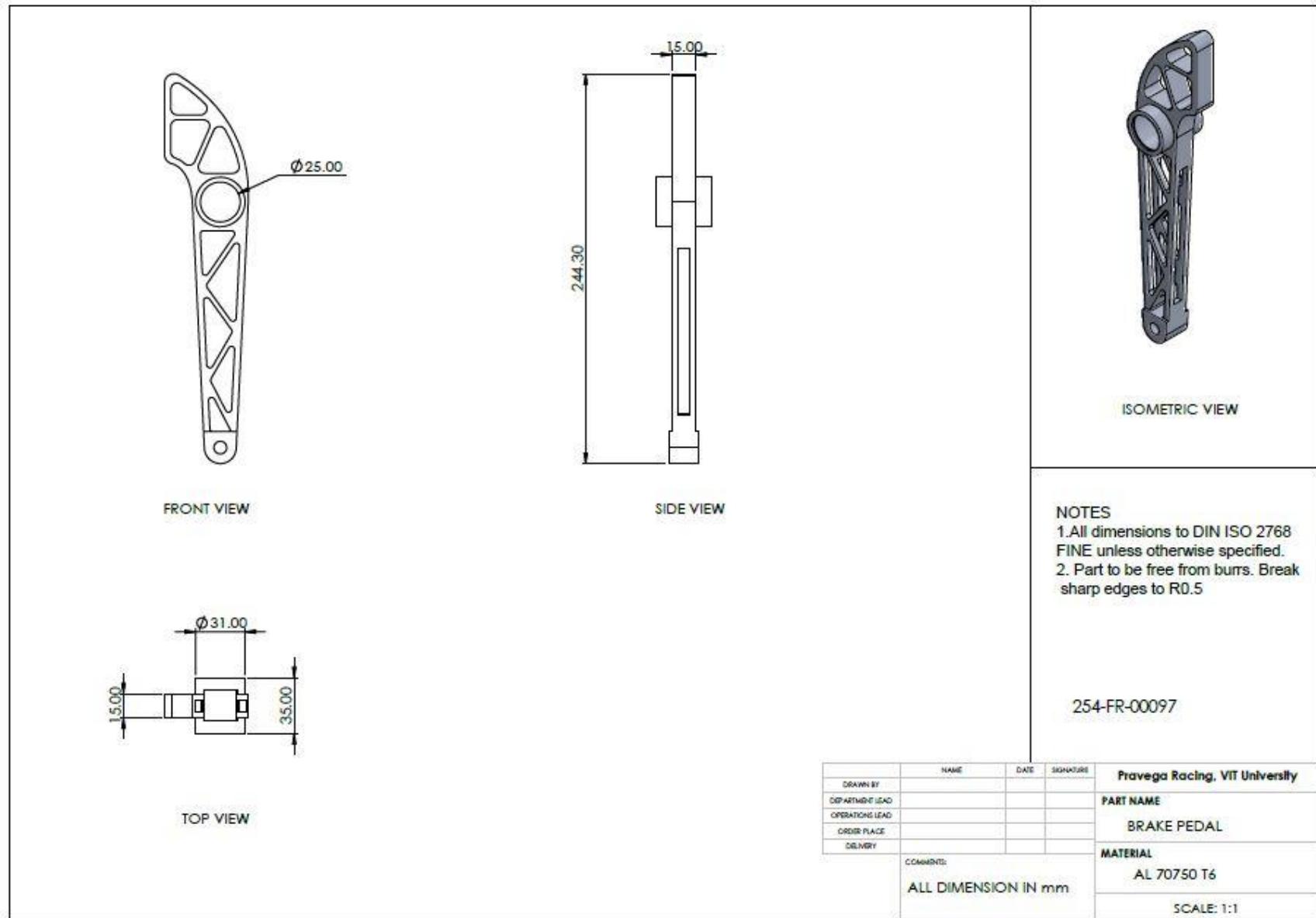


3.Throttle Pedal Stopper (254-FR-00091,Quantity -1)

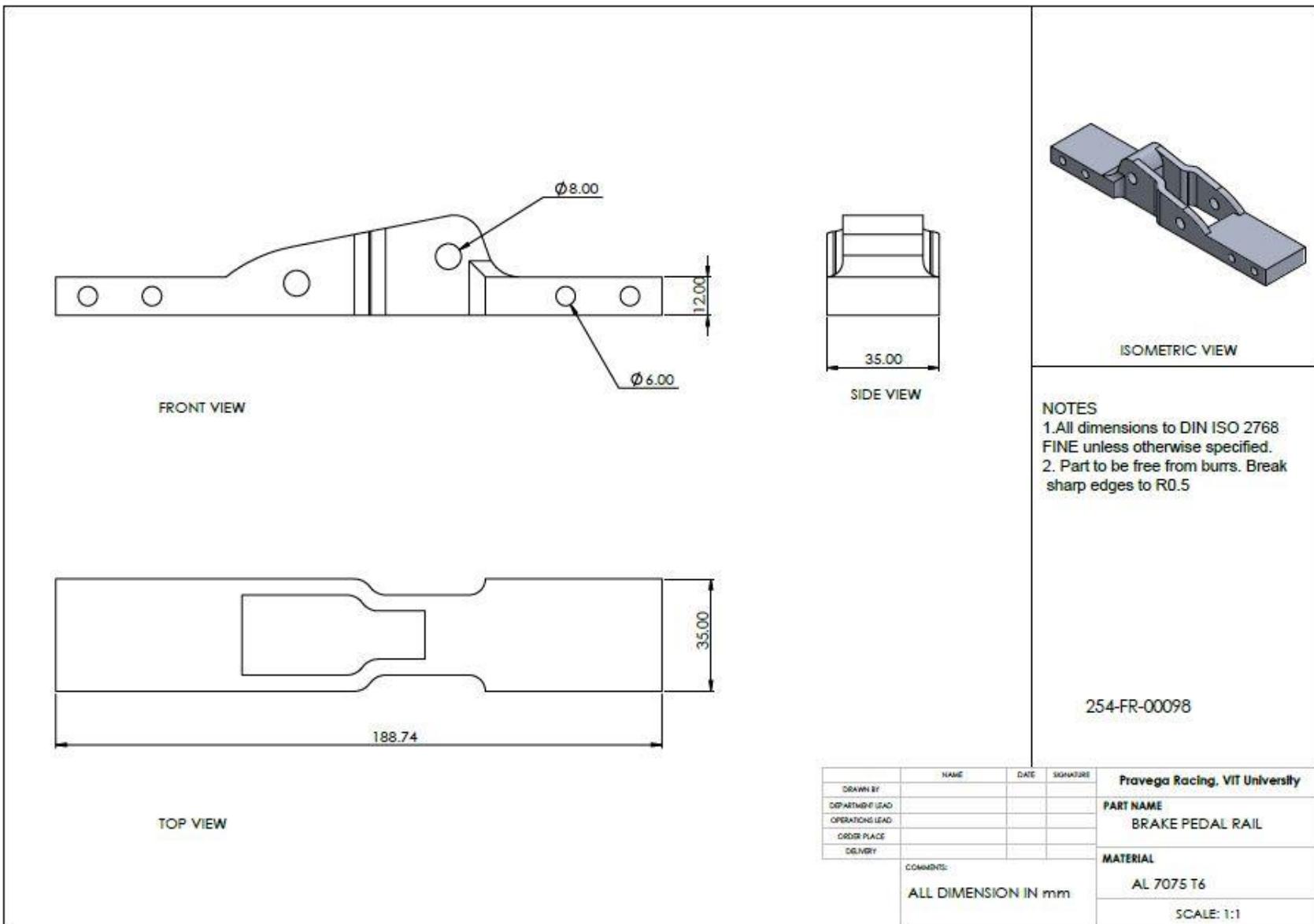


Assembly- Pedal Brake(254-FR-A021)

1.Brake pedal(254-FR-00097,Quantity -1)



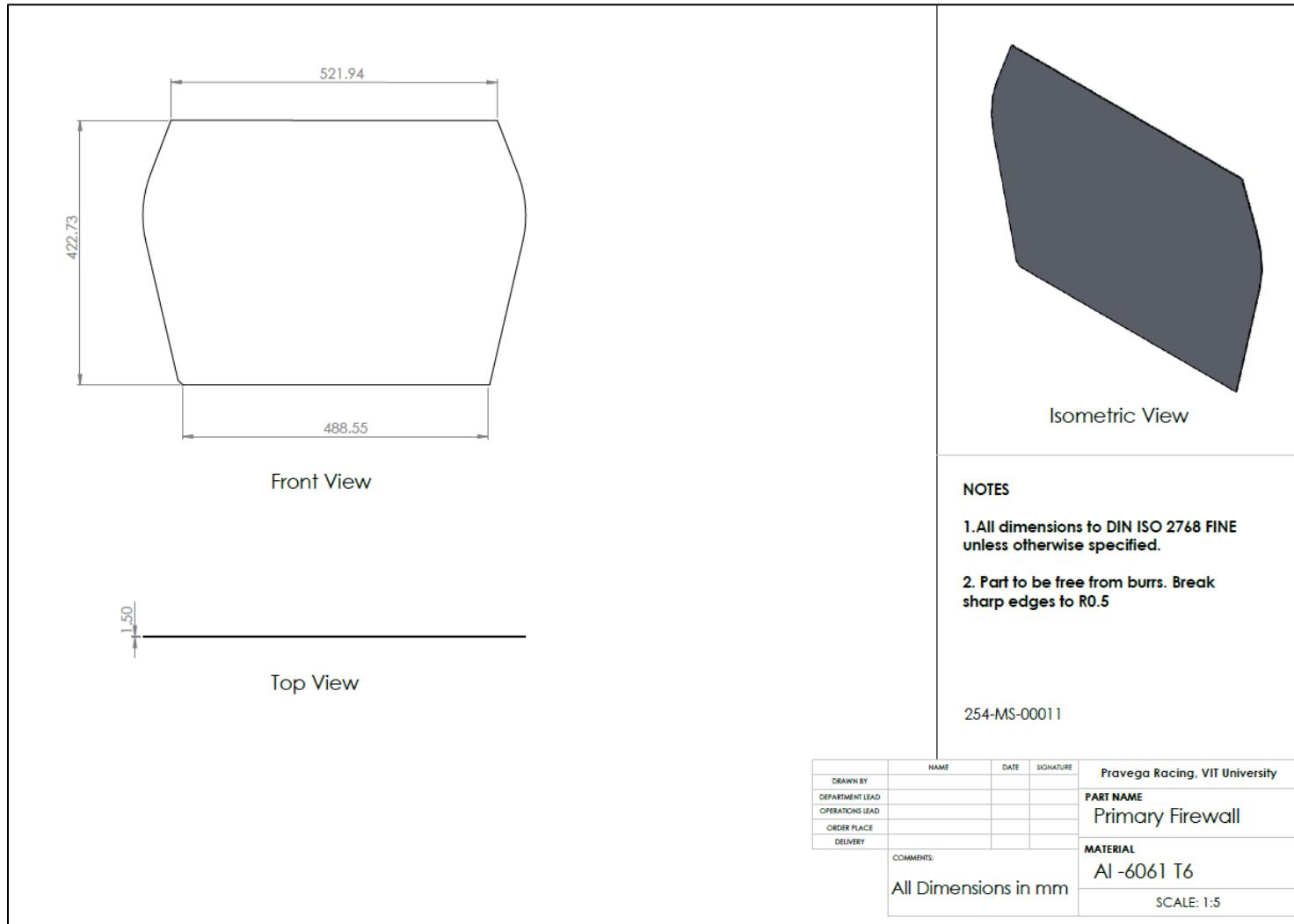
2..Brake Pedal Rail (254-FR-00098,Quantity -1)



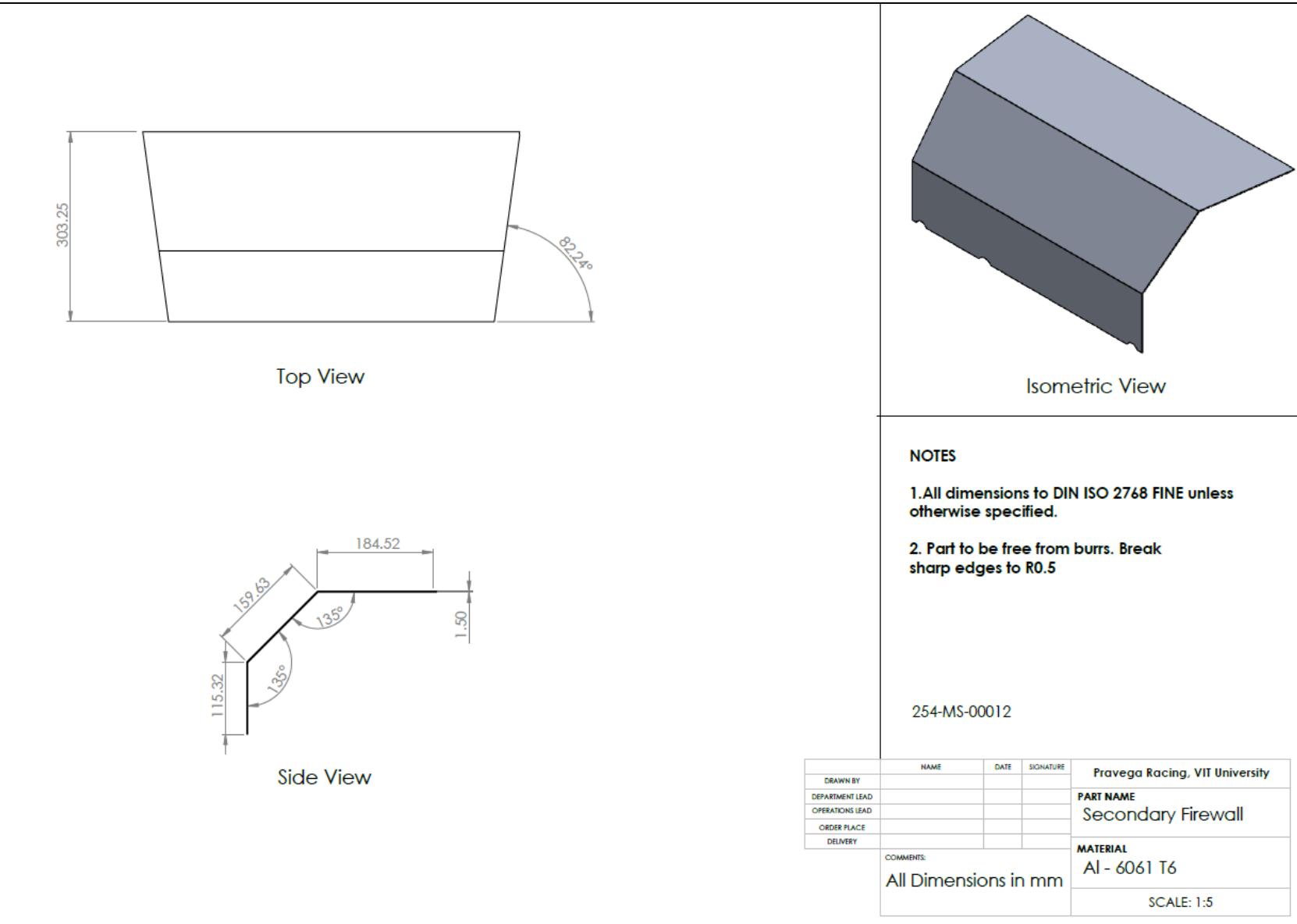
Miscellaneous Fit and Finish (MS)

Assembly – Other Driver Protection – Firewall (254-MS-A004)

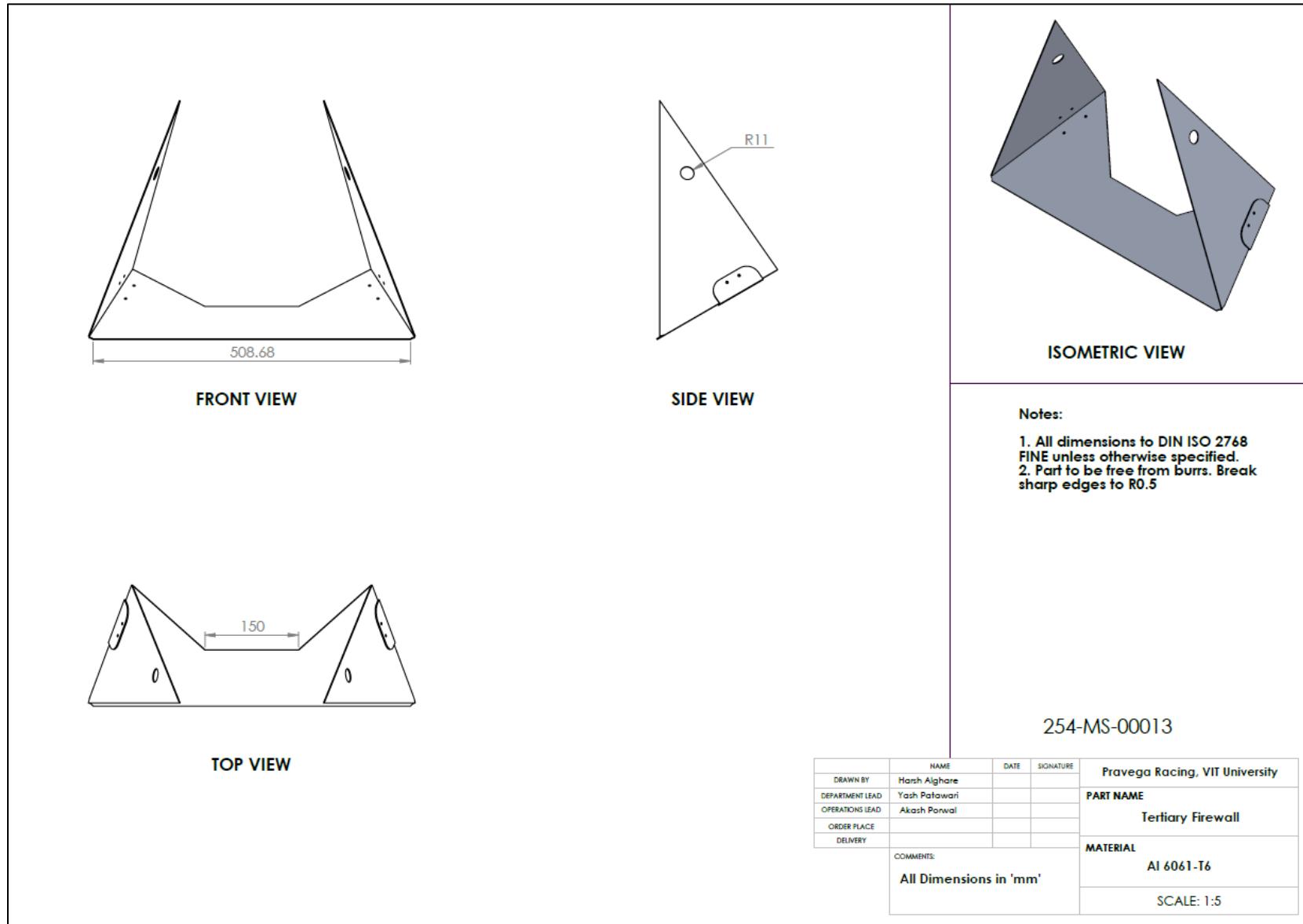
1. Primary Firewall (254-MS-00011, Quantity – 1)



2. Secondary Firewall (254-MS-00012, Quantity - 1)

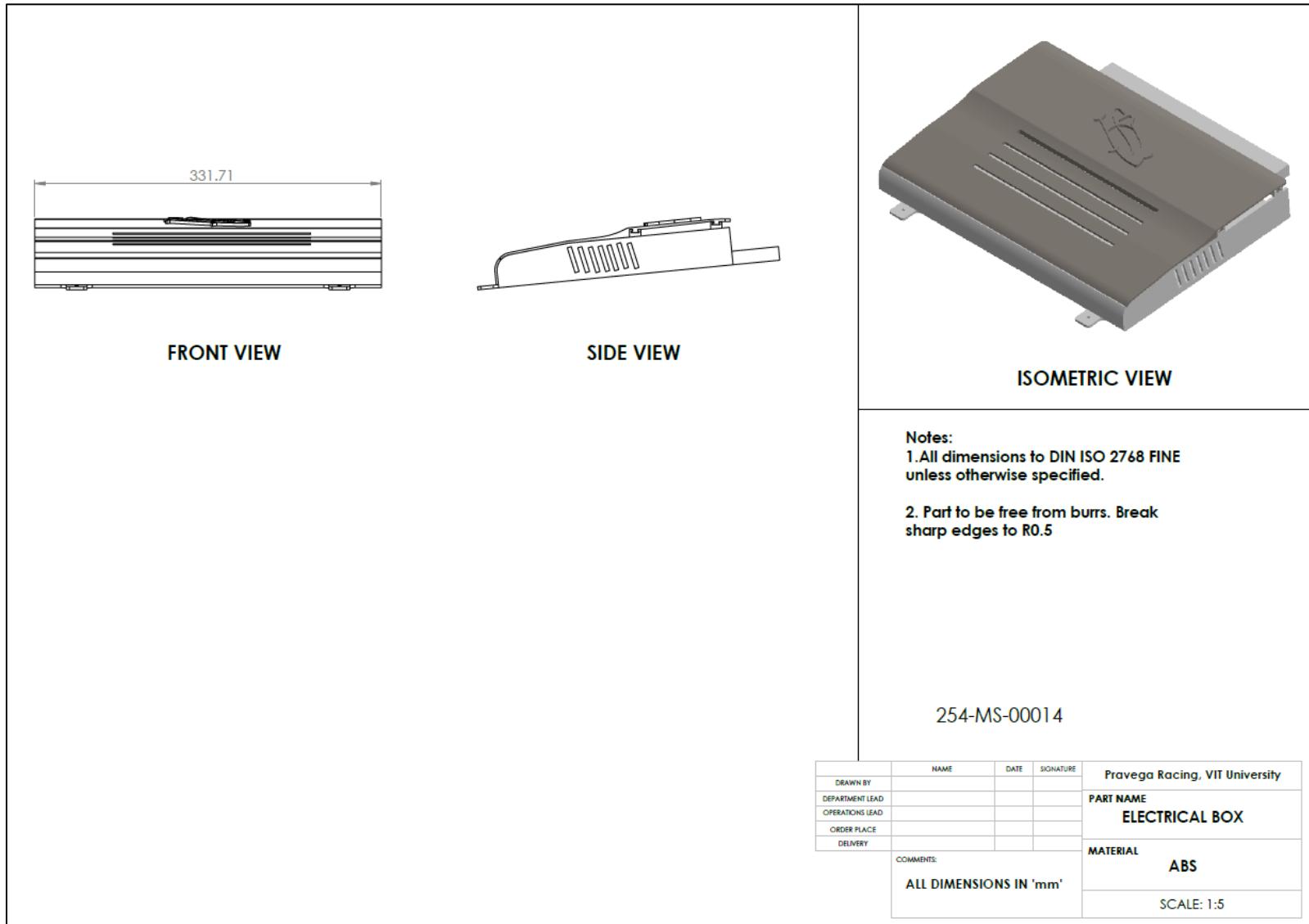


3. Tertiary Firewall (254-MS-00013, Quantity – 3)

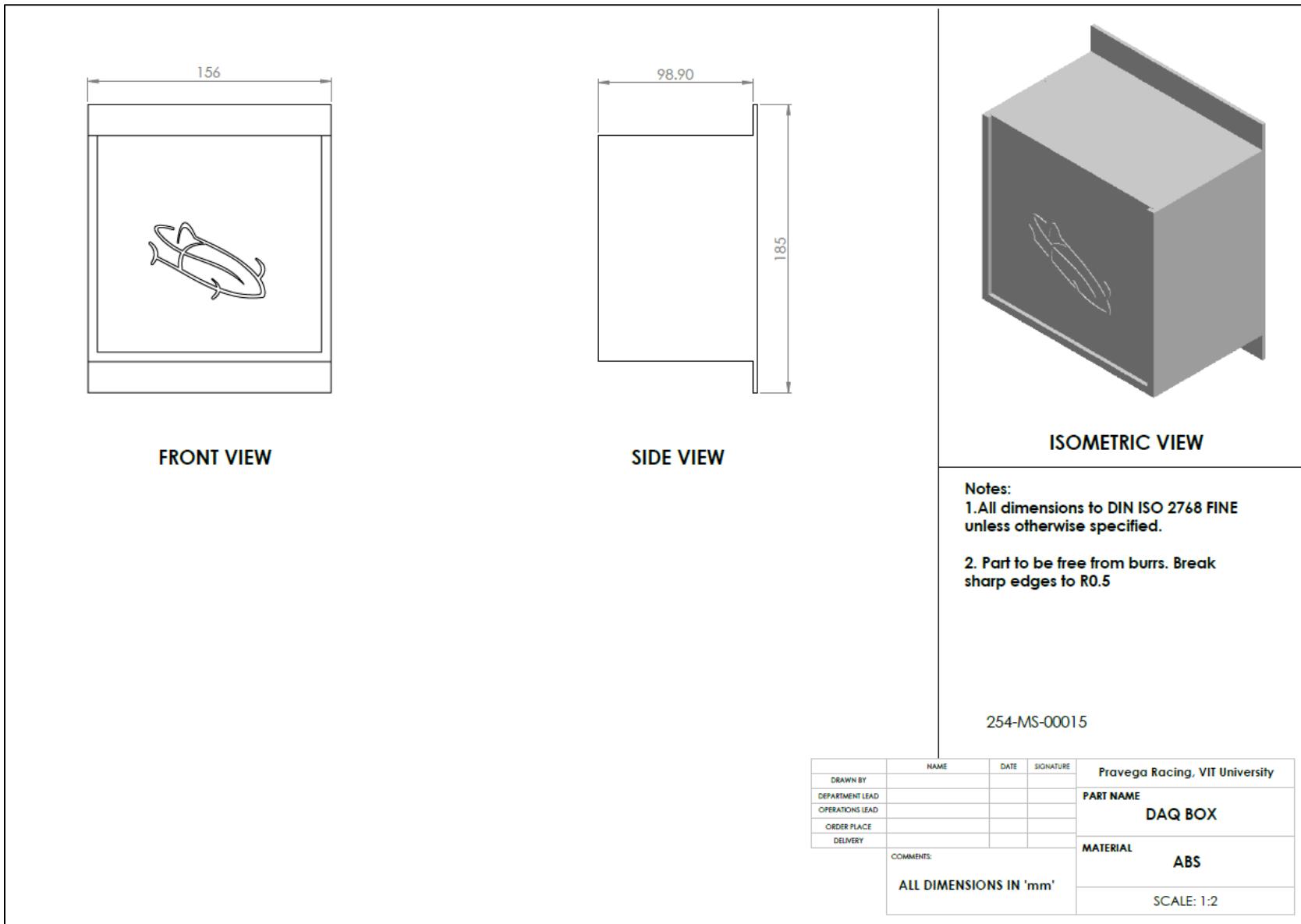


Assembly - Other: Electrical Packaging - Electrical Box (254-MS-A005)

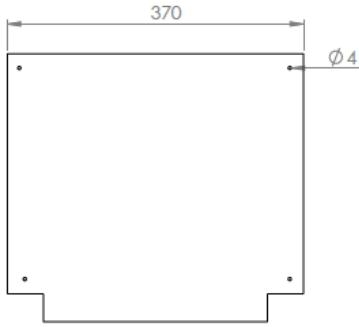
1. PCB and ECB box(254-MS-00014, Quantity - 2)



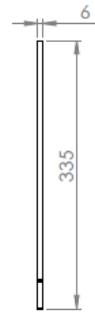
2. DAQ Box (254-MS-00015, Quantity - 1)



3. Backing Plate (254-MS-00016, Quantity – 1)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

Notes:

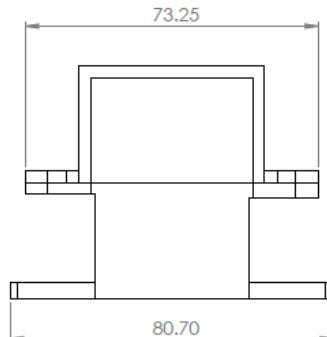
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

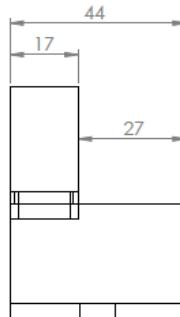
254-MS-00016

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				ELECTRICAL BOX SUPPORT
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:		ALL DIMENSIONS IN 'mm'		
SCALE: 1:5				

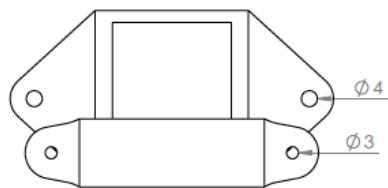
4. Starter Relay Casing (254-MS-00017, Quantity – 1)



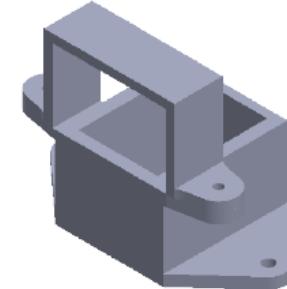
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

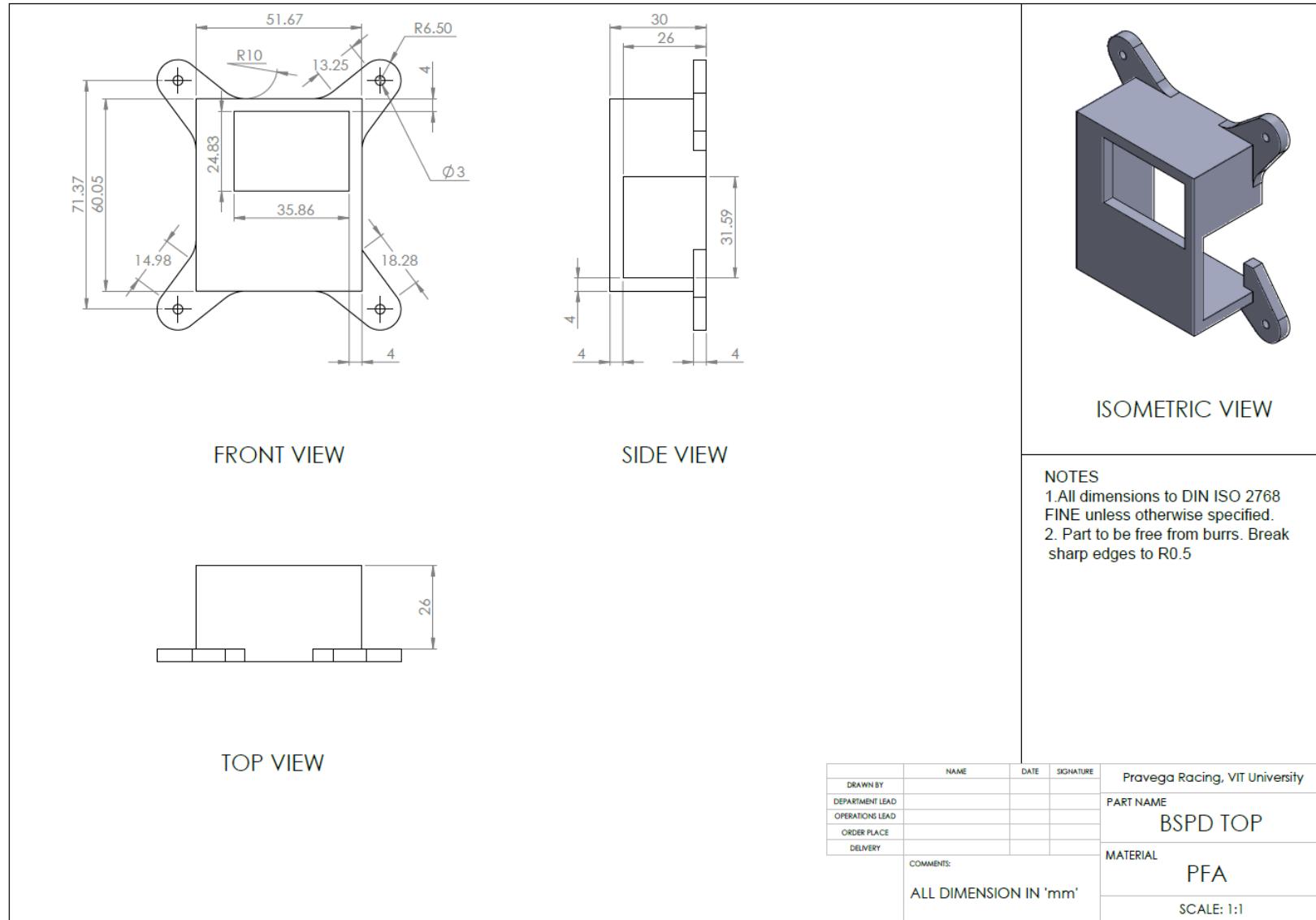
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

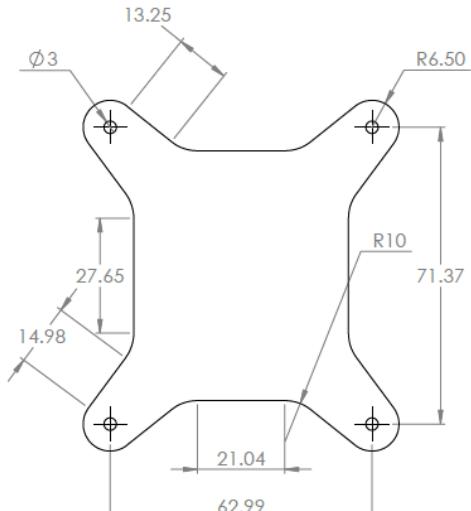
2. Part to be free from burrs. Break sharp edges to R0.5

254-MS-00017

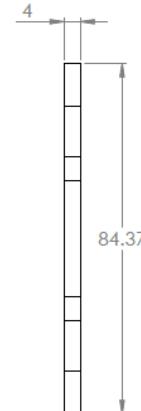
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				STARTER RELAY CASING
ORDER PLACE				MATERIAL
DELIVERY				ABS
COMMENTS: ALL DIMENSIONS IN 'mm'				
SCALE: 1:1				

5. BSPD Casing (254-MS-00018, Quantity - 1)





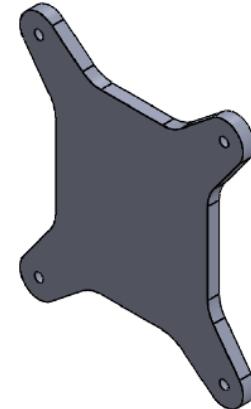
FRONT VIEW



SIDE VIEW



TOP VIEW



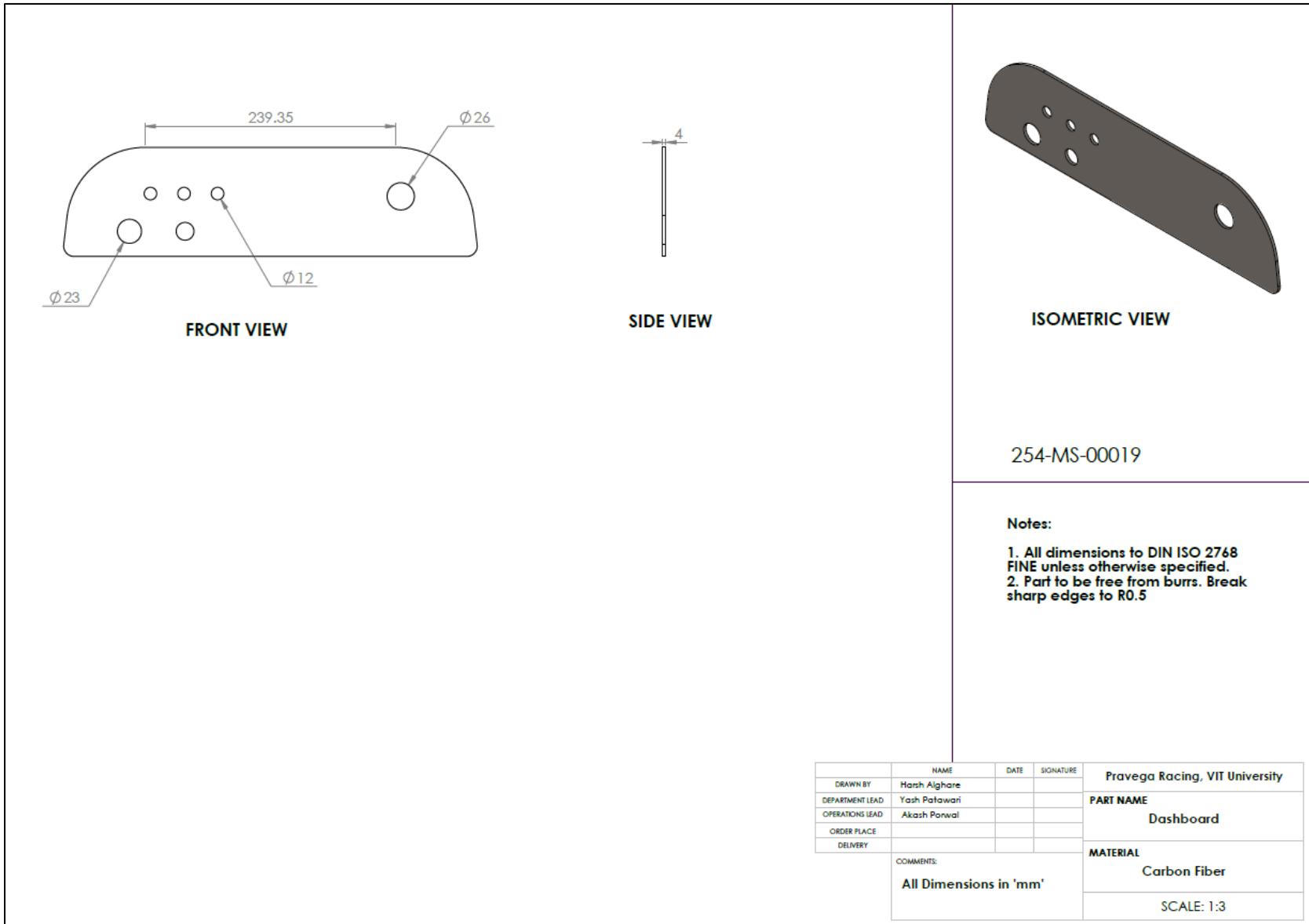
ISOMETRIC VIEW

NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

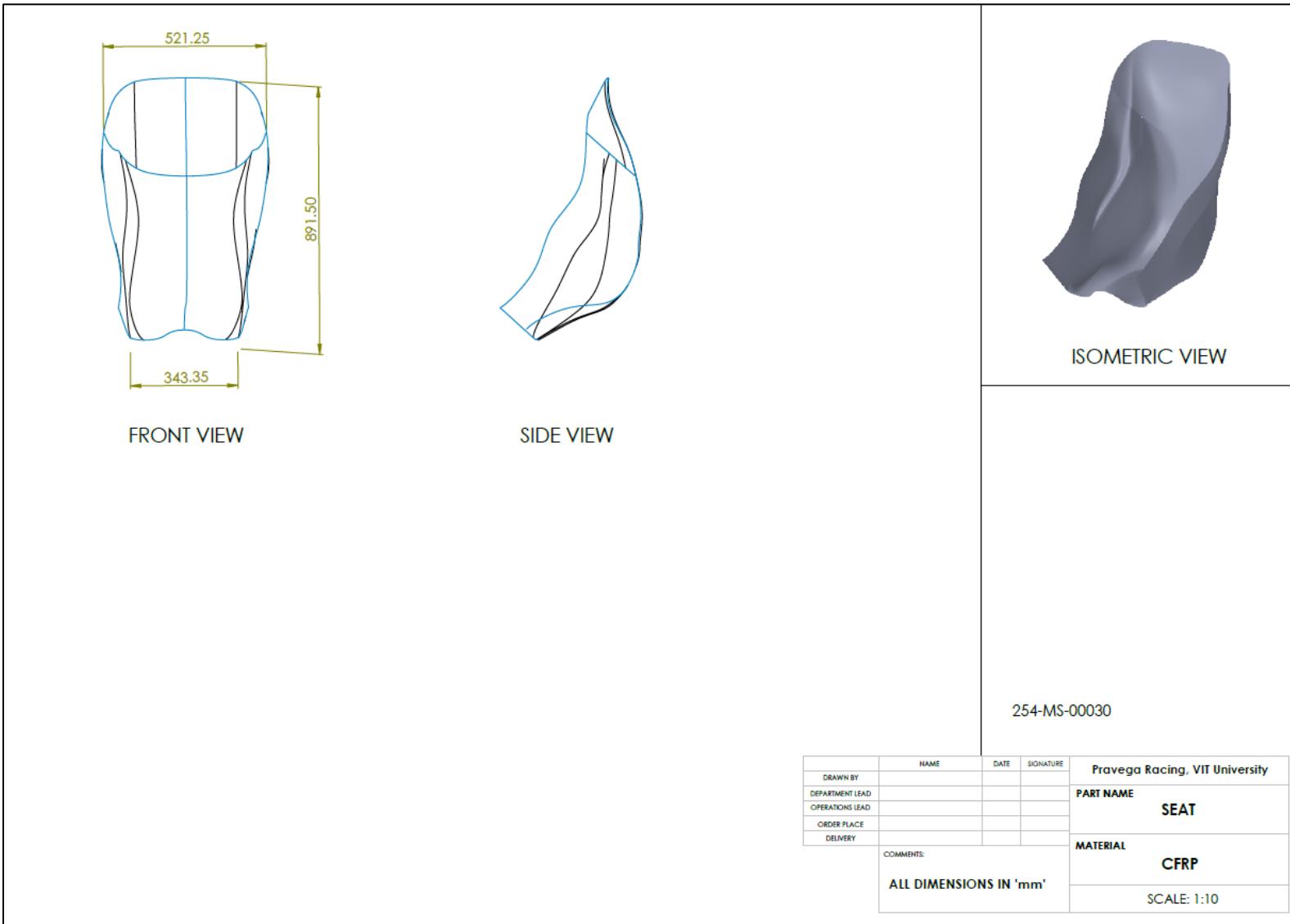
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				BSPD BASE
ORDER PLACE				MATERIAL
DELIVERY				PFA
COMMENTS:				
ALL DIMENSION IN 'mm'				
SCALE: 1:1				

6. Dashboard (254-MS-00019, Quantity – 1)

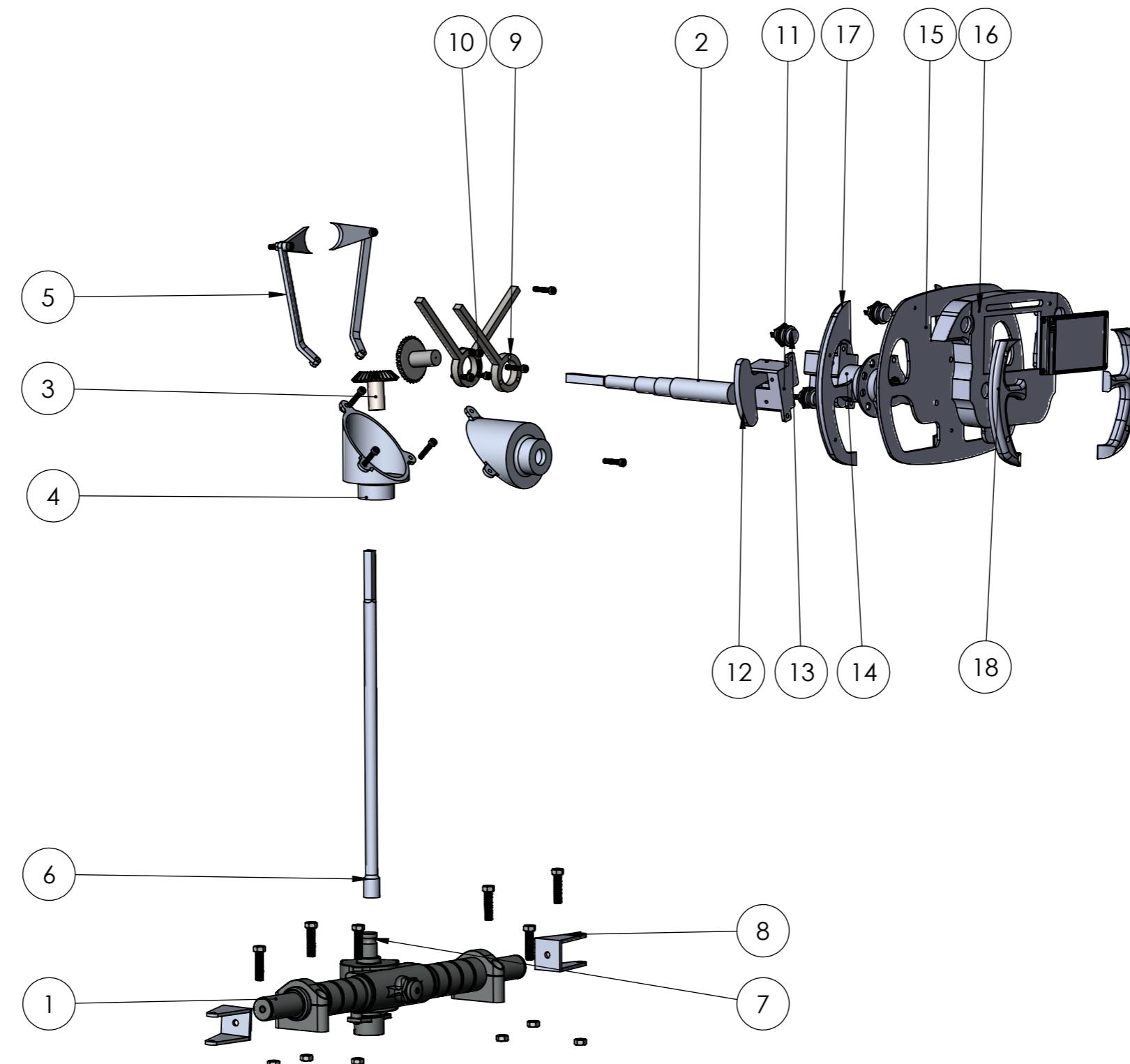


Assembly – Seats (254-MS-A010)

1. Driver's Seat (254-MS-00028, Quantity – 1)



4 Steering System

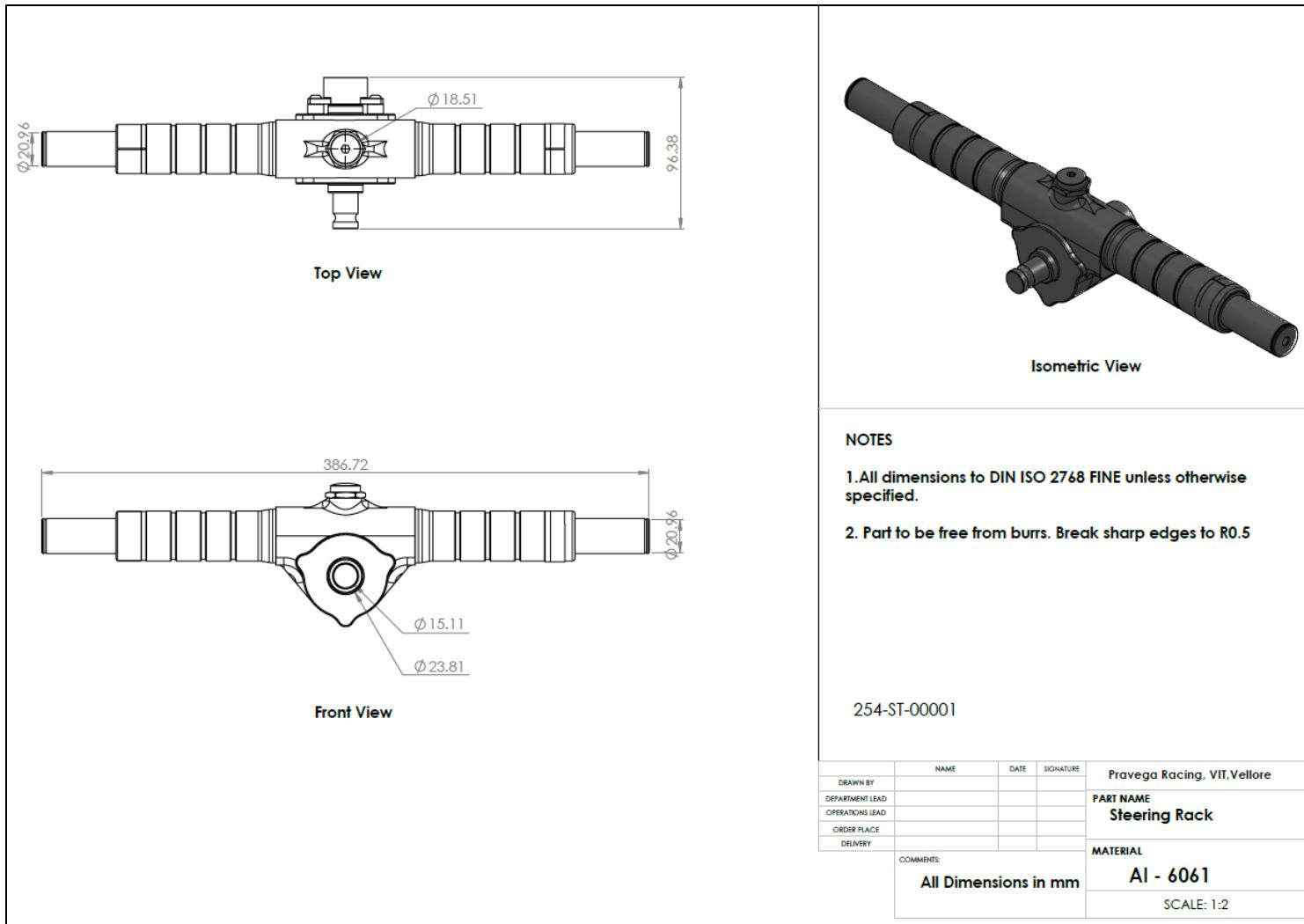


SERIAL NO.	PART NUMBER	PART NAME	MATERIAL	QTY.
1	254-ST-00001	Steering Rack	AL-6061 T6	1
2	254-ST-00009	Steering Shaft	AL-6075 T6	1
3	254-ST-00012	Bevel Gear	AISI 4340(EN 24)	2
4	254-ST-00013	Bevel Casing	AL-6075 T6	2
5	254-ST-00008	Bevel Casing Mount	AL-6075 T6	1
6	254-ST-00007	Pinion Shaft	AL-6075 T6	1
7	254-ST-00003	Coupler	AISI1020	1
8	254-ST-00002	Clevis	AL-6075 T6	2
9	254-ST-00011	O Clamp	AISI1020	1
10	254-ST-00012	O Clamp Mount	AISI1020	2
11	254-ST-00024	Paddle Housing	ABS	2
12	254-ST-00023	Paddles	ABS	2
13	254-ST-00022	Buttons	Bought	2
14	254-ST-00028	Quick Release	AI-6061 T6	1
15	254-ST-00018	Steering Wheel Base	PLA	1
16	254-ST-00019	Electronic Housing	PLA	1
17	254-ST-00020	Steering Wheel Lower Grip	TPU	2
18	254-ST-00021	Steering Wheel Upper Grip	TPU	2

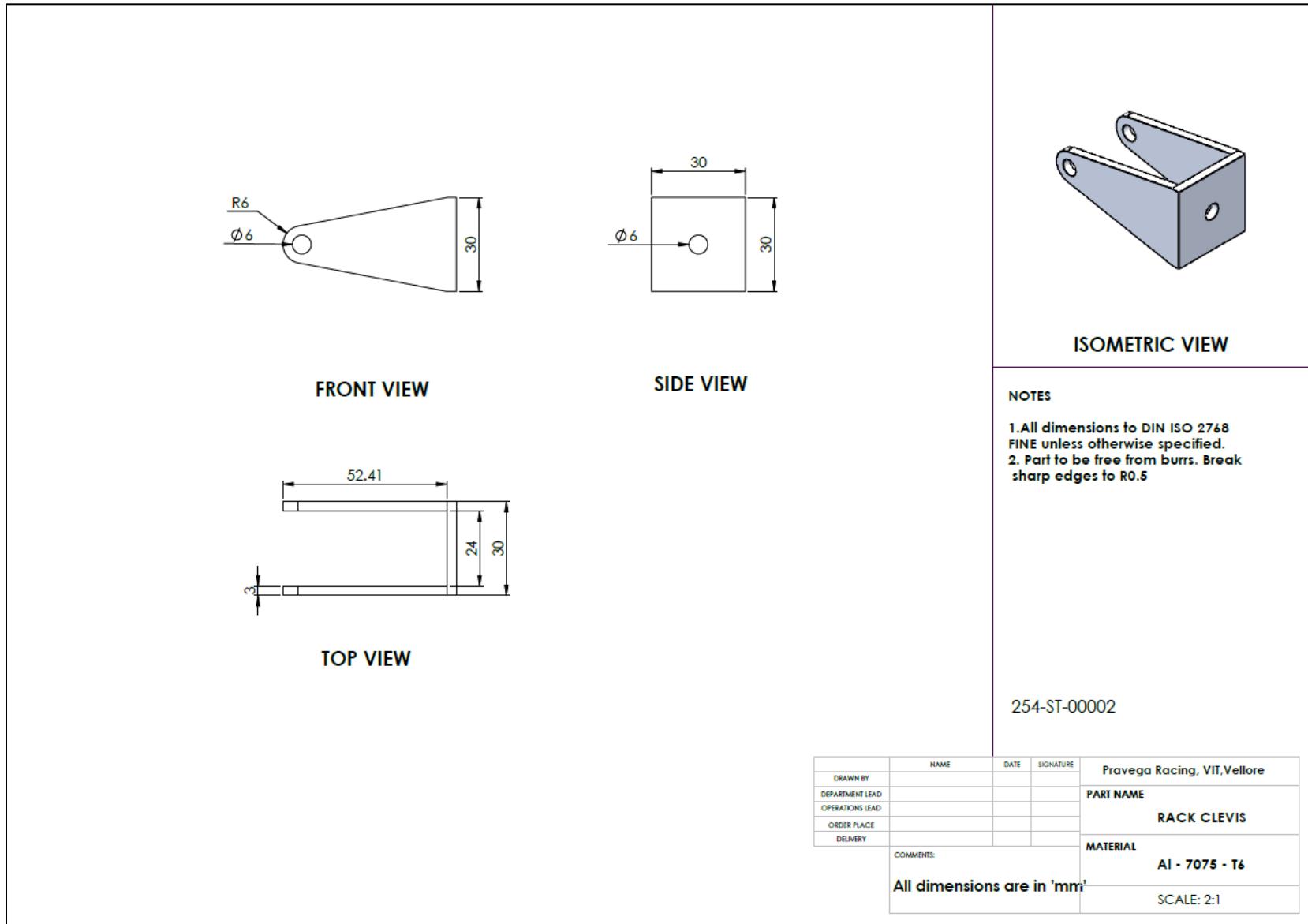
Steering System (ST)

Assembly- Steering Rack (254-ST-A001)

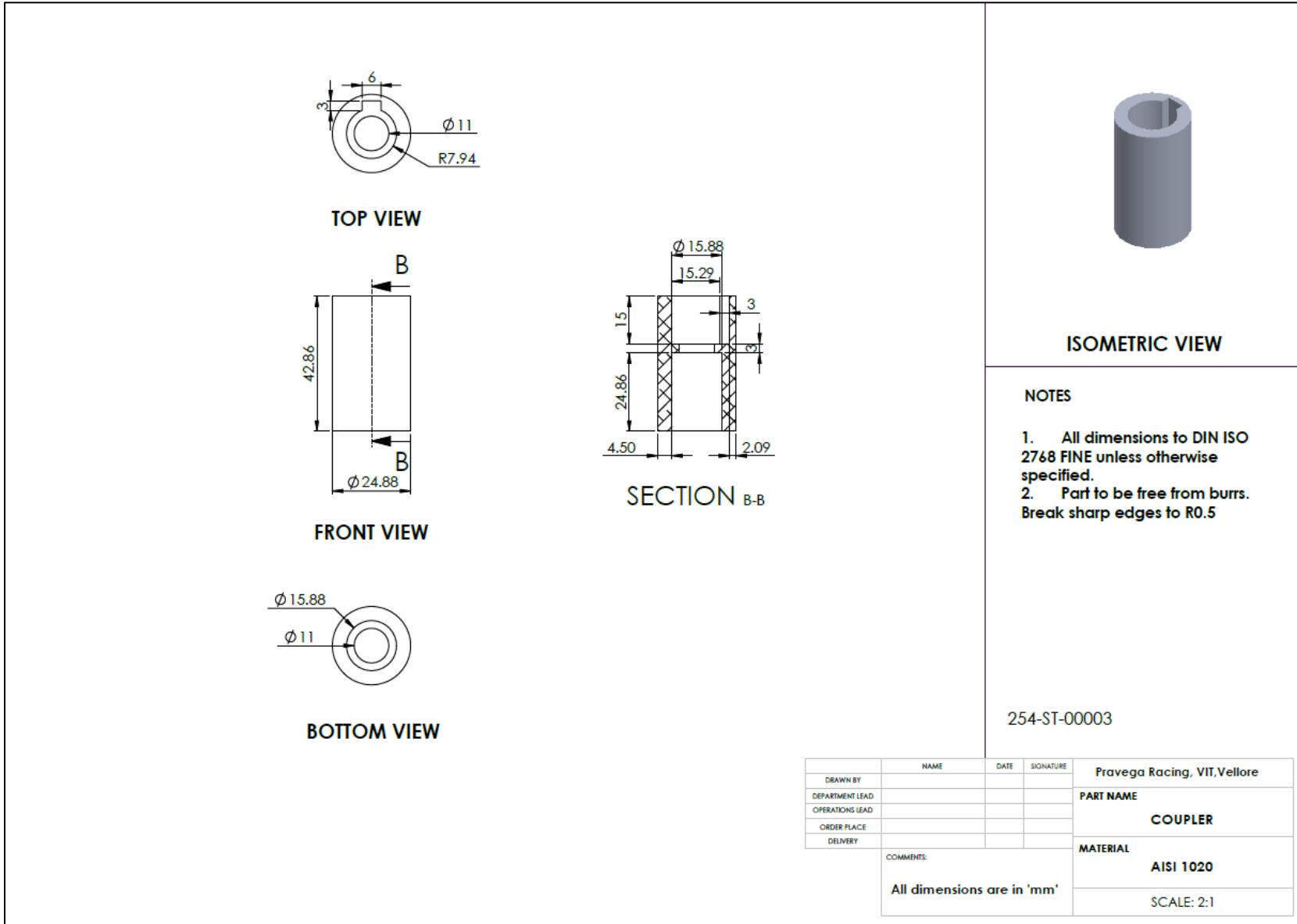
1. Steering Rack (254-ST-00001, Quantity – 1)



2. Clevis (254-ST-00002, Quantity - 2)



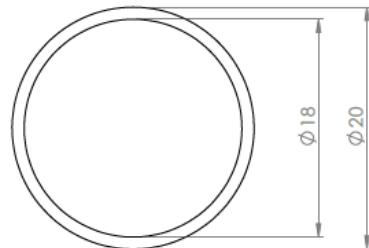
3. Coupler (254-ST-00003, Quantity – 1)



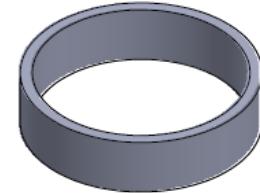
4. Rack Stopper (254-ST-00004, Quantity – 2)



Front View



Top View



Isometric View

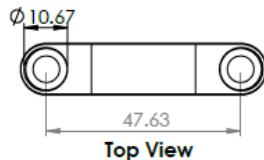
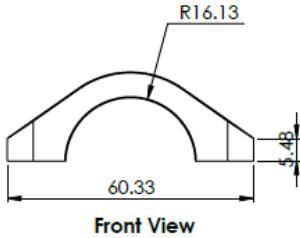
NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

254-ST-00004

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Rack Stopper
ORDER PLACE				MATERIAL
DELIVERY				AISI-1020
COMMENTS: All Dimensions in mm				
SCALE: 3:1				

5. Upper Rack Clamp (254-ST-00005, Quantity – 2)



Isometric View

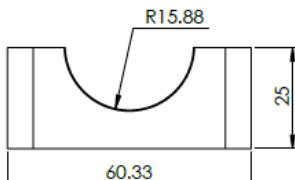
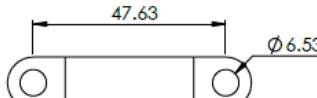
NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-ST-00005

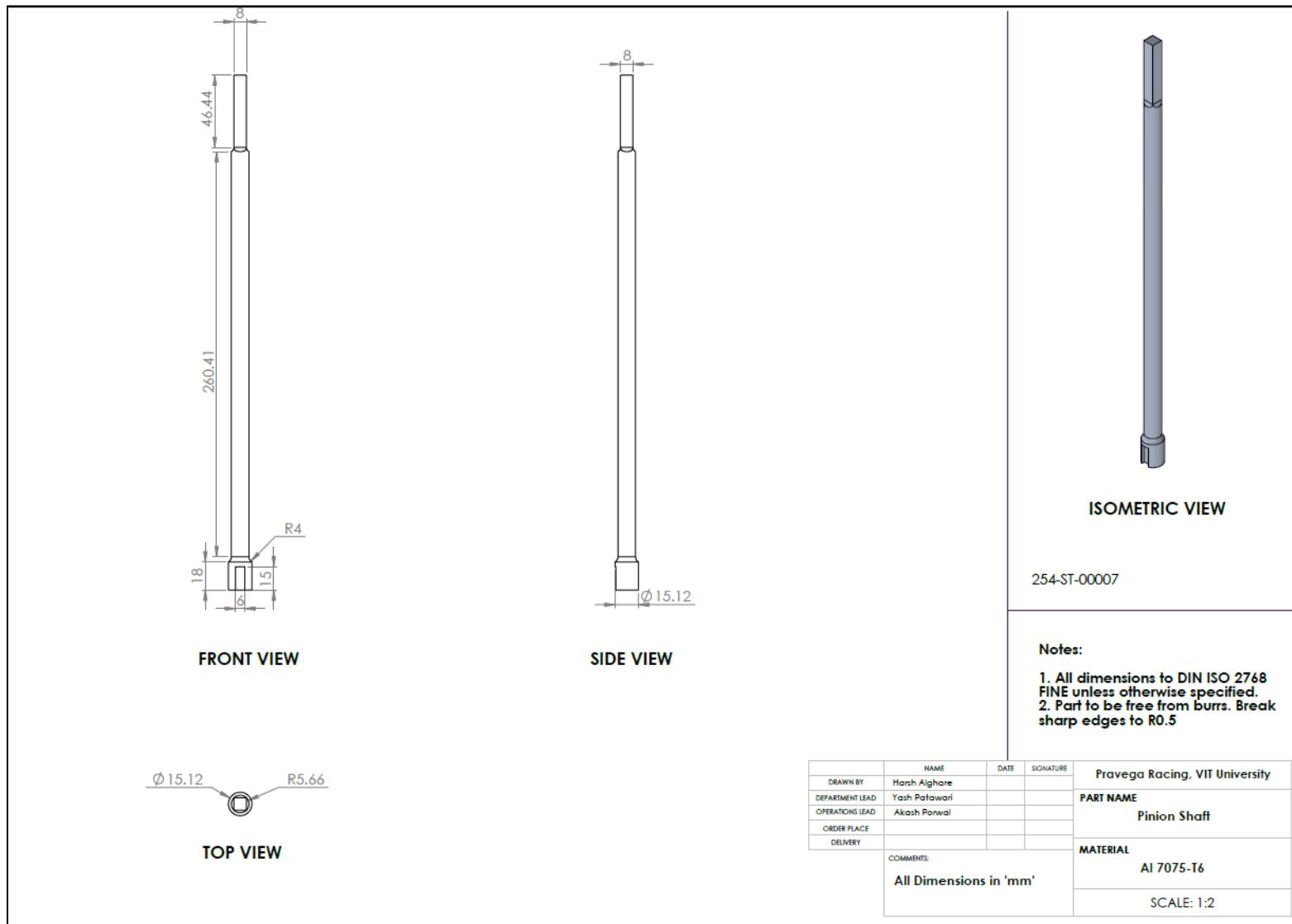
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT,Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Upper Rack Clamp
ORDER PLACE				MATERIAL
DELIVERY				AI-6061
COMMENTS: All Dimensions in mm				
SCALE: 1:1				

6. Lower Rack Clamp (254-ST-00006, Quantity – 2)

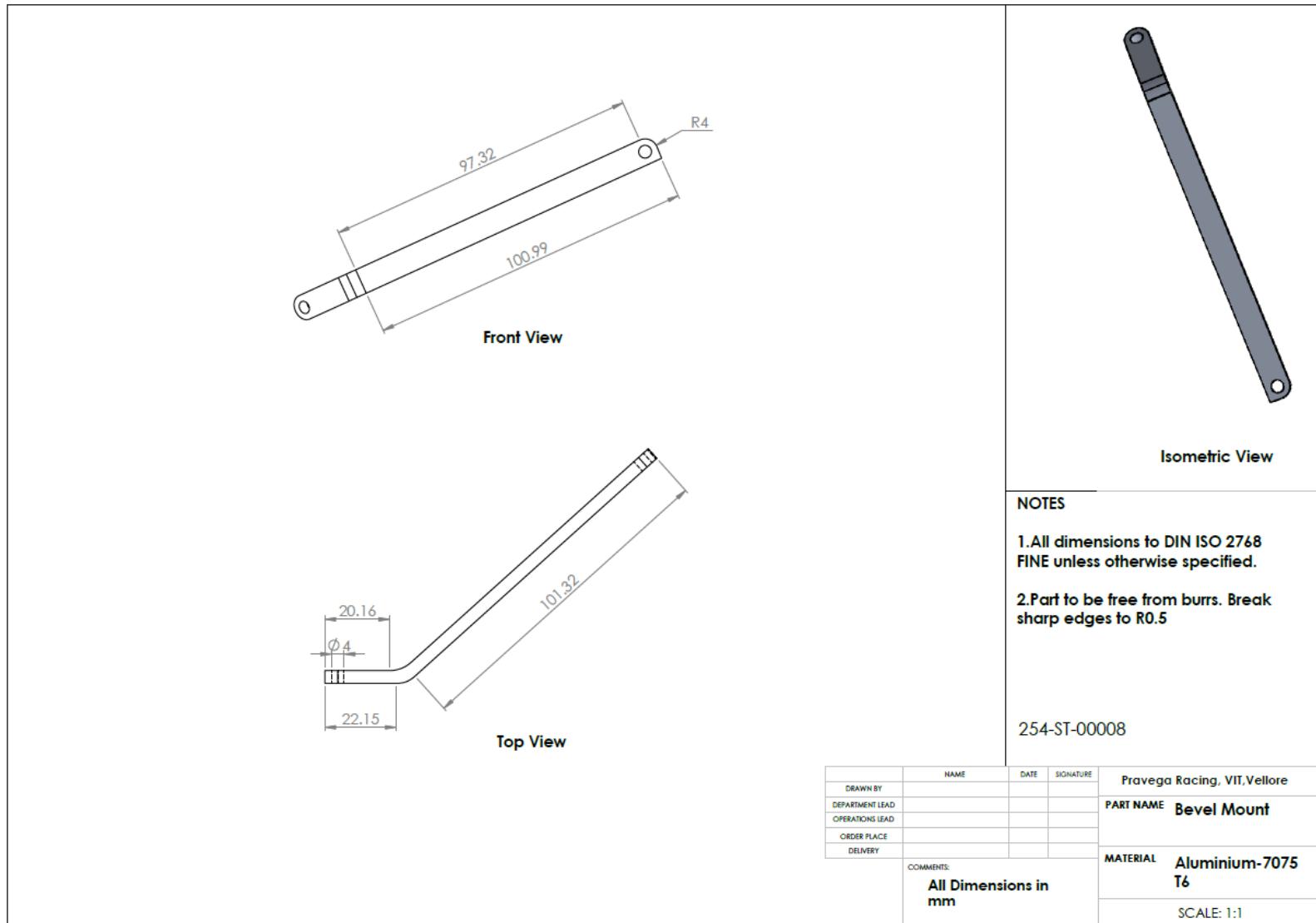
 <p>Front View</p>  <p>Top View</p>	 <p>Isometric View</p> <p>NOTES</p> <ol style="list-style-type: none">1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.2. Part to be free from burrs. Break sharp edges to R0.5 <p>254-ST-00006</p>																				
	<table border="1"><tr><td>DRAWN BY</td><td>NAME</td><td>DATE</td><td>SIGNATURE</td></tr><tr><td>DEPARTMENT LEAD</td><td></td><td></td><td></td></tr><tr><td>OPERATIONS LEAD</td><td></td><td></td><td></td></tr><tr><td>ORDER PLACE</td><td></td><td></td><td></td></tr><tr><td>DELIVERY</td><td></td><td></td><td></td></tr></table> <p>COMMENTS: All Dimensions in mm</p> <p>PART NAME Lower Clamp</p> <p>MATERIAL Al-6061</p> <p>SCALE: 1:1</p>	DRAWN BY	NAME	DATE	SIGNATURE	DEPARTMENT LEAD				OPERATIONS LEAD				ORDER PLACE				DELIVERY			
DRAWN BY	NAME	DATE	SIGNATURE																		
DEPARTMENT LEAD																					
OPERATIONS LEAD																					
ORDER PLACE																					
DELIVERY																					

Assembly- Steering Shaft (254-ST-A002)

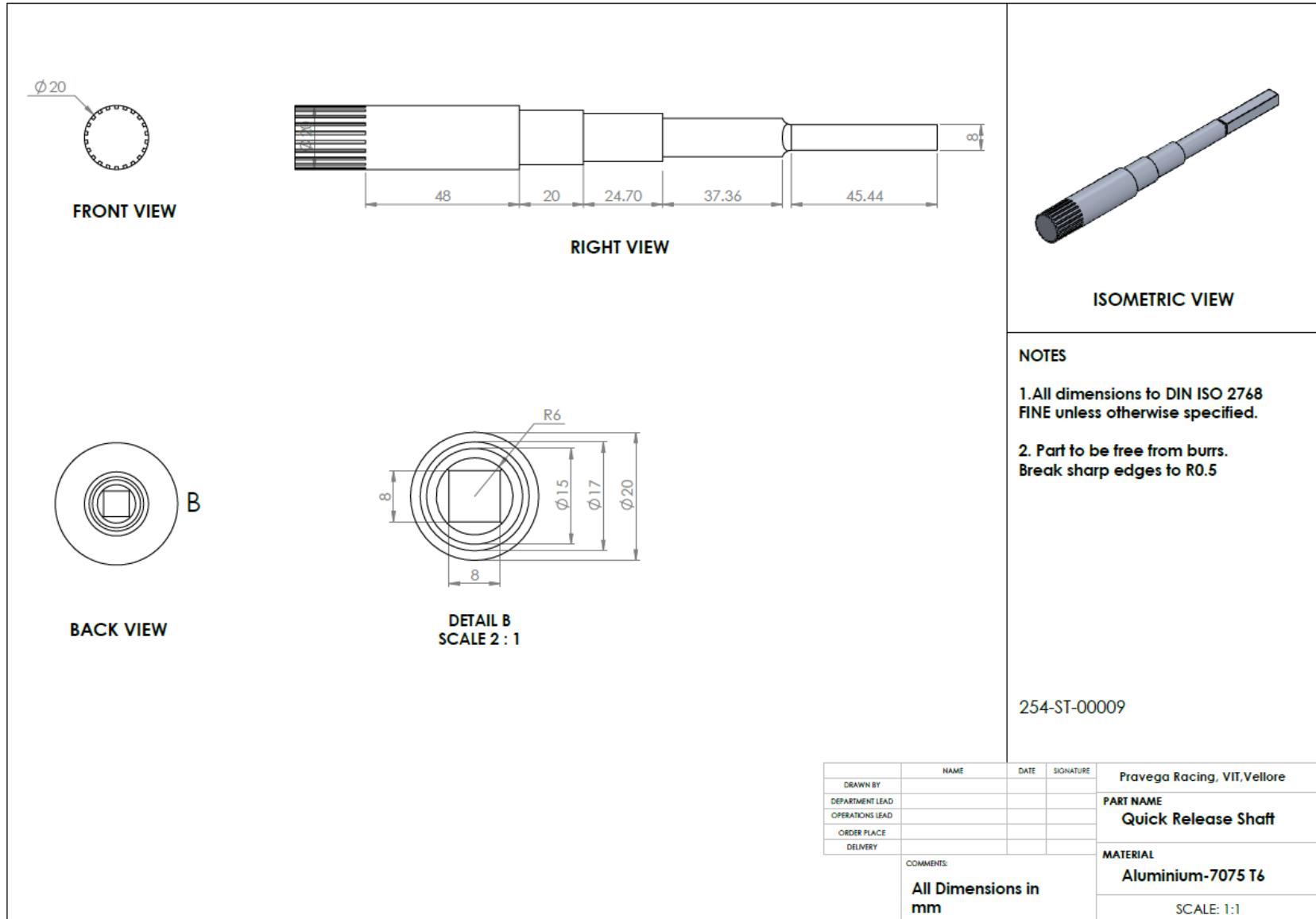
1. Pinion Shaft (254-ST-00007, Quantity – 1)



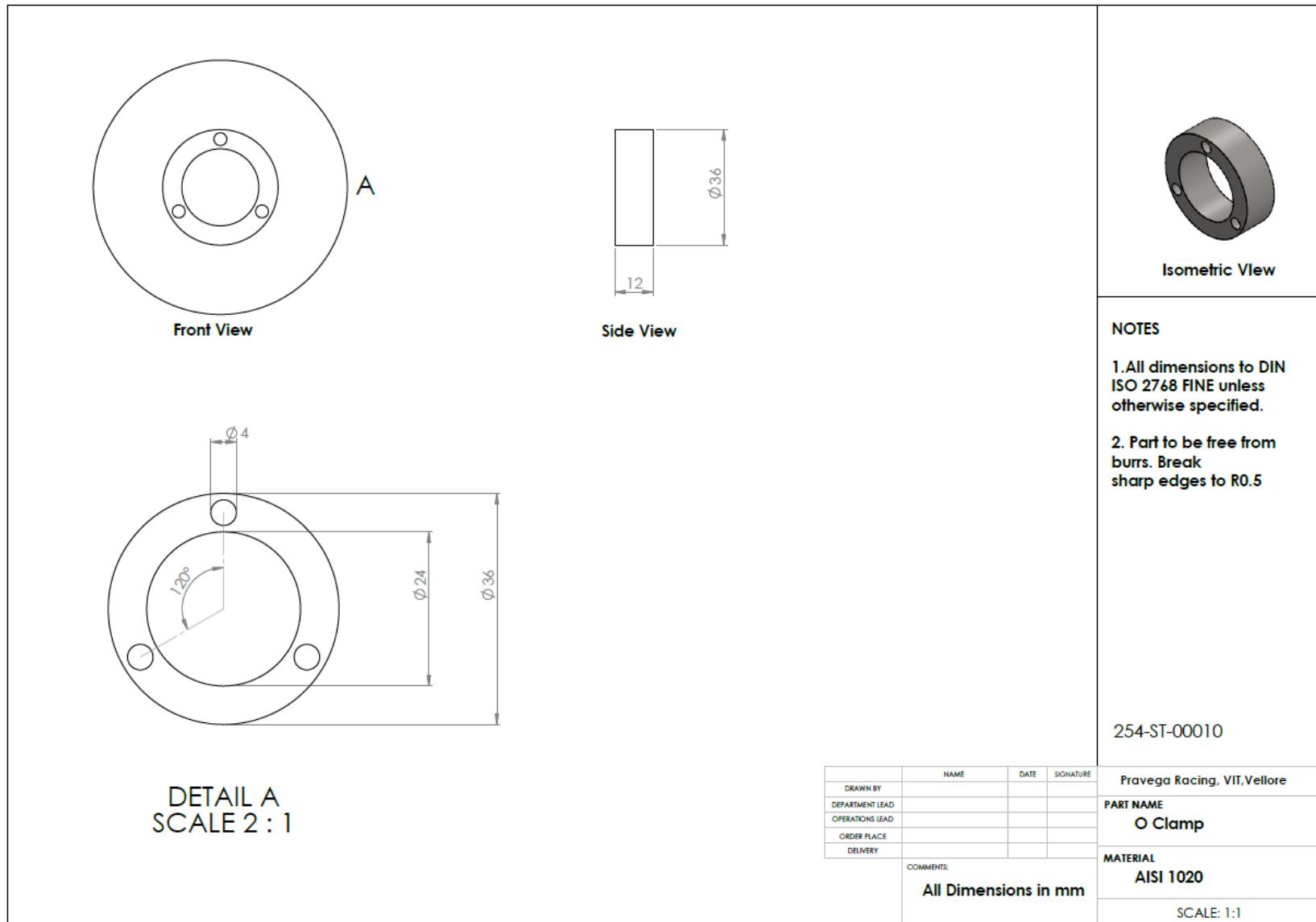
2. Bevel Casing Mount (254-ST-0008, Quantity – 2)



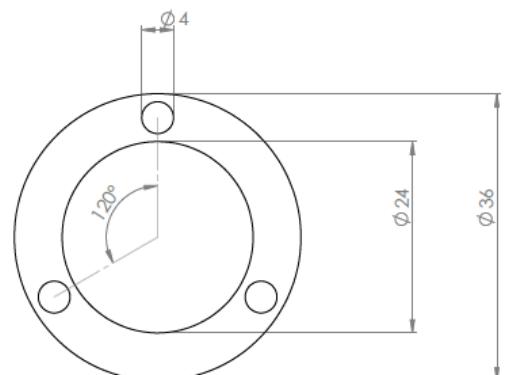
3. Steering Shaft (254-ST-00009, Quantity – 1)



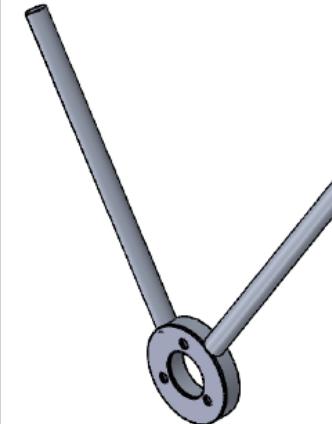
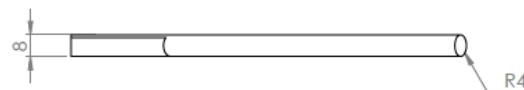
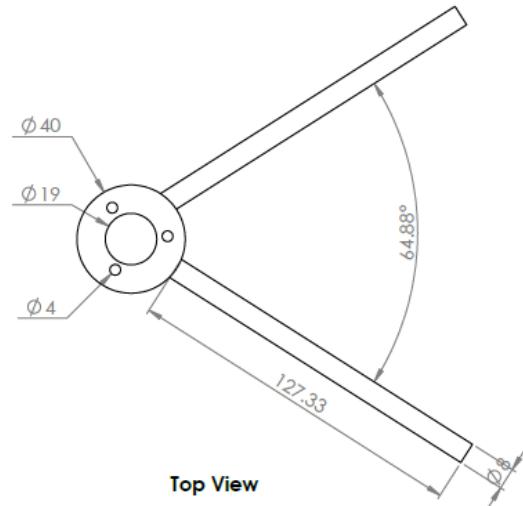
4. O Clamp (254-ST-00010, Quantity – 1)



DETAIL A
SCALE 2 : 1



5. O Clamp Mount (254-ST-00011, Quantity – 2)



Isometric View

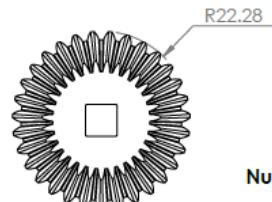
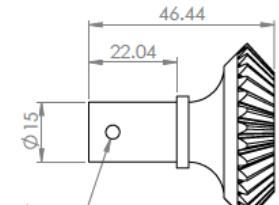
NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-ST-00011

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				O clamp mount
ORDER PLACE				MATERIAL
DELIVERY				AISI 1020
COMMENTS:				
All Dimensions in mm				
SCALE: 1:1.5				

6. Bevel Gear (254-ST-00012, Quantity – 2)



Number of teeth - 31

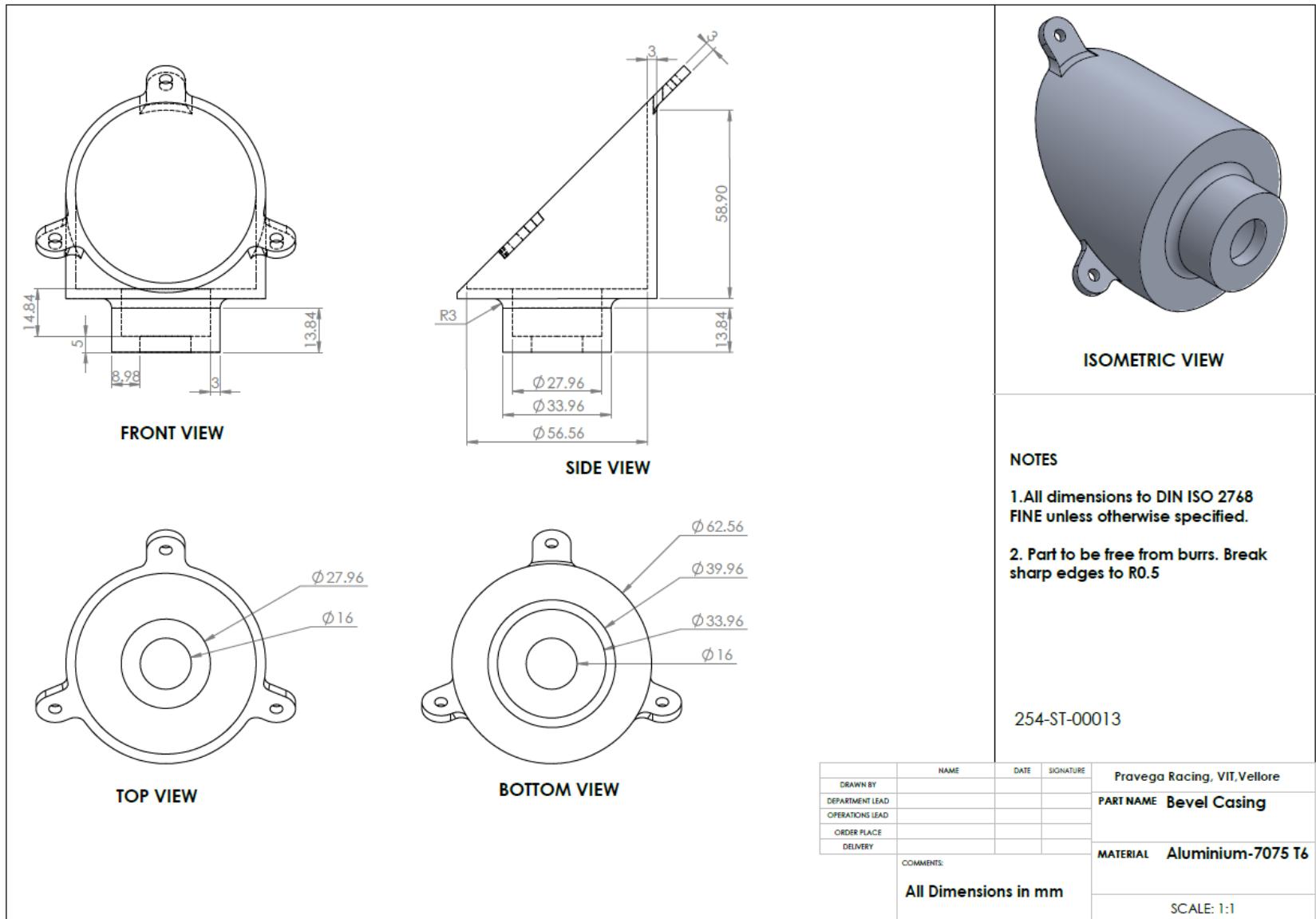
NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

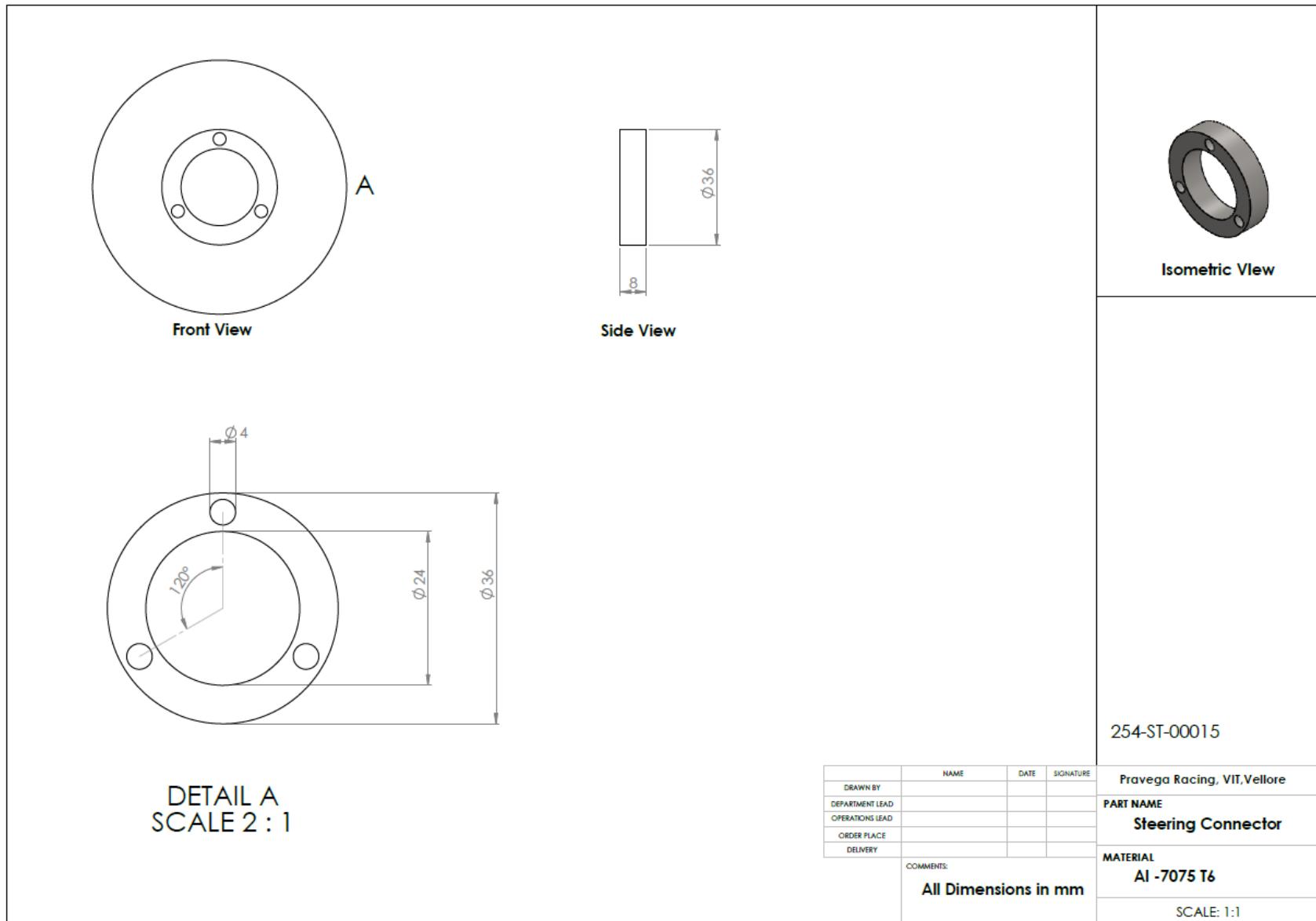
254-ST-00012

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT,Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Bevel Gear
ORDER PLACE				MATERIAL
DELIVERY				AISI 4340 (EN -24)
COMMENTS: All Dimensions in mm				
SCALE: 1:1				

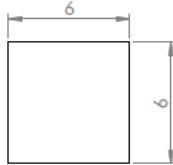
7. Bevel Casing (254-ST-00013, Quantity – 2)



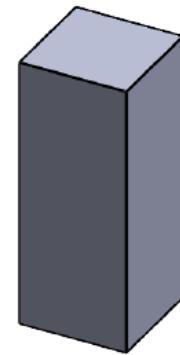
8. O Clamp Connector (254-ST-00014, Quantity – 1)



9. Square Key (254-ST-00017, Quantity – 1)



Top View



Isometric View



Front View

NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

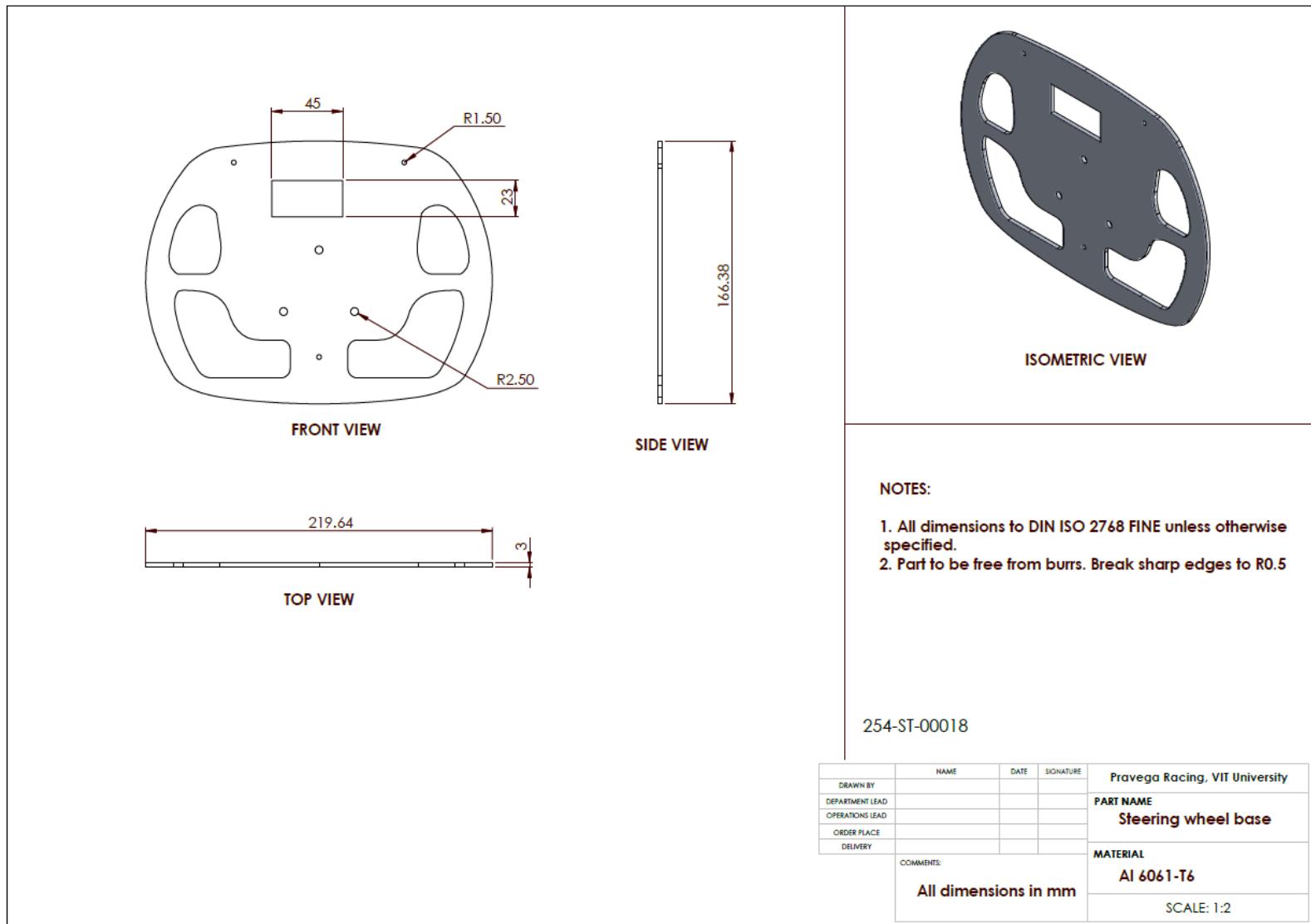
2. Part to be free from burrs.
Break sharp edges to R0.5

254-ST-00017

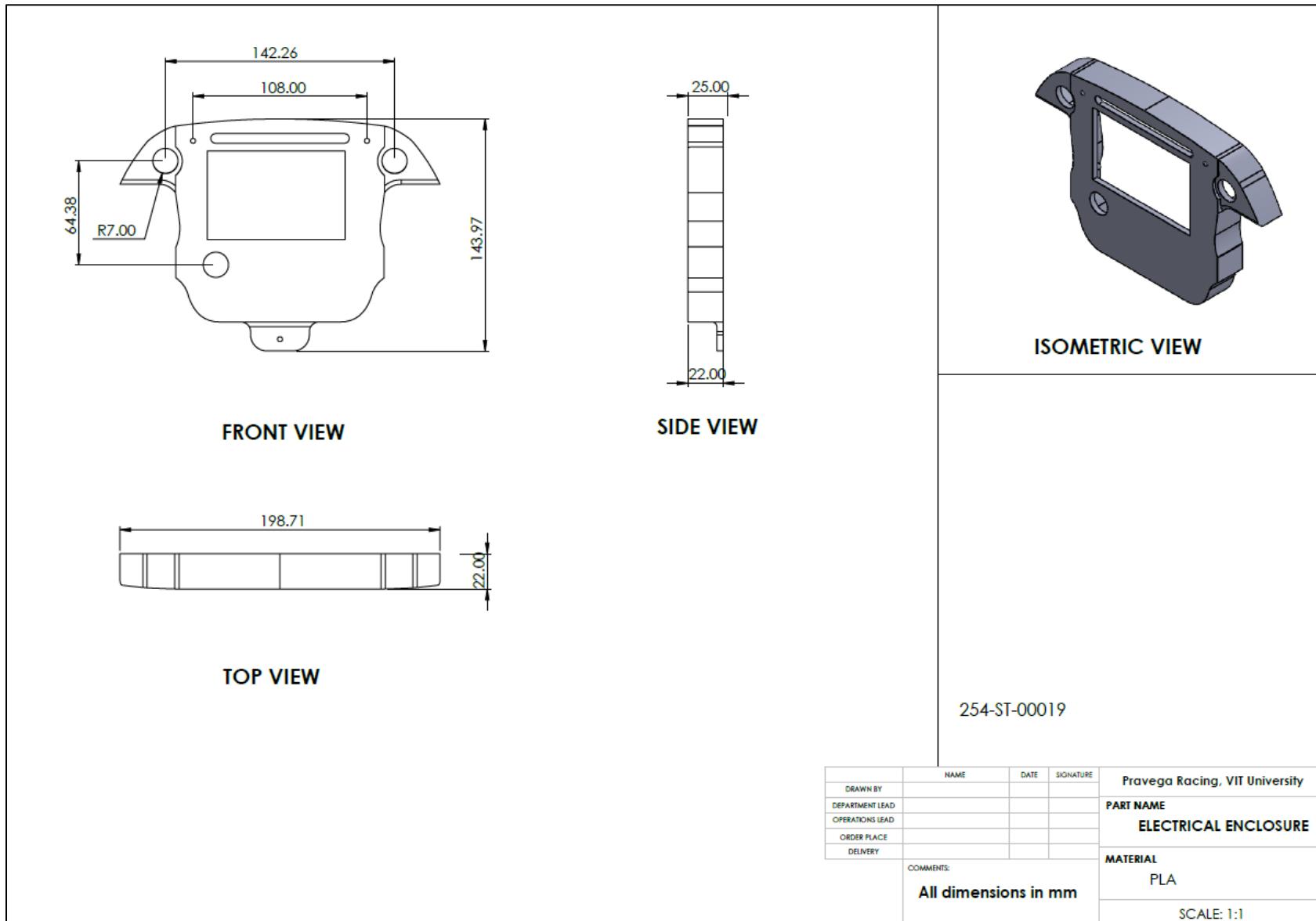
DRAWN BY	NAME	DATE	SIGNATURE
DEPARTMENT LEAD			
OPERATIONS LEAD			
ORDER PLACE			
DELIVERY			
COMMENTS:	All Dimensions in mm		
	AISI 1020		
	SCALE: 5:1		

Assembly – Steering Wheel (254-ST-A003)

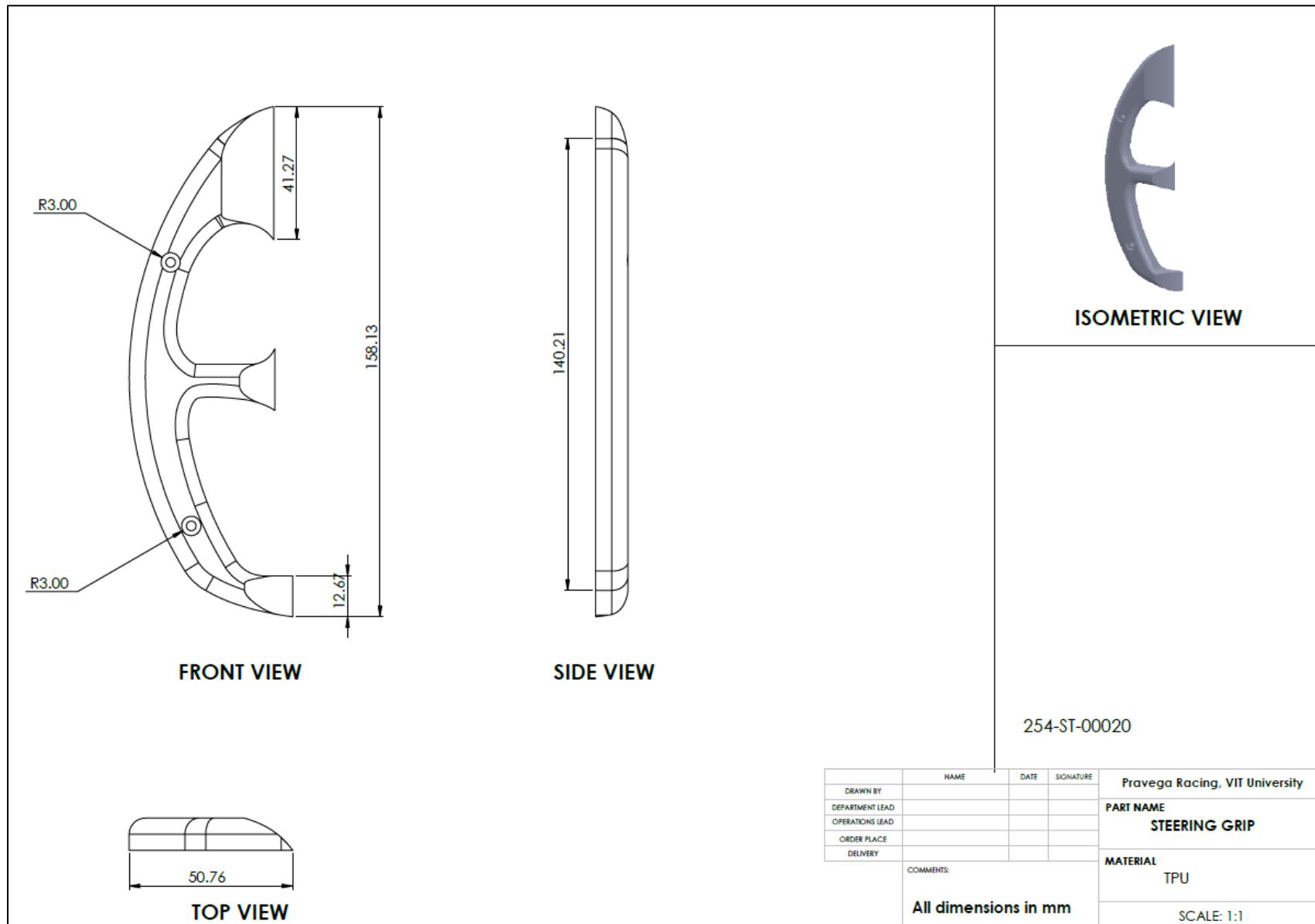
1. Steering Wheel Base (254-ST-00018, Quantity – 1)



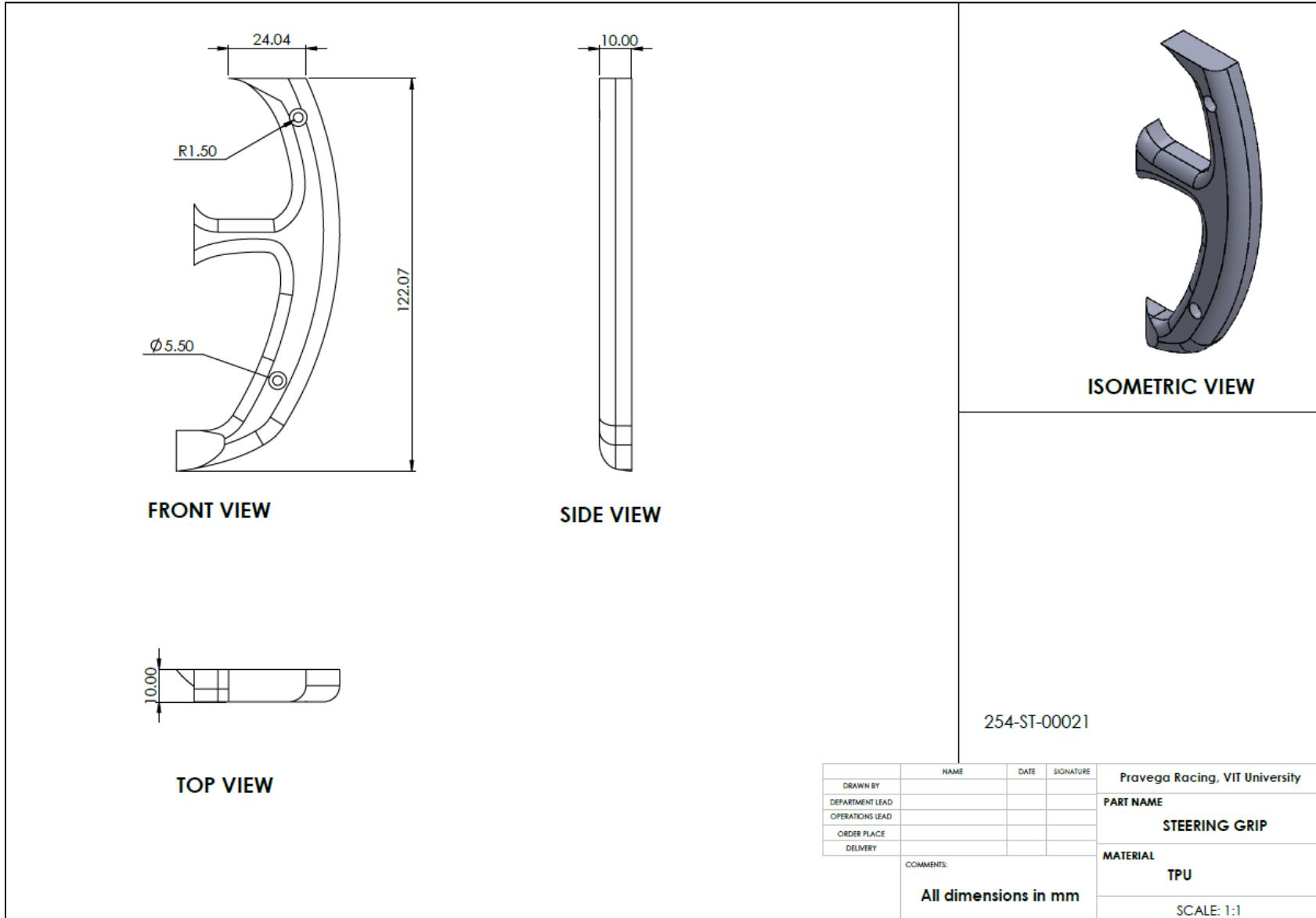
2. Electronic Housing (254-ST-00019, Quantity – 1)



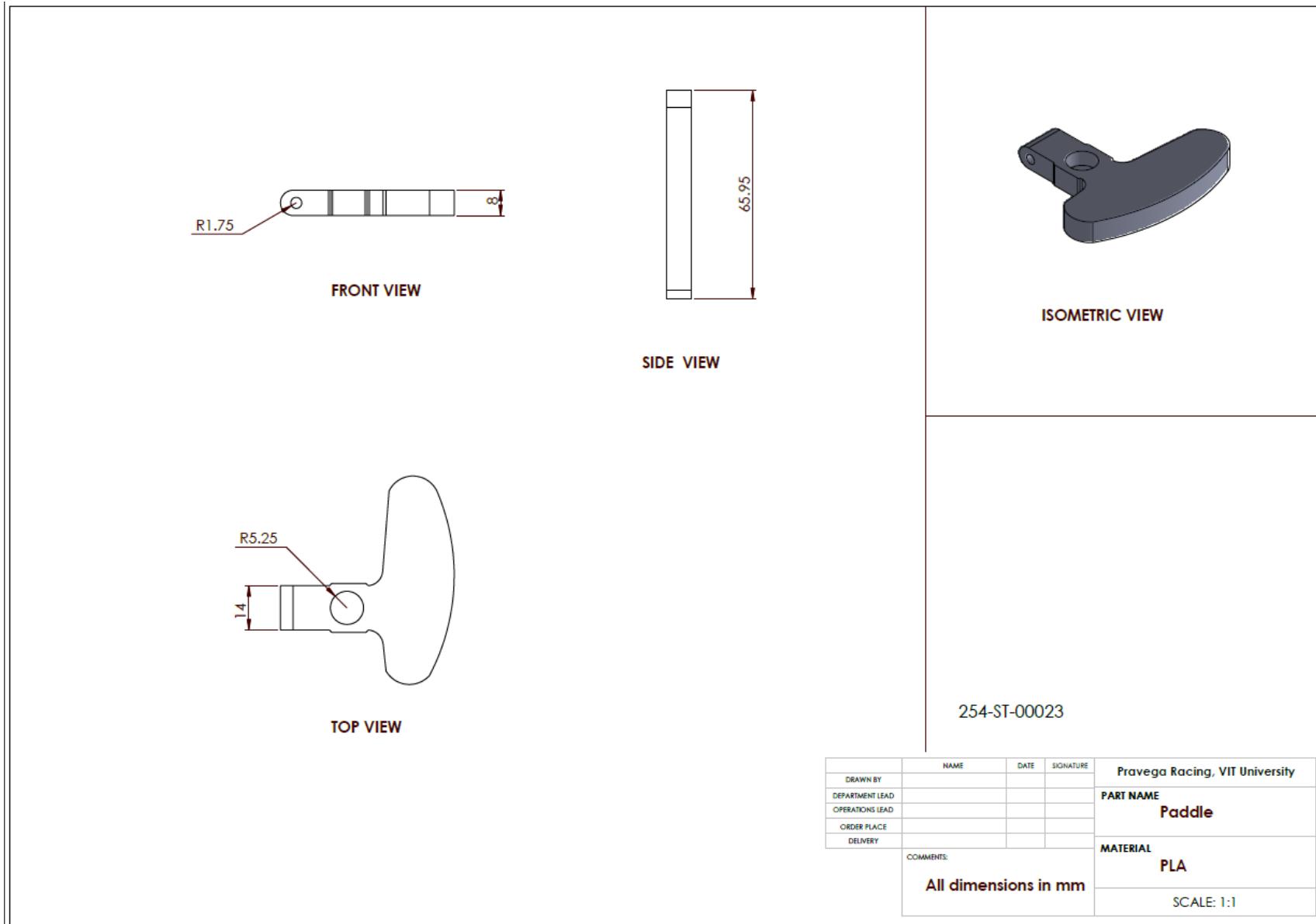
3. Steering Wheel Lower Grip (254-ST-00020, Quantity – 2)



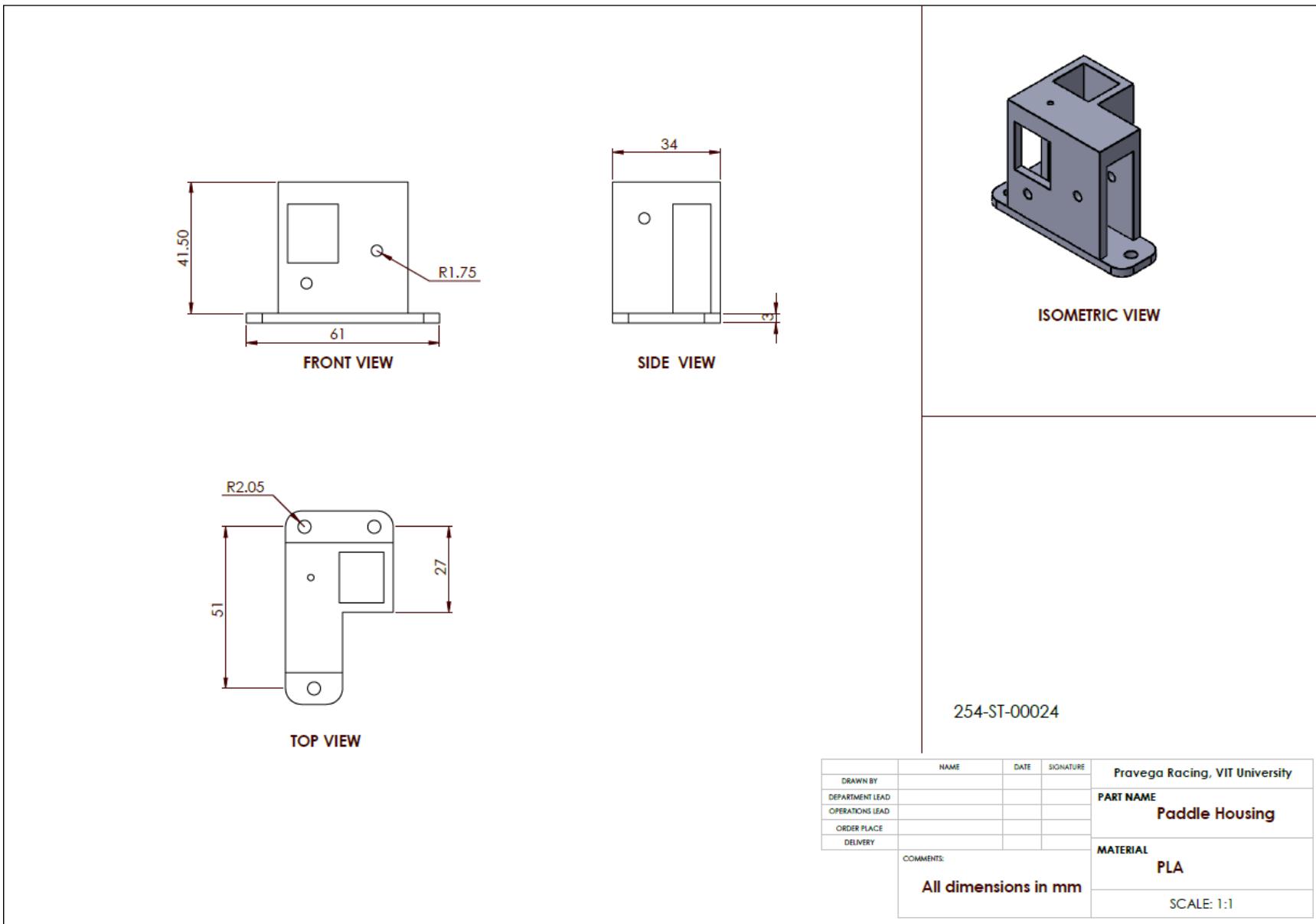
4. Steering Wheel Upper Grip (254-ST-00021, Quantity – 2)



5. Paddles (254-ST-00023, Quantity – 2)

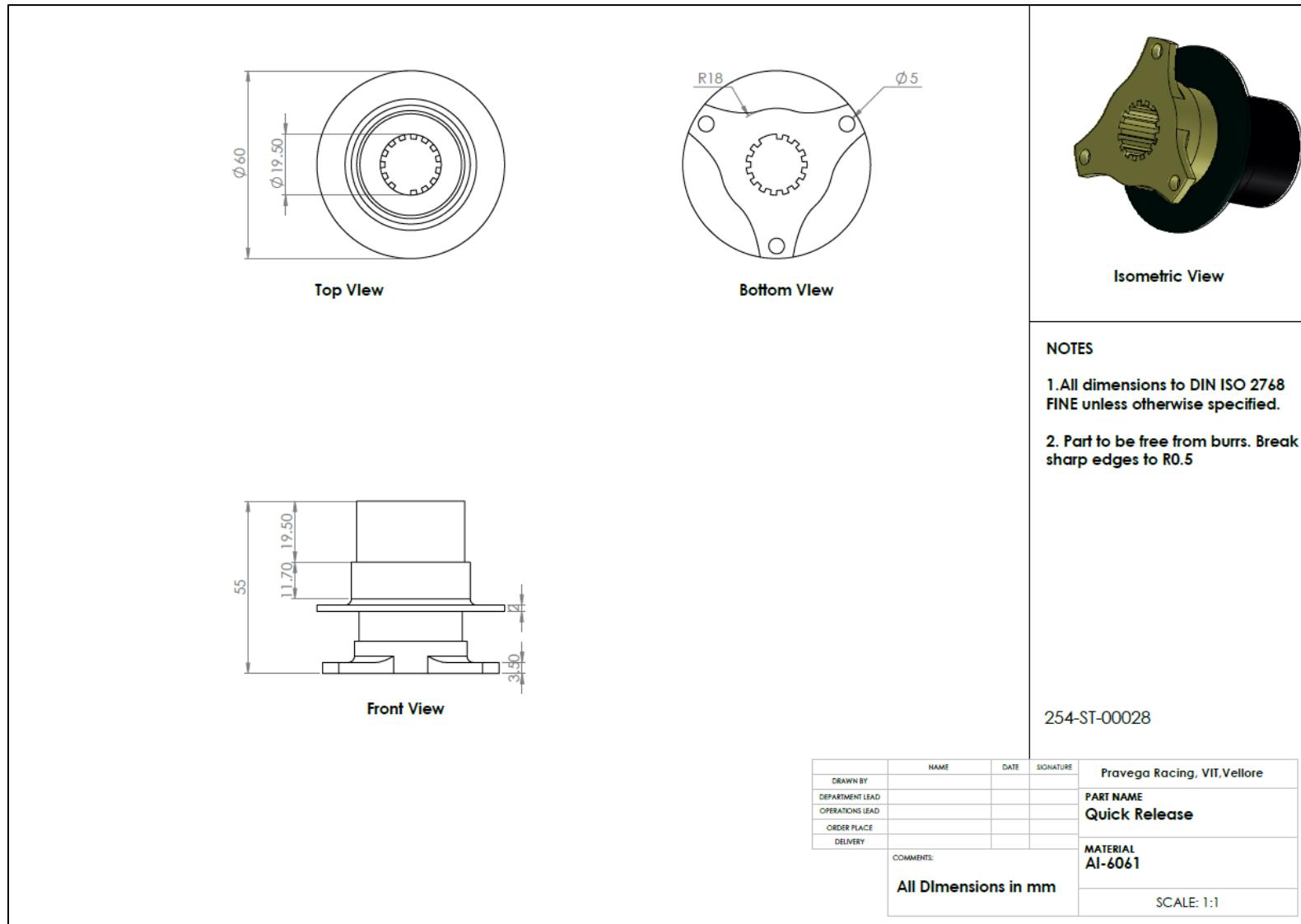


6. Paddle Housing (254-ST-00024, Quantity – 2)



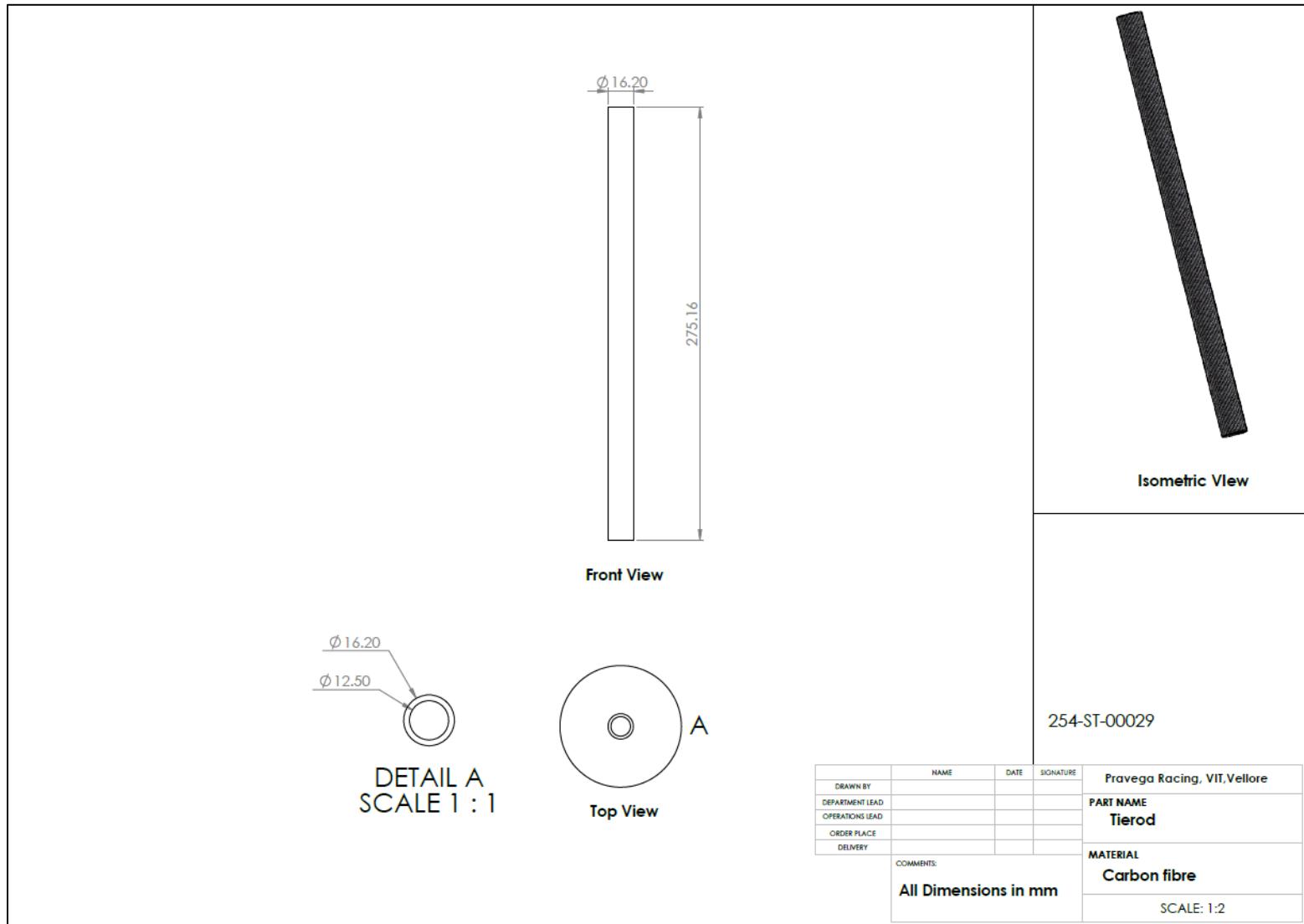
Assembly – Steering Wheel Quick Release (254-ST-A004)

1. Quick Release (254-ST-00028, Quantity – 1)

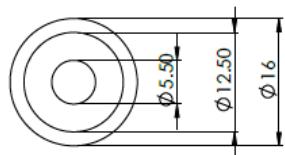


Assembly – Tie Rods (254-ST-A005)

1. Tie Rod Tube (254-ST-00029, Quantity – 2)



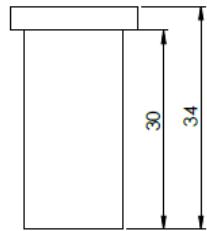
2. Tie Rod Insert (254-ST-00032, Quantity – 4)



Top View



Isometric View



Front View

NOTES

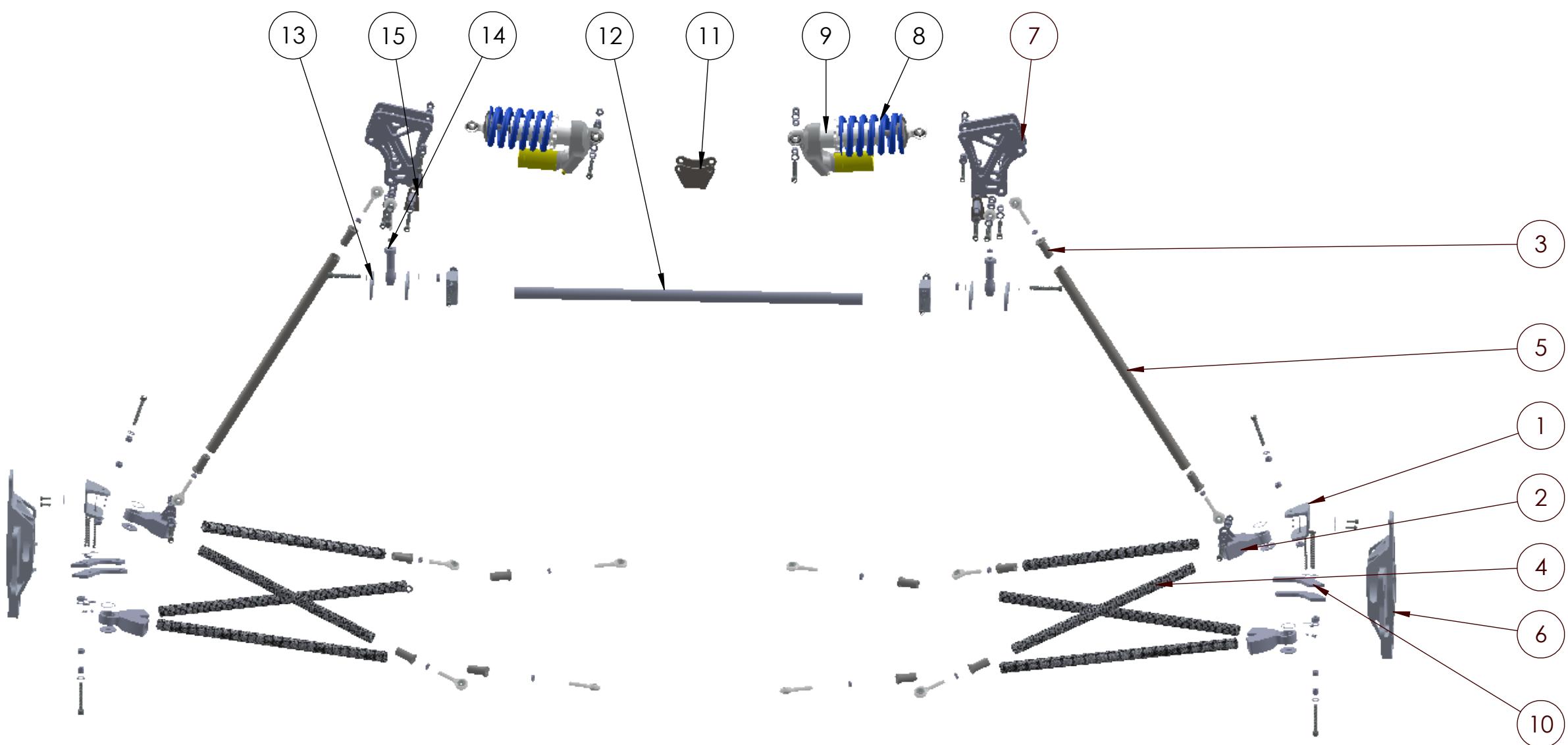
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs.
Break sharp edges to R0.5

254-ST-00032

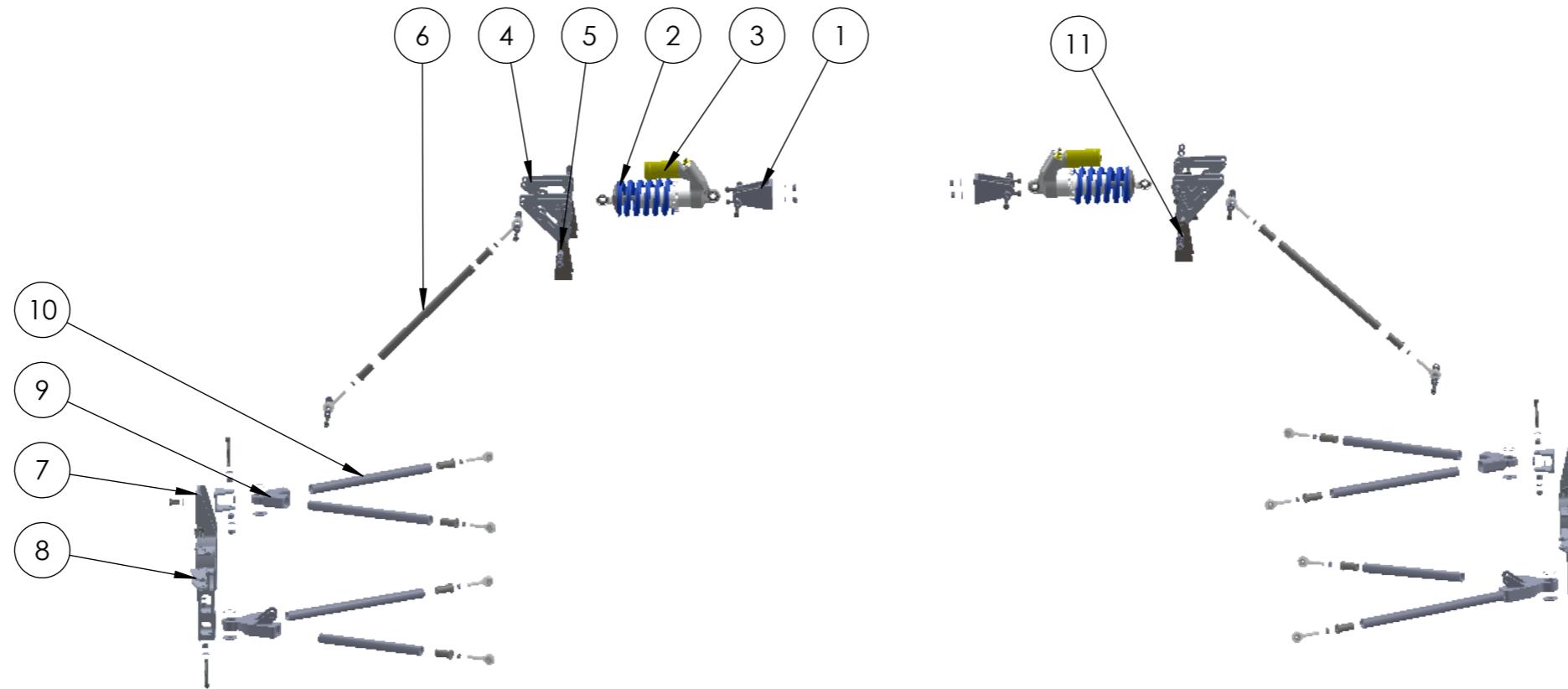
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT, Vellore
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Insert
ORDER PLACE				MATERIAL
DELIVERY				AI - 7075
COMMENTS:				
All dimensions in mm				
SCALE: 2:1				

FRONT SUSPENSION ASSEMBLY



ITEM NO.	PART NUMBER	PART NAME	MATERIAL	QTY.
1	254-SU-00059	Front upright bracket	AI 7075 T6	2
2	254-SU-00008	A-arm plate	AI 7075 T6	4
3	254-SU-00012	A-arm insert	AI 7075 T6	12
4	254-SU-00011	A-arm tube	CFRP	8
5	254-SU-00064	Pushrod tube	CFRP	2
6	254-SU-00057	Front Upright	AI 7075 T6	2
7	254-SU-00046	Bell crank plates	AI 6061 T6	4
8	254-SU-00075	Suspension spring	BOUGHT	2
9	254-SU-00050	Damper	BOUGHT	2
10	254-SU-00060	Steering flange	AI 7075 T6	4
11	254-FR-00055	Damper mount tab	AISI 1020	2
12	254-SU-00031	Front ARB shaft	AI 7075 T6	1
13	254-SU-00033	Front ARB moment arm	AI 7075 T6	2
14	254-SU-00032	Front ARB flange	AI 7075 T6	4
15	254-FR-00053	Bell crank tab	AISI 1020	4

REAR SUSPENSION ASSEMBLY

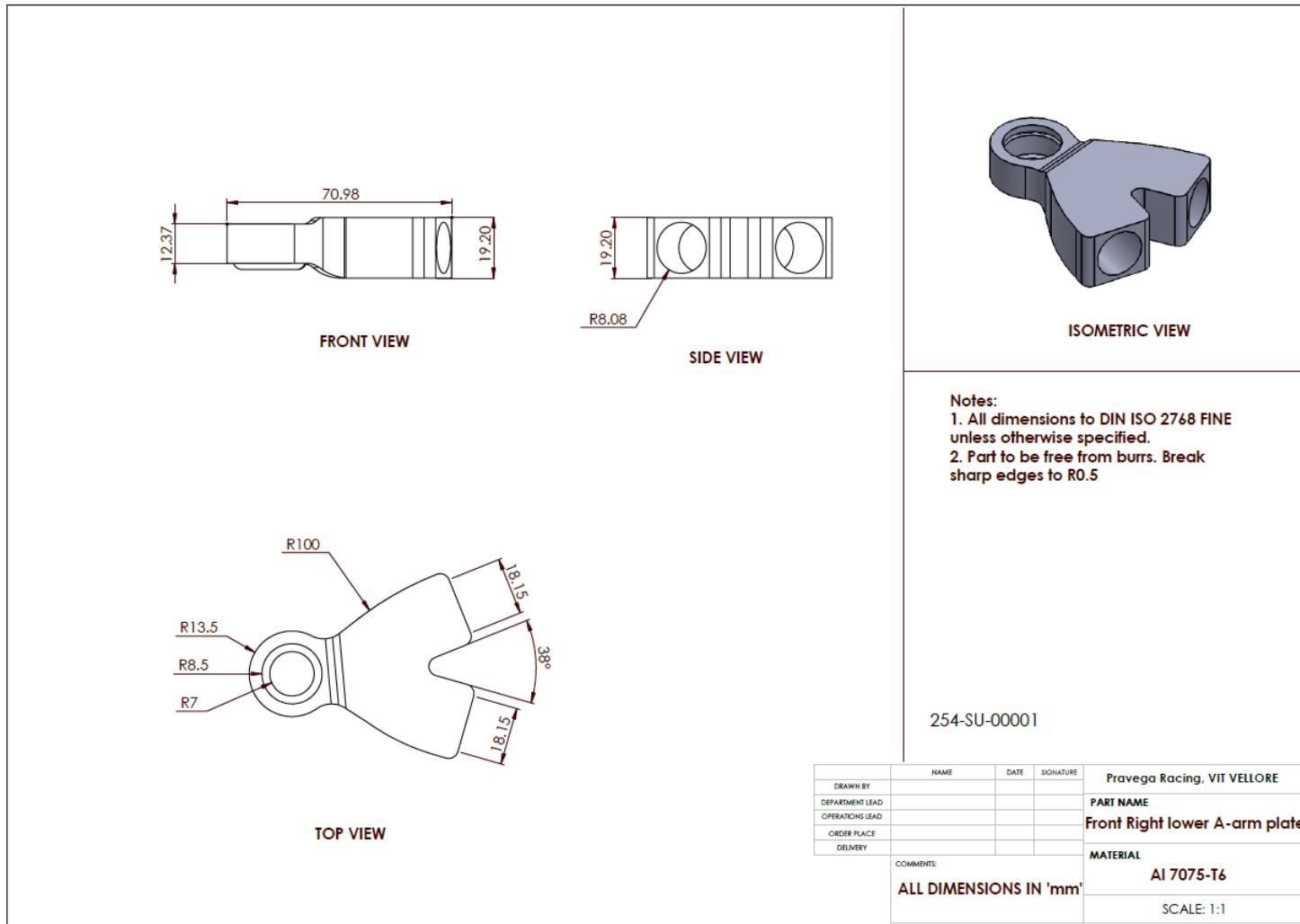


ITEM NO.	PART NUMBER	PART NAME	MATERIAL	QTY.
1	254-FR-00055	Damper Mount	BOUGHT	2
2	254-SU-00076	Suspension Spring	BOUGHT	2
3	254-SU-00053	Damper	BOUGHT	2
4	254-SU-00048	Bell crank plates	AI 6061-T6	4
5	254-FR-00054	Bell crank tabs	AISI 1020	5
6	254-SU-00067	Pushrod tube	CFRP	2
7	254-SU-00070	Rear upright	AI 7075-T6	2
8	254-SU-00072	Toe link flange	AI 7075 T6	4
9	254-SU-00025	A-arm plates	AISI 1020	4
10	254-SU-00026	A-arm tubes	CFRP	8
11	254-SU-00049	Bell crank sleeve	AI 6061-T6	2

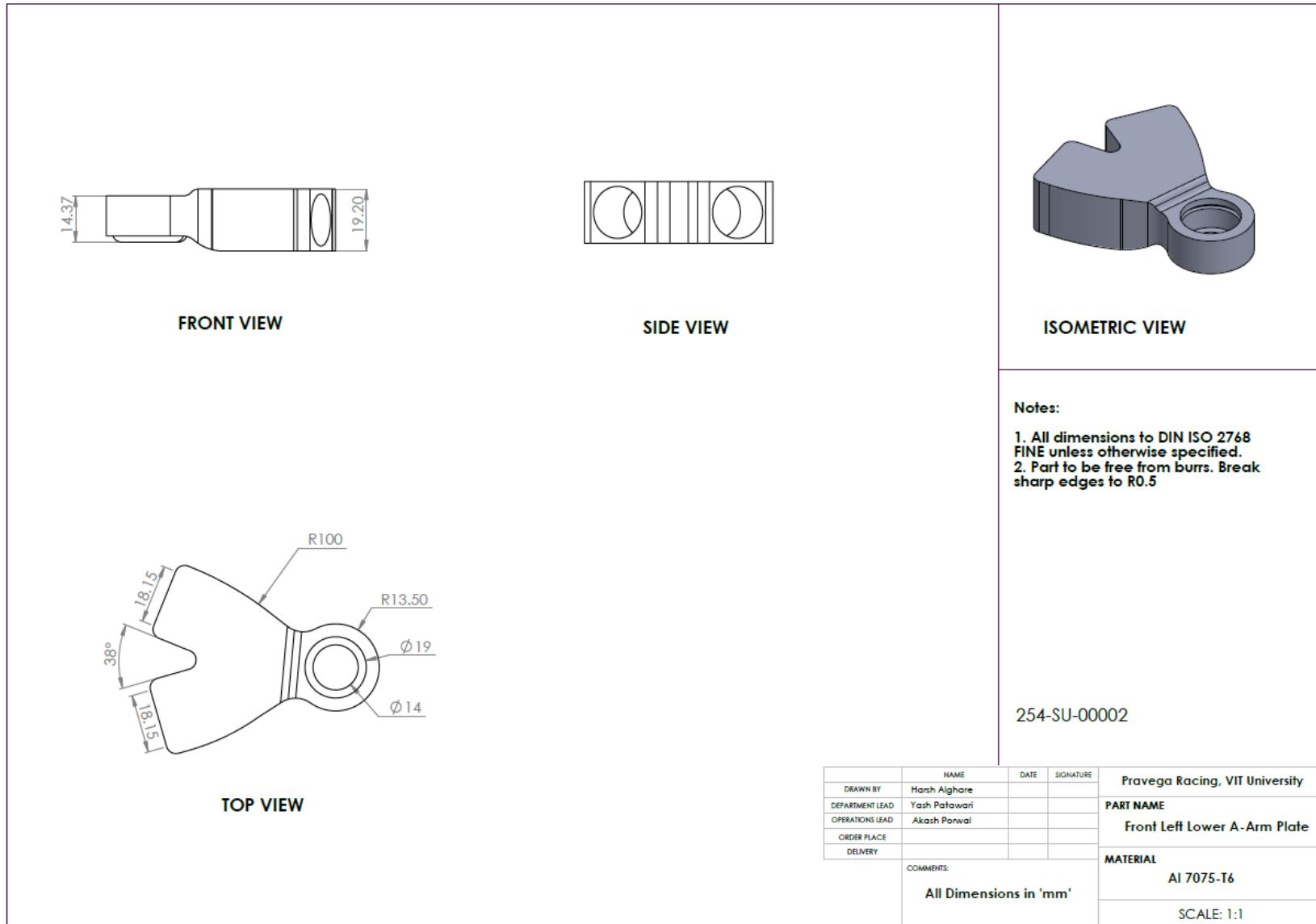
SUSPENSION SYSTEM (SU)

Assembly:A-Arms Front Lower (254-SU-A001)

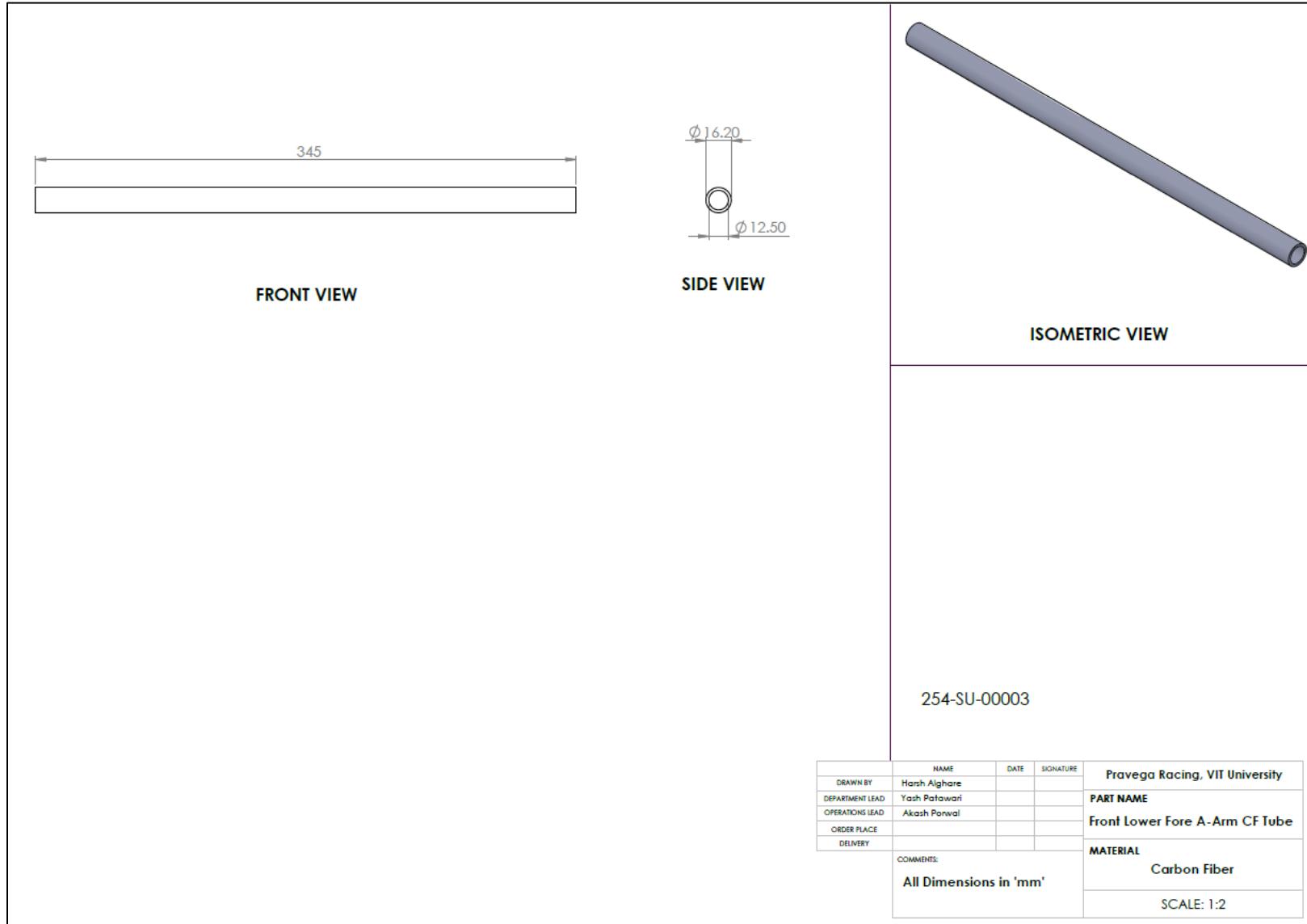
1. A-Arm Plate right (254-SU-00001, Quantity - 1)



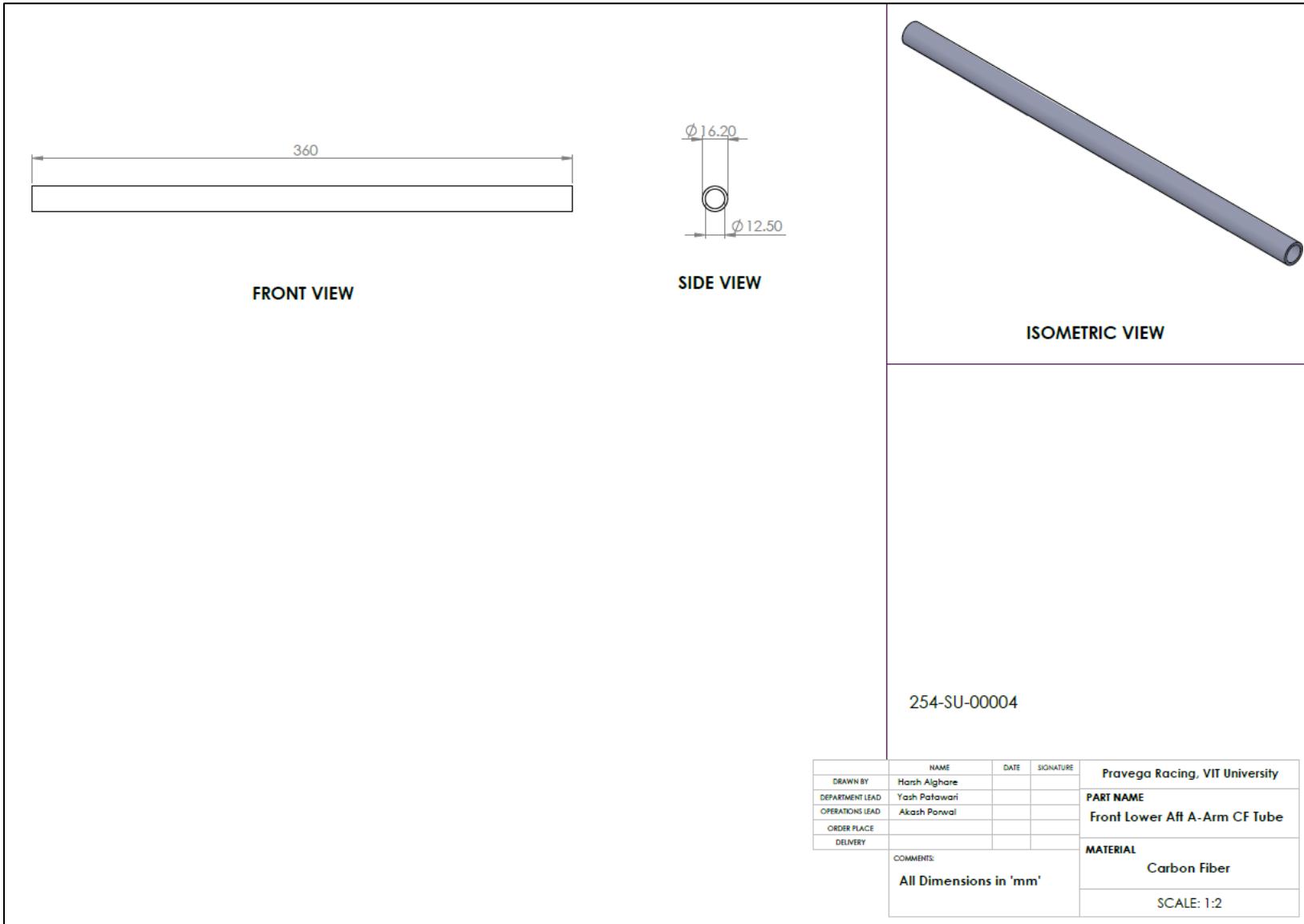
2. A-Arm Plate Left (254-SU-00002, Quantity - 1)



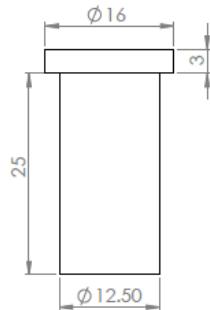
3. A-Arm fore CF tube (254-SU-00003, Quantity - 2)



4. A-Arm aft CF tube (254-SU-00004, Quantity - 2)



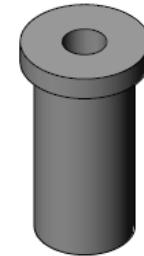
5. Inserts (254-SU-00005, Quantity – 4)



FRONT VIEW



TOP VIEW



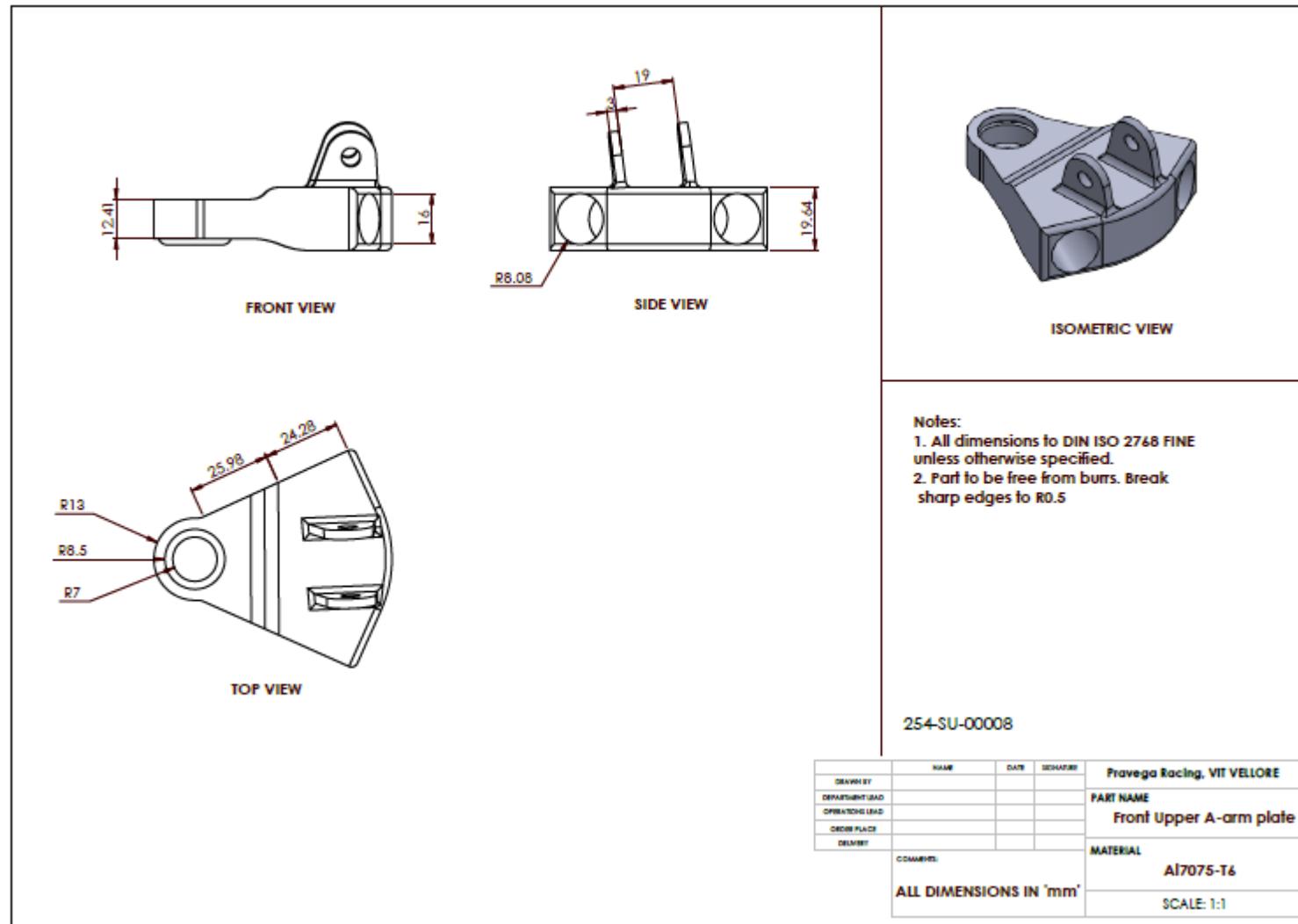
ISOMETRIC VIEW

254-SU-00005

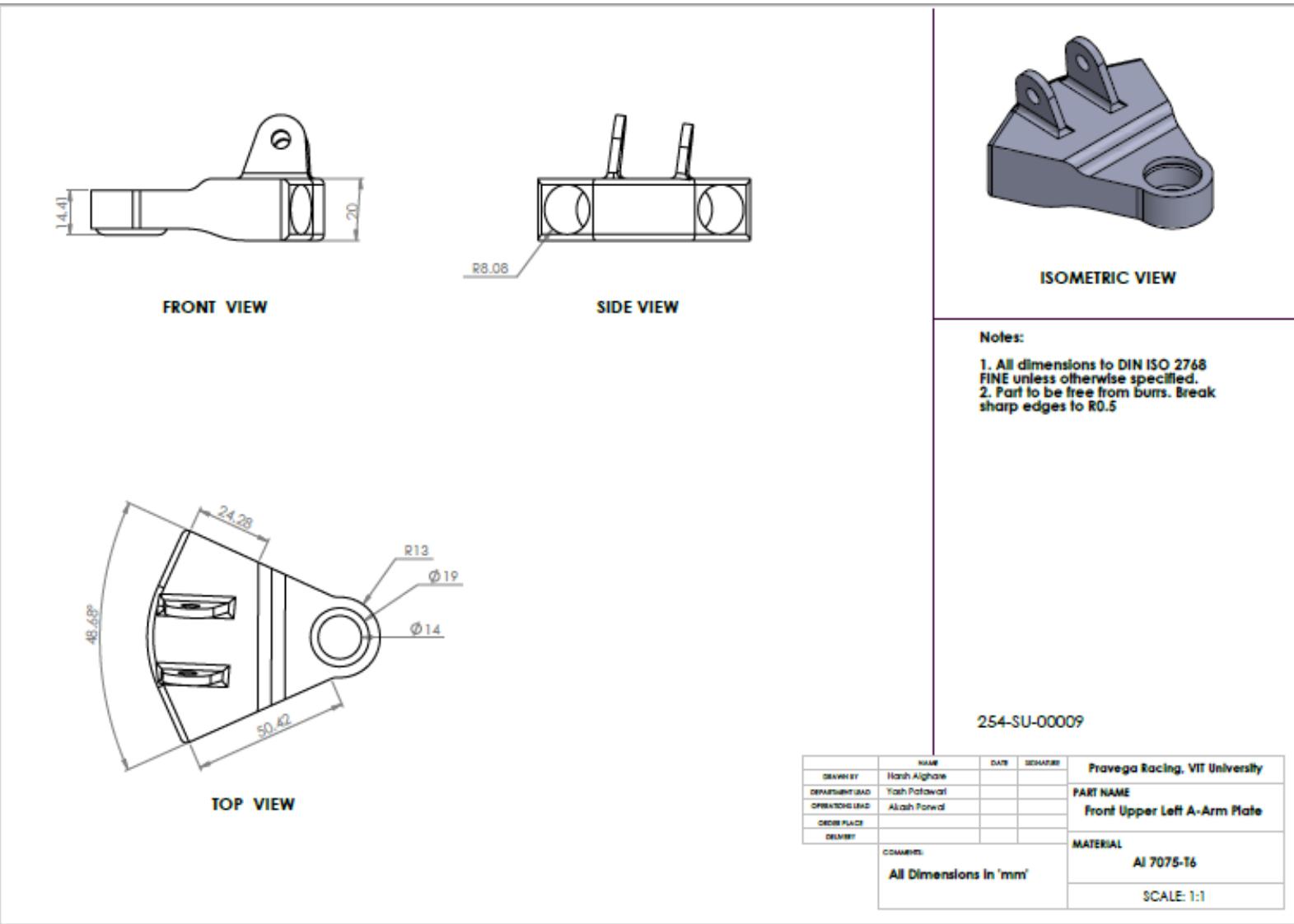
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Patawari			PART NAME
OPERATIONS LEAD	Akash Porwal			Insert
ORDER PLACE				MATERIAL
DELIVERY				AI 7075 T6
COMMENTS: All Dimensions in 'mm'				SCALE: 2:1

Assembly:A-Arms Front Upper (254-SU-A002)

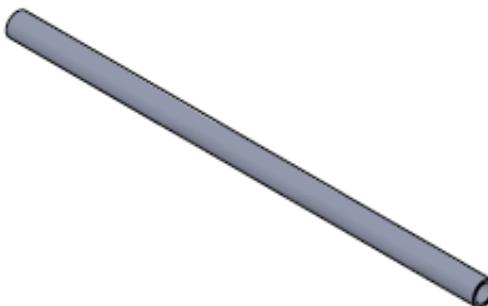
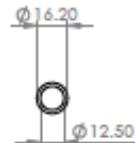
1. A-Arm Plate right (254-SU-00008, Quantity - 1)



2. A-Arm Plate left (254-SU-00009, Quantity - 1)



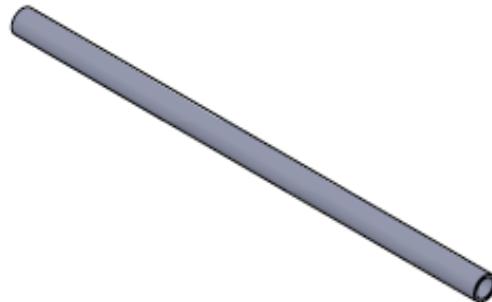
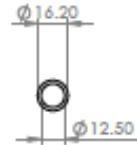
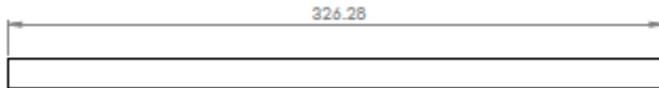
3. A-Arm fore CF tube (254-SU-00010, Quantity - 2)



254-SU-00010

DRAWN BY	NAME	DATE	ISSUED BY	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Patowar		PART NAME	Front Upper A-Arm Fore CF Tube
OPERATIONS LEAD	Akash Pawar		MATERIAL	Carbon Fiber
CORR PLACE			COMMENTS:	All Dimensions In 'mm'
DRAWN BY			SCALE:	1:2

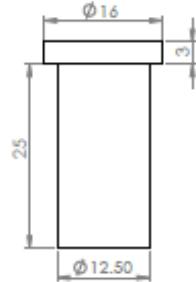
4. A-Arm aft CF tube (254-SU-00011, Quantity - 2)



254-SU-00011

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Patowari			PART NAME
OPERATIONS LEAD	Aakash Purohit			Front Upper A-Arm Aft CF Tube
DRAWN PLACE				MATERIAL
DRAFTER				Carbon Fiber
COMMENTS:				SCALE: 1:2
All Dimensions In 'mm'				

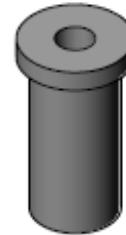
5. Inserts (254-SU-00012, Quantity – 4)



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

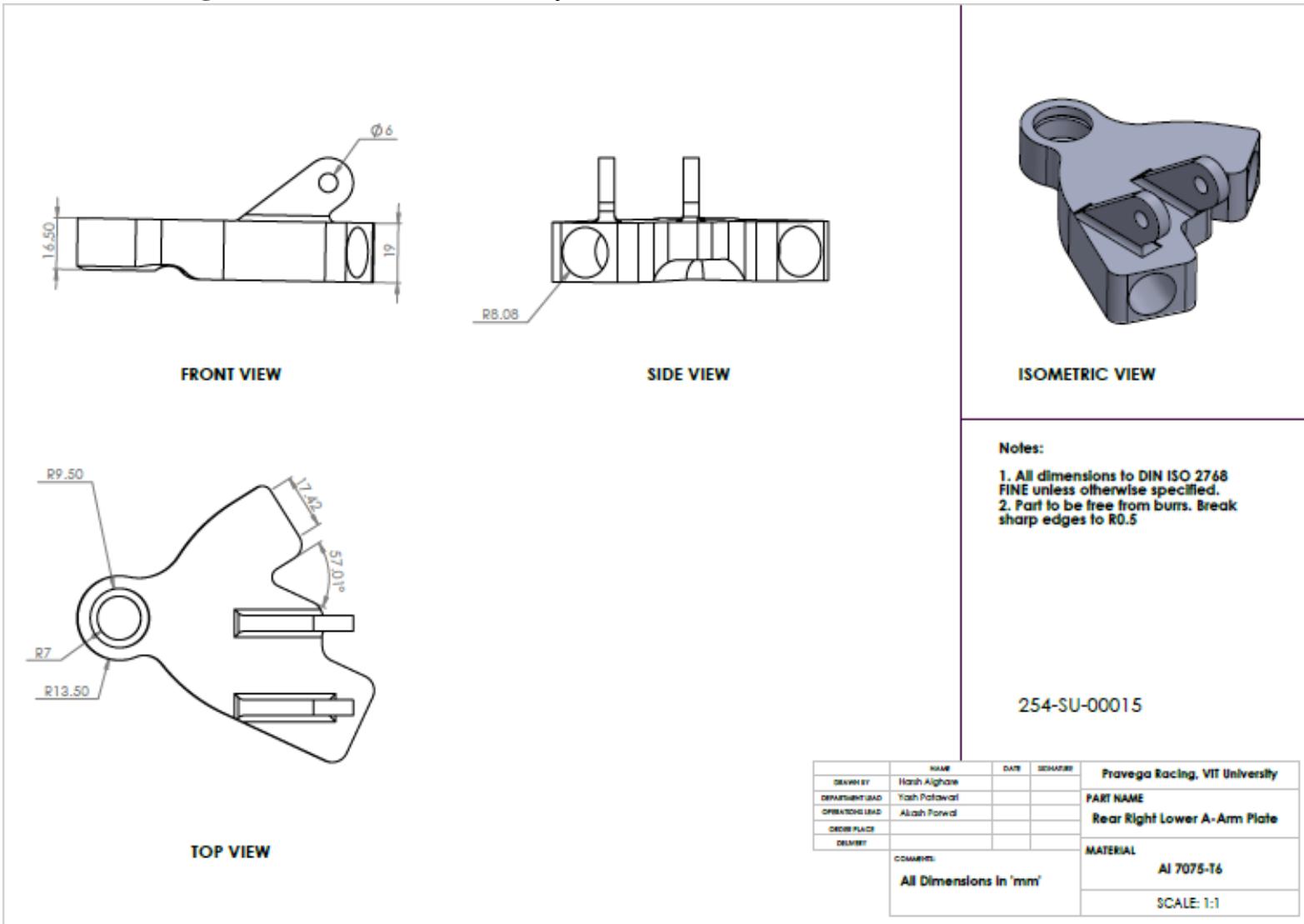
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00012

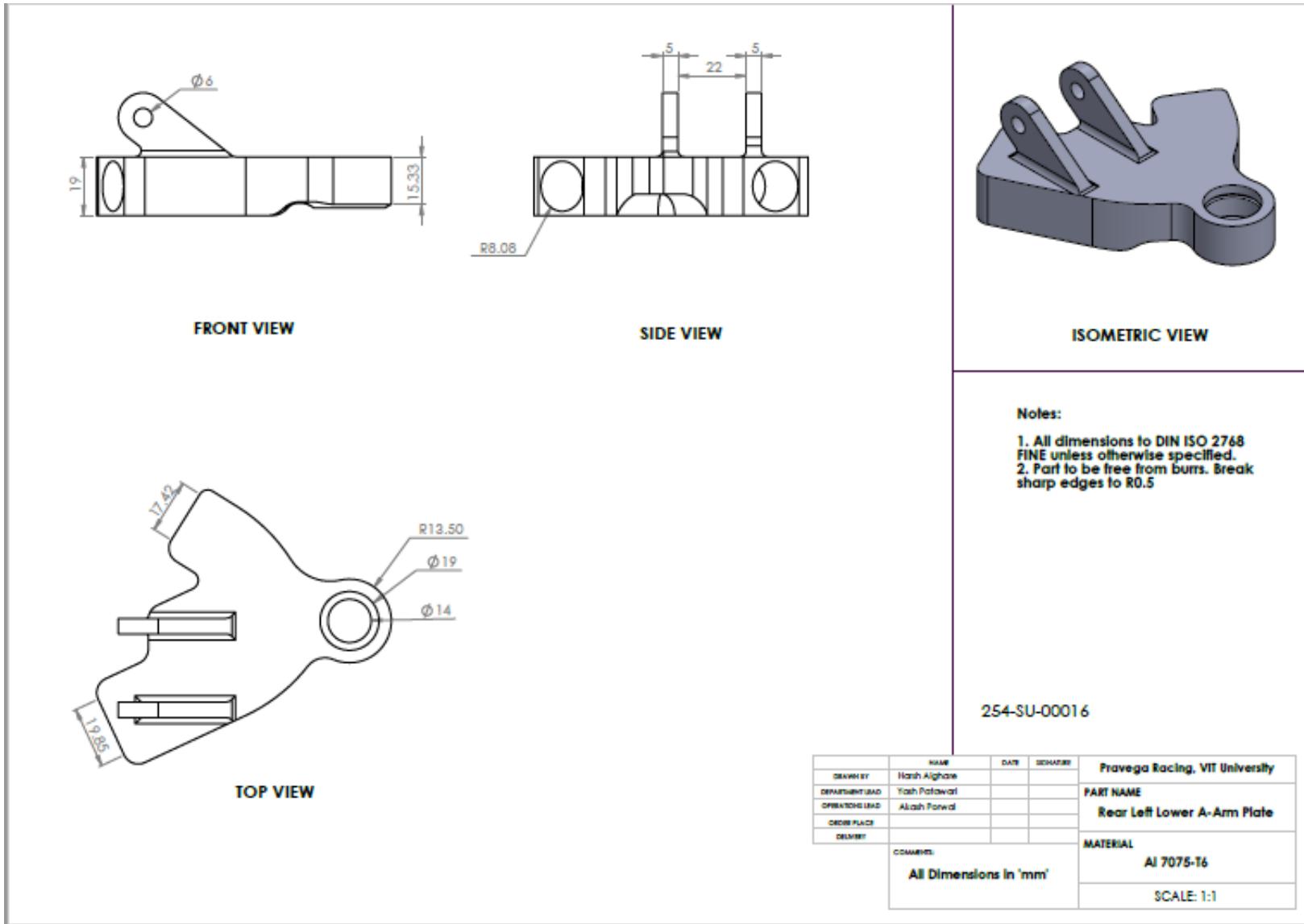
DRAWN BY	NAME	DATE	DESIGNER	Pravega Racing, VIT University
DEPARTMENT LEAD	Tushar Patilwar			
OPERATIONS LEAD	Akash Powar			
CROWN PLACE				
DRAFTER				
COMMENTS: All Dimensions in 'mm'				
PART NAME Insert				
MATERIAL Al 7075 T6				
SCALE: 2:1				

Assembly:A-Arms Rear Lower (254-SU-A003)

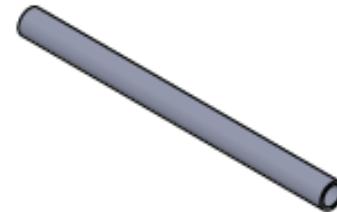
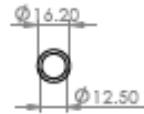
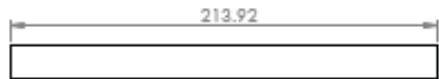
1. A-Arm Plate right (254-SU-00015, Quantity - 1)



2. A-Arm Plate left (254-SU-00016, Quantity - 1)



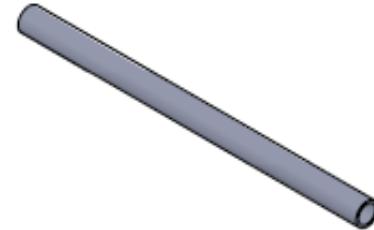
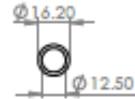
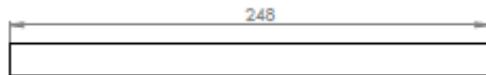
3. A-Arm fore CF tube (254-SU-00017, Quantity - 2)



254-SU-00017

CREATOR	Hamz Alghare	DATE	DISCUSSER	Pravega Racing, VIT University
DEPARTMENT/TEAM	Yash Patowari			PART NAME
GRADUATION CLASS	Akash Ponwal			Rear Lower Fore A-Arm CF Tube
CHEERPLACE				MATERIAL
CREATOR				Carbon Fiber
COMMENTS:				SCALE: 1:2
All Dimensions in 'mm'				

4. A-Arm aft CF tube (254-SU-00018, Quantity - 2)

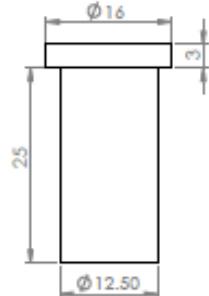


ISOMETRIC VIEW

254-SU-00018

DRAWN BY	Harsh Alighare	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Patowar			PART NAME
OPERATIONS LEAD	Akash Ponwal			Rear Lower Aft A-Arm CF Tube
DRAWN PLACE				MATERIAL
DEPART				Al 7075-T6
COMMENTS: All Dimensions in 'mm'				
SCALE: 1:2				

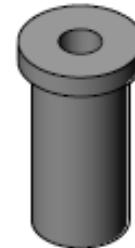
5. Inserts (254-SU-00019, Quantity – 4)



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

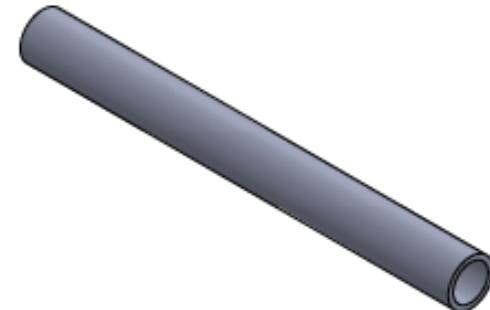
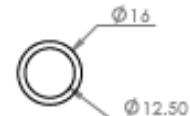
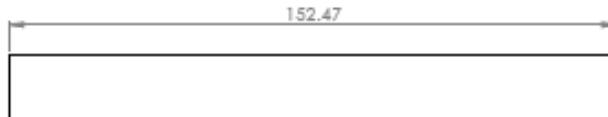
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00019

NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEAWN BY	Hanif Alghare		
DEPARTMENT/LEAD	Yash Patawar		
OPERATIONS LEAD	Alash Pawar		
DRAW PLACE			
DRAWN BY			
COMMENTS: All Dimensions In 'mm'			MATERIAL Al 7075 T6
			SCALE: 2:1

6. Toe Link Tube (254-SU-00020,Quantity-2)

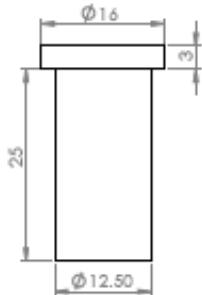


ISOMETRIC VIEW

254-SU-00020

NAME	DATE	DESIGNER	Pravega Racing, VIT University
DRAWN BY	Hanish Alghare		
DEPARTMENT/LEAD	Yash Patowari		
OPERATIONS LEAD	Alosh Powar		
CHECKED PLACE			
DRAWN BY			
COMMENTS:			MATERIAL
All Dimensions in 'mm'			Carbon Fiber
			SCALE: 1:1

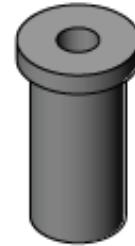
7. Toe Link Tube Inserts (254-SU-00021,Quantity-2)



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

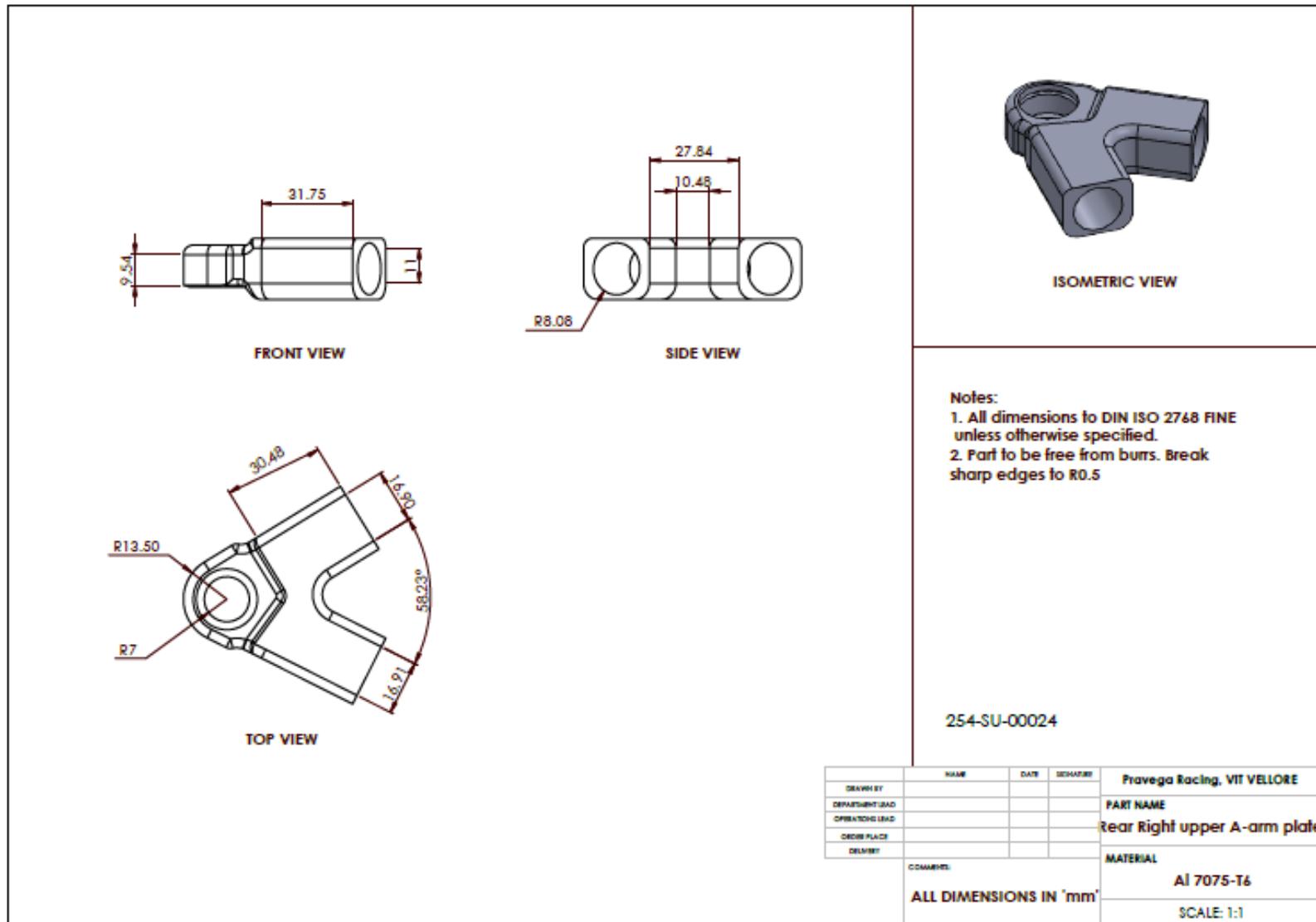
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00021

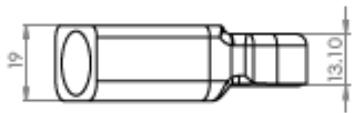
DRAWN BY	NAME	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT/LEAD	Yash Patowari			PART NAME
OPERATIONS LEAD	Akash Powar			Insert
ORDER PLACE				MATERIAL
DISMANTL				Al 7075 T6
COMMENTS:				SCALE: 2:1
All Dimensions in 'mm'				

Assembly:A-Arms Rear Upper (254-SU-A004)

1. A-Arm Plate right (254-SU-00024, Quantity - 1)



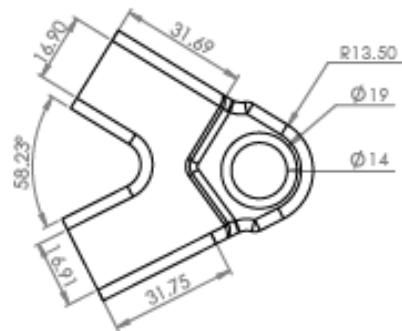
2. A-Arm Plate left (254-SU-00025, Quantity - 1)



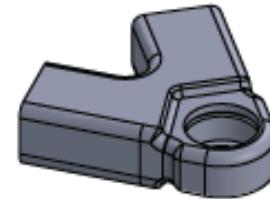
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

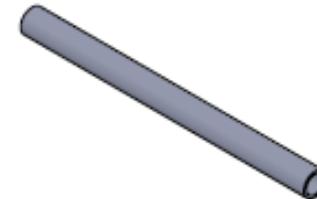
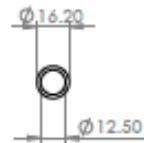
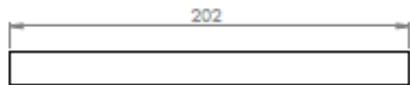
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5.

254-SU-00025

DESIGNED BY	Harsh Alghare	DATE	DEPARTMENT	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Patowar			PART NAME
OPERATIONS LEAD	Alokh Powar			Rear Left Upper A-Arm Plate
CHECKED PLACE				
DRAWN BY				MATERIAL
				Al 7075-T6
COMMENTS: All Dimensions in 'mm'				SCALE: 1:1

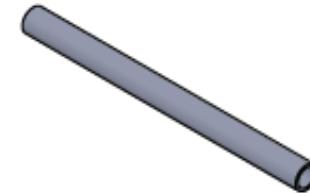
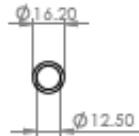
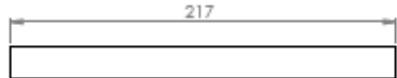
3. A-Arm fore CF tube (254-SU-00026, Quantity – 2)



254-SU-00026

NAME	DATE	DESIGNER	Pravega Racing, VIT University
DRAWN BY	Harsh Alghare		
DEPARTMENT LEAD	Yash Patowar		PART NAME
OPERATIONS LEAD	Aakash Powar		Rear Upper Fore A-Arm CF Tube
CROSS PLACE			MATERIAL
DELIVERY			Carbon Fiber
COMMENTS:	All Dimensions In 'mm'		
	SCALE: 1:2		

4. A-Arm aft CF tube (254-SU-00027, Quantity – 2)

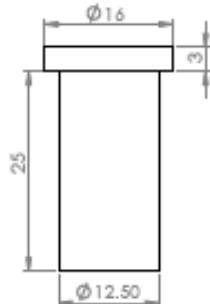


ISOMETRIC VIEW

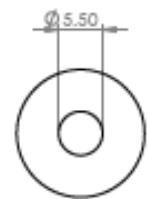
254-SU-00027

DESIGNED BY	Harsh Alghare	DATE	DISCHARGE	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Patilward			PART NAME
OPERATIONS LEAD	Aloish Powal			Rear Upper Aft A-Arm CF Tube
ORDER PLACE				MATERIAL
DISMANTLE				Carbon Fiber
COMMENTS:				SCALE: 1:2
All Dimensions in 'mm'				

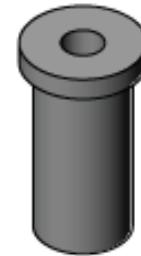
5. Inserts (254-SU-00028, Quantity – 4)



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

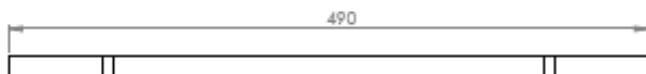
- All dimensions to DIN ISO 2768 FINE unless otherwise specified.
- Part to be free from burrs. Break sharp edges to R0.5

254-SU-00028

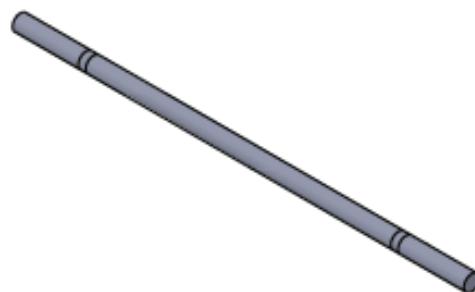
NAME	DATE	DESIGNER	Pravega Racing, VIT University
DRAWN BY	Hasth Alghare	DEPARTMENT USED	Yash Patowar
CHECKED BY		CREATIONS USED	Akash Powar
CHEKED PLACE		CHIEF PLACE	
DESIGNER		COMMENTS	All Dimensions in 'mm'
		MATERIAL	Al 7075 T6
		SCALE	2:1

Assembly: Anti Roll Bar Front (254-SU-A005)

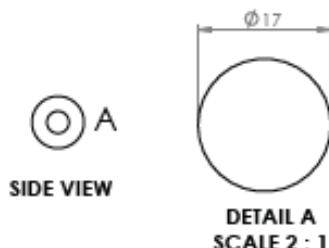
1. ARB Shaft (254-SU-00031, Quantity – 1)



FRONT VIEW



ISOMETRIC VIEW



SIDE VIEW

DETAIL A
SCALE 2 : 1

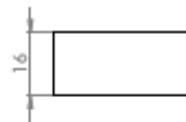
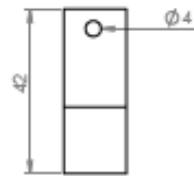
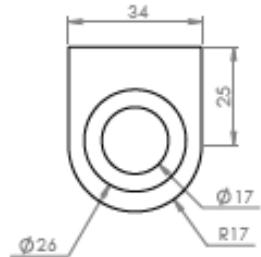
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00031

DRAWN BY	Haresh Alghare	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT/USD	Yash Patowari			PART NAME
OPERATIONS/UD	Akash Powar			Front ARB Shaft
ORDER PLACE				
DESIGNER				
COMMENTS:	All Dimensions in 'mm'			
	MATERIAL			
	Al 7075-T6			
	SCALE: 1:3			

2. Front ARB flange(254-SU-00032, Quantity – 2)



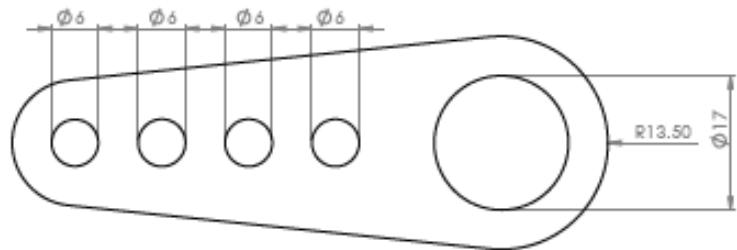
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

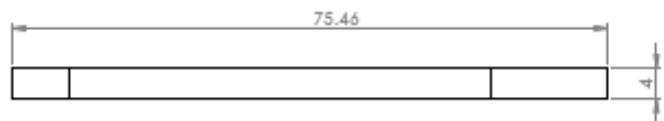
254-SU-00032

DESIGNED BY	NAME	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Patwardhan			PART NAME
OPERATIONS LEAD	Alosh Powar			Front ARB Flange
CHECKER PLACE				MATERIAL
DRAWN BY				Al 7075-T6
COMMENTS: All Dimensions in 'mm'				SCALE: 1:1

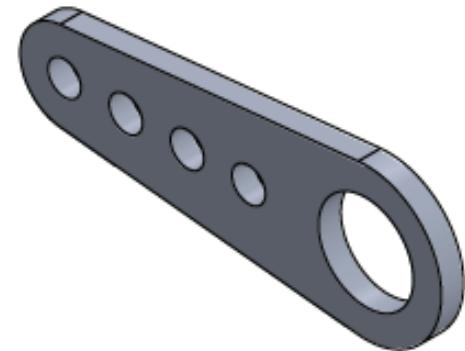
3. Moment Arm(254-SU-00033, Quantity – 2)



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

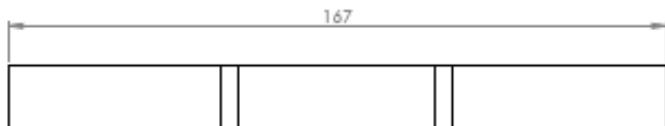
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00033

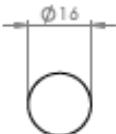
NAME	DATE	COMMITTEE	Pravega Racing, VIT University
DESIGNER	Hanish Alghare		
DEPARTMENT/LEAD	Yash Patilwar		PART NAME
OPERATIONS LEAD	Akash Powar		Front ARB Moment Arm
CHECKER PLACE			MATERIAL
DEMENT			Al 7075-T6
COMMENTS	All Dimensions in 'mm'		SCALE: 2:1

Assembly:Anti Roll Bar Rear (254-SU-A006)

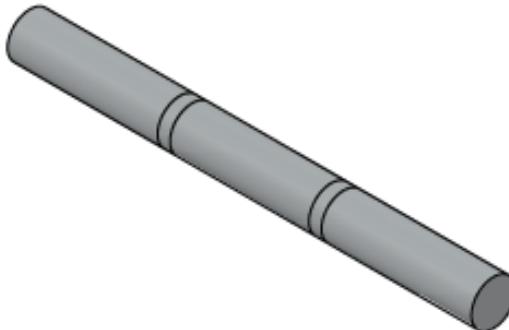
1. ARB Shaft (254-SU-00039, Quantity – 1)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

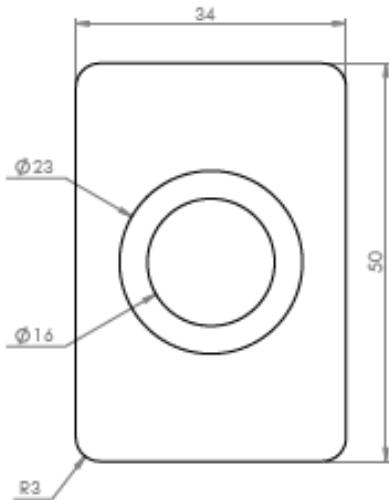
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

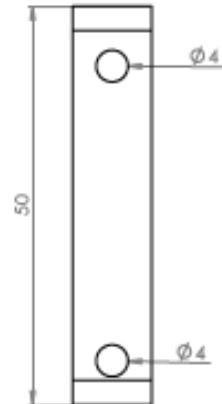
254-SU-00039

DRAWN BY	Harsh Alghare	DATE	DOMESTIC	Pravega Racing, VIT University
DEPARTMENT USED	Yash Polawar			PART NAME
CREATIONS LEAD	Alokash Powar			Rear ARB Shaft
ORDER PLACE				MATERIAL
CREATED BY	COMMENTS: All Dimensions in 'mm'			
	MATERIAL Al 6061-T6			
	SCALE: 1:1			

2. Rear ARB flange (254-SU-00040, Quantity – 2)



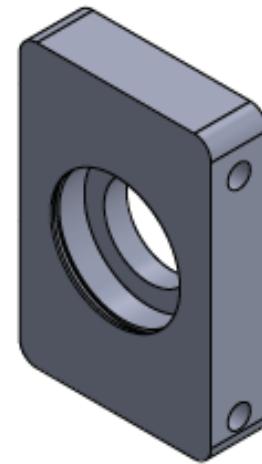
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

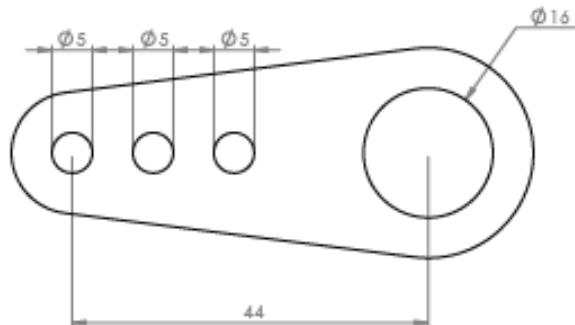
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00040

NAME		DATE	DESIGNER	Pravega Racing, VIT University
DESIGNER	Hasth Alghare		DEPARTMENT/SD	Tush Polawar
DEPARTMENT/SD			CREATOR'S NAME	Akash Powar
CREATOR'S NAME			ORDER PLACE	
ORDER PLACE			DESIGNER	
DESIGNER			COMMENTS	All Dimensions in 'mm'
			MATERIAL	Al 7075-T6
			SCALE	2:1

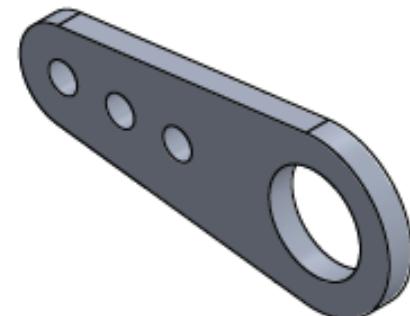
3. Moment Arm (254-SU-00041, Quantity – 2)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

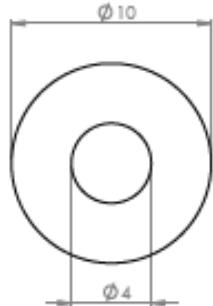
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

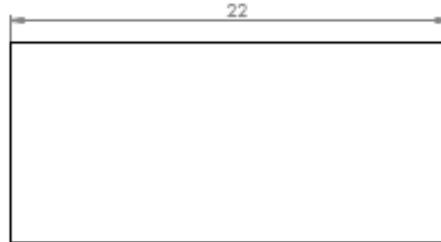
254-SU-00041

NAME	DATE	REVISION	Pravega Racing, VIT University
DRAWN BY	Hans Alghani		
DEPARTMENT LEAD	Yash Patwari		PART NAME
CREATIONS LEAD	Akash Powar		Moment Arm
ORDER PLACE			MATERIAL
DELIVERY			Al 7075-T6
COMMENTS	All Dimensions in 'mm'		
	SCALE: 2:1		

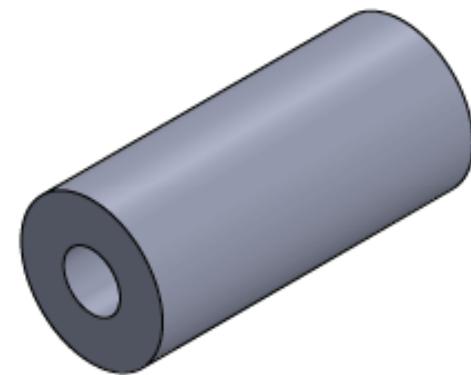
4. Inserts (254-SU-00042, Quantity – 4)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

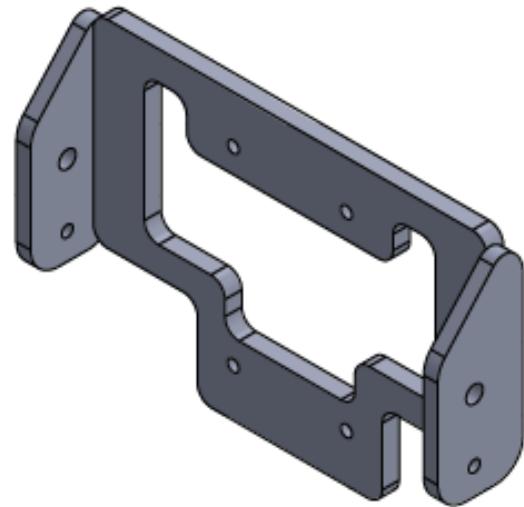
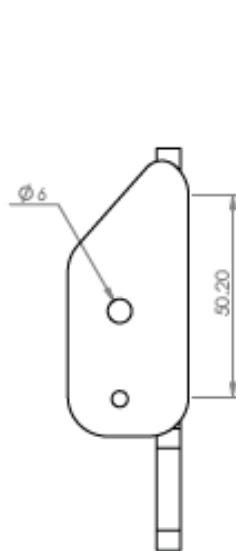
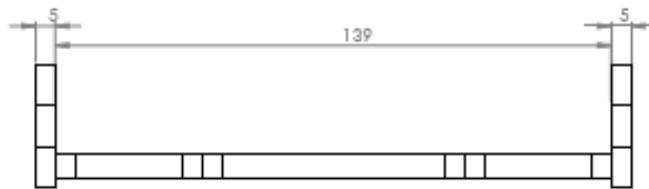
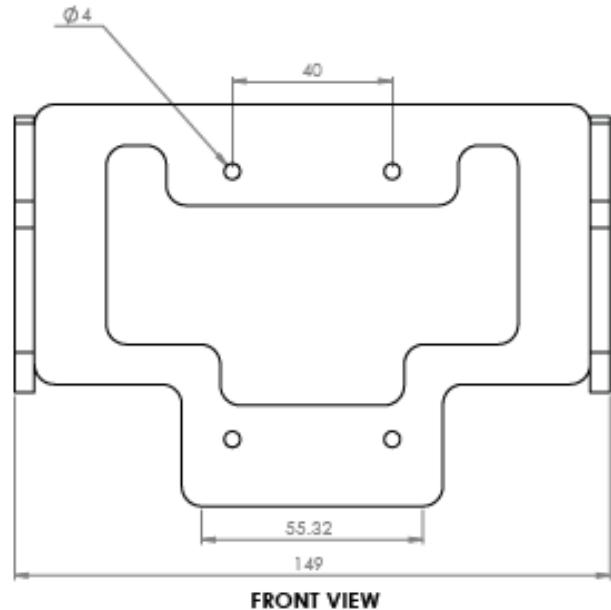
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00042

DRAWN BY	NAME	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT/SD	Yash Patowar			PART NAME
CREATOR'S SD	Akash Patowar			Insert
ORDER PLACE				MATERIAL
DRAWER				Al 7075-T6
COMMENT:				SCALE: 5:1
All Dimensions in 'mm'				

5. Mount (254-SU-00043, Quantity – 1)



Notes:

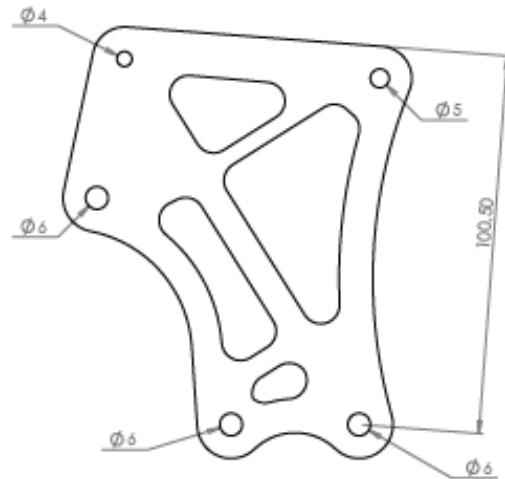
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00043

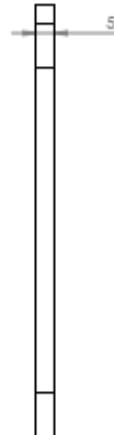
DRAWN BY	NAME	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT/HEAD	Yash Polawar			PART NAME
CORPORATE LEAD	Akash Powar			Rear ARB Mount
CHEK PLACE				
DRAWER				
COMMENTS	All Dimensions in 'mm'		MATERIAL	Al 7075-T6
			SCALE	1:1

Assembly: Bell Crank Front (254-SU-A007)

1. Bell Crank Plates (254-SU-00046, Quantity – 4)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

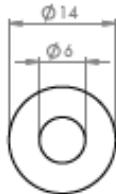
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

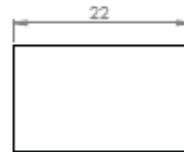
254-SU-00046

	NAME	DATE	WORKSHOP	Pravega Racing, VIT University
DRAWN BY	Hanif Alghare			
DEPARTMENT LEAD	Yash Polawar			
CREATIONS LEAD	Aakash Powar			
ORDER PLACE				
DESIGNER				
COMMENTS	All Dimensions in 'mm'		MATERIAL	Al 6061-T6
			SCALE	1:1

2. Sleeves (254-SU-00047, Quantity – 10)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

Notes:

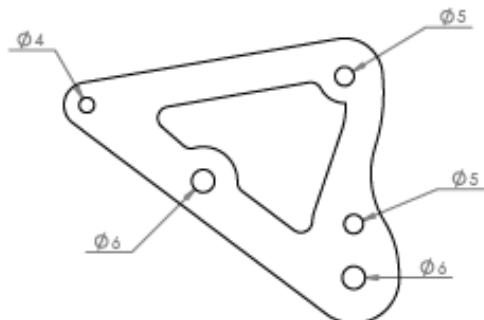
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00047

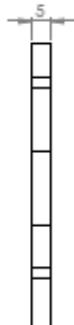
NAME	DATE	DESIGNER	Pravega Racing, VIT University
DRAWN BY	Hanish Alghare		
DEPARTMENT LEAD	Yash Patowar		
OPERATIONS LEAD	Akash Powar		
CHECKED BY			
REVIEWED BY			
APPROVED BY			
COMMENTS	All Dimensions in 'mm'		
MATERIAL	Al 6061 T6		
SCALE	2:1		

Assembly: Bell Crank Rear (254-SU-A008)

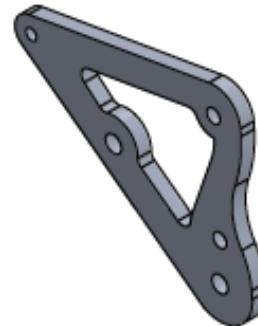
1. Bell Crank Plates(254-SU-00048, Quantity – 4)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

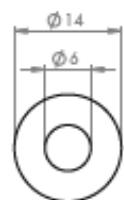
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

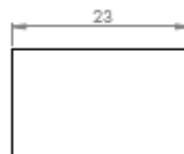
254-SU-00048

DRAWN BY	Harsh Alghare	DATE	DISCHARGE	Pravega Racing, VIT University
DEPARTMENT USED	Yash Patawar			PART NAME
OPERATORS USED	Akash Powar			Rear Bellcrank Plate
CHECKER PLACE				MATERIAL
DESIRED				Al 6061-T6
COMMENTS: All Dimensions in 'mm'				SCALE: 1:1

2. Sleeves (254-SU-00049, Quantity – 10)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

Notes:

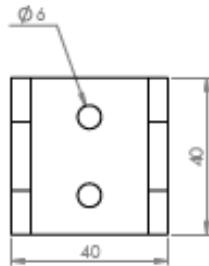
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00049

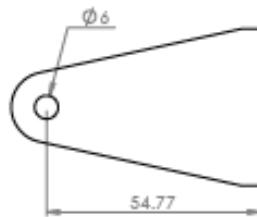
DRAWN BY	NAME	DATE	ISSUED BY	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Patilwani		PART NAME	Sleeve
OPERATIONS LEAD	Akash Powar		MATERIAL	Al 6061 T6
ORDER PLACE			COMMENTS	All Dimensions in 'mm'
DESIGNER				SCALE: 2:1

Assembly: Damper System Rear (254-SU-A010)

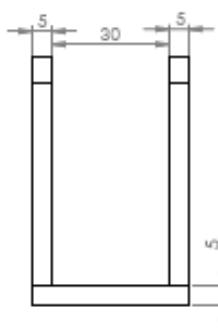
1. Damper Mount Rear (254-SU-00054, Quantity – 2)



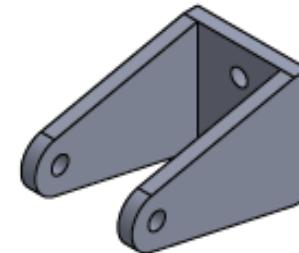
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

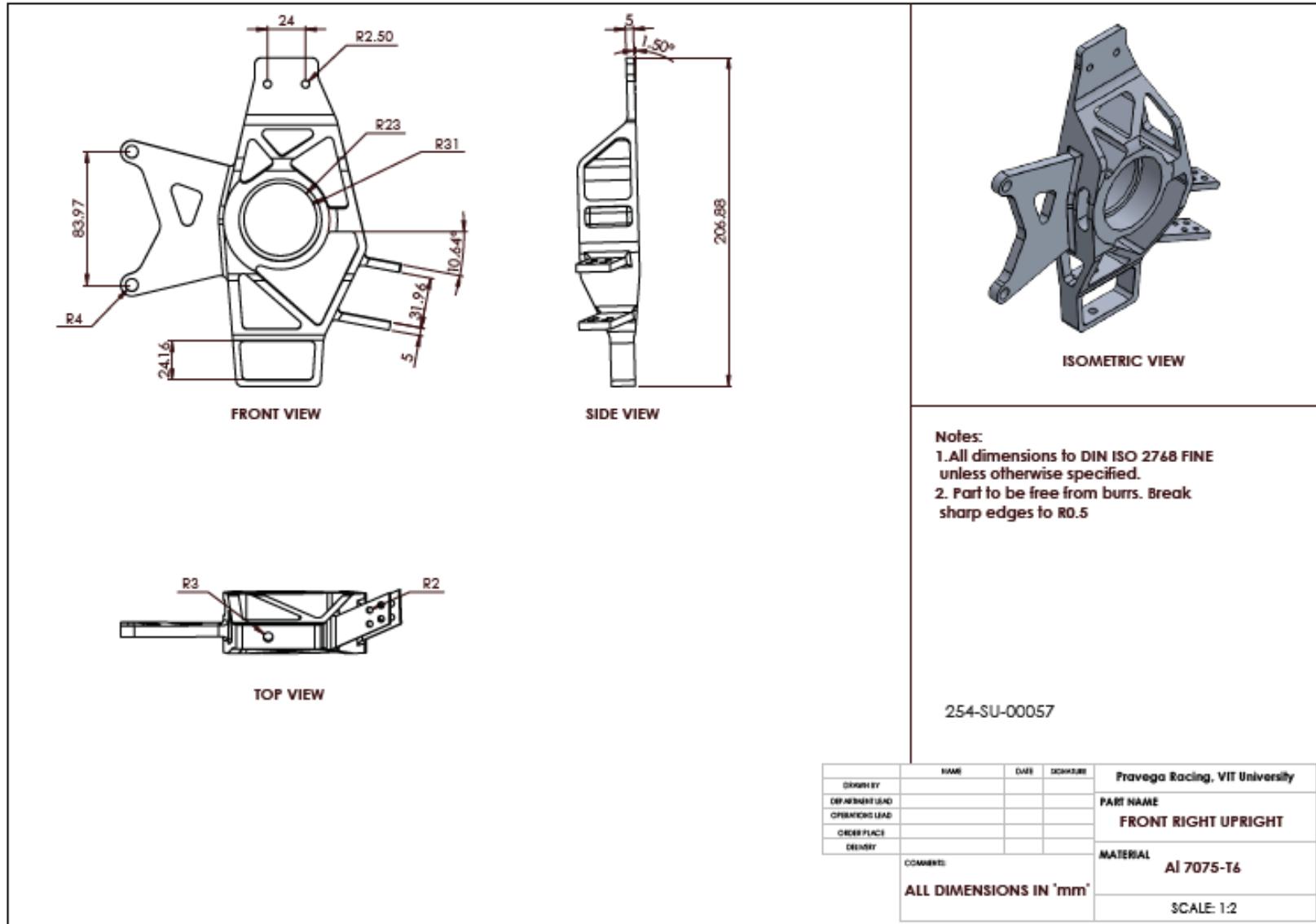
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00054

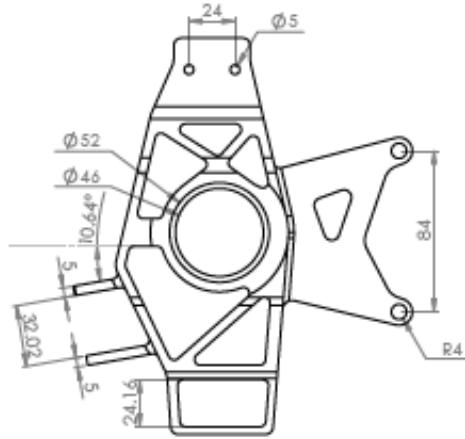
DRAWN BY	Harsh Alighare	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT USED	Yash Polawar			
CRAFTSMAN USED	Alokash Powar			
CHECKED PLACE				
DESIRED				
COMMENT: All Dimensions in 'mm'				
MATERIAL Al 7075-T6				
SCALE: 1:1				

Assembly: Front uprights (254-SU-A011)

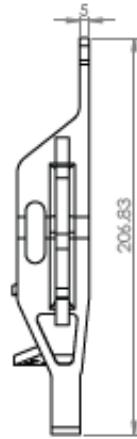
1. Front Upright Right (254-SU-00057, Quantity – 1)



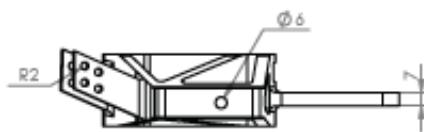
2. Front Upright Right (254-SU-00058, Quantity – 1)



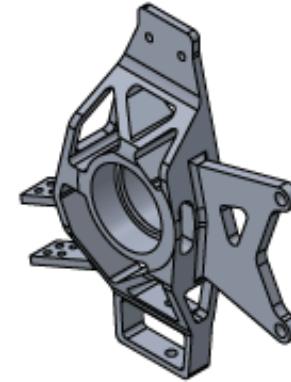
FRONT VIEW



SIDE VIEW



BOTTOM VIEW



ISOMETRIC VIEW

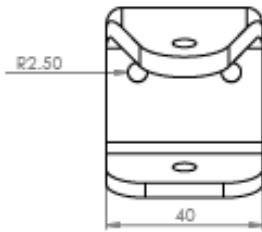
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

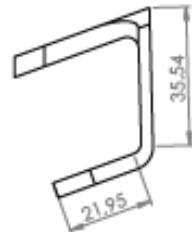
254-SU-00058

NAME	DATE	DESIGNER	Pravega Racing, VIT University
DRAWN BY	Hrush Alghare		
DEPARTMENT USED	Yash Patowari		
CHECKED BY	Akash Purohit		
CHEKED PLACE			
DESIGNED BY			
COMMENTS:	All Dimensions in 'mm'		
	MATERIAL		
	Al 7075-T6		
	SCALE: 1:2		

3. Front Upright Bracket (254-SU-00059, Quantity – 2)



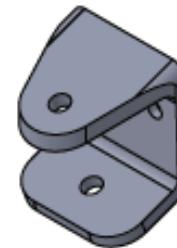
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

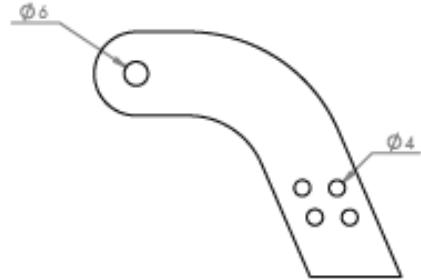
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

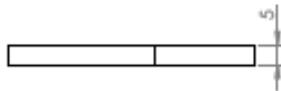
254-SU-00059

DESIGNER	NAME	DATE	DEPARTMENT	Pravega Racing, VIT University
DEPARTMENT/LEAD	Yash Patowari		PART NAME	Front Upright Bracket
CHAMFER/LEAD	Aloch Powar		MATERIAL	Al 7075-T6
CHECKER			COMMENTS	All Dimensions in 'mm'
REVISER			SCALE	1:1

4. Steering Flange (254-SU-00060, Quantity – 4)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

Notes:

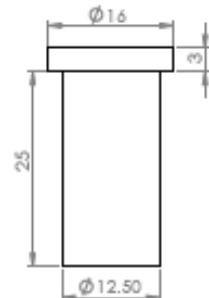
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00060

CREATED BY	NAME	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT USED	Yash Polawar			PART NAME
CREATED USED	Alosh Powell			Steering Flange
CHECKED PLACE				MATERIAL
DESIGNER				Al 7075-T6
COMMENTS				SCALE: 1:1
All Dimensions in 'mm'				

Assembly: Push rod Front (254-SU-A012)

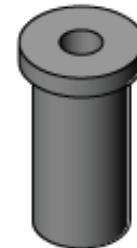
1. Inserts (254-SU-00063, Quantity – 4)



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

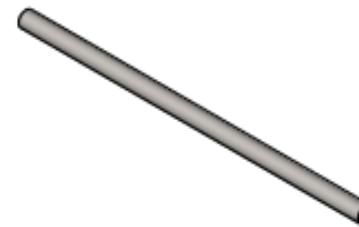
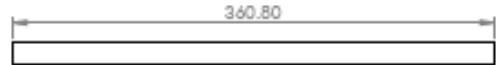
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00063

DRAWN BY	NAME	DATE	DESIGNER	Pravega Racing, VIT University
DEPARTMENT/LEAD	Yash Patwardhan			
OPERATORS LEAD	Aakash Powar			PART NAME Insert
CHECKER/PLACE				
DRAWN BY				MATERIAL Al 7075 T6
COMMENTS: All Dimensions in 'mm'				SCALE: 2:1

2. Push rod Tube (254-SU-00064, Quantity – 2)



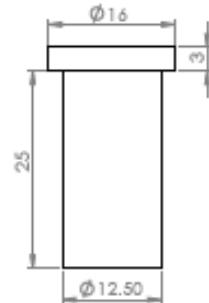
ISOMETRIC VIEW

254-SU-00064

NAME		DATE	DESIGNER	Pravega Racing, VIT University
DESIGNER	Hrishikesh Alghare			
DEPARTMENT LEAD	Yash Patelwal			
OPERATIONS LEAD	Aloash Powal			
CHEMIST				
COMMENTS:	All Dimensions in 'mm'			
MATERIAL	Carbon Fiber			
SCALE:	1:3			

Assembly: Push rod Rear (254-SU-A013)

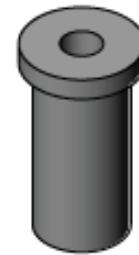
1. Inserts (254-SU-00066, Quantity – 4)



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

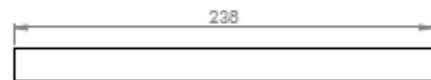
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00066

DESIGNED BY	NAME	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Patilwar			PART NAME
OPERATORS LEAD	Aakash Powar			Insert
ORDER PLACE				MATERIAL
DISMANTLED				Al 7075 T6
COMMENTS:				SCALE: 2:1
All Dimensions in 'mm'				

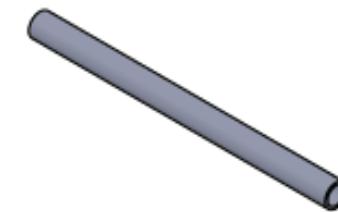
2. Push rod Tube (254-SU-00067, Quantity – 2)



SIDE VIEW



DETAIL A
SCALE 2 : 1

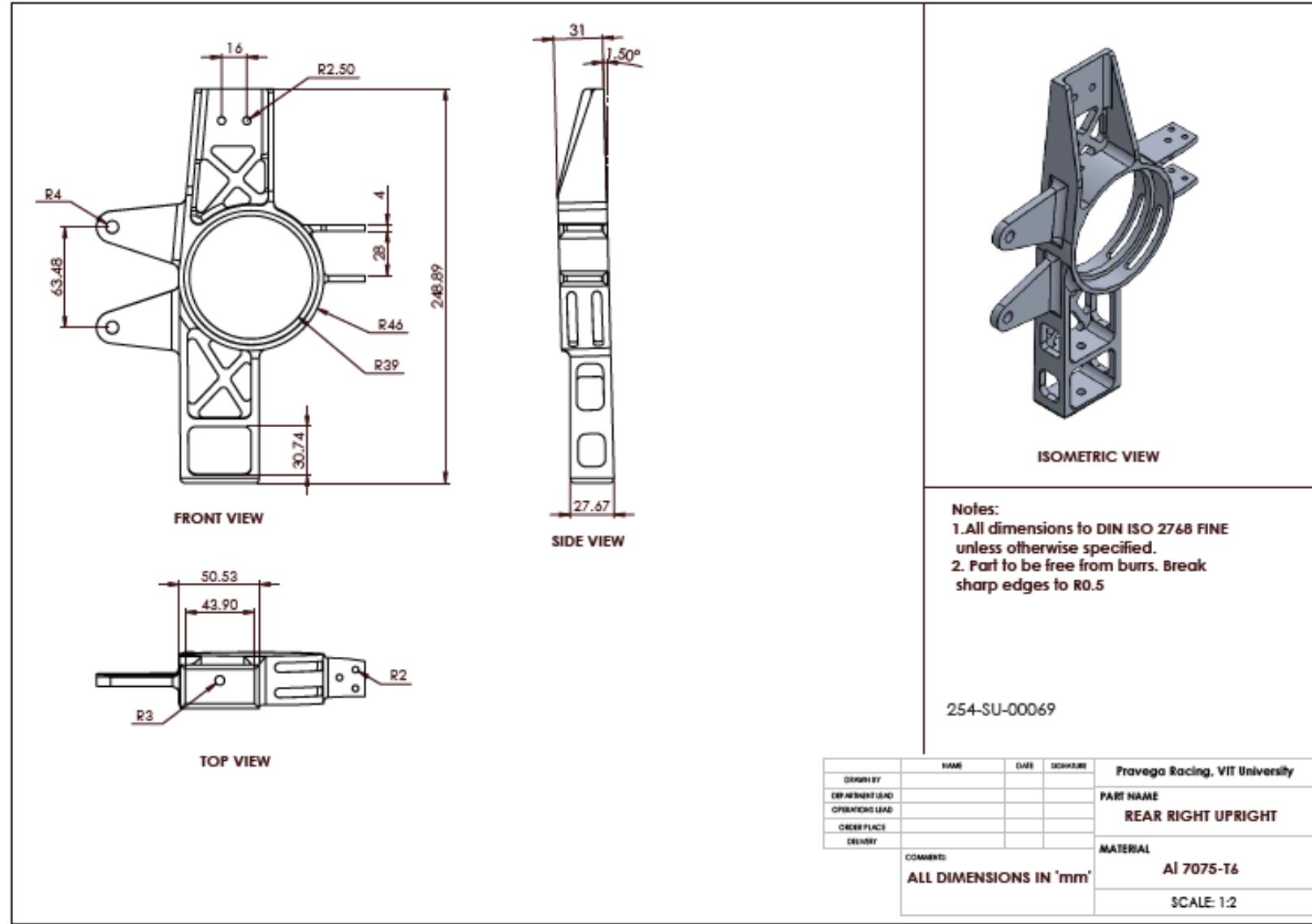


254-SU-00067

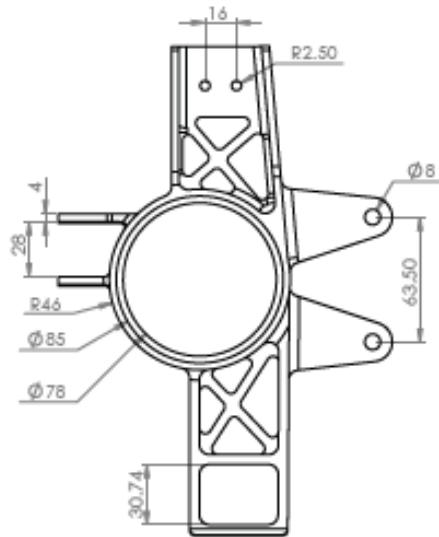
NAME	Pravega Racing, VIT University
DESIGNER	Hanth Alghare
DEPARTMENT USED	Yash Patward
OPERATIONS LEAD	Ajith Powar
ORDER PLACE	
DISASTER	
COMMENTS	All Dimensions in 'mm'
	SCALE: 1:2
PART NAME	Rear Pushrod tube
MATERIAL	Carbon Fiber

Assembly: Rear uprights (254-SU-A014)

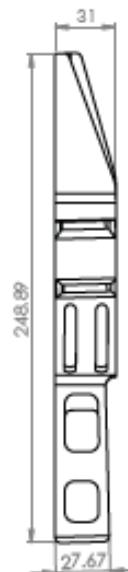
1. Rear Upright Right (254-SU-00069, Quantity – 1)



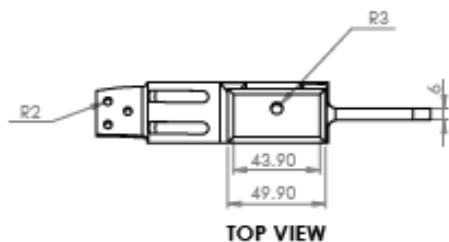
2. Rear Upright Left (254-SU-00070, Quantity – 1)



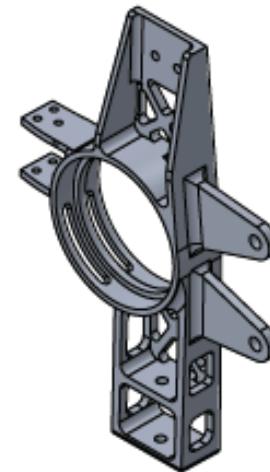
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

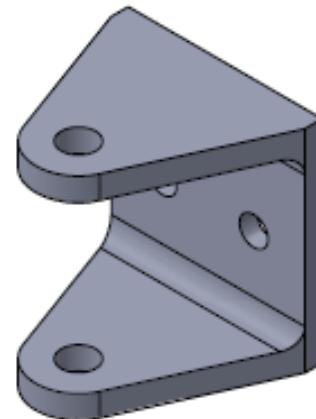
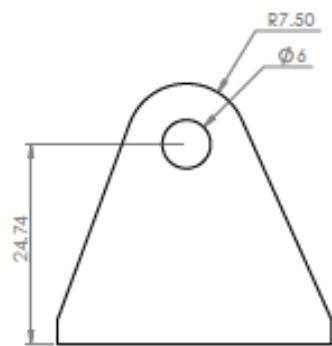
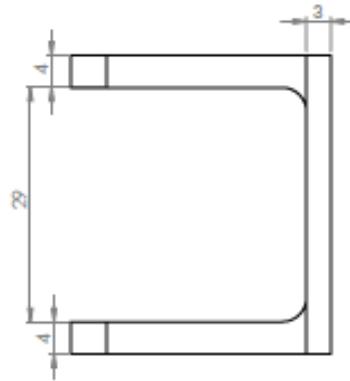
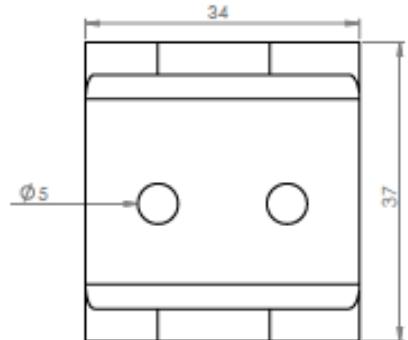
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00070

DESIGNED BY	NAME	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT LEAD	Yash Polawar			PART NAME
CRAFTSMAN LEAD	Aakash Powar			Rear Left Upright
ORDER PLACE				MATERIAL
DELIVERY				Al 7075-T6
COMMENTS:				SCALE: 1:2
All Dimensions in 'mm'				

3. Rear Upright Brackets (254-SU-00071, Quantity – 2)



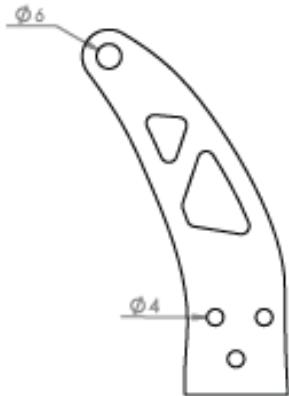
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00071

NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DRAWN BY	Hanif Alghas		PART NAME
DEPARTMENT LEAD	Yash Patowar		Rear Upright Bracket
OPERATIONS LEAD	Akash Powar		
CODER PLACE			
DELIVERY			
COMMENTS:			MATERIAL
All Dimensions In 'mm'			Al 7075-T6
			SCALE: 2:1

4. Toe Link Flange (254-SU-00072, Quantity – 4)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

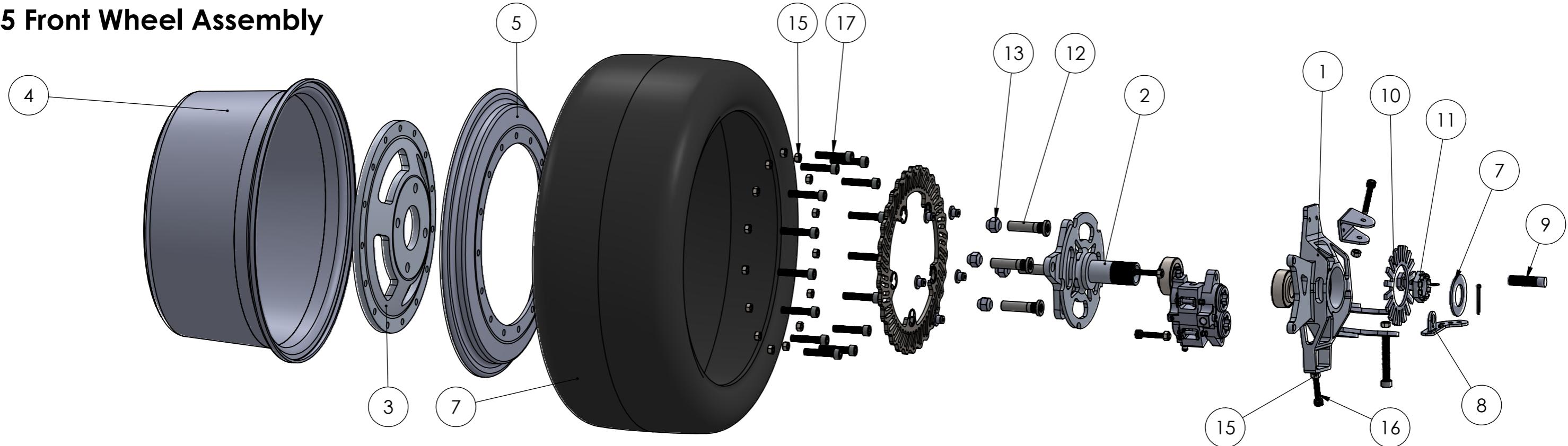
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5

254-SU-00072

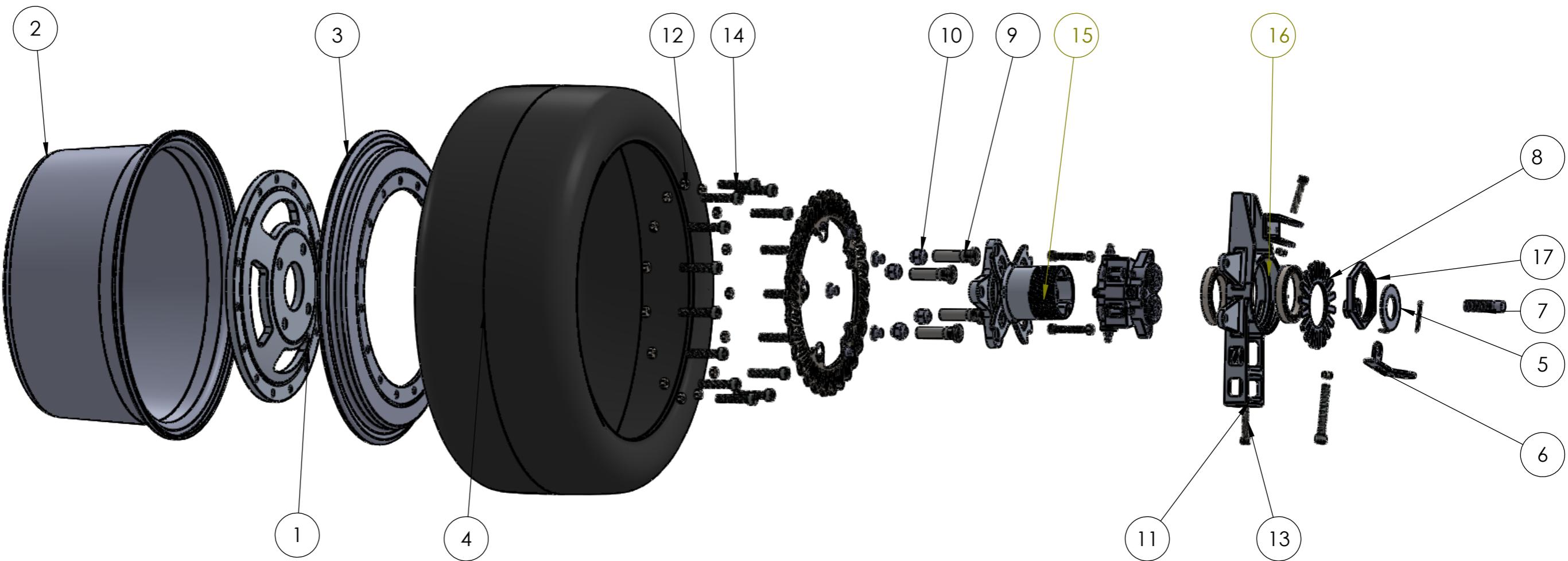
DRAWN BY	NAME	DATE	REVISION	Pravega Racing, VIT University
DEPARTMENT USED	Yash Polawar			PART NAME
CRAFTSMAN LEAD	Alosh Powar			Toe link flange
ORDER PLACE				MATERIAL
DESIGNER				Al 7075-T6
COMMENT:				SCALE: 1:1
All Dimensions in 'mm'				

5 Front Wheel Assembly



SERIAL NO.	PART NUMBER	PART NAME	MATERIAL	QTY.
1	254-SU-00053	Front Upright	AI 7075T6	1
2	254-WT-00001	Front Hub	AI 7075 T6	1
3	254-WT-00020	Front Wheel Center	CFRP	1
4	254-WT-00021	Front Wheel Inner Shell	AL6061 T6	1
5	254-WT-00021	Front Wheel Outer Shell	CFRP	1
6	254-WT-00014	Front Tire	CONTINENTAL (34M)	1
7	254-WT-00003	Hub Washer	AL 6061 T6	1
8	254-WT-00005	Front Wheel Speed Sensor Mount	AL6061 T6	1
9	119-EL-00174	Wheel Speed Sensor	BOUGHT	1
10	254-WT-00004	Front Wheel Speed Sprocket	AISI 1020	1
11	254-WT-00002	Castle Nut	AISI 1020	1
12	254-WT-00019	Wheel Stud	AISI 1020	4
13	254-WT-00007	Lug Nut	AISI 1020	4
14		M6 Nut	AISI 1020	1
15		M8 Nut	AISI 1020	15
16		M6 Bolt	AISI 1020	1
17		M8 Bolt	AISI 1020	15

REAR WHEEL ASSEMBLY



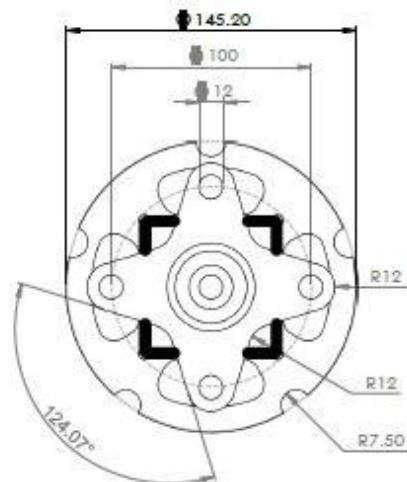
ITEM NO.	PART NUMBER	PART NAME	Material	QTY.
1	254-WT-00020	Rear Wheel Center	CFRP	1
2	254-WT-00021	Rear Wheel Inner Shell	AL 6061-T6	1
3	254-WT-00021	Rear Wheel Outer Shell	CFRP	1
4	254-WT-00014	Rear Tire	Continental (34M)	1
5	254-WT-00010	Hub Washer	AL 6061-T6	1
6	254-WT-00012	Rear Wheel Speed Sensor Mount	AL 6061-T6	1
7	119-EL-00174	Wheel Speed Sensor	Bought	1
8	254-WT-00011	Rear Wheel Speed Sprocket	AISI 1020	1
9	254-WT-00019	Wheel Stud	AISI 1020	4
10	254-WT-00007	Lug Nut	AISI 1020	4
11		M6 Nut	AISI 1020	1
12		M8 Nut	AISI 1020	15
13		M6 Bolt	AISI 1020	1
14		M8 bolt	AISI 1020	15
15	254-WT-00008	Rear Hub	AL 7075-T6	1
16	254-SU-00069	Rear Upright	AL 7075-T6	1
17	254-WT-00009	Rear hub locker	AL 7075-T6	1

Scale 1:5

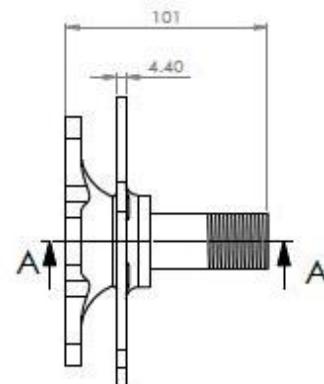
sWHEEL AND TIRES(WT)

Assembly-Front Hubs (254-WT-A001)

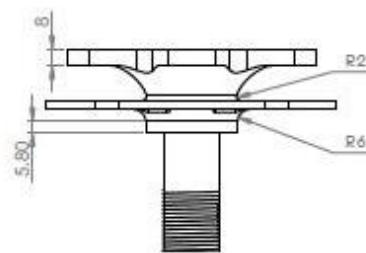
1.Front Hub (254-WT-00001,Quantity -2)



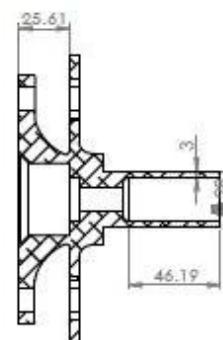
FRONT VIEW



SIDE VIEW



TOP VIEW



SECTION A-A



ISOMETRIC VIEW

Notes:

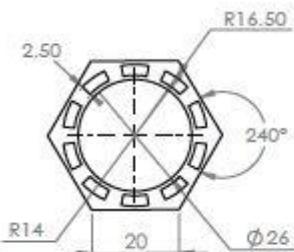
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

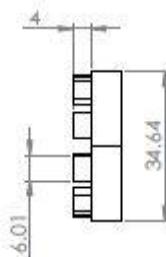
254-WT-00001

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
ORIGINATION LEAD				FRONT HUB
CROSS REF				MATERIAL
DISP/NFT				Al 7075-T6
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 1:2				

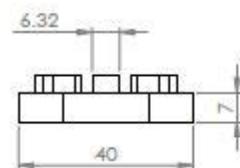
2.Castle Nut (254-WT-00002, Quantity -2)



FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

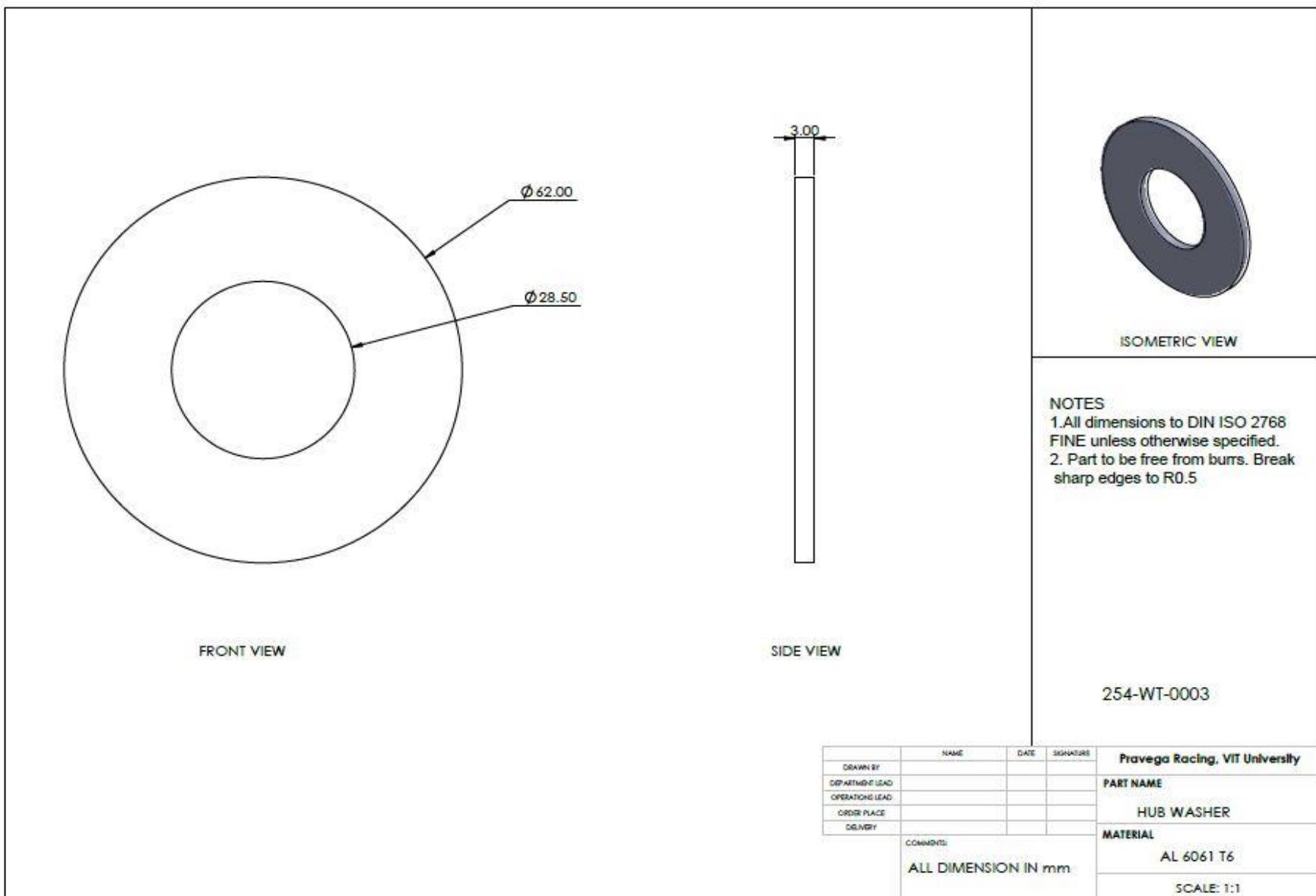
NOTES

- All dimensions to DIN ISO 2768 FINE unless otherwise specified.
- Part to be free from burrs. Break sharp edges to R0.5

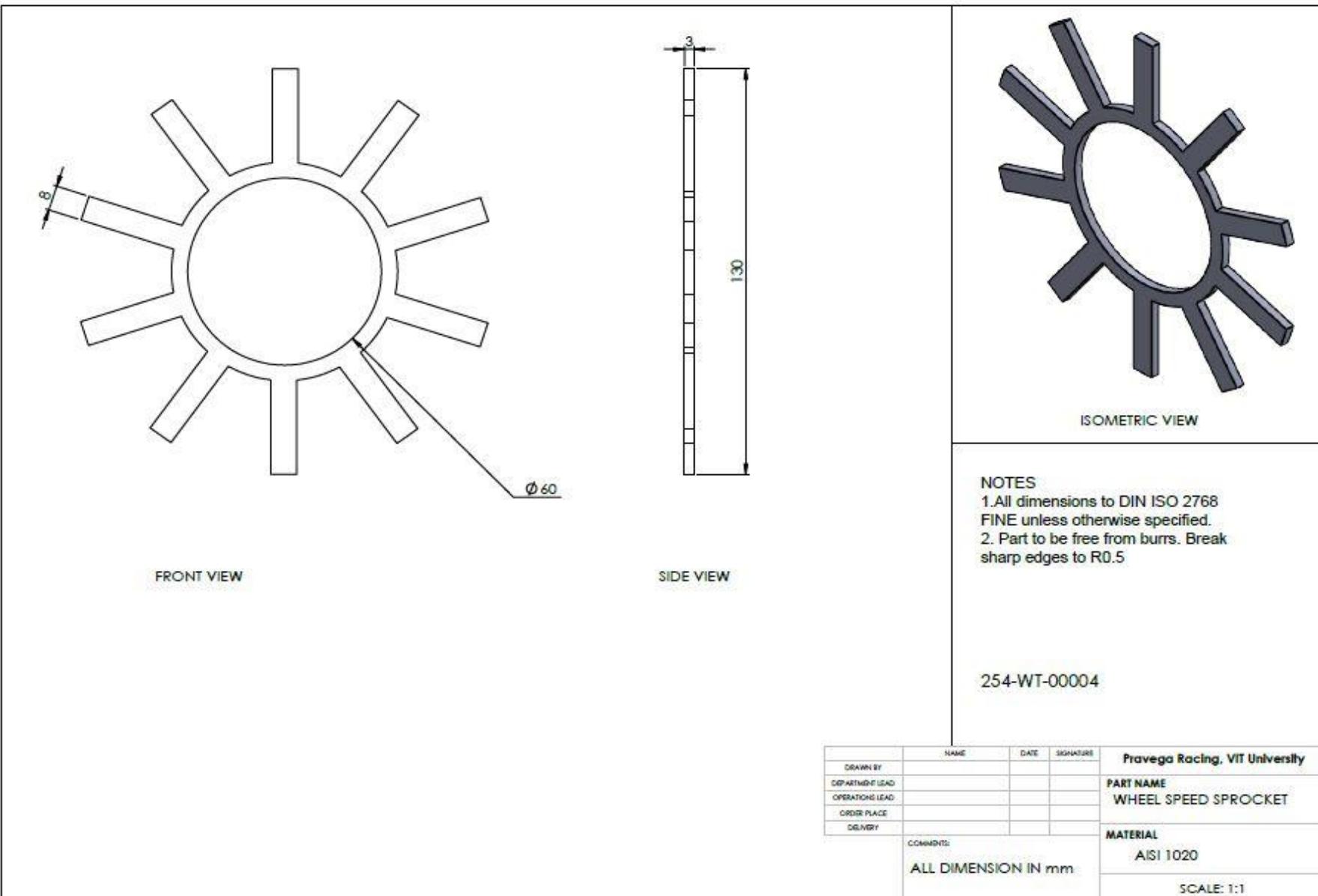
254-WT-00002

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				CASTLE NUT
ORDER PLACE				MATERIAL
DELIVERY				AL 6061-T6
COMMENTS:	ALL DIMENSION IN 'mm'			SCALE: 1:1

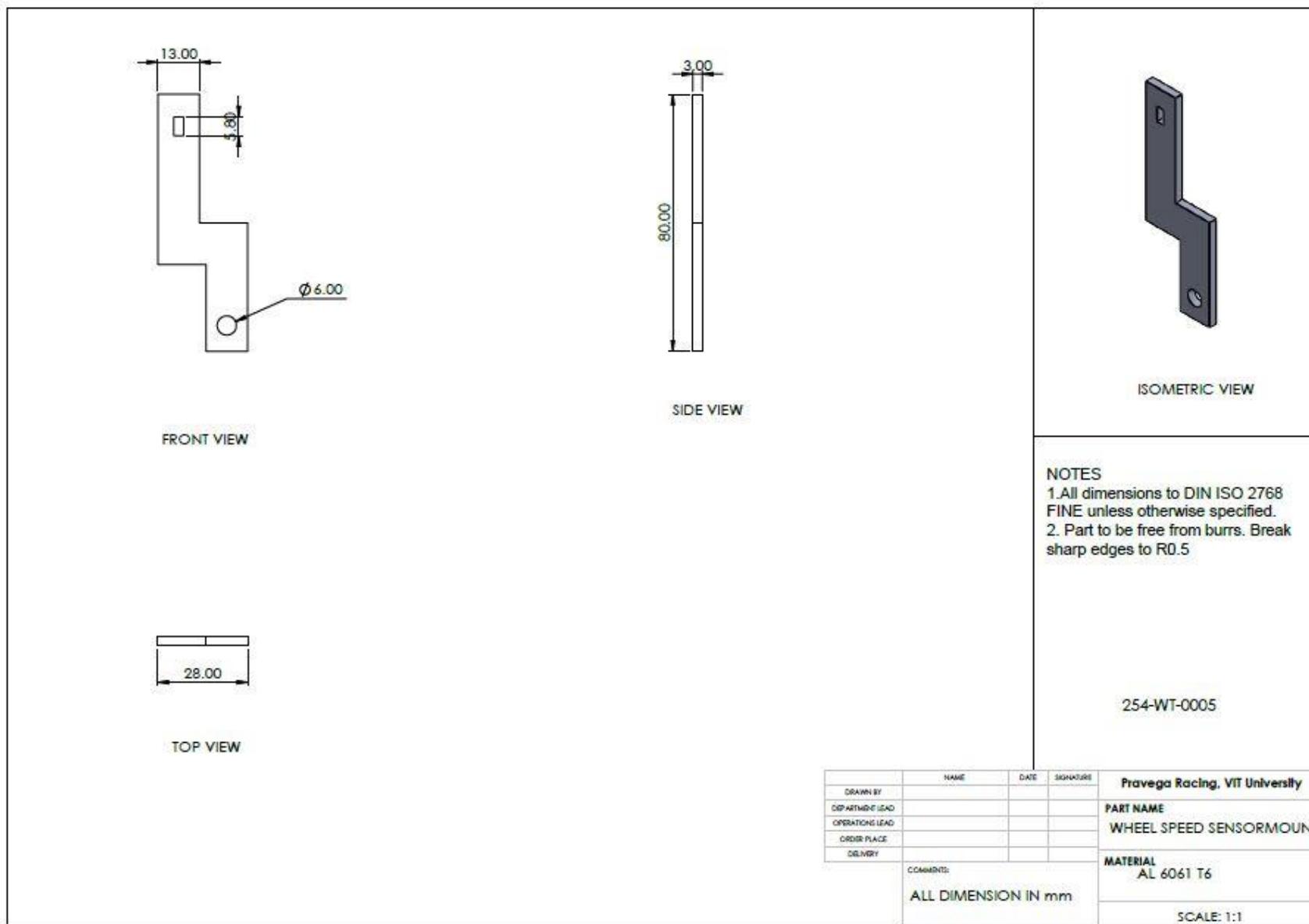
3. Hub Washer(254-WT-00003,Quantity -2)



4. Wheel Speed Sprocket(254-WT-00004,Quantity -2)

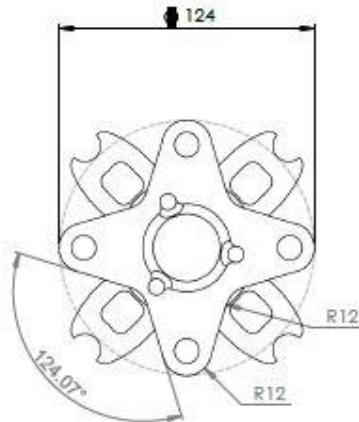


5. Wheel Speed Sensor Mount(254-WT-00005,Quantity -2)

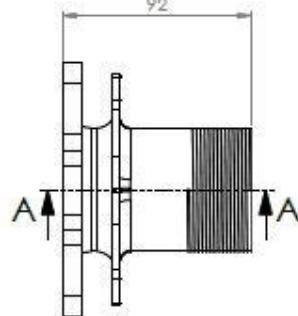


Assembly-Rear Hubs (254-WT-A003)

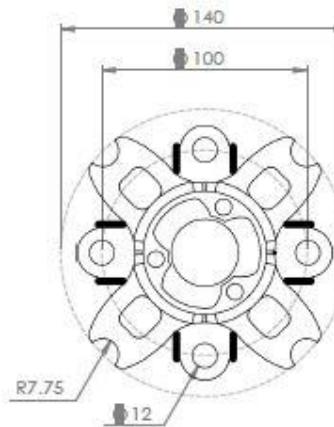
1.Rear Hub (254-WT-00008,Quantity -2)



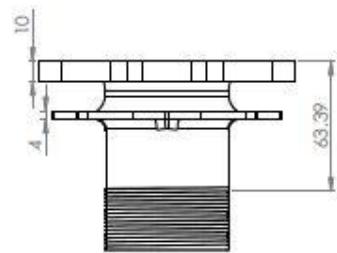
FRONT VIEW



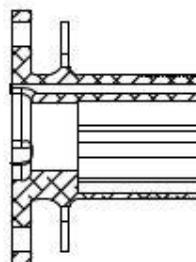
SIDE VIEW



BACK VIEW



TOP VIEW



SECTION A-A



ISOMETRIC VIEW

Notes:

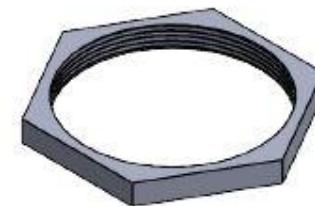
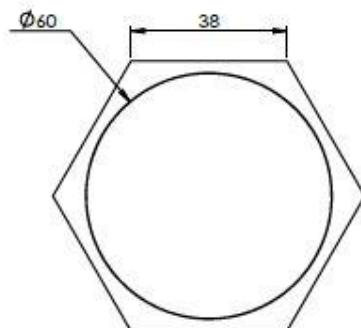
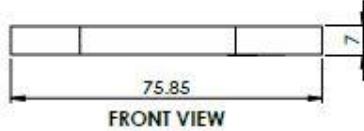
1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

2. Part to be free from burrs. Break sharp edges to R0.5

254-WT-00008

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				REAR HUB
ORDER PLACE				MATERIAL
DELIVERY				Al7075-T6
COMMENTS:				
ALL DIMENSIONS IN 'mm'				
SCALE: 1:2				

2.Hub Locker (254-WT-00009,Quantity -2)



ISOMETRIC VIEW

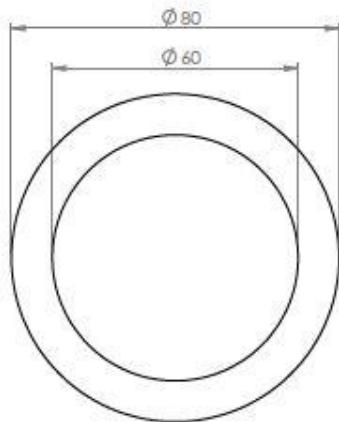
NOTES

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs.
Break sharp edges to R0.5

254-WT-00009

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				Hub Locker
ORDER PLACE				MATERIAL
DELIVERY				Aluminium 7075 T6
COMMENTS: All Dimensions in mm				
SCALE: 1:1				

3.Hub Washer (254-WT-00010,Quantity -2)



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

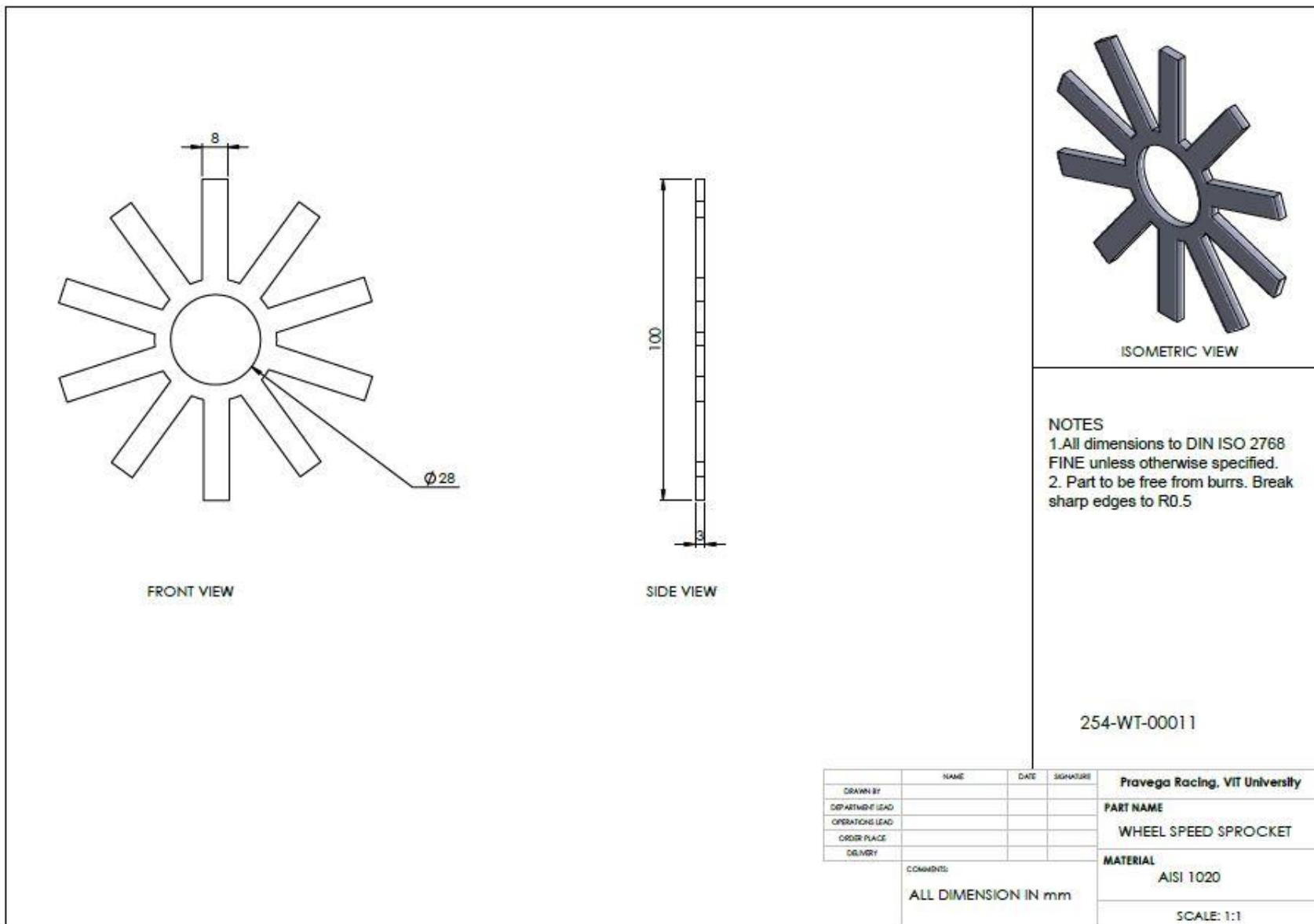
Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.
2. Part to be free from burrs. Break sharp edges to R0.5.

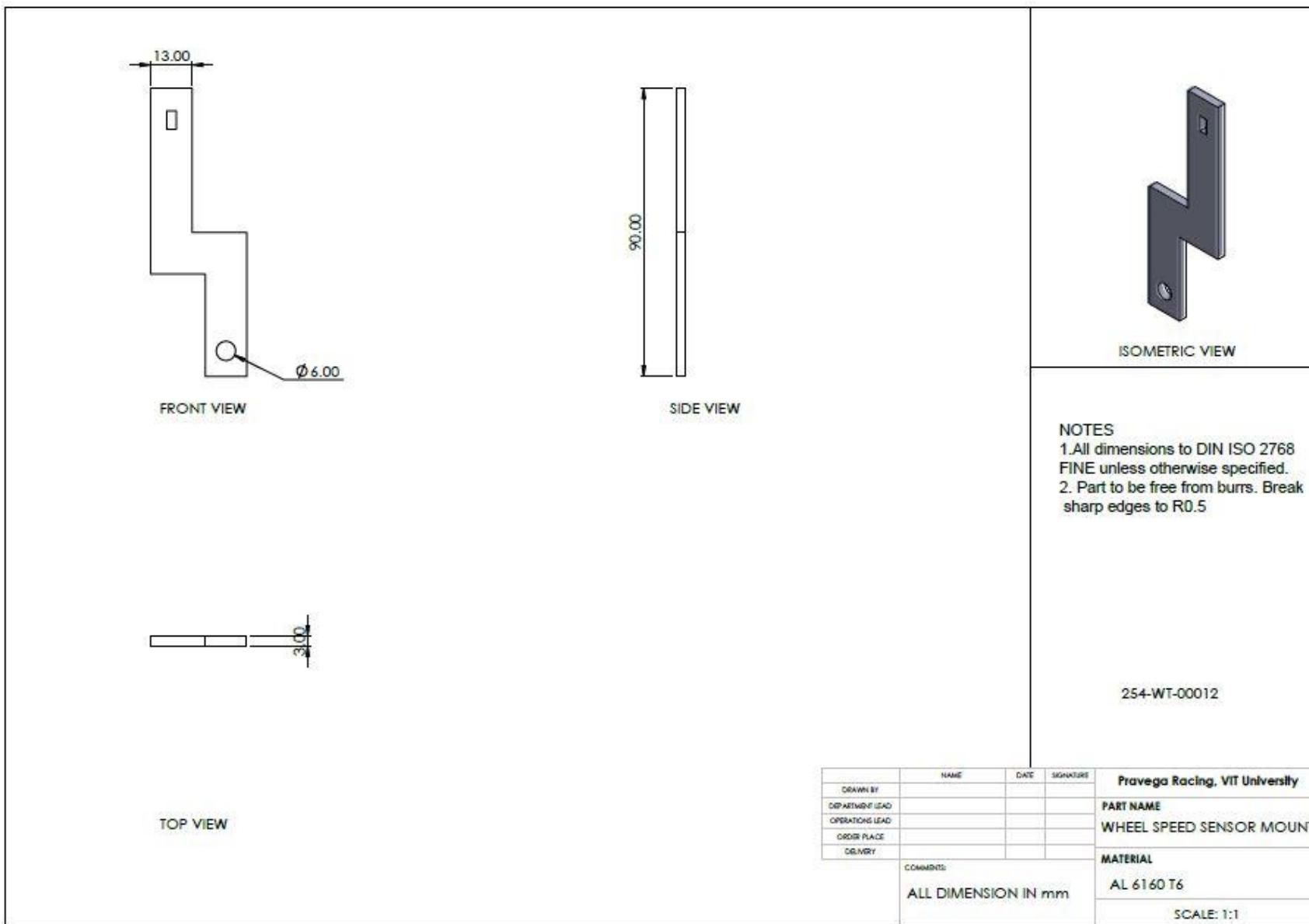
254-WT-00010

DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				HUB WASHER
ORDER PLACE				MATERIAL
DELIVERY				Al 6061
COMMENTS:				SCALE: 1:1
ALL DIMENSIONS IN 'mm'				

4.Wheel Speed Sprocket (254-WT-00011,Quantity -2)

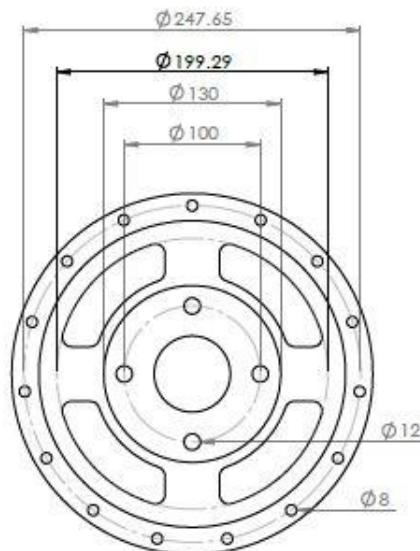


5.Wheel Speed Sensor Mount (254-WT-00012Quantity -2)



Assembly-Wheels (254-WT-A006)

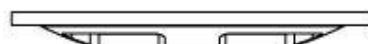
1.Wheel Center (254-WT-00020,Quantity -4)



FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

Notes:

1. All dimensions to DIN ISO 2768 FINE unless otherwise specified.

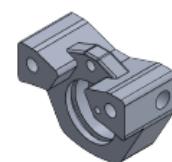
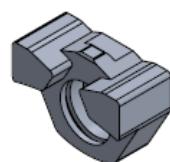
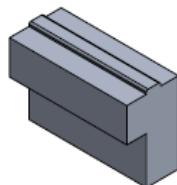
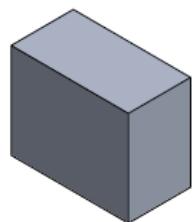
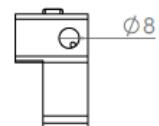
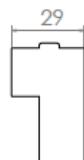
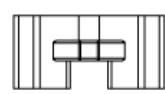
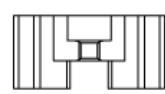
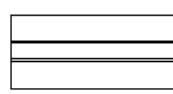
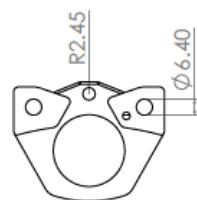
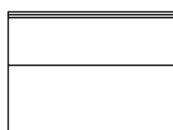
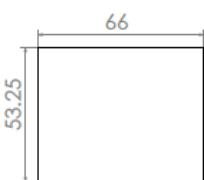
2. Part to be free from burrs. Break sharp edges to R0.5

254-WT-00020

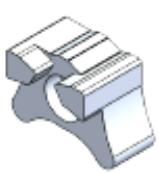
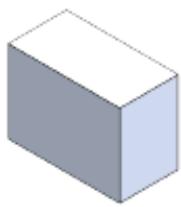
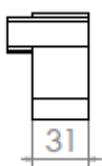
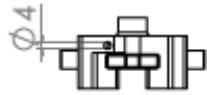
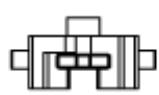
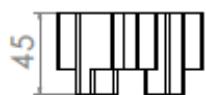
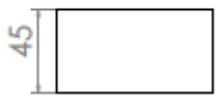
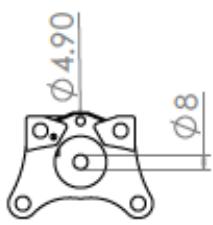
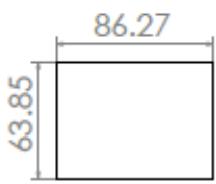
DRAWN BY	NAME	DATE	SIGNATURE	Pravega Racing, VIT University
DEPARTMENT LEAD				PART NAME
OPERATIONS LEAD				WHEEL CENTRE
ORDER PLACE				MATERIAL
DELIVERY				CFRP
COMMENTS:				ALL DIMENSIONS IN 'mm'
				SCALE: 1:5

STEP BY STEP MACHINING

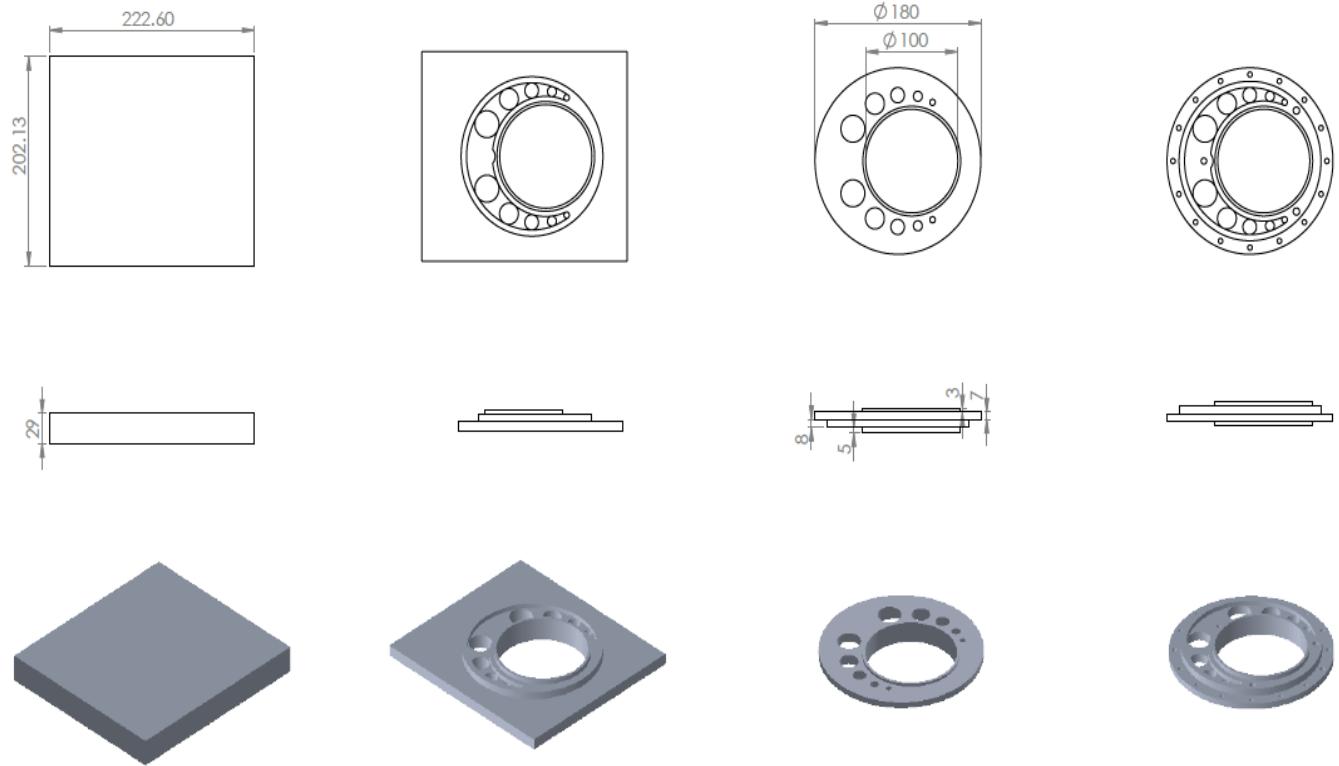
1. REAR CALIPER UPPER (AL-7075 T6)



2. REAR CALIPER UPPER (AL-7075 T6)



3. LEFT ECCENTRIC MACHINING

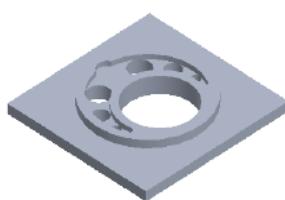
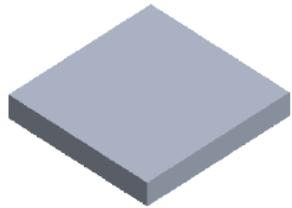
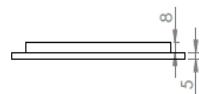
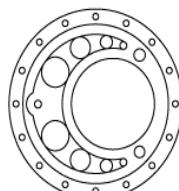
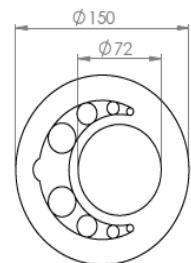
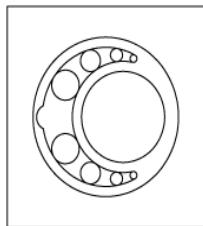
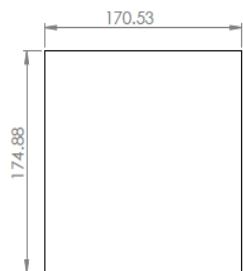


LEFT ECCENTRIC

ALL DIMENSIONS IN 'mm'

SCALE 1:4

4. RIGHT ECCENTRIC MACHINING (AL-7075 T6)



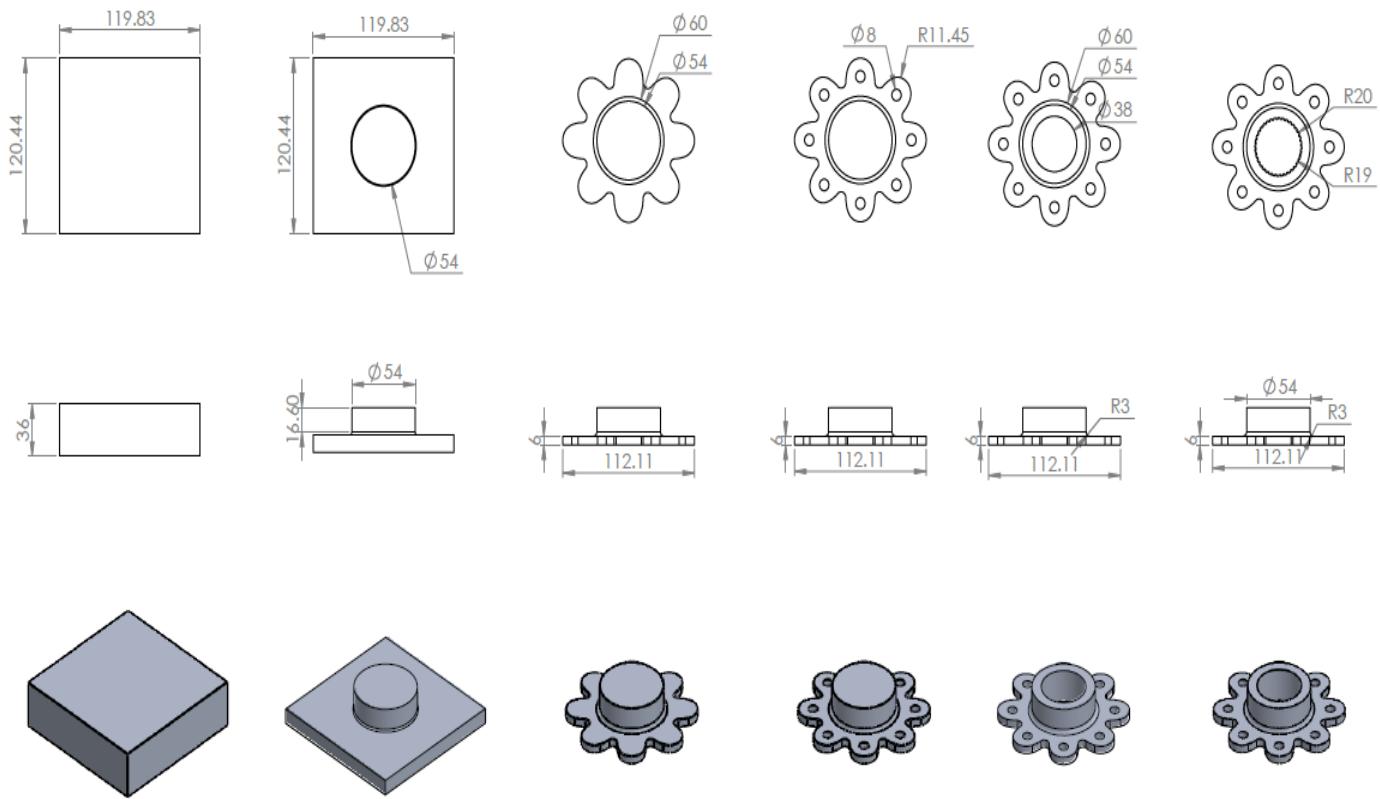
RIGHT ECCENTRIC

SCALE 1:3

ALL DIMENSIONS IN 'mm'



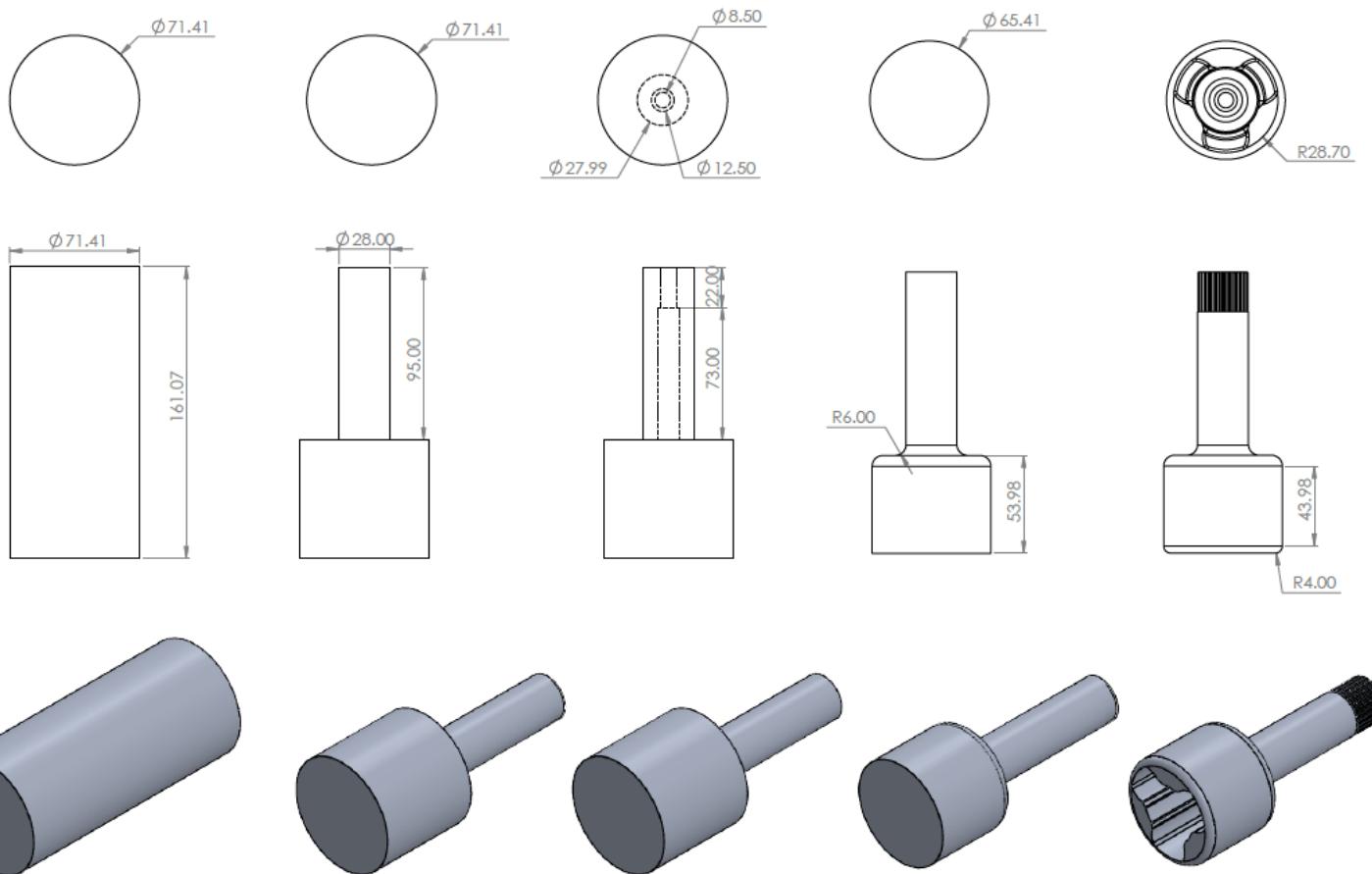
5. SPROCKET ADAPTER MACHINING (AL-7075 T6)



SPROCKET ADAPTOR
ALL DIMENSIONS IN MM
SCALE 1:3



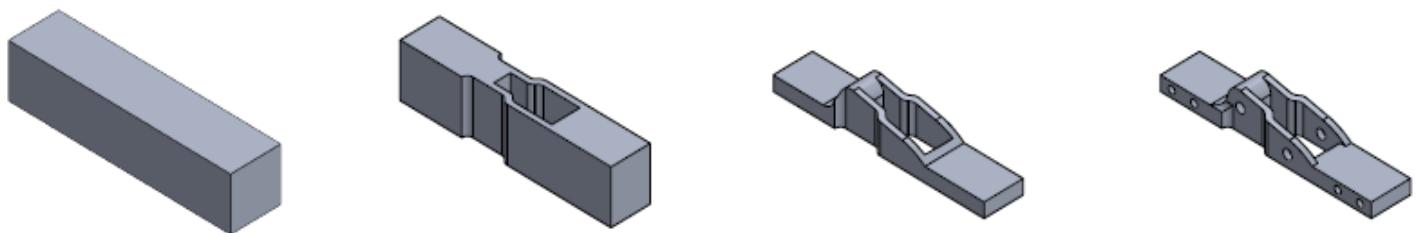
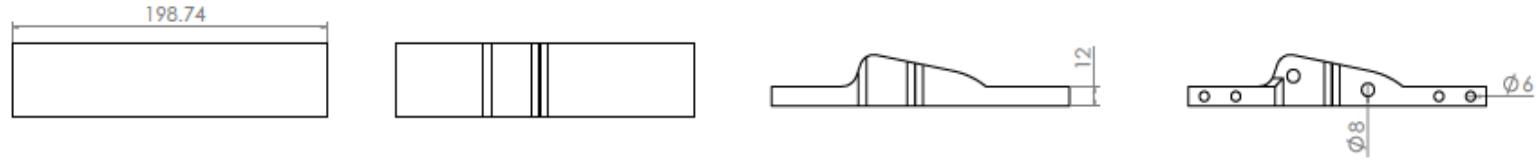
6. TRIPOD HOUSING



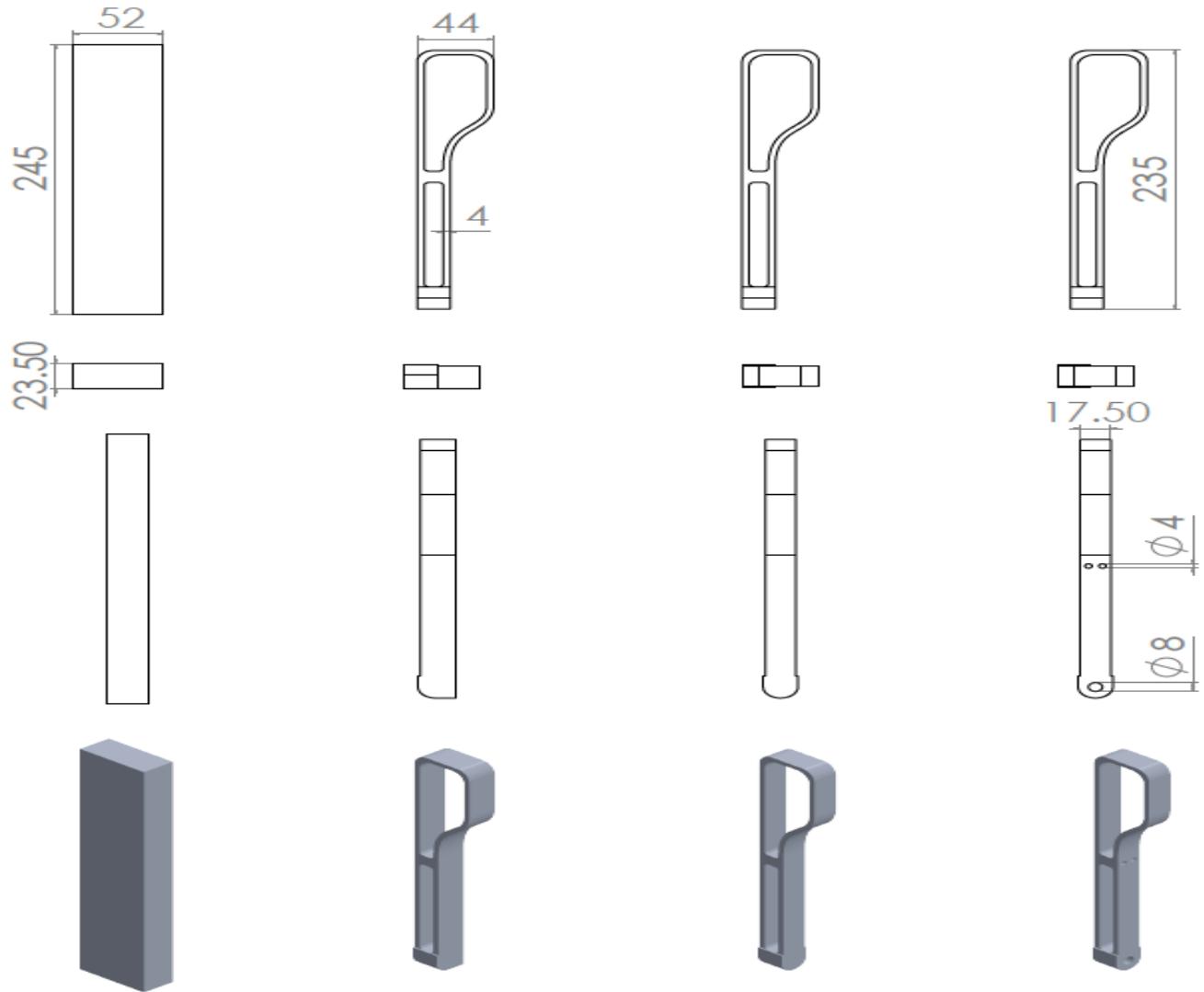
Tripod Casing
All Dimensions in mm
Scale 1:2



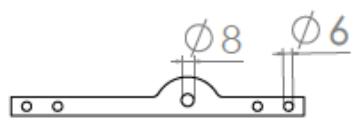
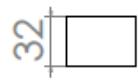
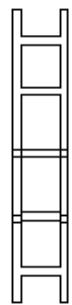
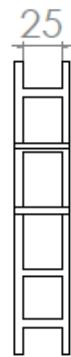
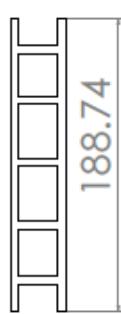
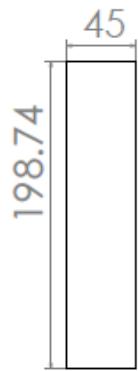
7. BRAKE PEDAL BASE (Al-7075 T6)



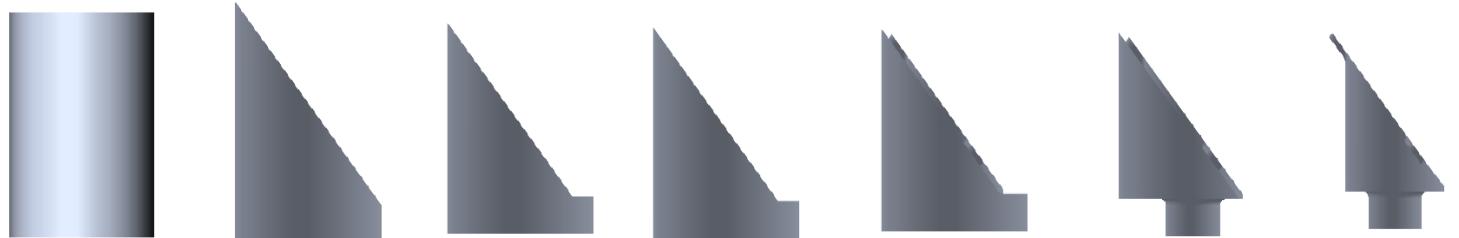
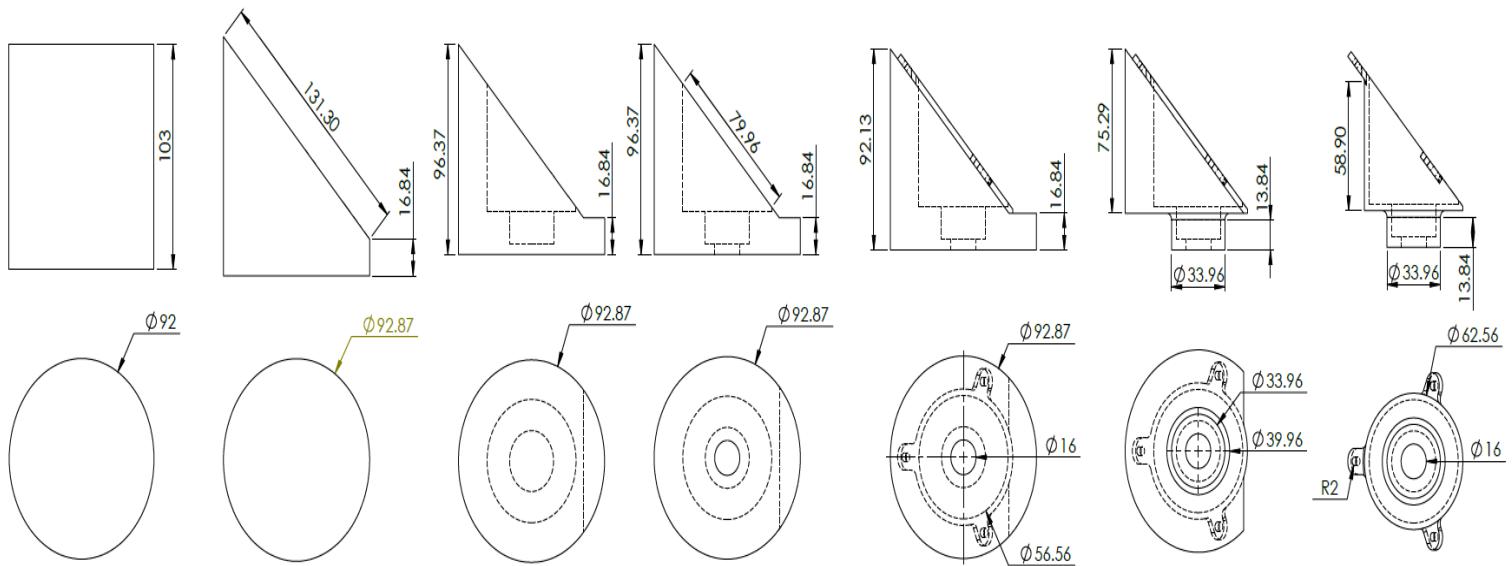
8. Brake Pedal (AL- 7075 T6)



9. CLUTCH PEDAL BASE



9. BEVEL CASING MACHINING (AL-7075 T6)

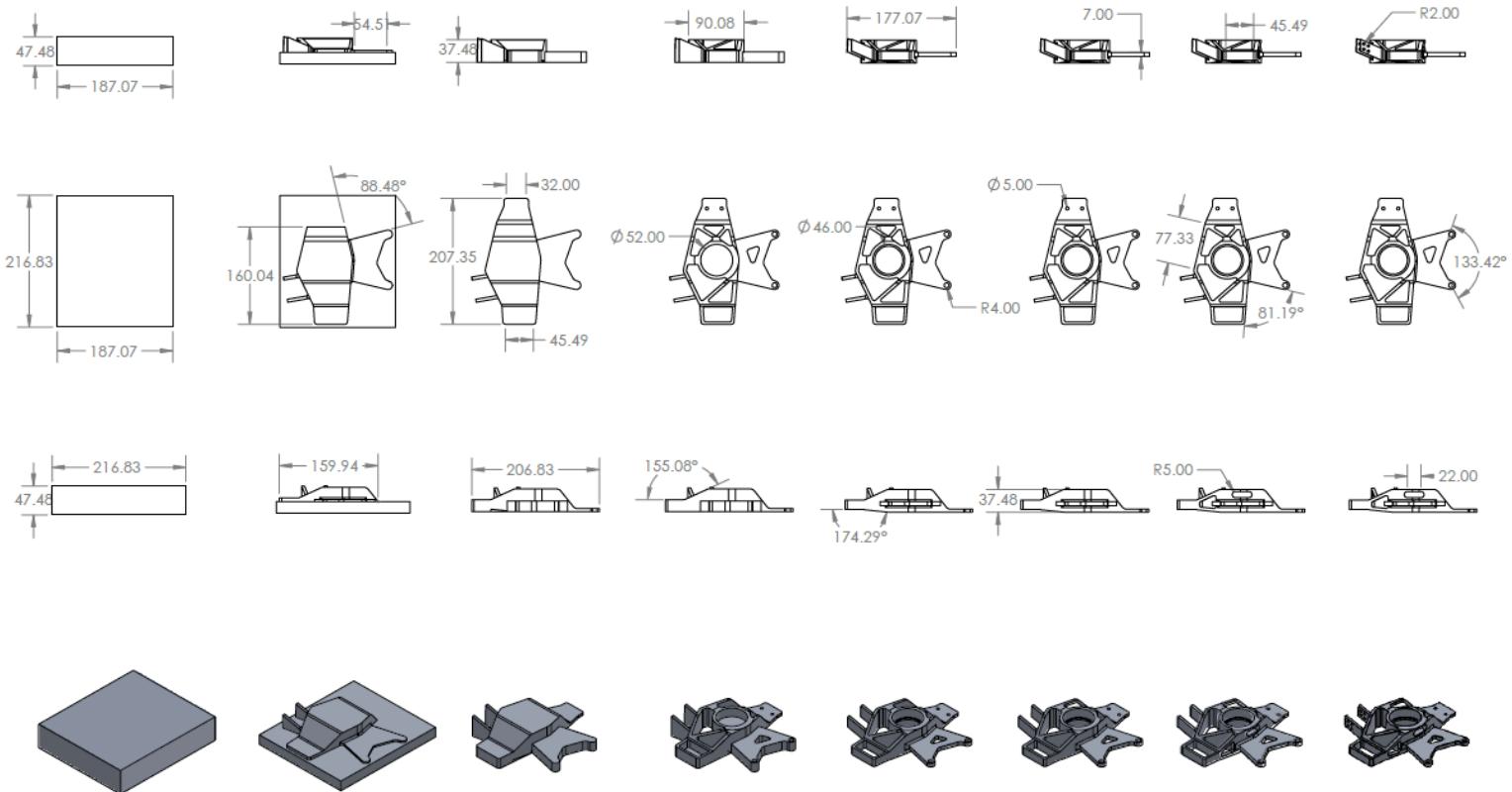


All dimension are in 'mm'
Scale 1:2

BEVEL CASING



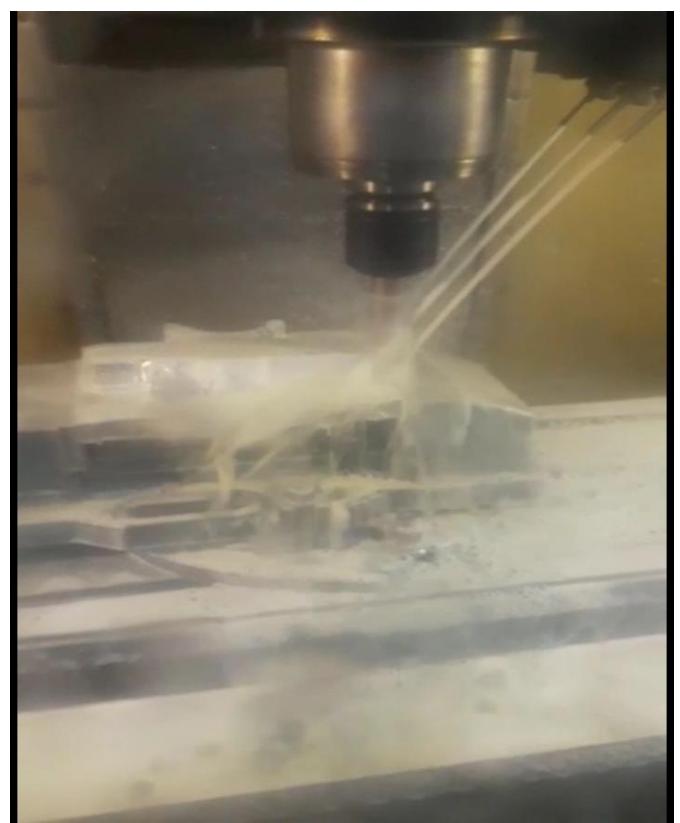
10.FRONT UPRIGHT (AL-7075 T6)



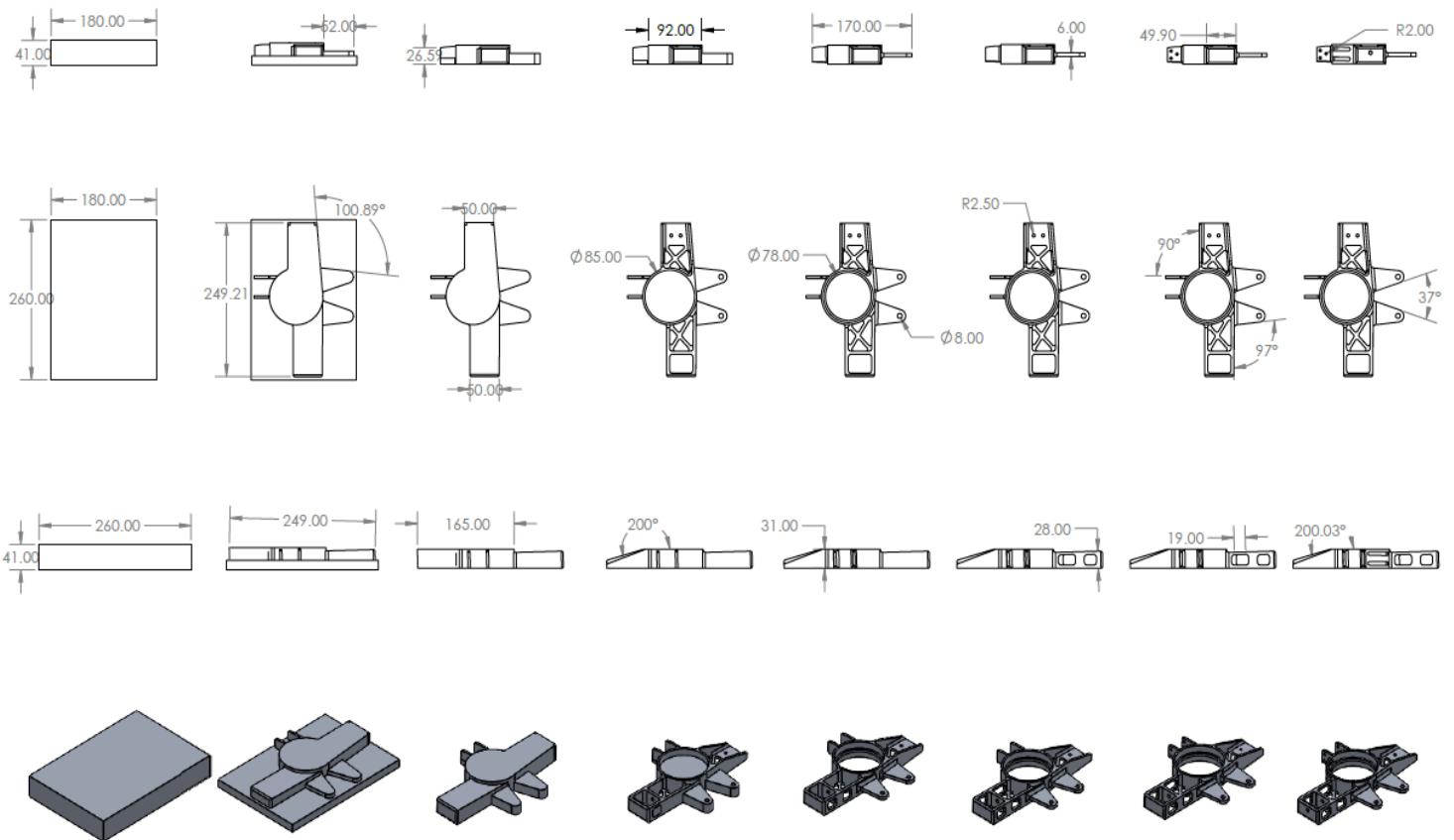
Front Upright

All Dimensions in mm

Scale 1:6

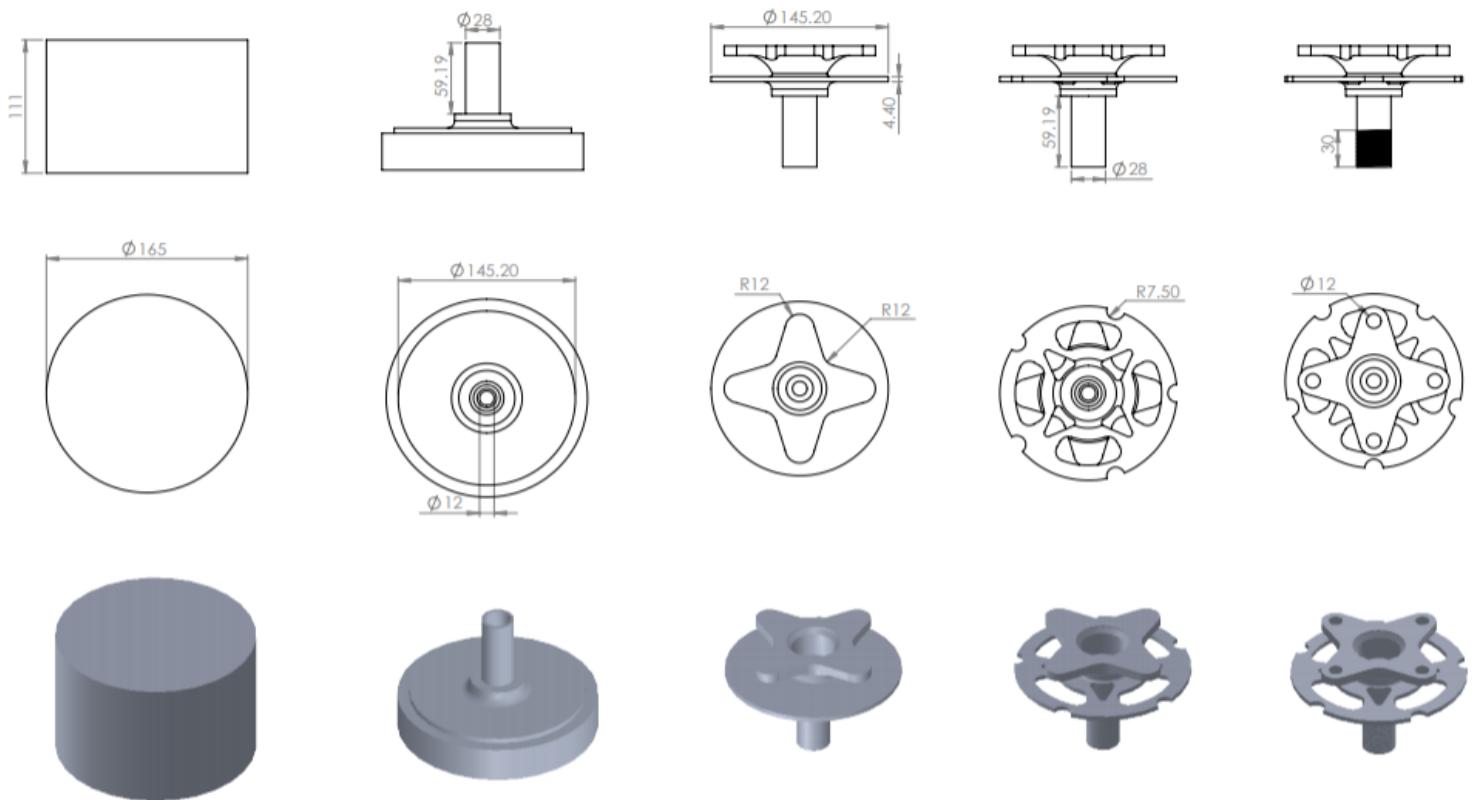


11. REAR UPRIGHT (AL- 7075 T6)



Rear Upright
All Dimensions in mm
Scale 1:6

12.FRONT HUB (Al – 7075 T6)

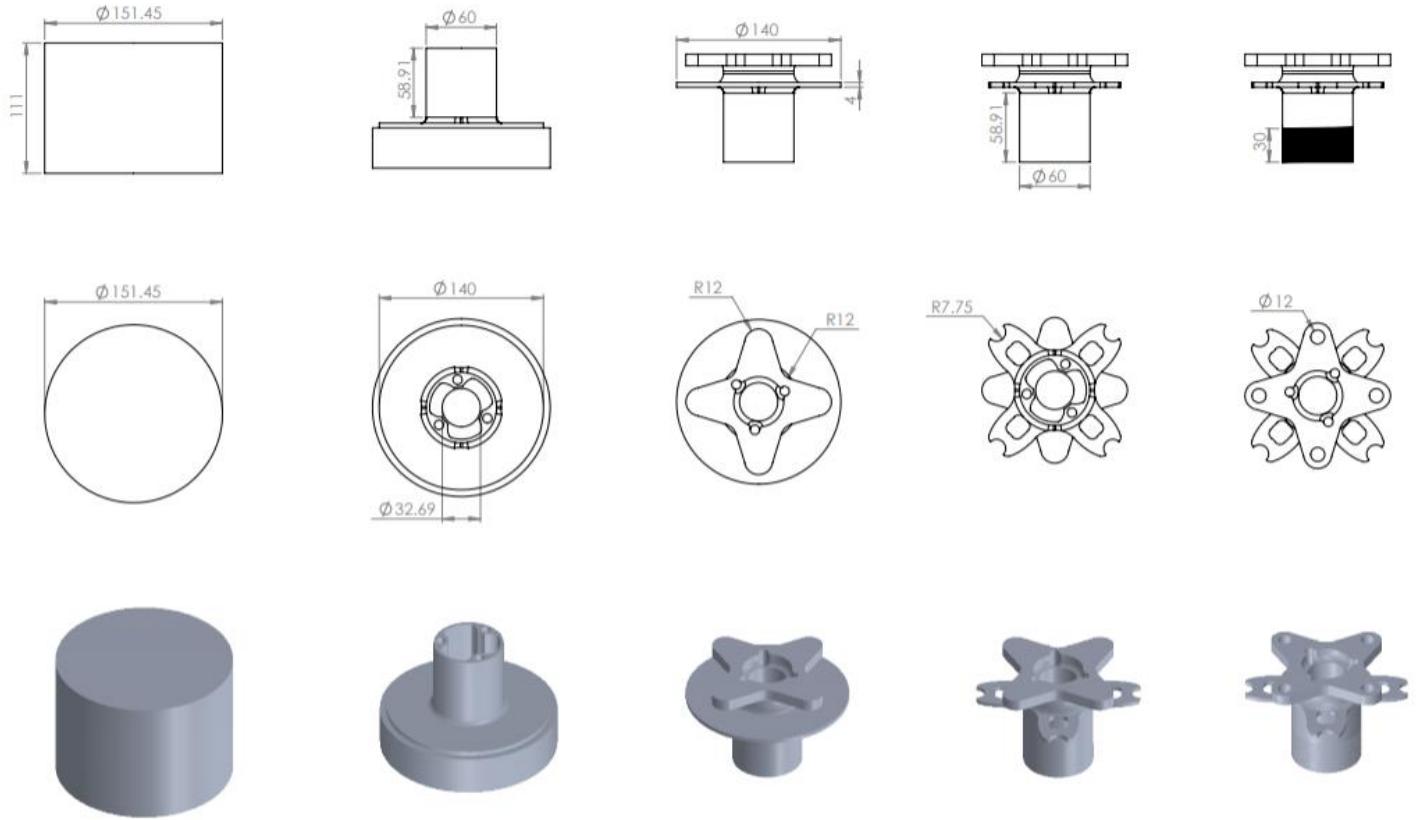


FRONT HUB

ALL DIMENSIONS IN 'mm'

SCALE 1:3

13.REAR HUB (Al- 7075 T6)



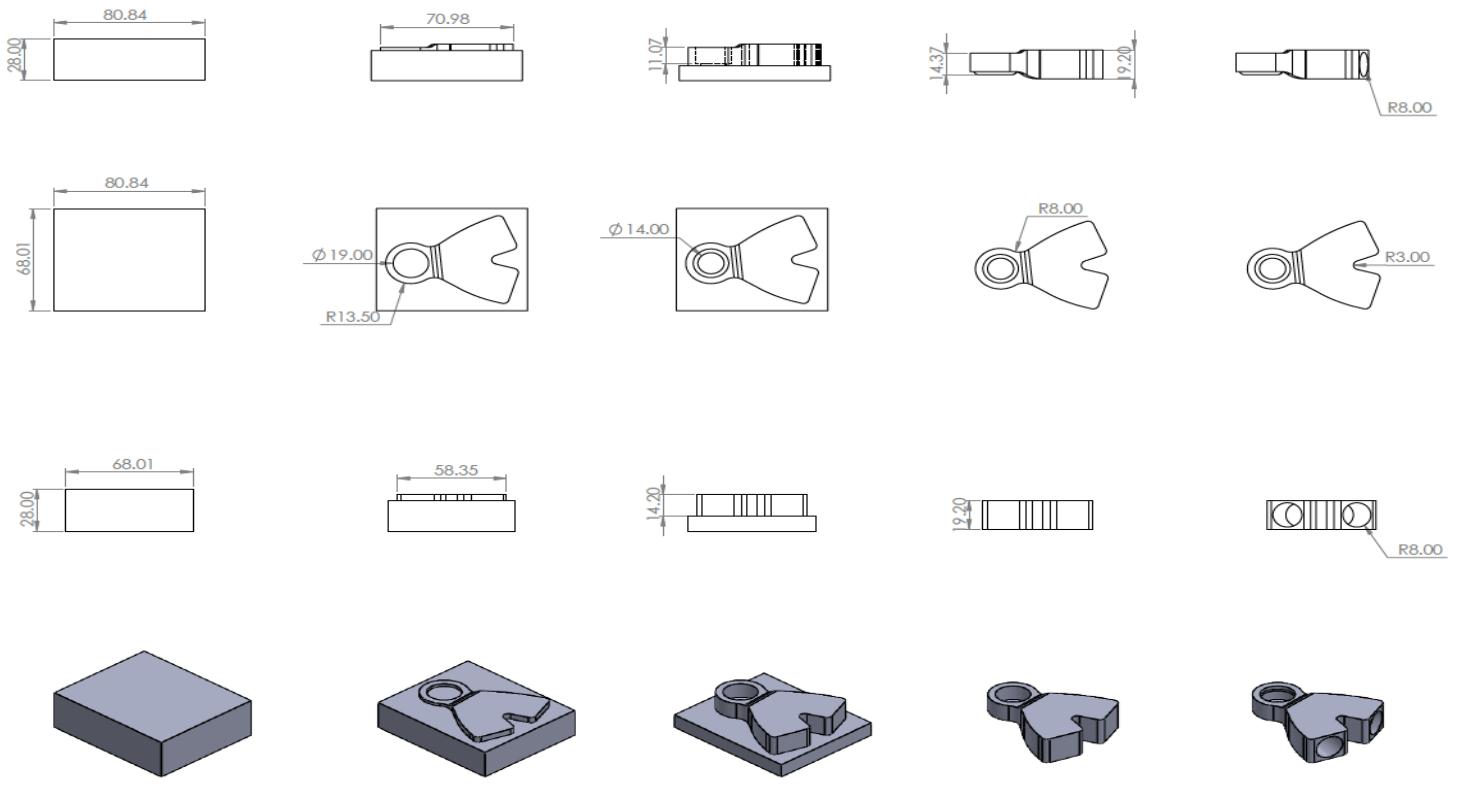
REAR HUB

ALL DIMENSIONS IN 'mm'

SCALE 1:3

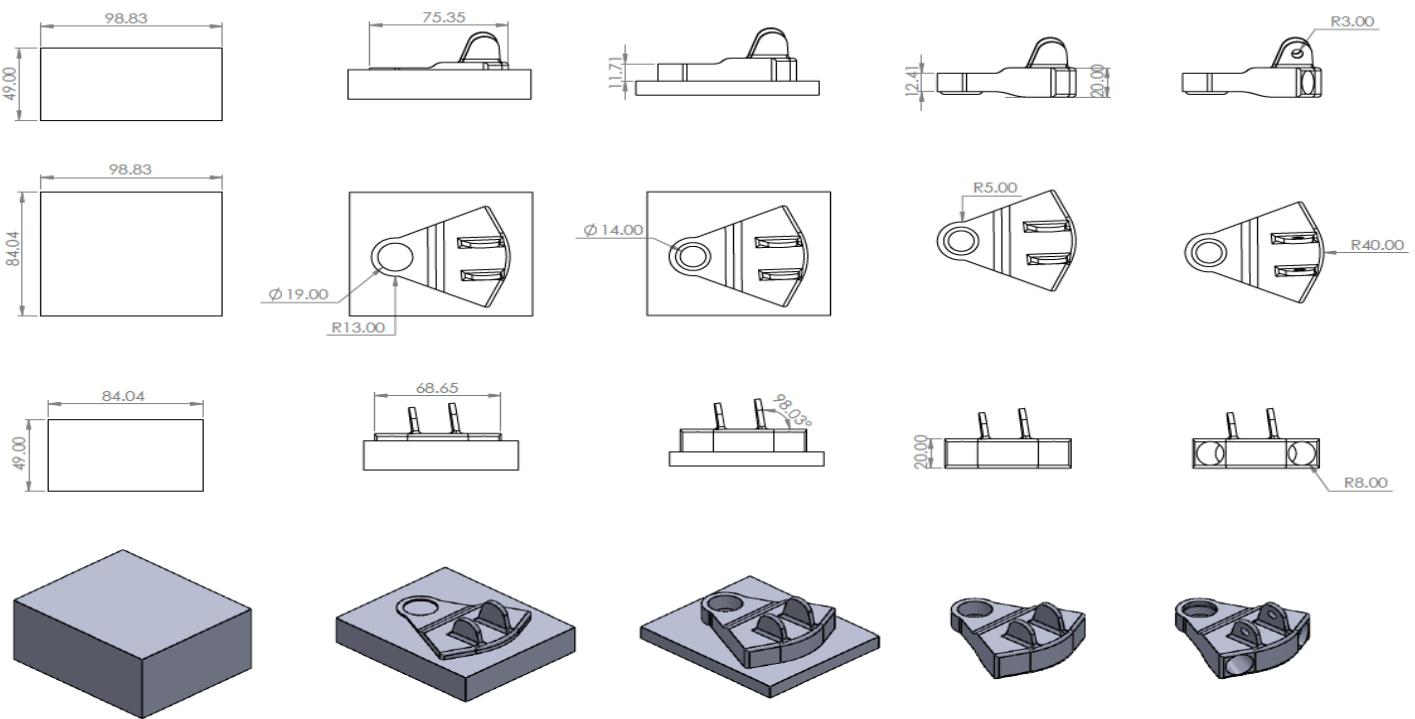


14. FRONT LOWER A-ARM



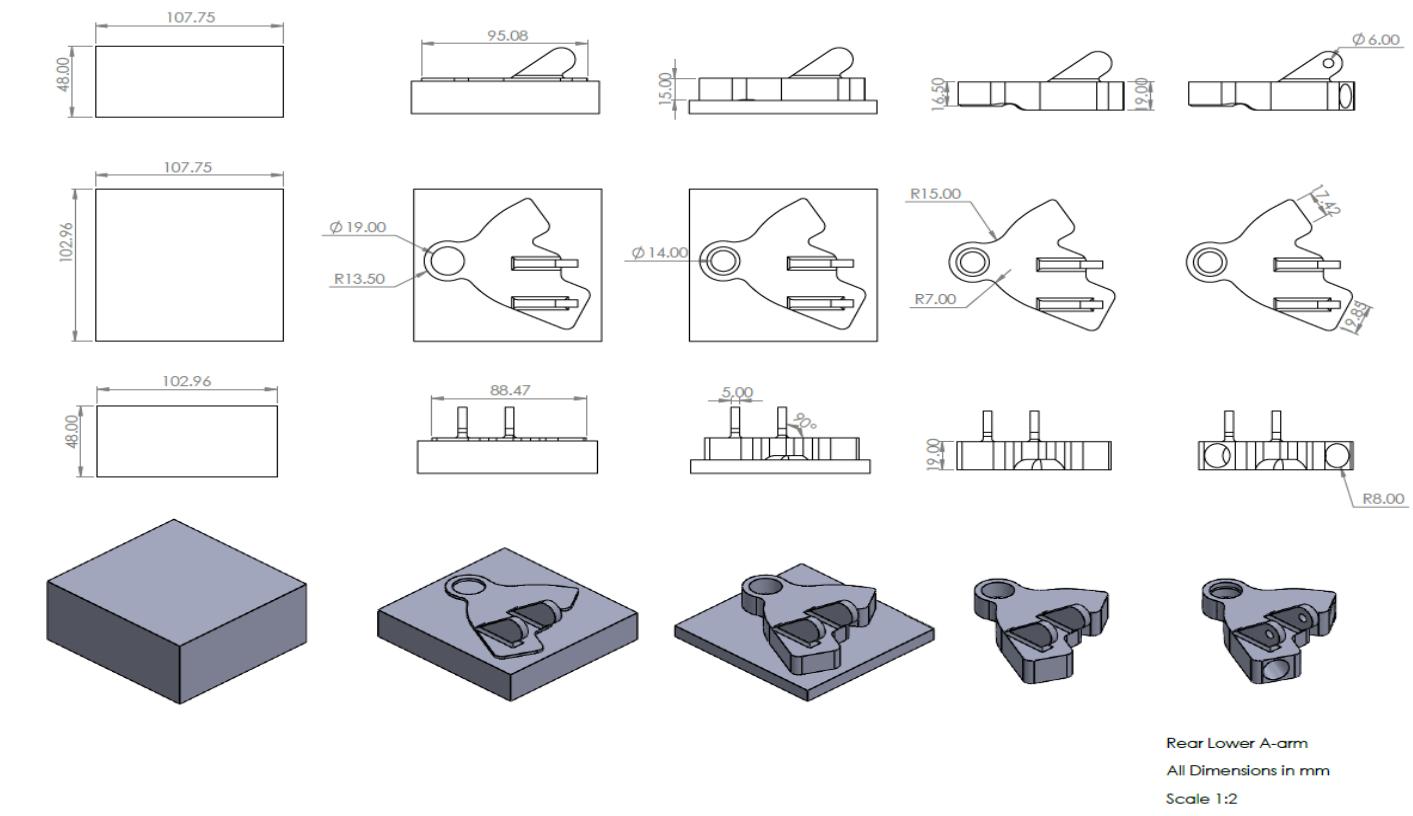
Front Lower A-arm
All Dimensions in mm
Scale 1:2

15. FRONT UPPER A-ARM



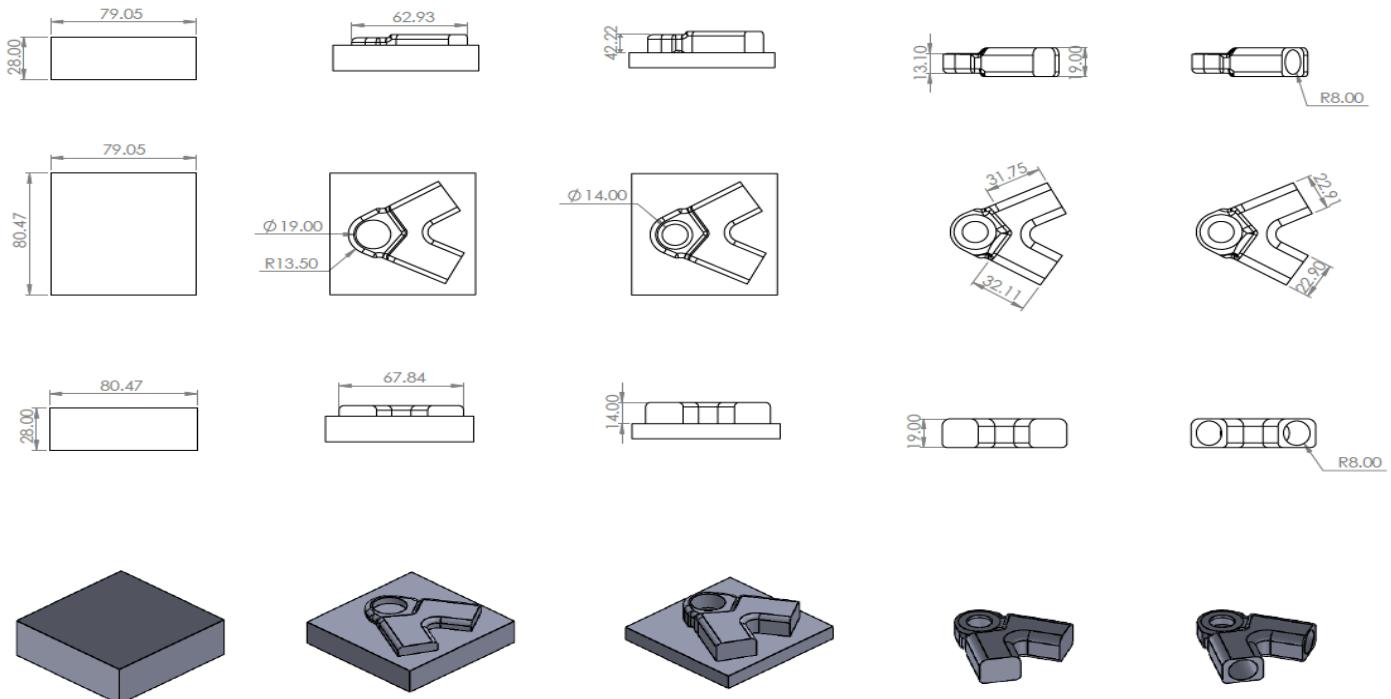
Front upper A-arm
All Dimensions in mm
Scale 1:2

16. REAR LOWER A-ARM



Rear Lower A-arm
All Dimensions in mm
Scale 1:2

17. REAR UPPER A-ARM



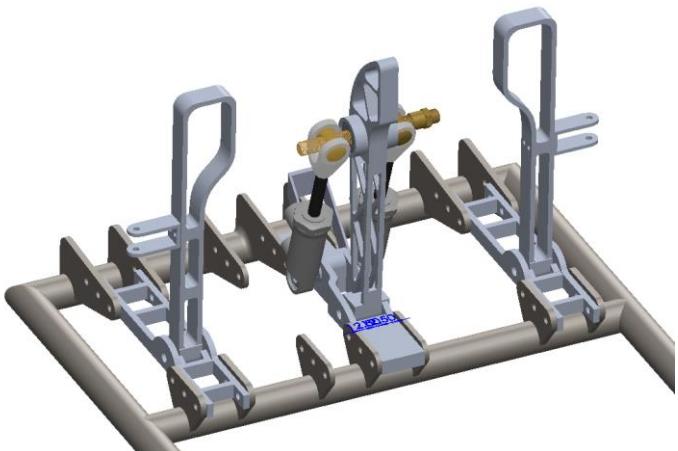
Rear upper A-arm
All Dimensions in mm
Scale 1:2



DESIGN FOR MANUFACTURING (DFM)

1. Pedal Assembly

Pedal Assembly – 2019

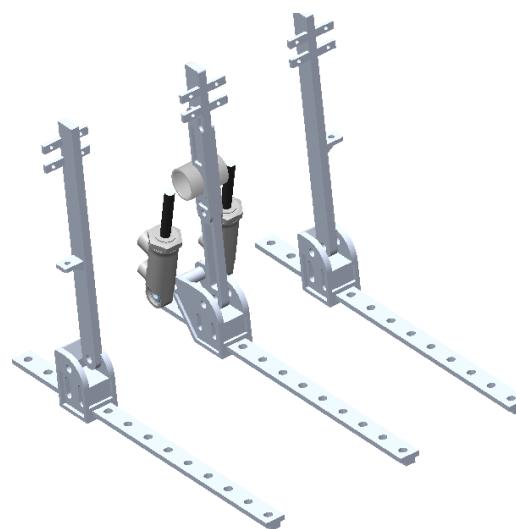


Brake Pedal, Clutch Pedal ,Throttle
Pedal - Single piece Al 7075 T6
Machined

No of welds - 0

Total no of parts – 8

Pedal Assembly – 2018



Brake Pedal, Clutch Pedal , Throttle
Pedal – Laser Cut parts joined
through welding techniques

No of welds – 22

Total number of parts – 16

No of welds is significantly reduced, and number of separate parts are reduced thus minimising the number of constraints.

2. Wheel Centre mould

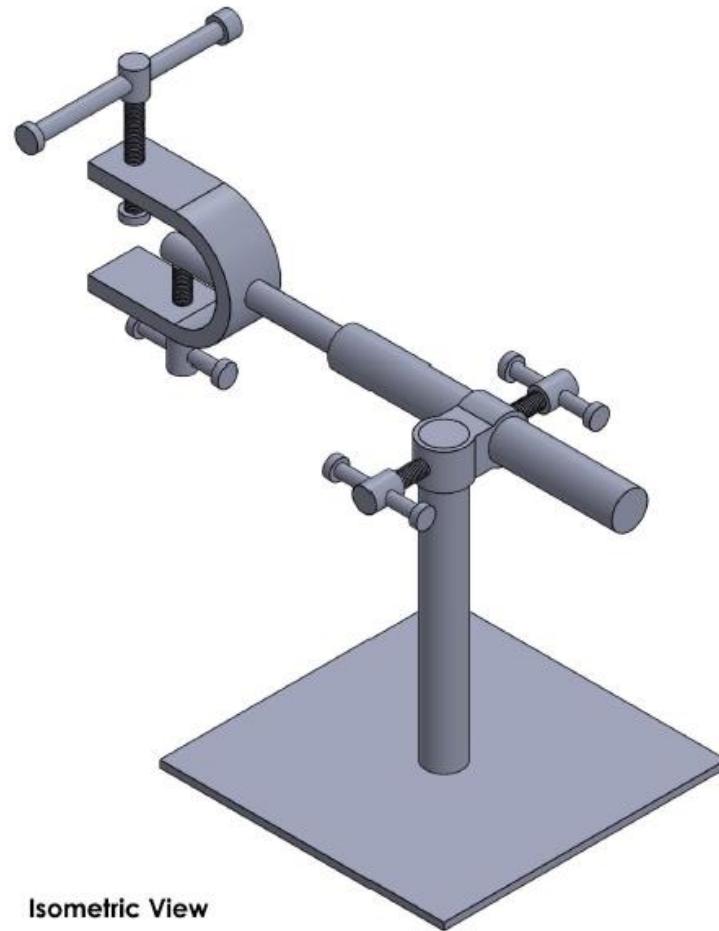
Wheel centre mould was made with PCD slots and weight reduction slots which significantly reduced the post process machining thereby reducing the overall cost.



Wheel Centre Mould



1. Universal Welding Fixture



Isometric View

Universal Welding Fixture

Scale 1:2
All dimensions are in mm

2. V block Welding Fixture



Top View



Isometric View



Front View



Right View

V Block

3. Chassis Fixtures

