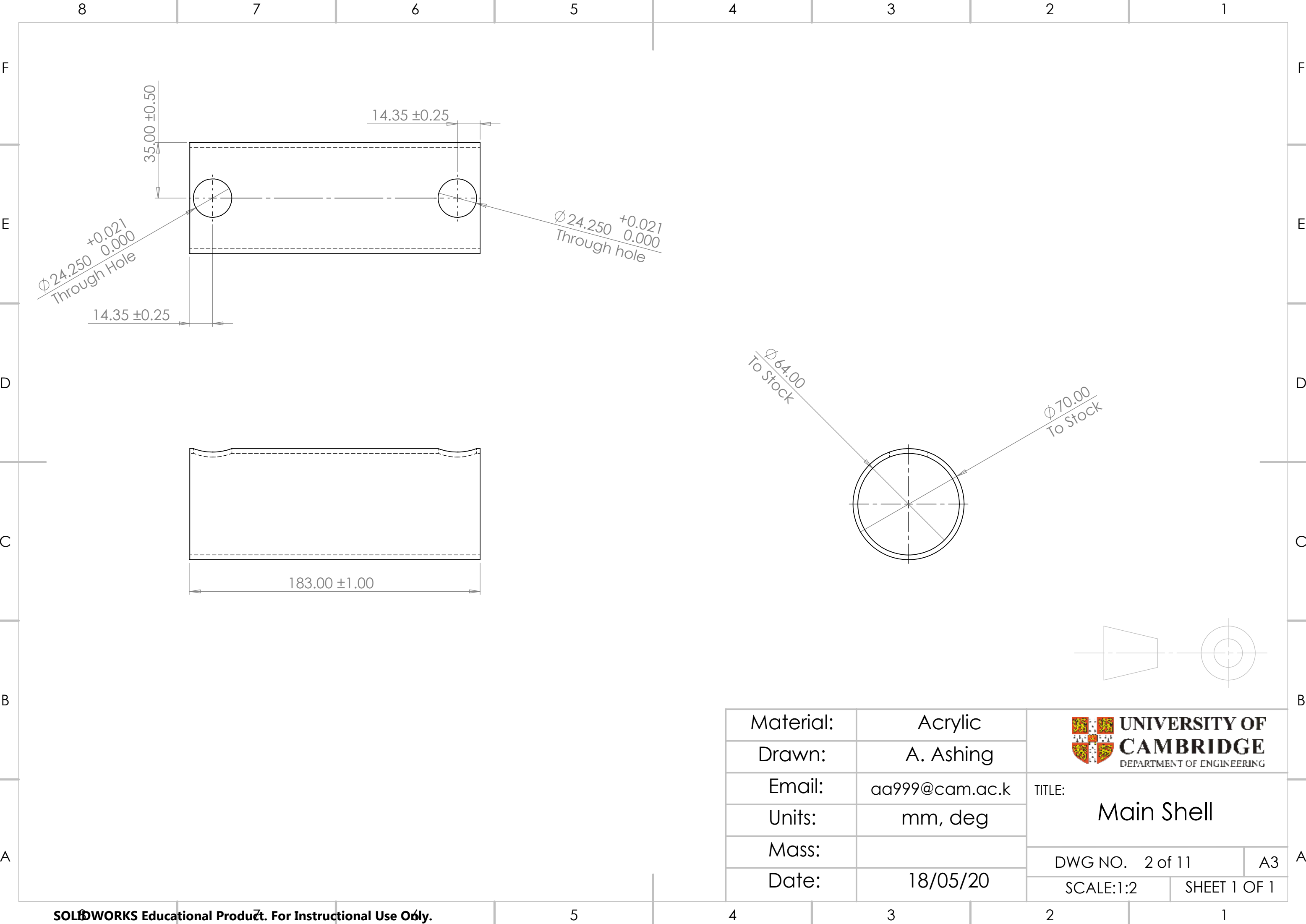
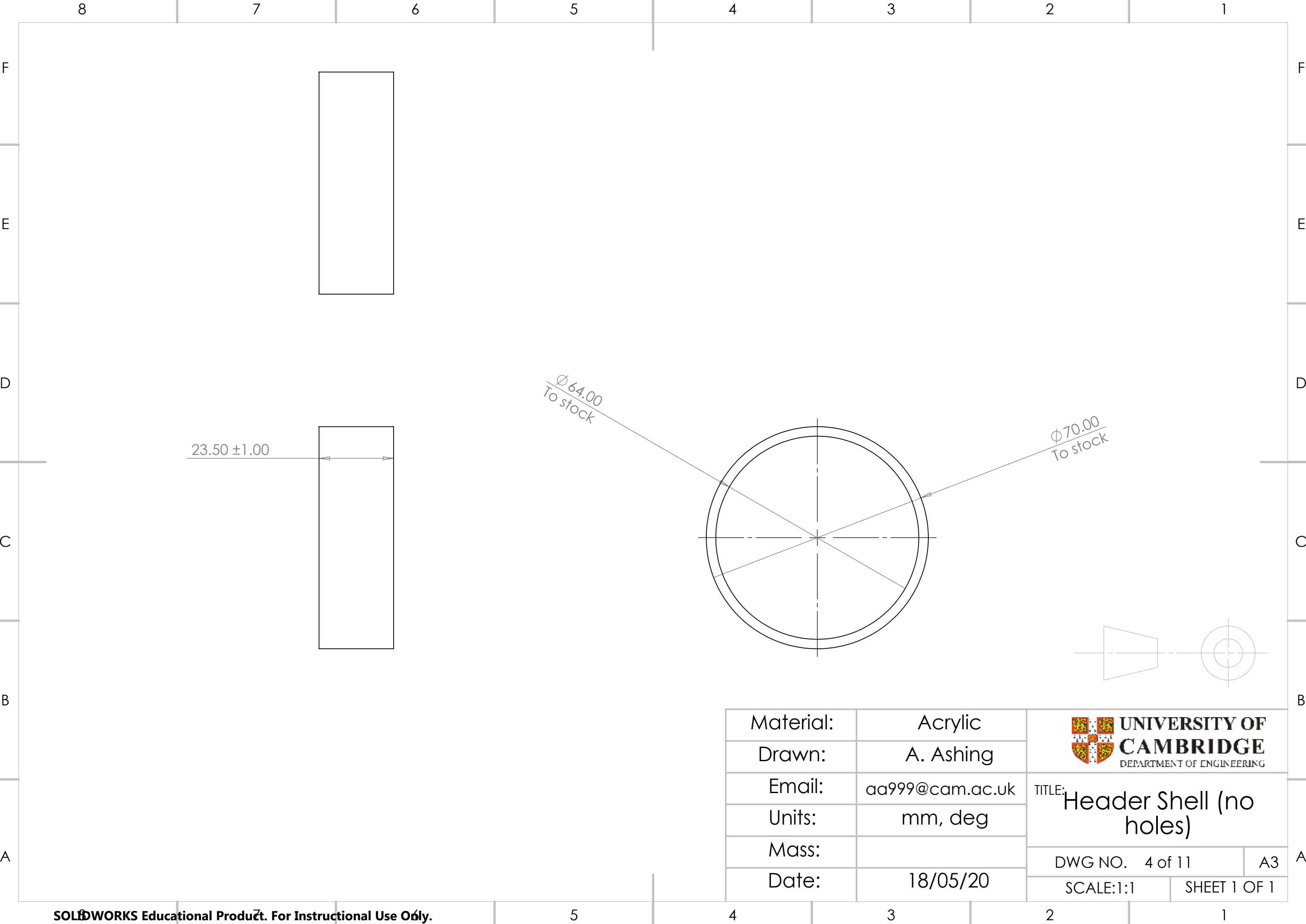
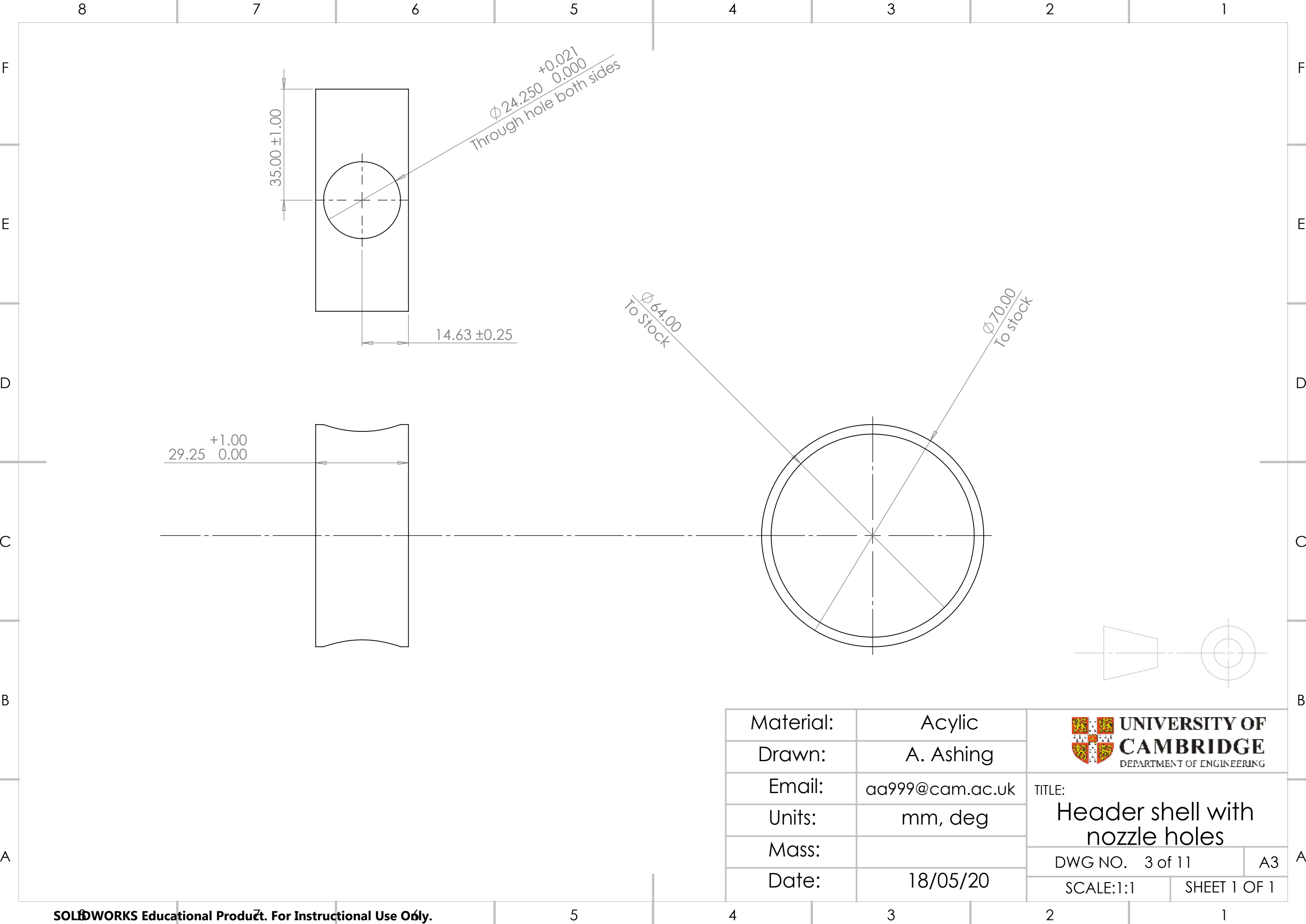



GA3 Heat Exchanger		Group B	
Part No.	Component Name	Quantity	
1	Main Shell	1	
2	Header Shell with nozzle holes	1	
3	Header shell without holes	1	
4	End Plate	2	
5	Nozzle	4	
6	Baffle	7	
7	Tube Plate with divider slot	1	
8	Tube plate without slot	1	
9	Copper Tube	16	
10	Header Divider	1	
Material:		n/a	
Drawn:		A. Ashing & A. Hughes	
Email:		aa999@cam.ac.uk	
Units:		mm, deg	
Mass:		0.986kg	
Date:		18/05/20	
		TITLE:	
		Group B Final Design	
		DWG NO.	1 of 11
		A3	
		SCALE:1:2	SHEET 1 OF 1



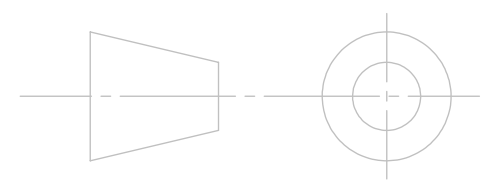
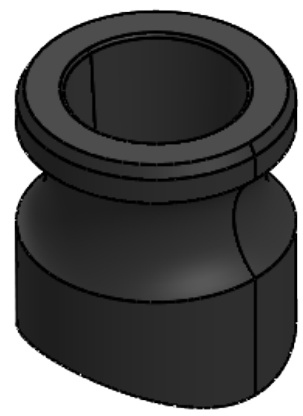
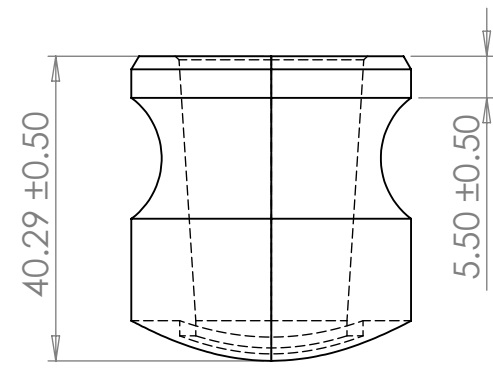
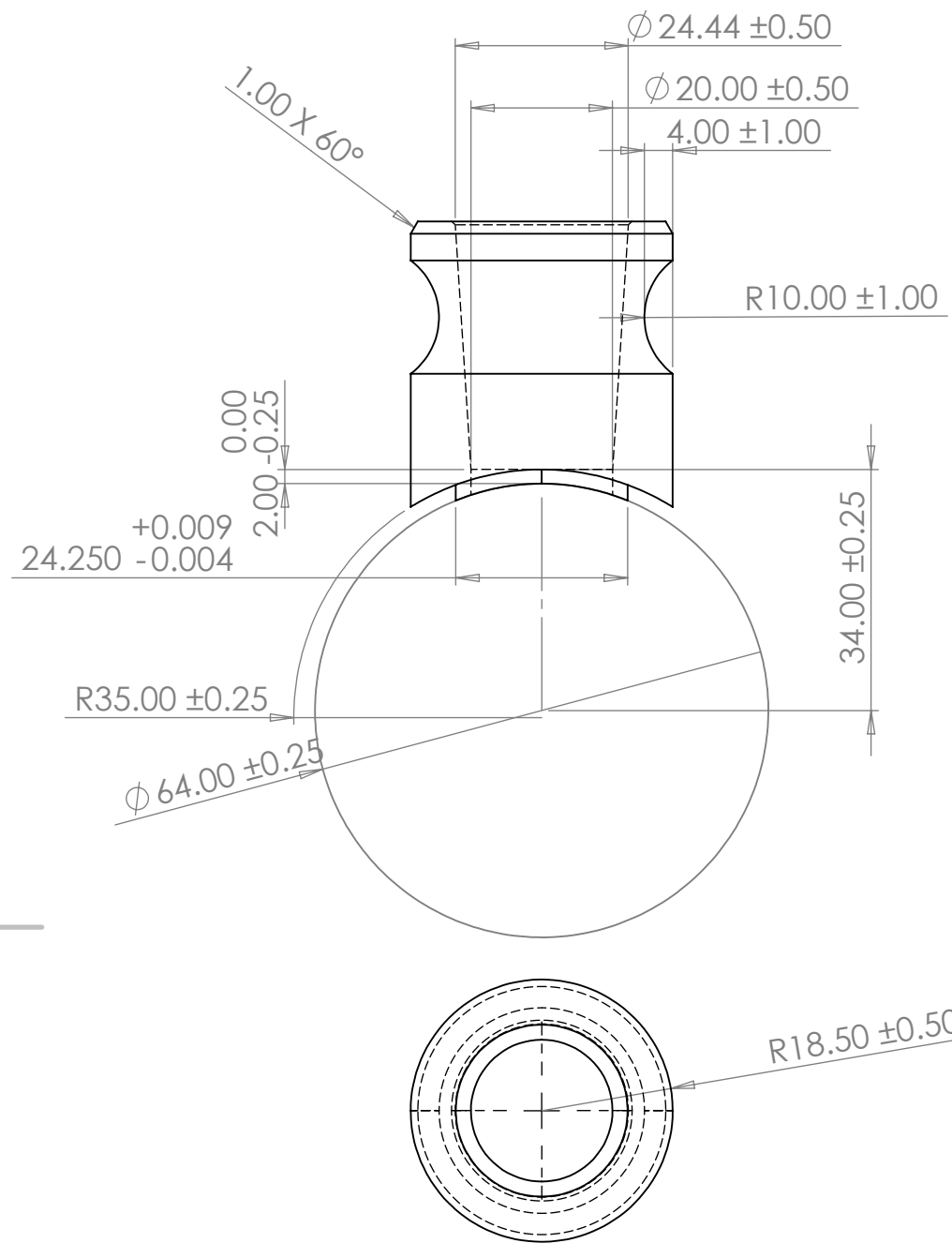





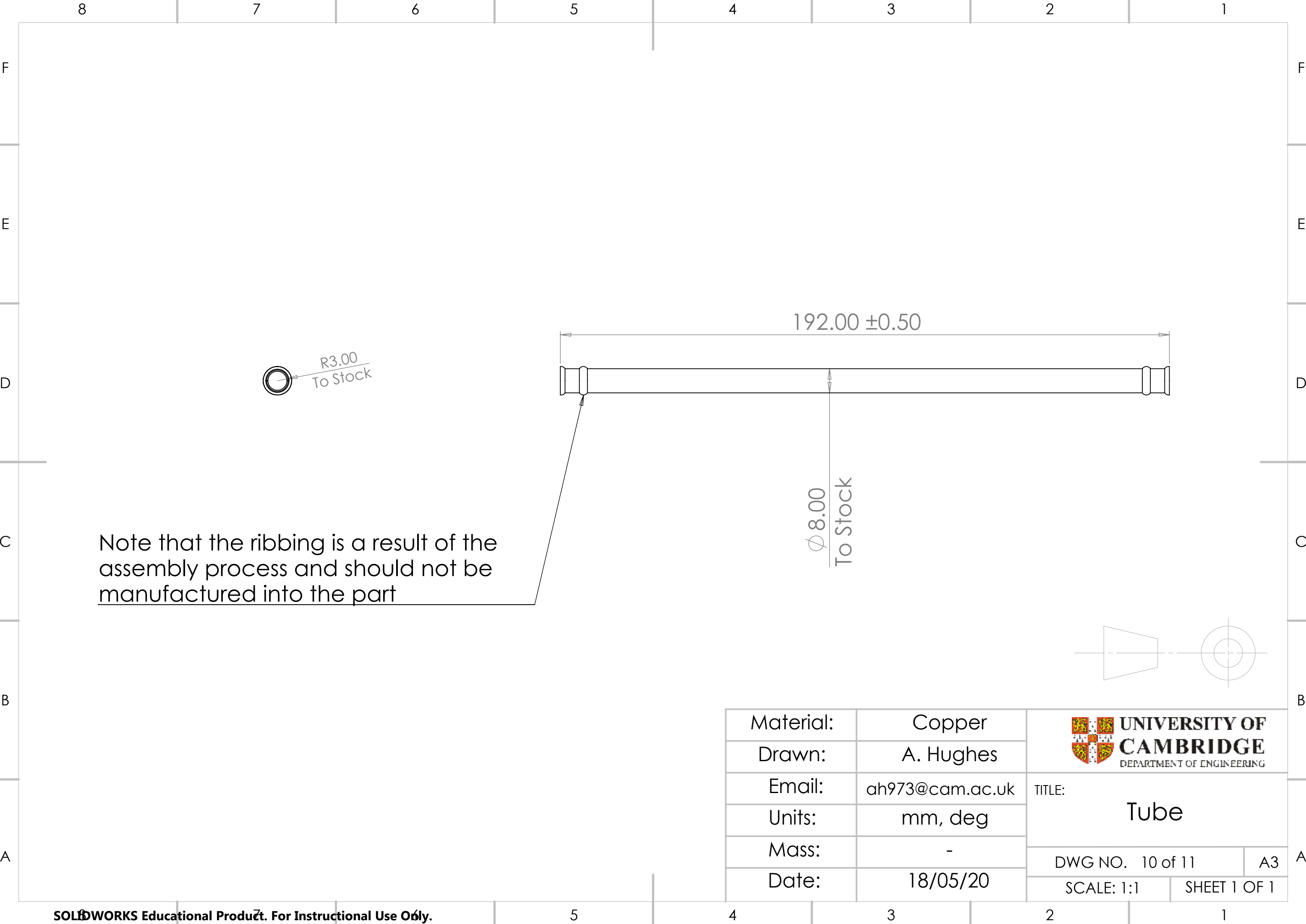
Material:	Acylic	 <b>UNIVERSITY OF CAMBRIDGE</b> DEPARTMENT OF ENGINEERING	
Drawn:	A. Ashing		
Email:	aa999@cam.ac.uk	TITLE: <b>Header shell with nozzle holes</b>	
Units:	mm, deg		
Mass:			
Date:	18/05/20	DWG NO. 3 of 11	A3
		SCALE:1:1	SHEET 1 OF 1

F  
E  
D  
C  
B  
A

F  
E  
D  
C  
B  
A



Material:	PLA	 <b>UNIVERSITY OF CAMBRIDGE</b> DEPARTMENT OF ENGINEERING	
Drawn:	A. Ashing		
Email:	aa999@cam.ac.uk	TITLE: <b>Nozzle</b>	
Units:	mm, deg		
Mass:		DWG NO. 6 of 11	A3
Date:	18/05/20	SCALE:1:1	SHEET 1 OF 1

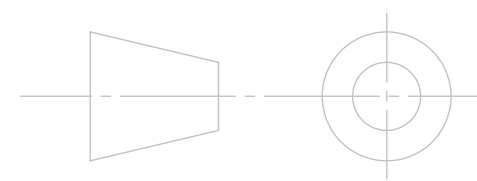



Note that the ribbing is a result of the assembly process and should not be manufactured into the part

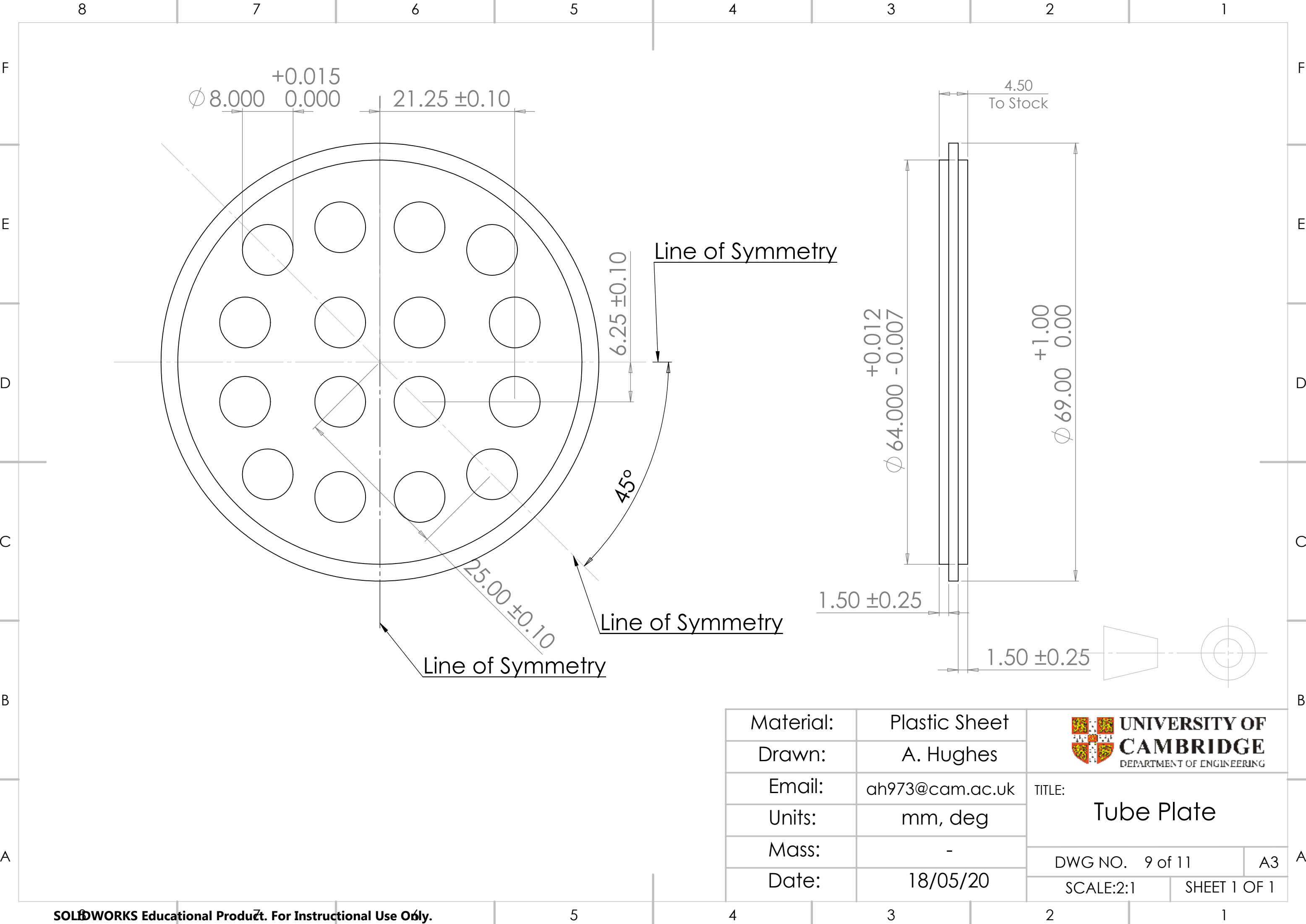
R3.00  
To Stock


192.00 ±0.50

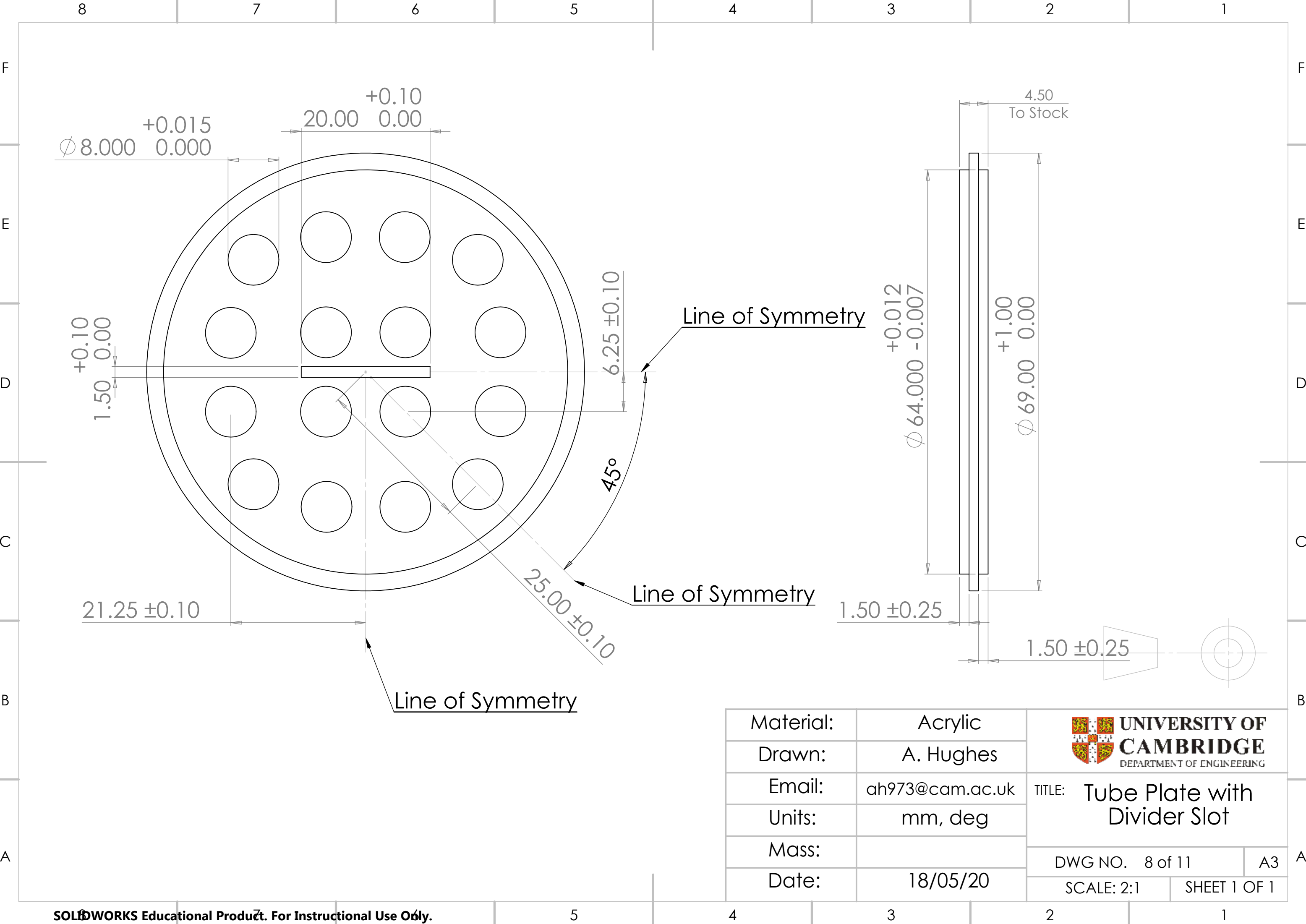
8.00  
To Stock



Material:	Copper	 <b>UNIVERSITY OF CAMBRIDGE</b> DEPARTMENT OF ENGINEERING	
Drawn:	A. Hughes		
Email:	ah973@cam.ac.uk	TITLE: <b>Tube</b>	
Units:	mm, deg		
Mass:	-		
Date:	18/05/20	DWG NO. 10 of 11	A3
		SCALE: 1:1	SHEET 1 OF 1



Material:	Plastic Sheet	 <b>UNIVERSITY OF CAMBRIDGE</b> DEPARTMENT OF ENGINEERING	
Drawn:	A. Hughes		
Email:	ah973@cam.ac.uk	TITLE: <b>Tube Plate</b>	
Units:	mm, deg		
Mass:	-	DWG NO. 9 of 11	
Date:	18/05/20	A3	
		SCALE:2:1	SHEET 1 OF 1



$\phi 8.000$   $+0.015$   $0.000$

$20.00$   $+0.10$   $0.00$

$1.50$   $+0.10$   $0.00$

$21.25 \pm 0.10$

$6.25 \pm 0.10$

$25.00 \pm 0.10$

$45^\circ$

Line of Symmetry

Line of Symmetry

Line of Symmetry


$4.50$  To Stock

$\phi 64.000$   $+0.012$   $-0.007$

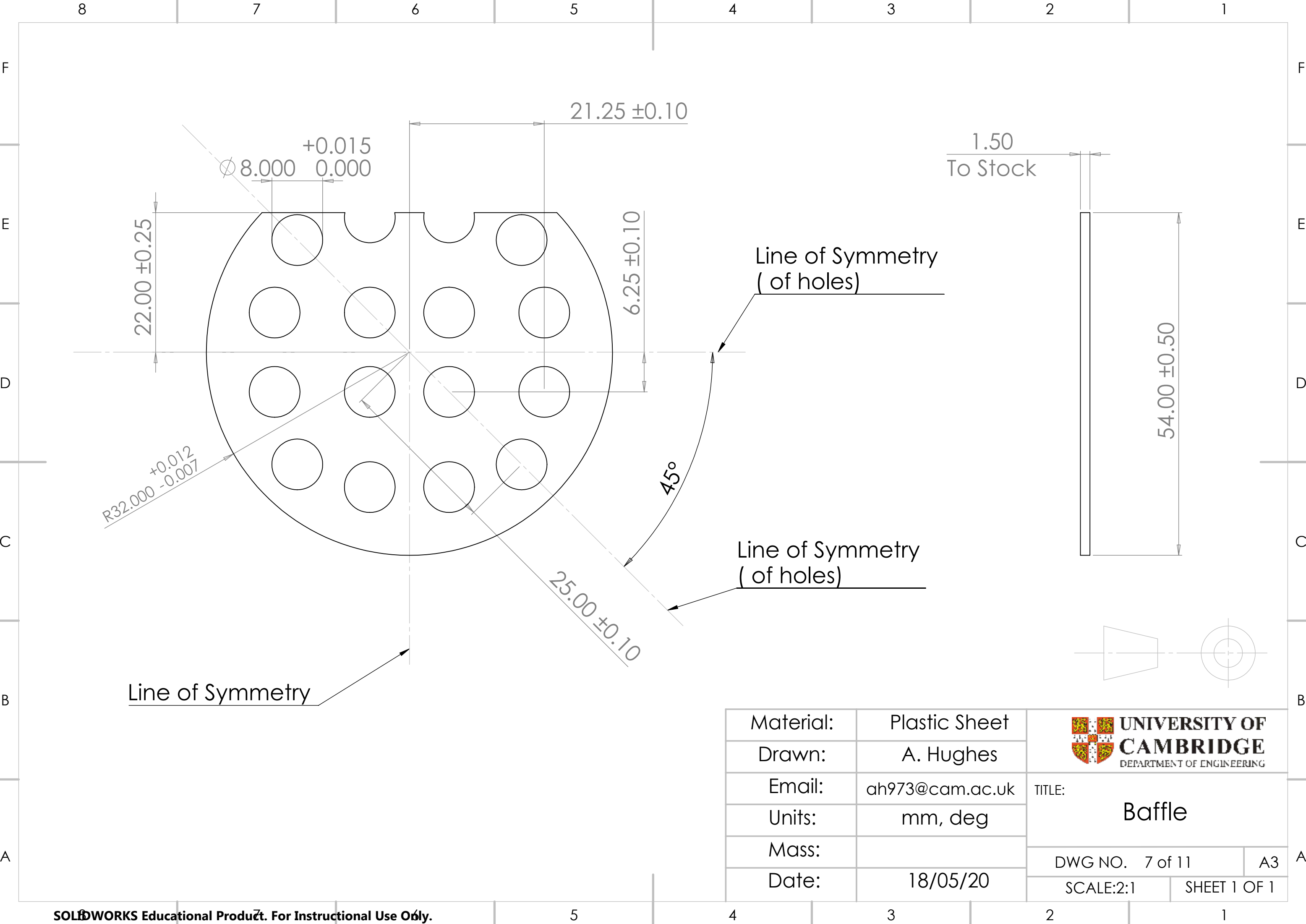
$\phi 69.00$   $+1.00$   $0.00$


$1.50 \pm 0.25$

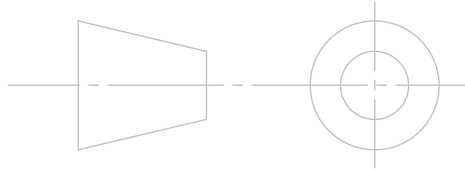
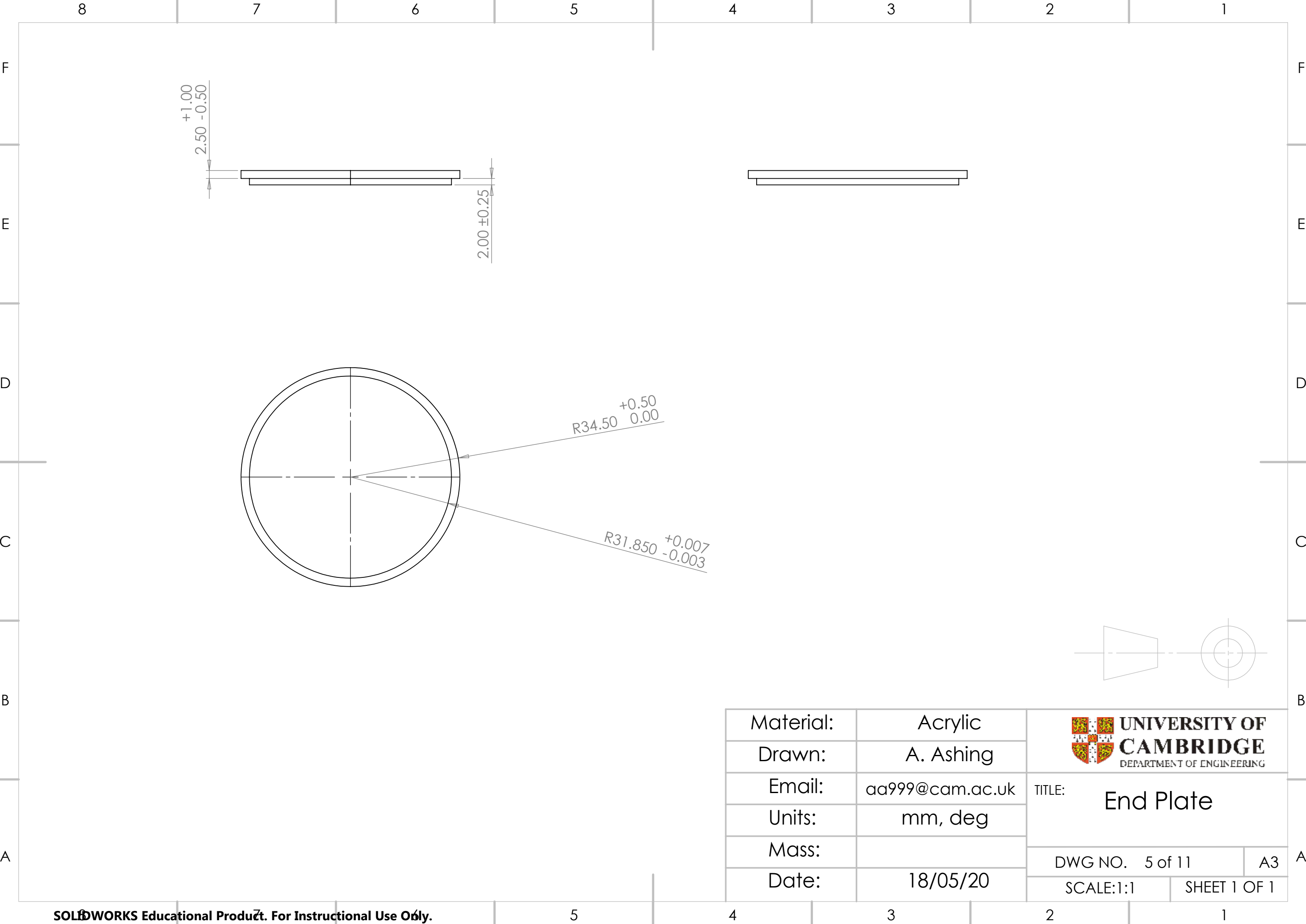
$1.50 \pm 0.25$


Material:	Acrylic	 <b>UNIVERSITY OF CAMBRIDGE</b> DEPARTMENT OF ENGINEERING	
Drawn:	A. Hughes		
Email:	ah973@cam.ac.uk	TITLE: Tube Plate with Divider Slot	
Units:	mm, deg		
Mass:		DWG NO. 8 of 11 A3	
Date:	18/05/20	SCALE: 2:1	SHEET 1 OF 1





Material:	Plastic Sheet	 <b>UNIVERSITY OF CAMBRIDGE</b> DEPARTMENT OF ENGINEERING	
Drawn:	A. Hughes		
Email:	ah973@cam.ac.uk	TITLE: <b>Baffle</b>	
Units:	mm, deg		
Mass:		DWG NO. 7 of 11 A3	
Date:	18/05/20	SCALE:2:1	SHEET 1 OF 1



Material:	Acrylic	 <b>UNIVERSITY OF CAMBRIDGE</b> DEPARTMENT OF ENGINEERING	
Drawn:	A. Ashing		
Email:	aa999@cam.ac.uk	TITLE: <b>End Plate</b>	
Units:	mm, deg		
Mass:		DWG NO. 5 of 11 A3	
Date:	18/05/20	SCALE:1:1	SHEET 1 OF 1

