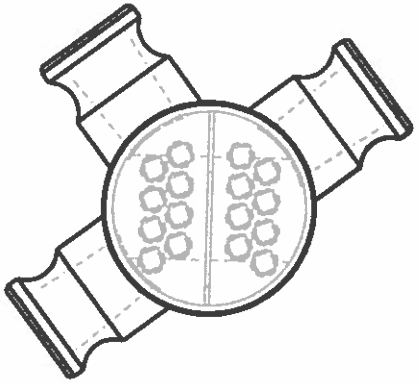
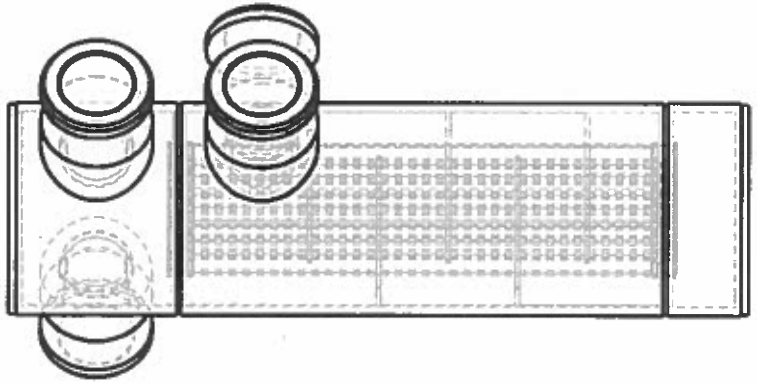
Heat Exchanger Manufacturing Drawings

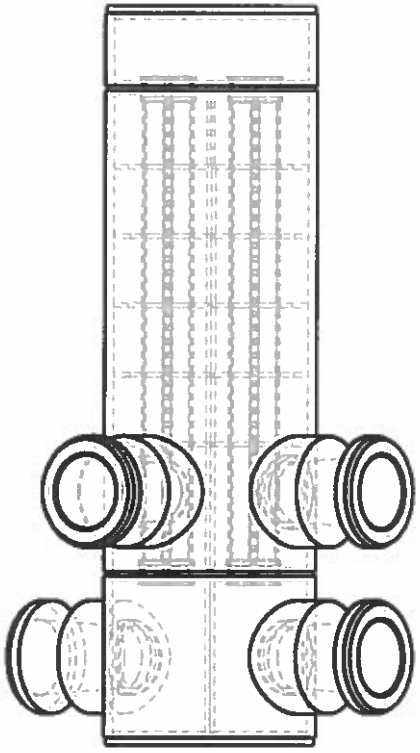
Group C

Notes:

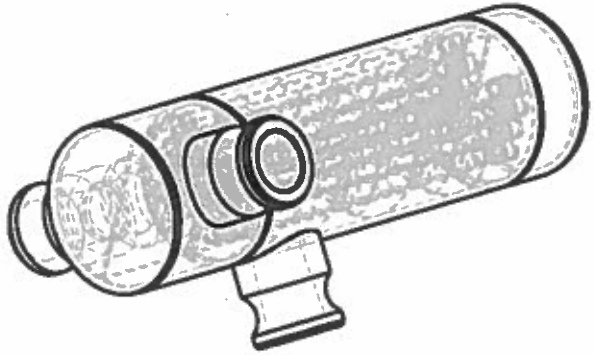
- The detailed hole spacing layout for the tube plates and baffles is shown on the "Tube Plate (2 Slots)" this is not repeated on the other drawings to aid clarity
- Where external diameters are set to 64mm these should be machined to fit the nominally 64mm ID stock tube
- Where holes are set to 8mm diameter these should be machined for a clearance fit with the nominally 8mm OD tube
- Where slots are shown as 1.5mm wide these should be machined to fit the nominally 1.5mm thick plastic sheet





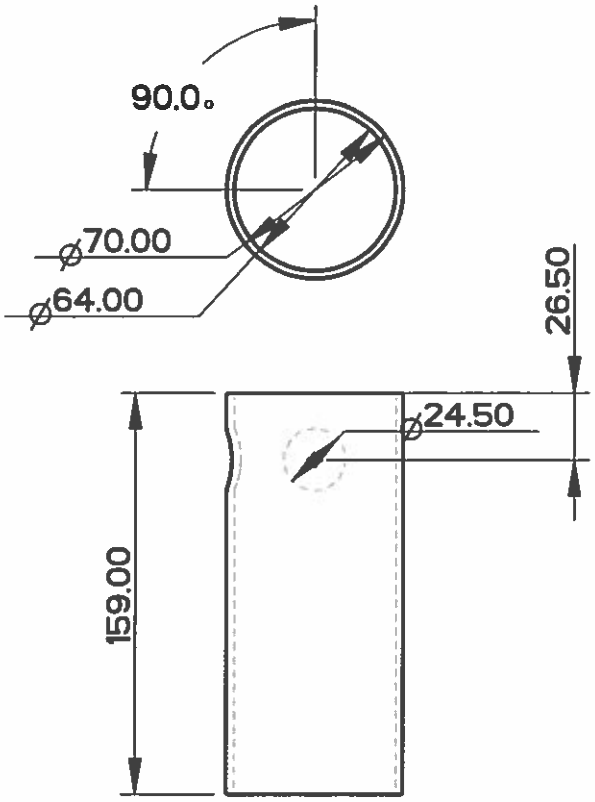


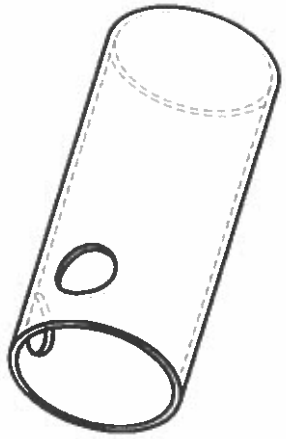
SCALE 0.400



SCALE 0.330

Linear	0.1	Cambridge University Engineering Department			
Angular	0.5	part.name			
Material	material.type	Filename ASSEMBLY		Sheet 1	* Sheets 1
Drawn	A.N. Other				
Tel.	(01223) 332600	Project project.no	Format A4	Scale 0.200	Date 22-May-18
e-mail	anoXX@eng.cam.ac.uk				





NOTES

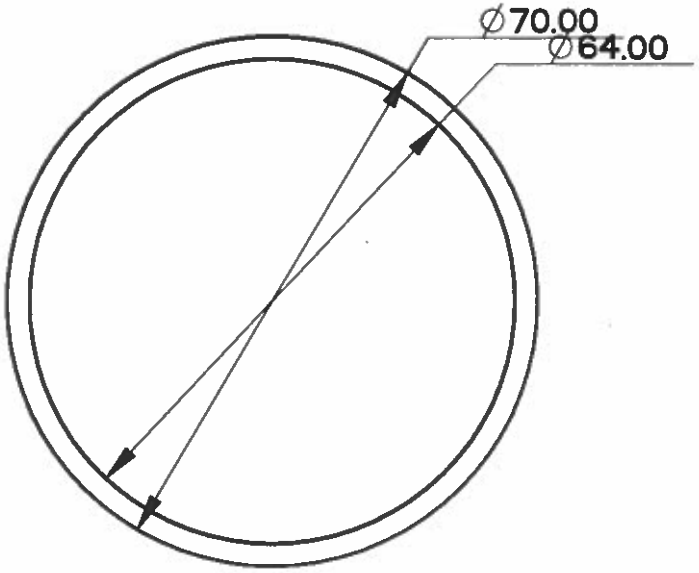
1) 1 PART REQUIRED

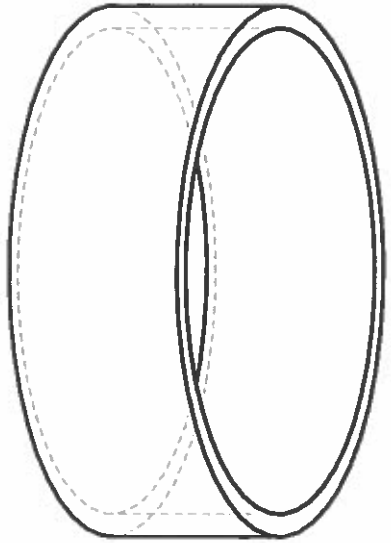
Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material_type
Drawn	A.N. Other
Tel.	(01223) 332600
e-mail	ano(X(*eng.cam.ac.uk
Checked	

Cambridge University Engineering Department

Shell Body

Filename		Sheet	* Sheets
TUBEBODY		1	1
Project	Format	Scale	Date
project_no	A4	0.333	22-May-18





NOTES

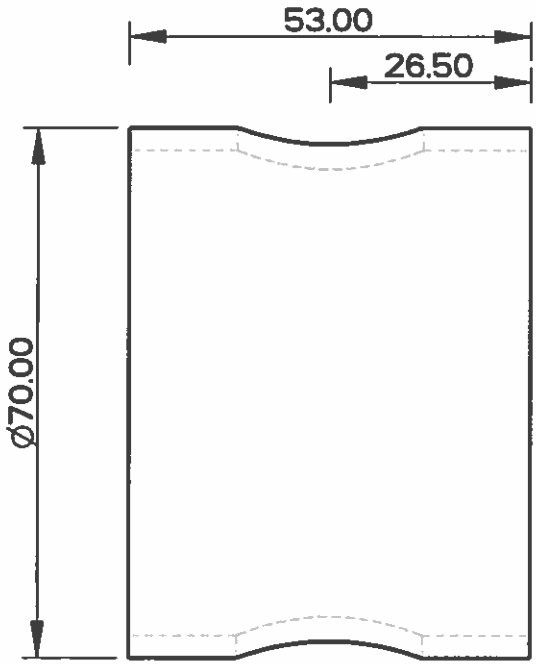
1) 1 PART REQUIRED

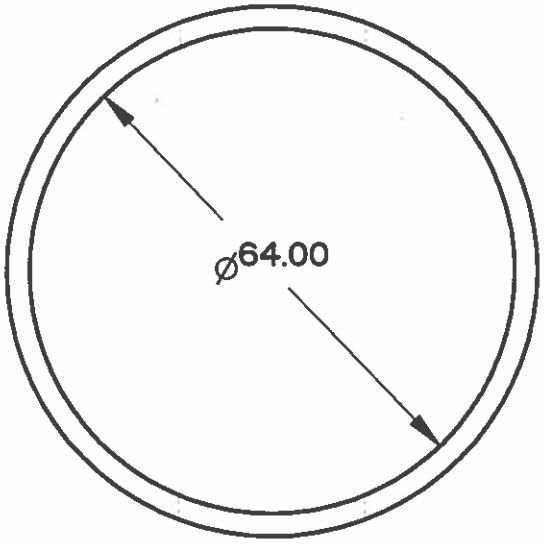
Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material type
Drawn	A.N. Other
Tel.	(01223) 332600
e-mail	anoXX@eng.cam.ac.uk

Cambridge University Engineering Department

Head no nozzles

Filename		Sheet	• Sheets
HEAD		1	1
Project	Format	Scale	Date
project no	A4	1.000	22-May-18





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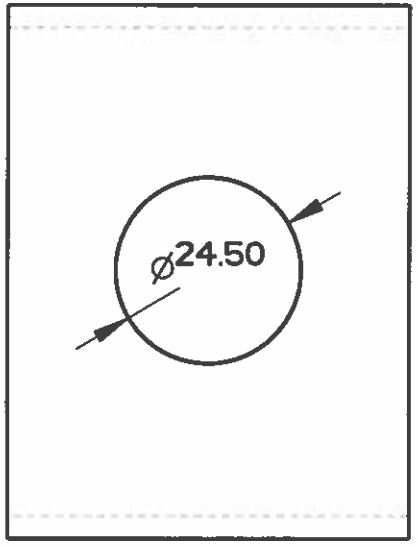
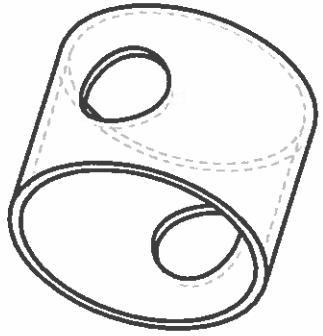
1) 1 PART REQUIRED





SCALE 0.500

Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material.type
Drawn	A.N. Other
Tel.	(01223) 332600
e-mail	anoXX@eng.cam.ac.uk

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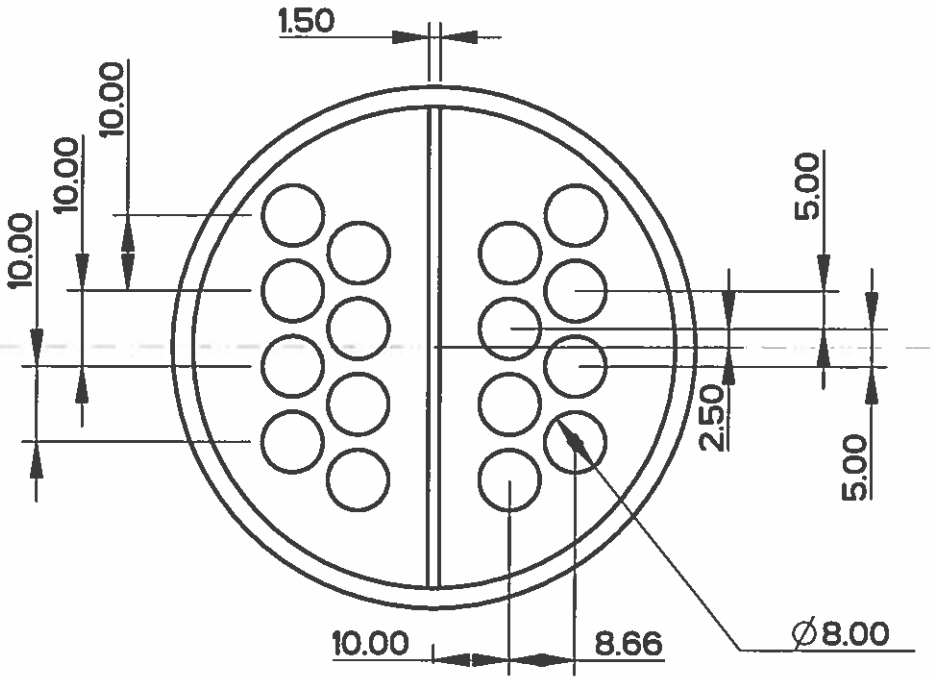
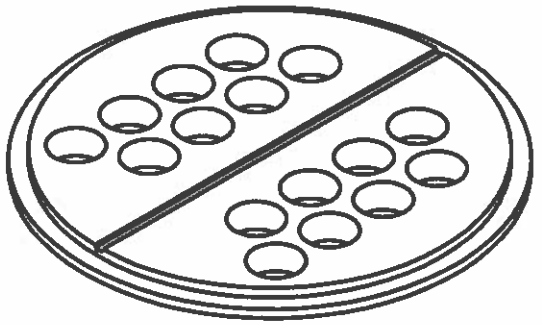
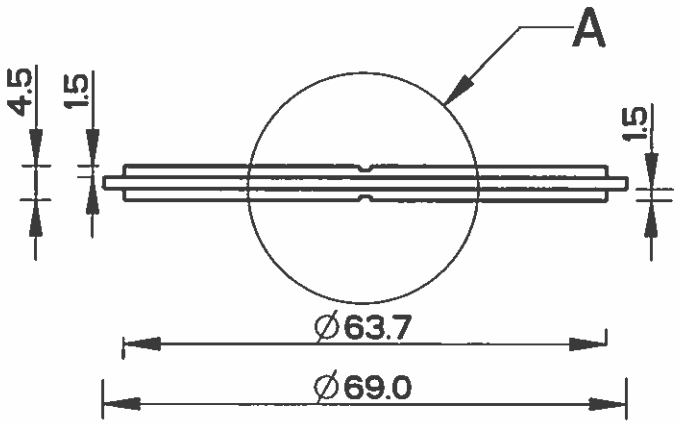
Feedheater (for hot flow nozzles)

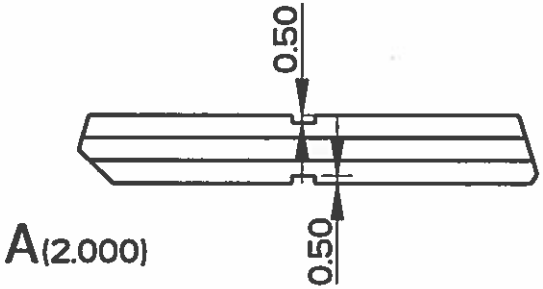
Filename	Sheet	* Sheets
FEED_HEADER	1	1

Project	Format	Scale	Date
project_no	A4	1.000	22-May-18









Note: 1 part required. Use this drawing for layout of holes on other parts with holes (i.e:other tube plate, baffle, baffle 2)

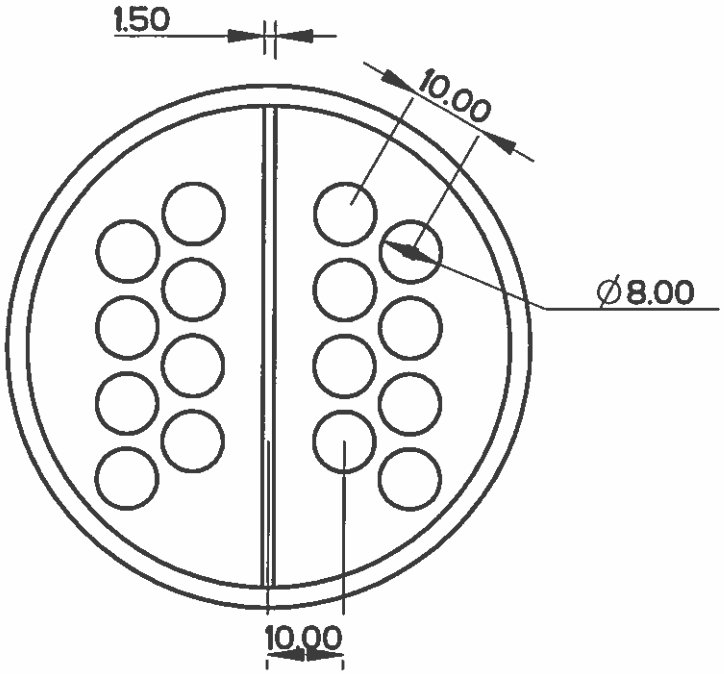
Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material.type
Drawn	A.N. Other
Tel.	(01223) 332600
e-mail	ano XX@eng.cam.ac.uk
Checked	

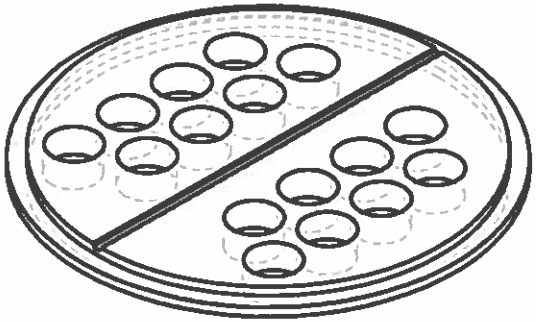
Cambridge University Engineering Department

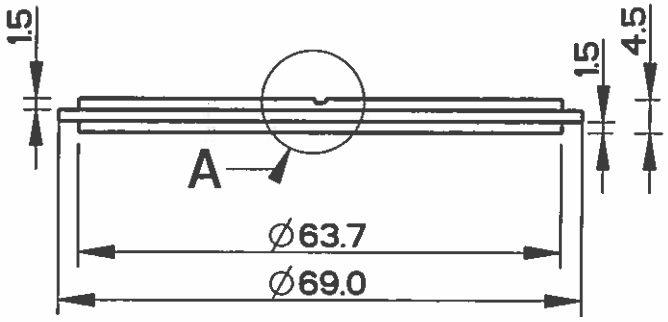
Tube Plate (2 slots)

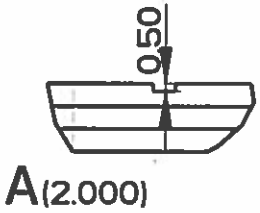
Filename	Sheet	* Sheets
PLATE_TUBE	1	1

Project	Format	Scale	Date
project_no	A4	1.000	22-May-18









NOTES

1) 1 PART REQUIRED

Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material.type
Drawn	A.N. Other
Tel.	(01223) 332600
e-mail	anoXX@eng.cam.ac.uk

Cambridge University Engineering Department

Tube Plate (1 slot)

Filename	Sheet	• Sheets
PLATE.TUBE.ONE.SLOT	1	1

Project	Format	Scale	Date
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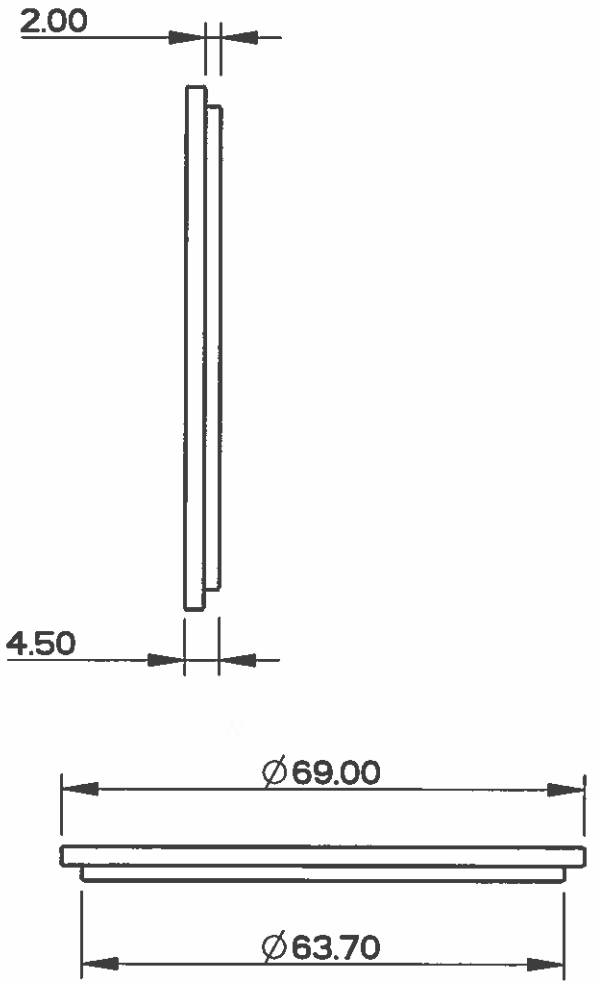

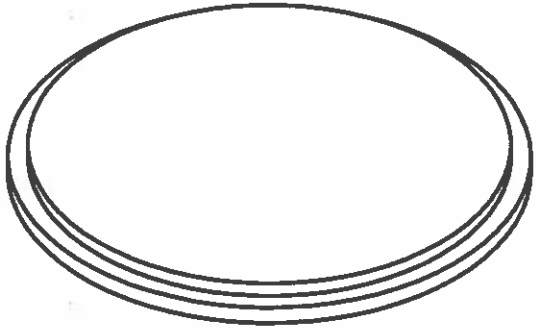

1 Part Required

Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material.type
Drawn	A.N. Other
Tel.	(01223) 332600
e-mail	anoXX@eng.cam.ac.uk

Cambridge University Engineering Department

part_name

Filename	Sheet	* Sheets
PLATEENDNOSLOT	1	1

Project	Format	Scale	Date
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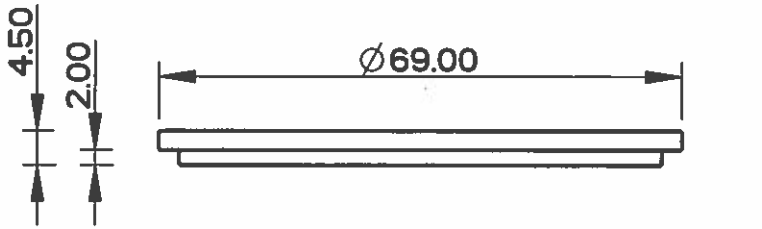
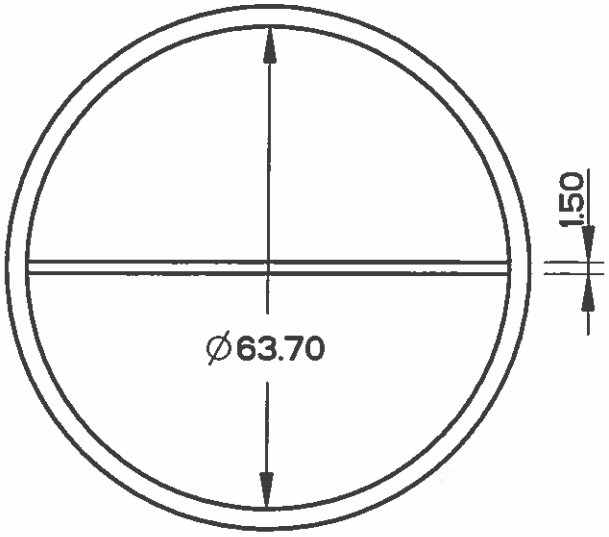
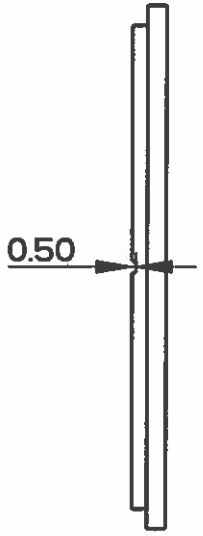
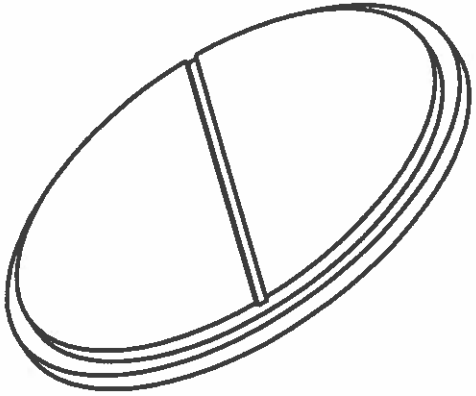








NOTES

1) 1 PART REQUIRED

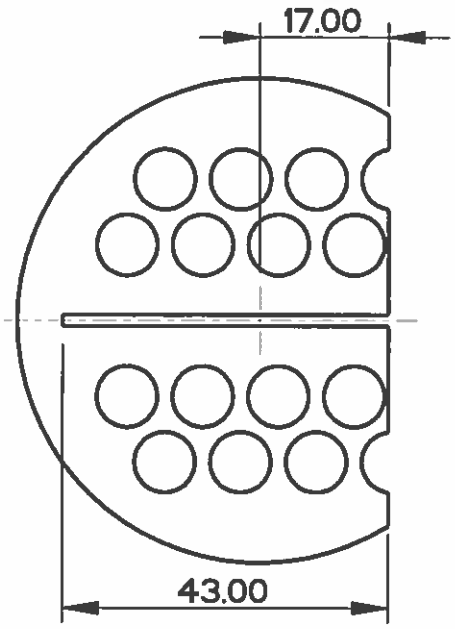
Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material.type
Drawn	HX group C
Tel.	(01223) 332600
e-mail	anoXX@eng.cam.ac.uk

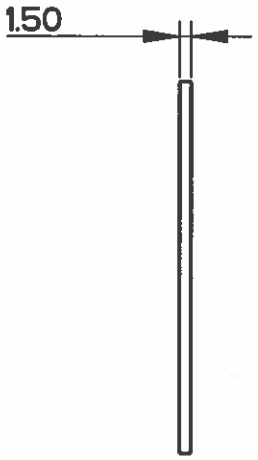
Cambridge University Engineering Department

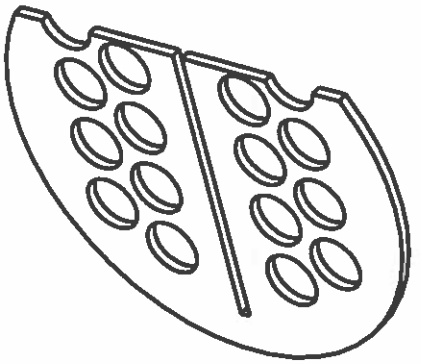
End Plate (with slot)

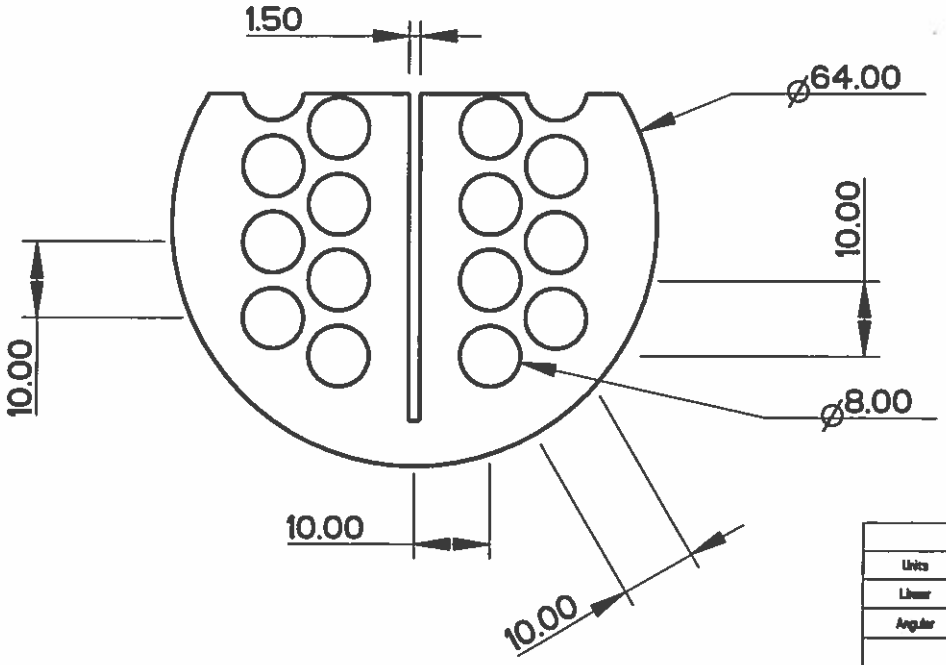
Filename	Sheet	• Sheets
PLATE.END	1	1

Project	Format	Scale	Date
	A4	1.000	22-May-18









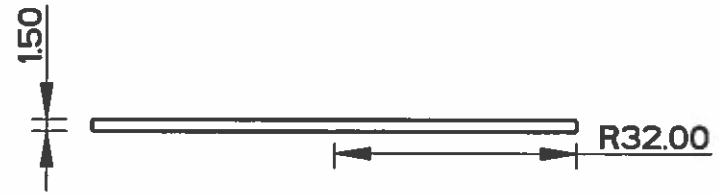
NOTES

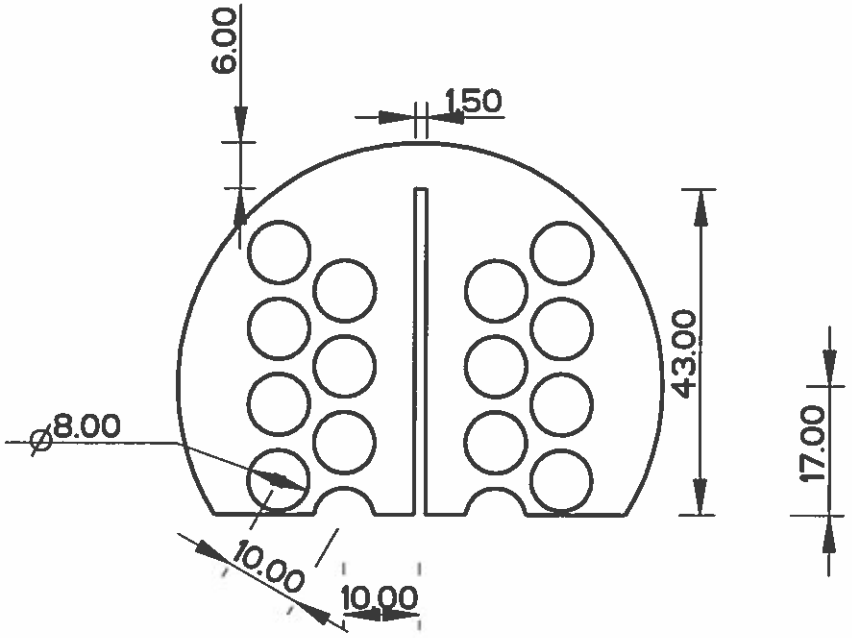
1) DRILL Ø8.00 HOLES IN PLATE BEFORE CUTTING SEGMENT OFF TO AVOID DAMAGE

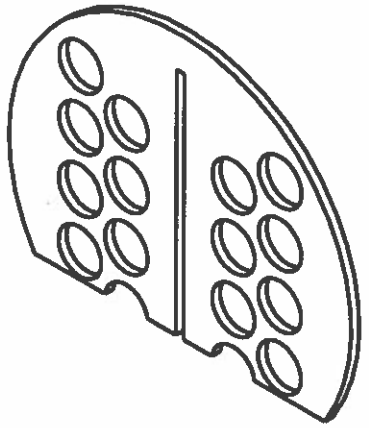
2) 3 PARTS REQUIRED

3) SEE TUBEPLATE2SLOTS DRAWING FOR FURTHER CLARIFICATION

Tolerances		Cambridge University Engineering Department				
Units	mm					
Linear	0.1					
Angular	0.5					
		part_name				
Material	material_type					
		Filename: BAFFLES1			Sheet: 1	* Sheets: 1
Drawn	A.N. Other					
Tel.	(01223) 332600	Project: project_no		Format: A4	Scale: 1.000	Date: 23-May-18
e-mail	anoXX@eng.cam.ac.uk					
Checked						







NOTES

1) Add holes in (circular) plate before cutting off segment.

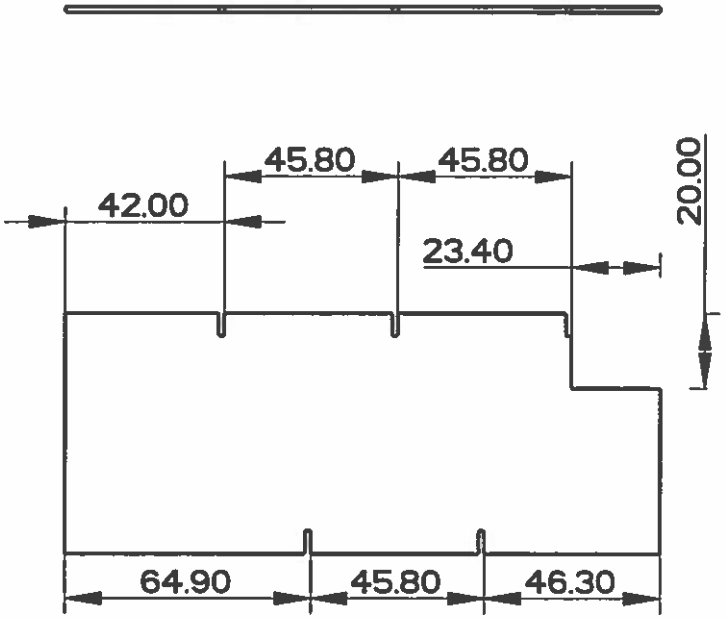
2) 2 of these baffles required.

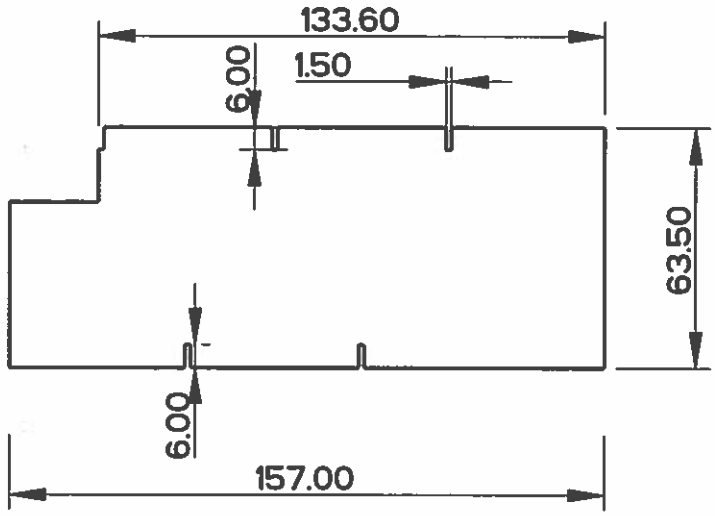
3) See TUBEPLATE2SLOT drawing for further dimension clarification.

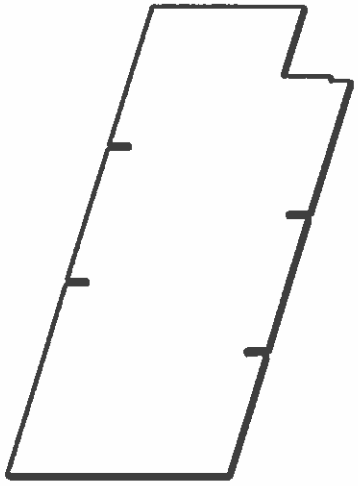
Tolerances		Cambridge University Engineering Department			
Units	mm				
Linear	0.1				
Angular	0.5				
		Baffle 2			
Material	material.type				
		Filename: BAFFLES.2		Sheet: 1	* Sheets: 1
Drawn	A.N. Other				
Tel.	(01223) 332600	Project: project_no	Format: A4	Scale: 1.000	Date: 22-May-18
e-mail	anoXX@eng.cam.ac.uk				
Checked					

NOTES

1) 1 PART REQUIRED







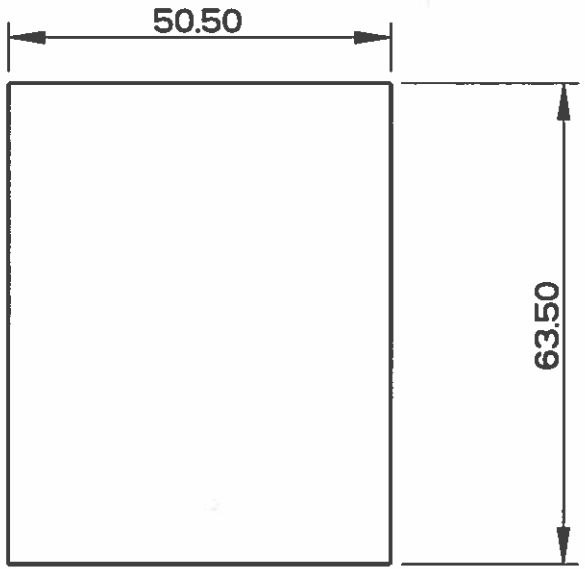
Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material_type
Drawn	A.N. Other
Tel	(01223) 332600
e-mail	ano XX@eng.cam.ac.uk
Checked	

Cambridge University Engineering Department

Central body divider with baffle notches

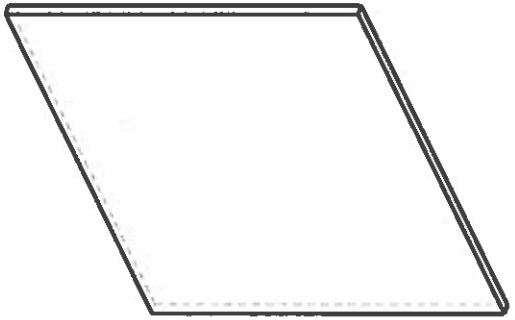
Filename	Sheet	• Sheets
BODY_DIVIDER	1	1

Project	Format	Scale	Date
project_no	A4	0.500	22-May-18



NOTES

1) 1 PART REQUIRED



Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material.type
Drawn	A.N. Other
Tel.	(01223) 332600
e-mail	anoXX@eng.cam.ac.uk
Checked	

Cambridge University
Engineering Department

Feed Head Divider

Filename		Sheet	* Sheets
FEEDERHEADDIVIDER		1	1
Project		Format	Scale	Date
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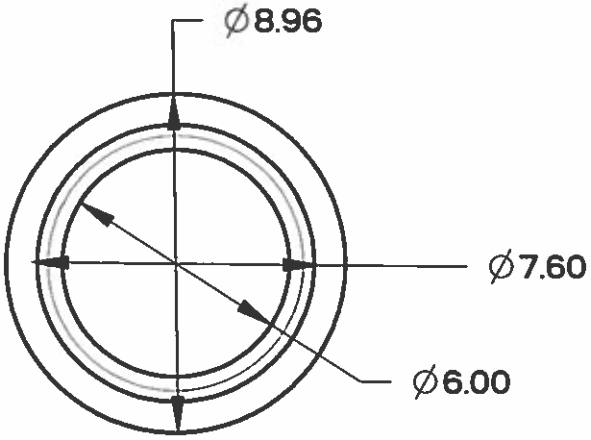
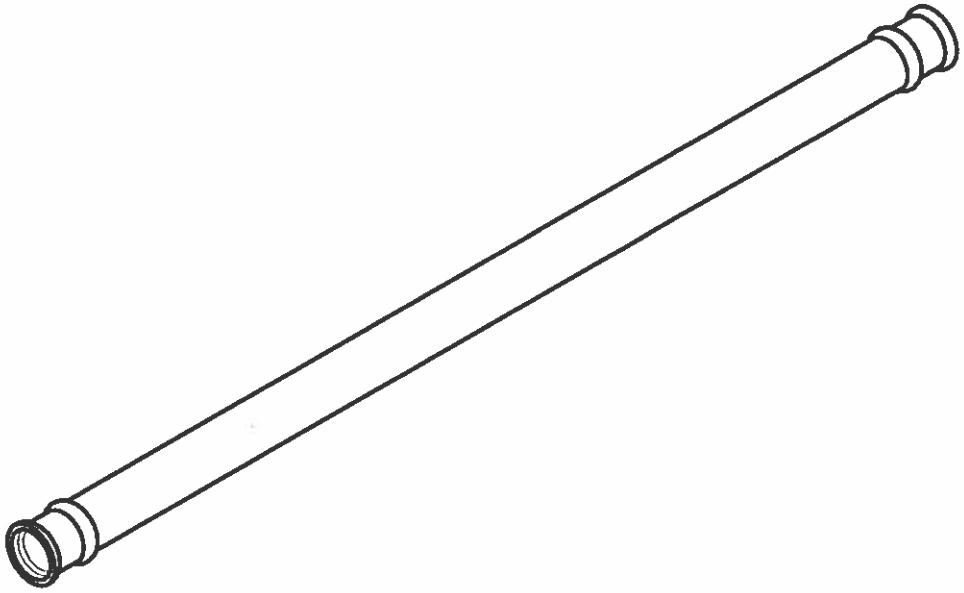
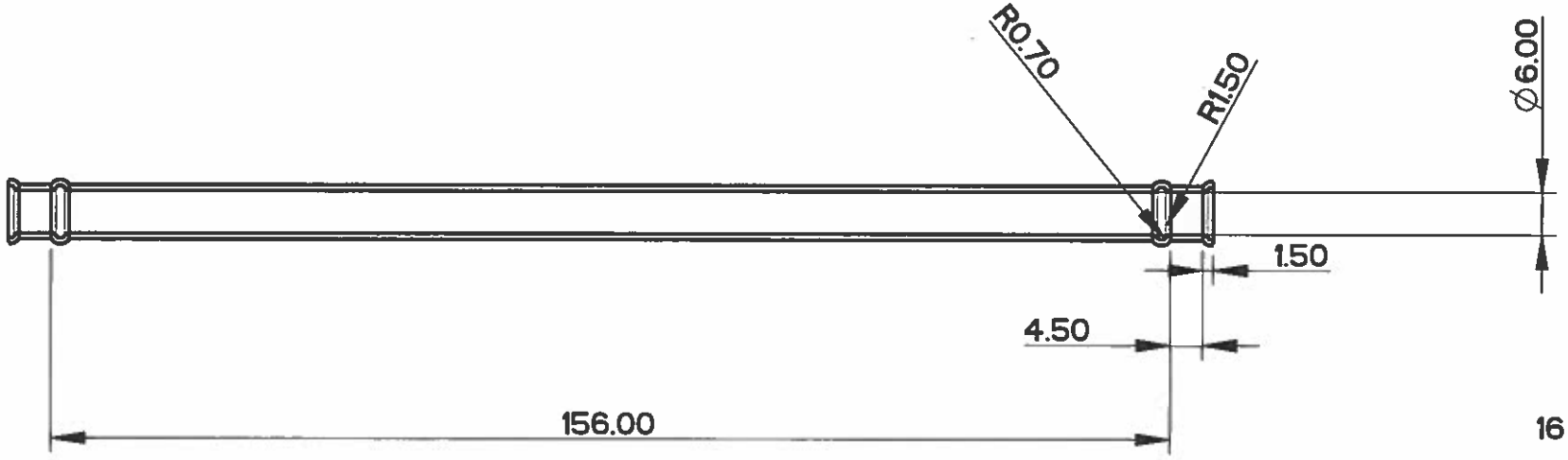


SCALE 5.000





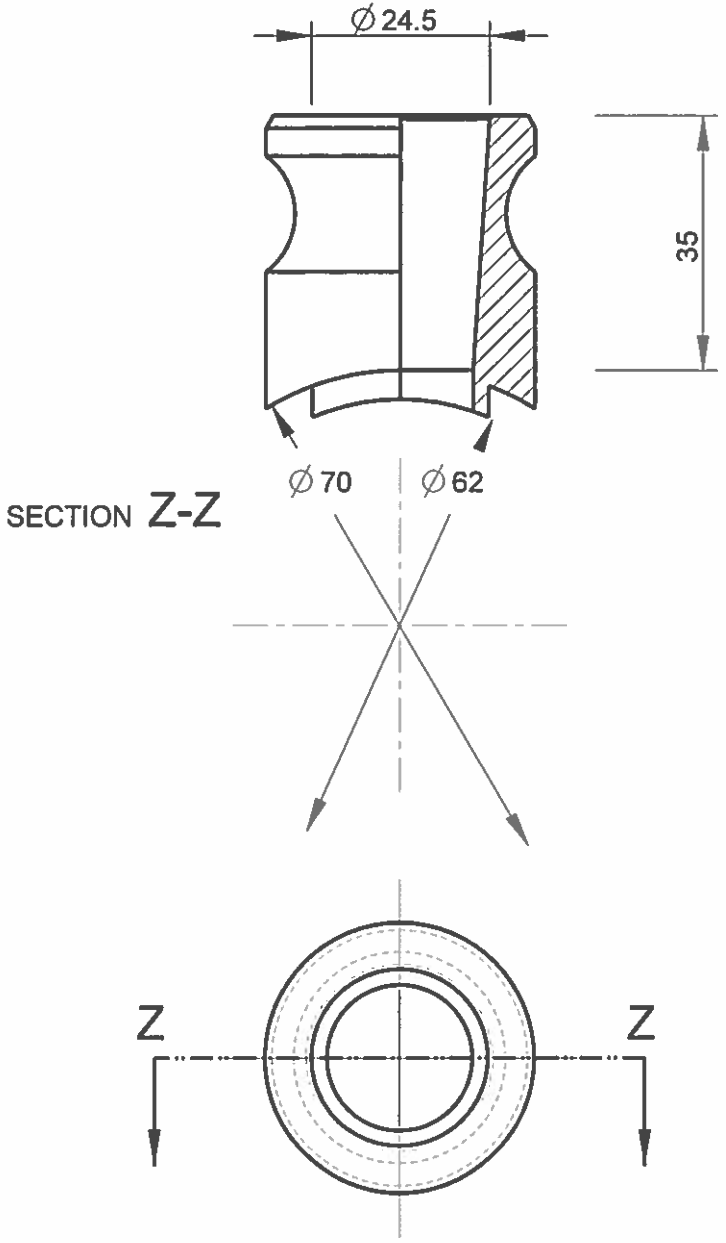
16 Parts Required

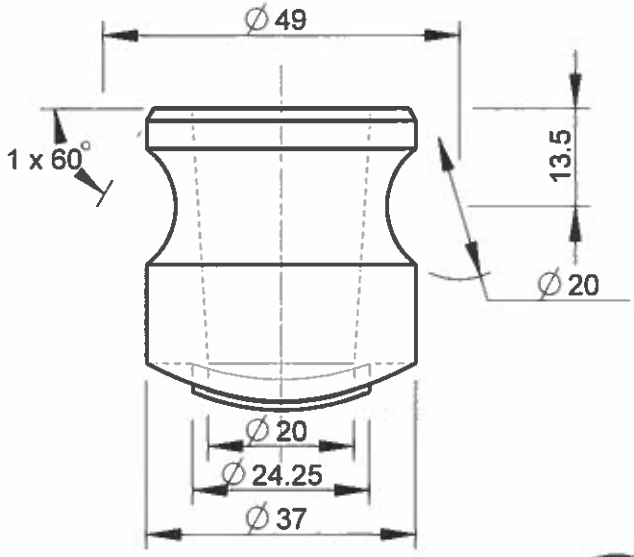
Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material.type
Drawn	A.N. Other
Tel.	(01223) 332600
e-mail	ano XX@eng.cam.ac.uk

Cambridge University Engineering Department

part.name

Filename		Sheet	* Sheets
COPPERTUBES		1	1
Project		Format	Scale	Date
project_no		A4	1.000	23-May-18





Tolerances	
Units	mm
Linear	0.1
Angular	0.5
Material	material_type
Drawn	A.N. Other
Tel.	(01223) 332600
e-mail	anoXX@eng.cam.ac.uk
Checked	

Cambridge University
Engineering Department

part_name

Filename	Sheet	# Sheets
DRW0001	1	1

Project	Format	Scale	Date
project_no	A4	1.000	23-Apr-18