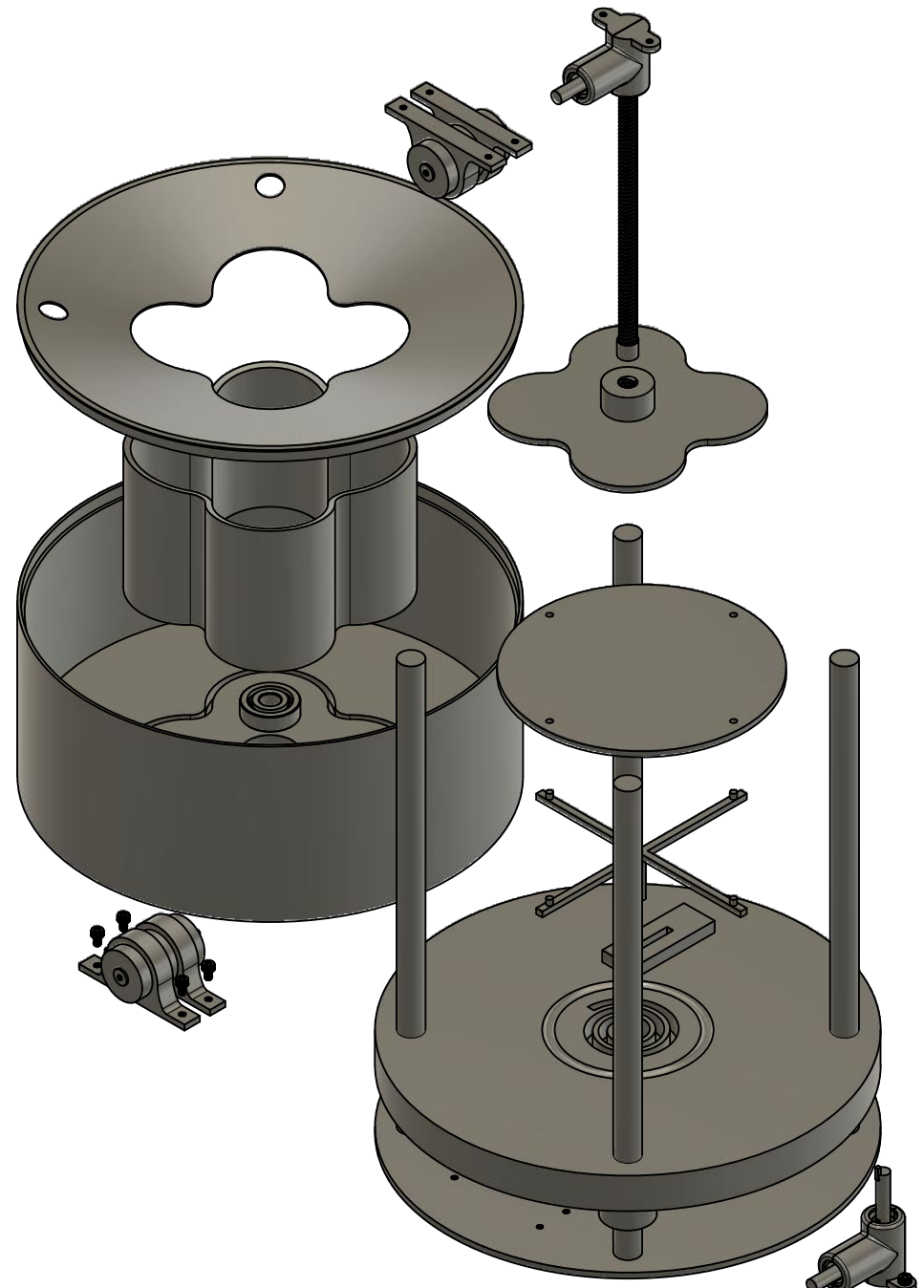


FRONT SECTION VIEW



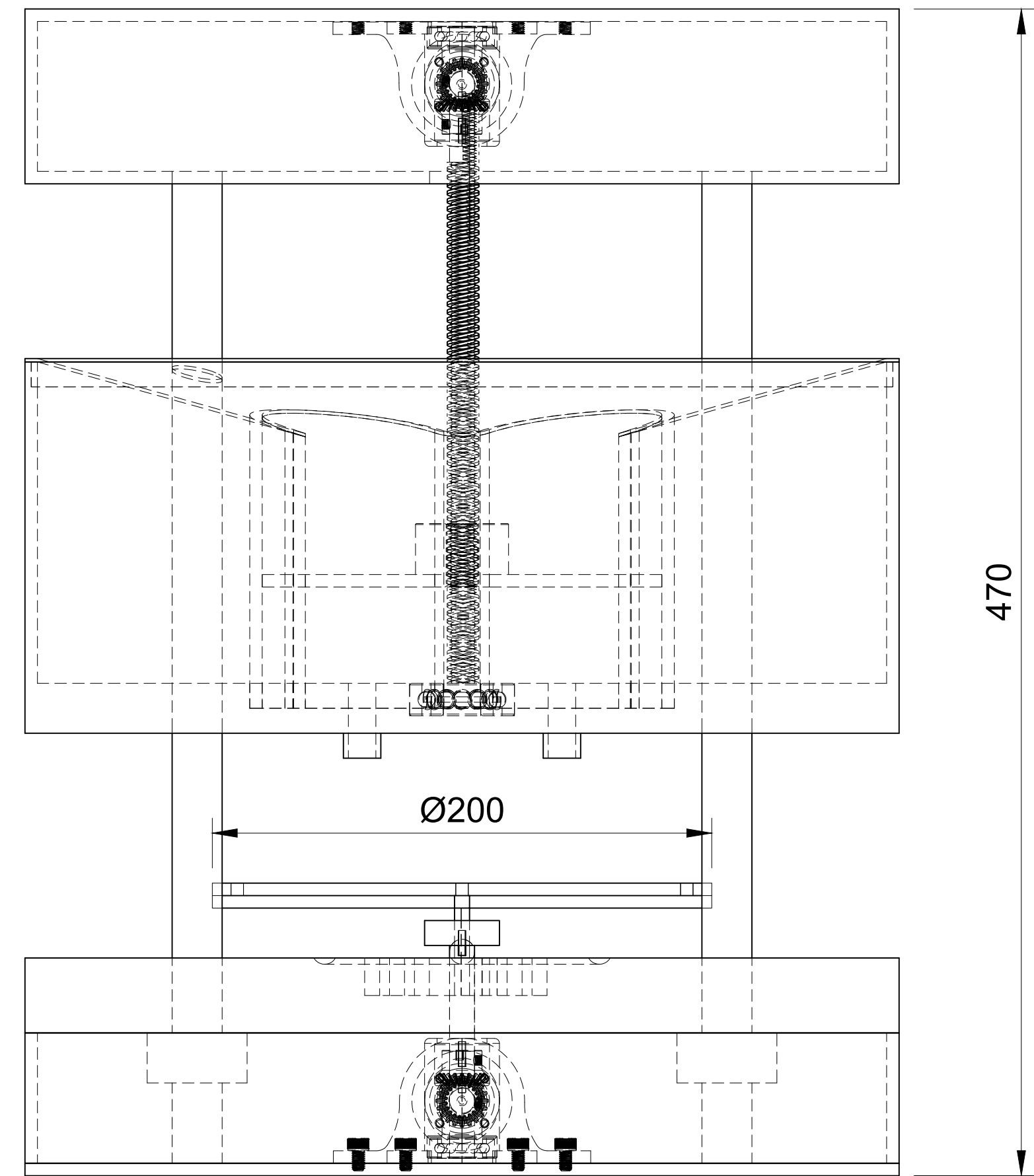
EXPLODED VIEW

15	12	Hex bolt M5 (IS: 2389 - P - 4D)	Steel
14	1	Nut and frame	Bronze
13	1	Lead screw	Steel
12	1	Bearing	Steel
11	1	Container	Aluminium 19000
10	1	Base plate	Aluminium 19000
9	4	Frame shaft	Aluminium 19000
8	1	Motor	
7	2	Gearbox	
6	1	Parallel key	Polyamide
5	1	Table	Polyamide
4	1	Follower	Polyamide
3	2	Ball bearing	High carbon steel
2	1	Rotating slot	Polyamide
1	1	Spiral groove plate	Polyamide
Item	Qty	Part name	Material

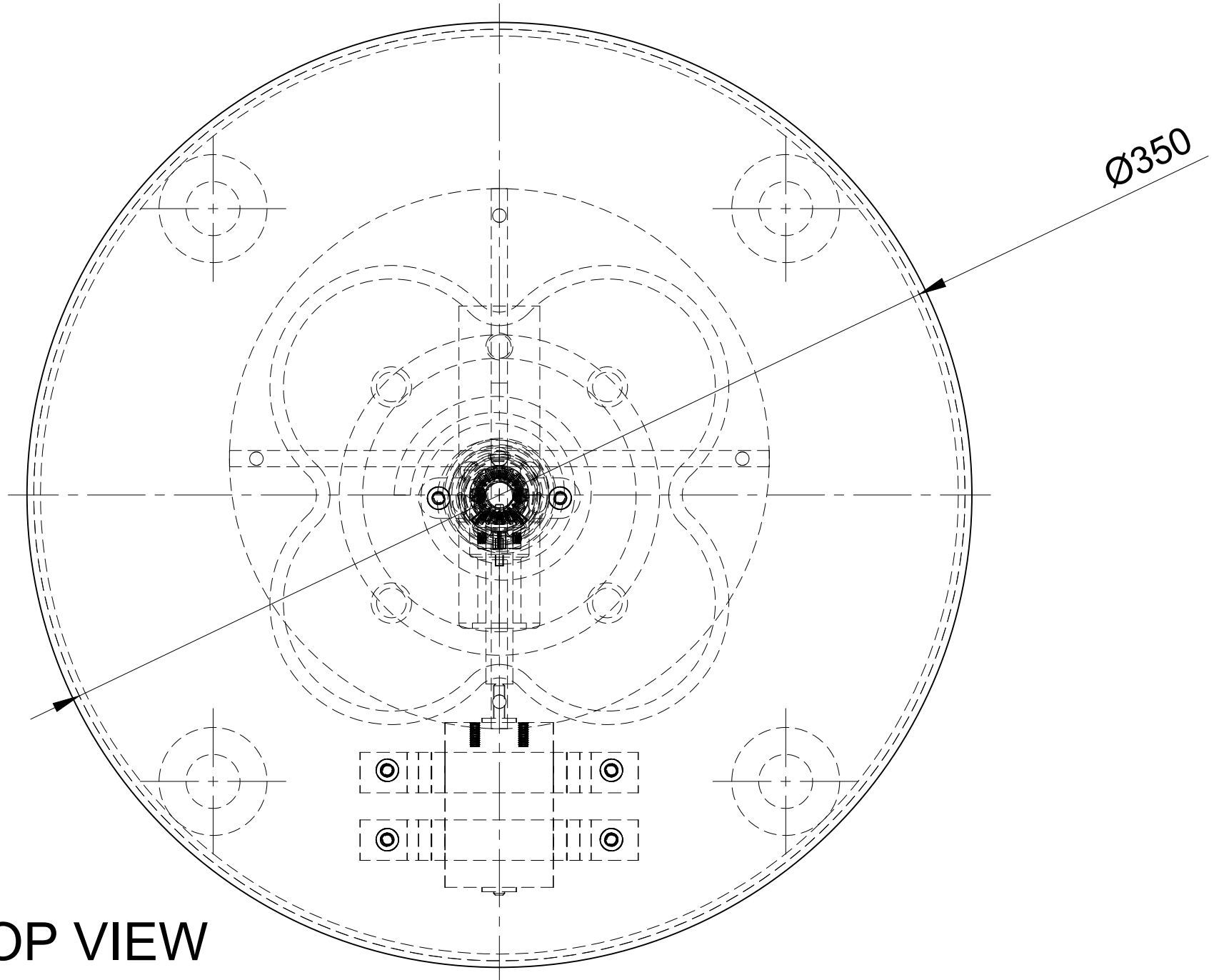
Part List

ALL DIMENSIONS ARE IN mm.

COLLEGE OF ENGINEERING PUNE	
MANDAR DATTATRAY URANE MAYURI SOPAN BHOSALE MRUDULA SUNIL SAWAIKAR NEHA LAXMAN RATHOD NIHAR CHETAN APTE NIKHIL RAJLINGU DONGRE NIKITA KISHOR NIMSE NISHANT ANANDRAO PATIL	111910058 111910059 111910060 111910062 111910063 111910064 111910065 111910066
CLASS : T.Y. MECHANICAL	BATCH : C2
TITLE : FLY BALL PRESS FOR RECTANGULAR PUNCH	
DESIGN OF MACHINE COMPONENTS PROJECT 2	DATE : 18/11/2021
	SCALE 1:2

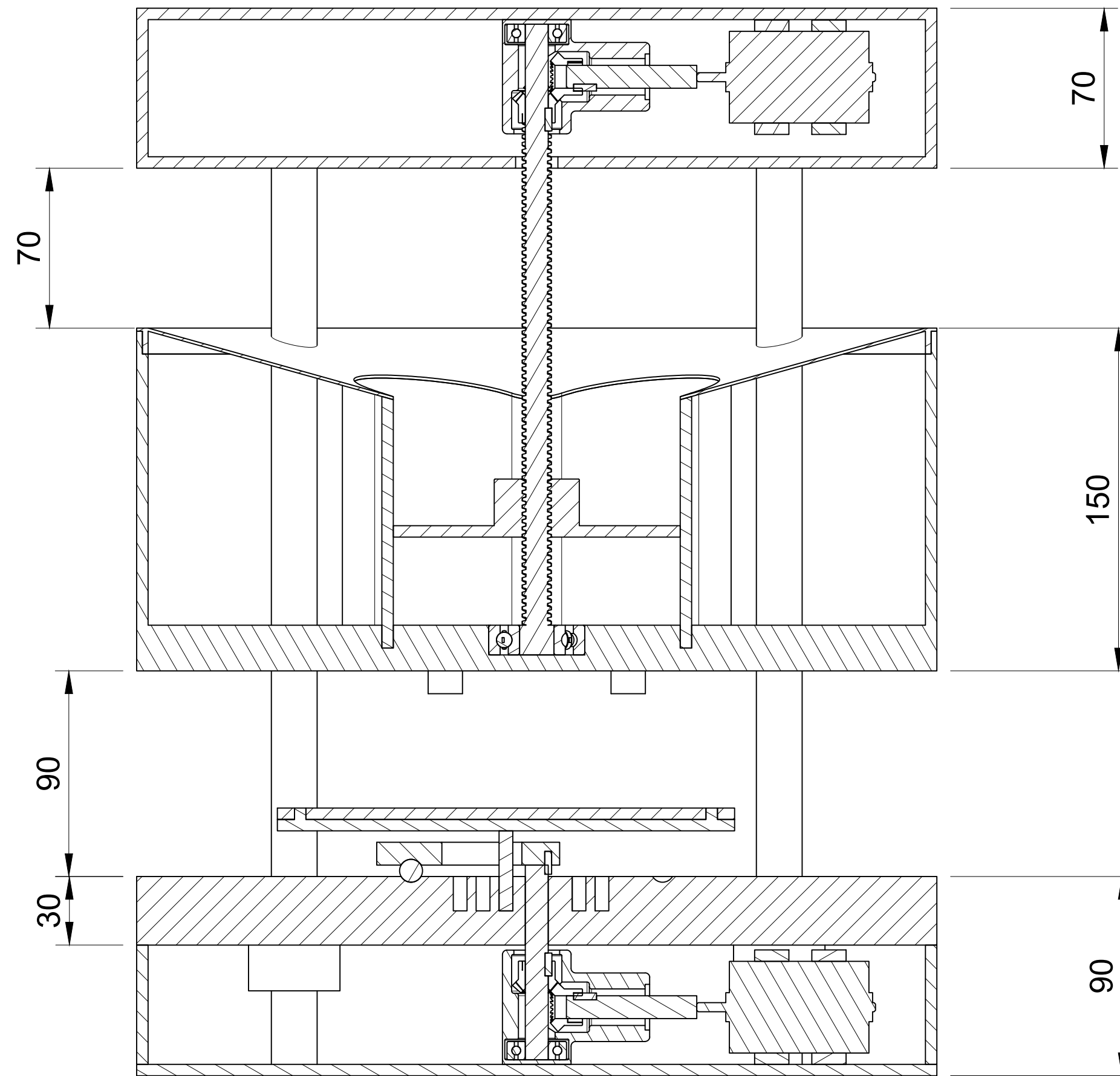


FRONT VIEW



TOP VIEW

A-A (1:2)

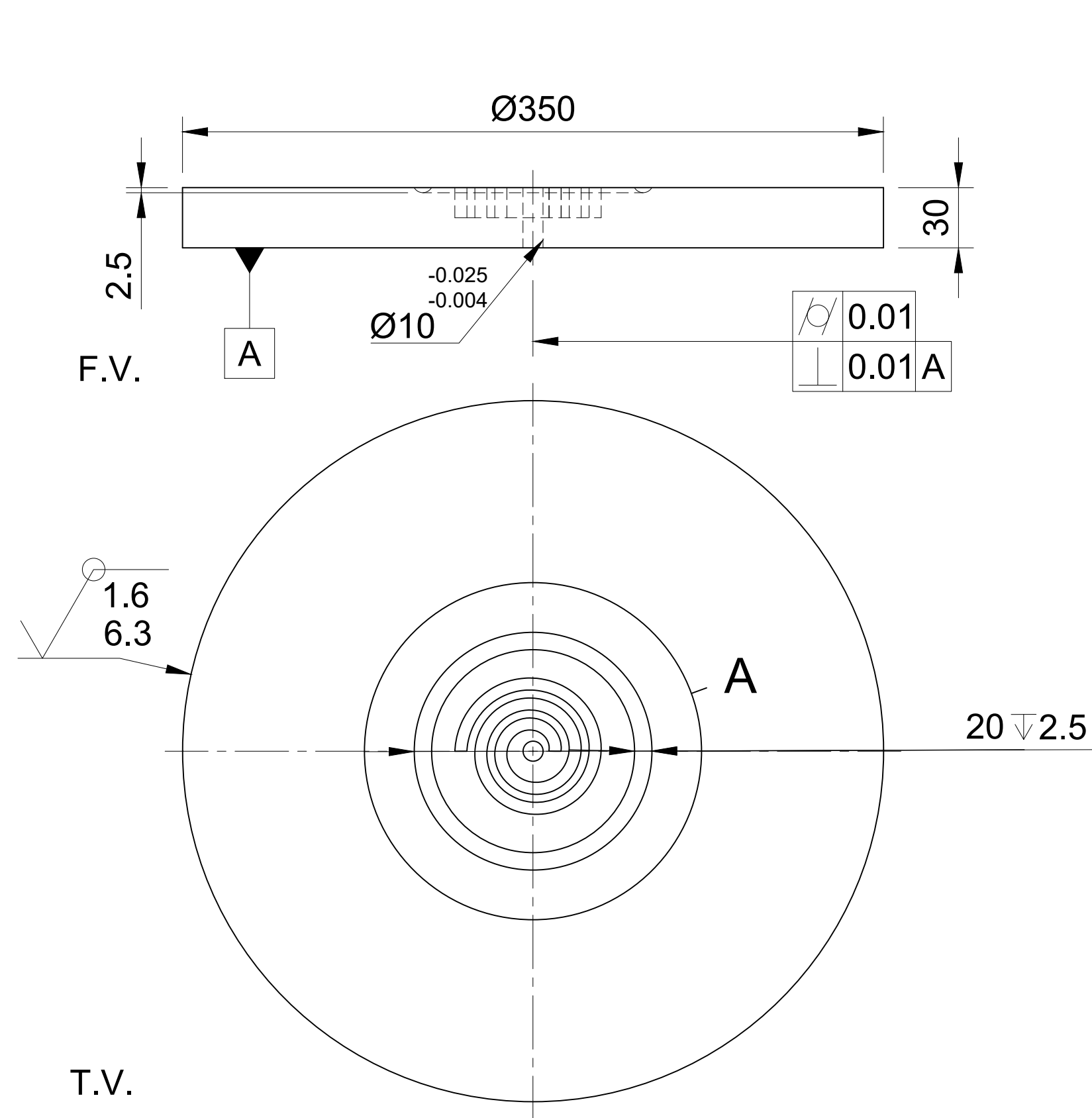


L.H.S.V

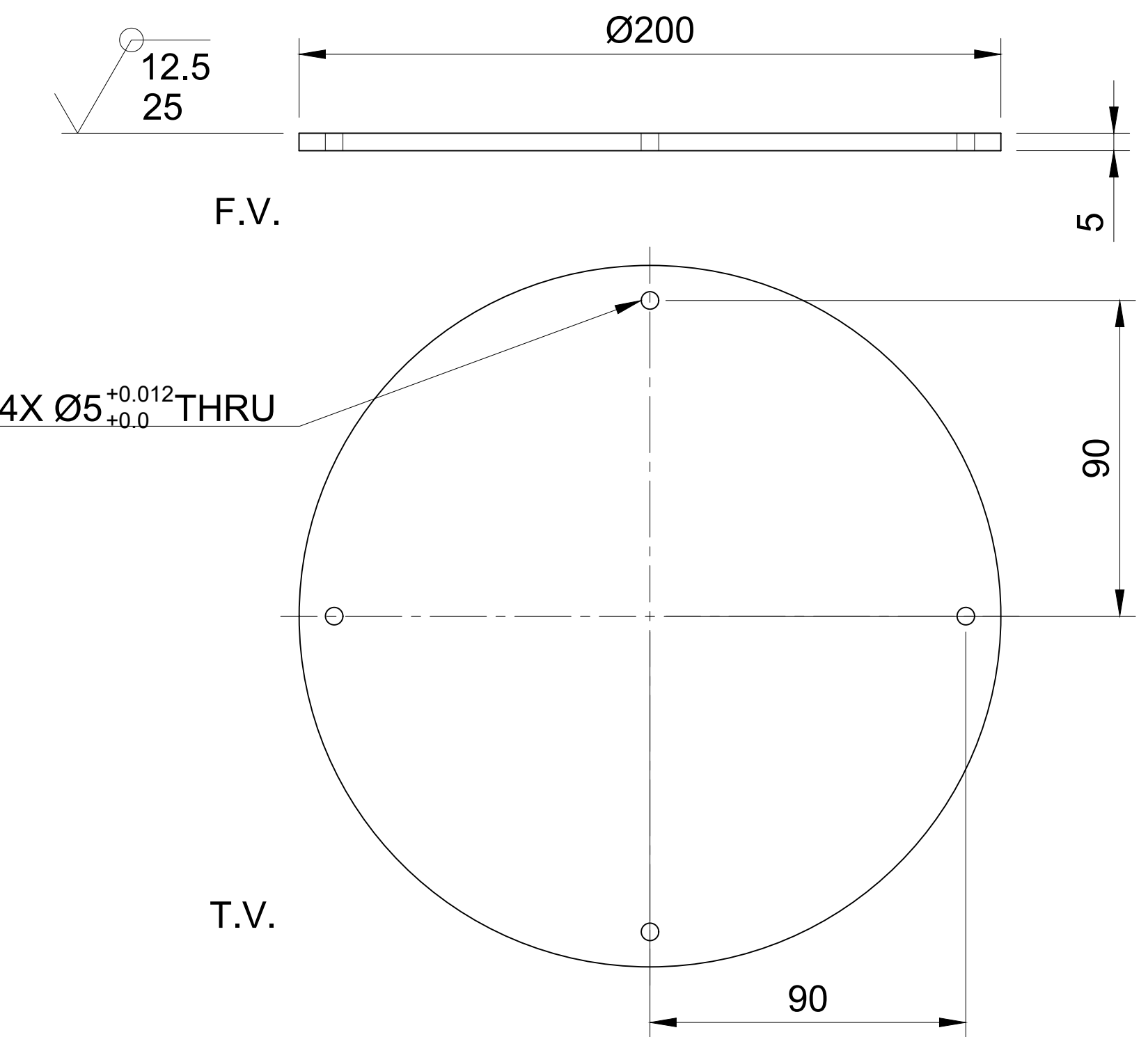
15	12	Hex bolt M5 (IS: 2389 - P - 4D)	Steel
14	1	Nut and frame	Bronze
13	1	Lead screw	Steel
12	1	Bearing	Steel
11	1	Container	Aluminium 19000
10	1	Base plate	Aluminium 19000
9	4	Frame shaft	Aluminium 19000
8	1	Motor	
7	2	Gearbox	
6	1	Parallel key	Polyamide
5	1	Table	Polyamide
4	1	Follower	Polyamide
3	2	Ball bearing	High carbon steel
2	1	Rotating slot	Polyamide
1	1	Spiral groove plate	Polyamide
Item	Qty	Part name	Material
Parts List			

Spiral groove plate (1) - Frame shaft (9)	Press fit	H7/r6
Rotating slot (2) - Follower (4)	Easy running	H8/e8
Nut (14) - Lead screw (13)	Normal running	H7/f7
Miter gear (7.3) - Shaft (7.5)	Press fit	H7/r6
Rotatating slot (2) - Bearing (12)	Loose running	H8/d9
Follower (4) - Table (5)	Press fit	H7/r6
Part	Fit	Tolerance
Fits		

COLLEGE OF ENGINEERING PUNE	
MANDAR DATTATRAY URANE MAYURI SOPAN BHOSALE MRUDULA SUNIL SAWAIKAR NEHA LAXMAN RATHOD NIHAR CHETAN APTE NIKHIL RAJLINGU DONGRE NIKITA KISHOR NIMSE NISHANT ANANDRAO PATIL	111910058 111910059 111910060 111910062 111910063 111910064 111910065 111910066
CLASS : T.Y. MECHANICAL	BATCH : C2
TITLE : FLY BALL PRESS FOR RECTANGULAR PUNCH	
DESIGN OF MACHINE COMPONENTS PROJECT 2	DATE : 10/27/2021
	SCALE 1:1

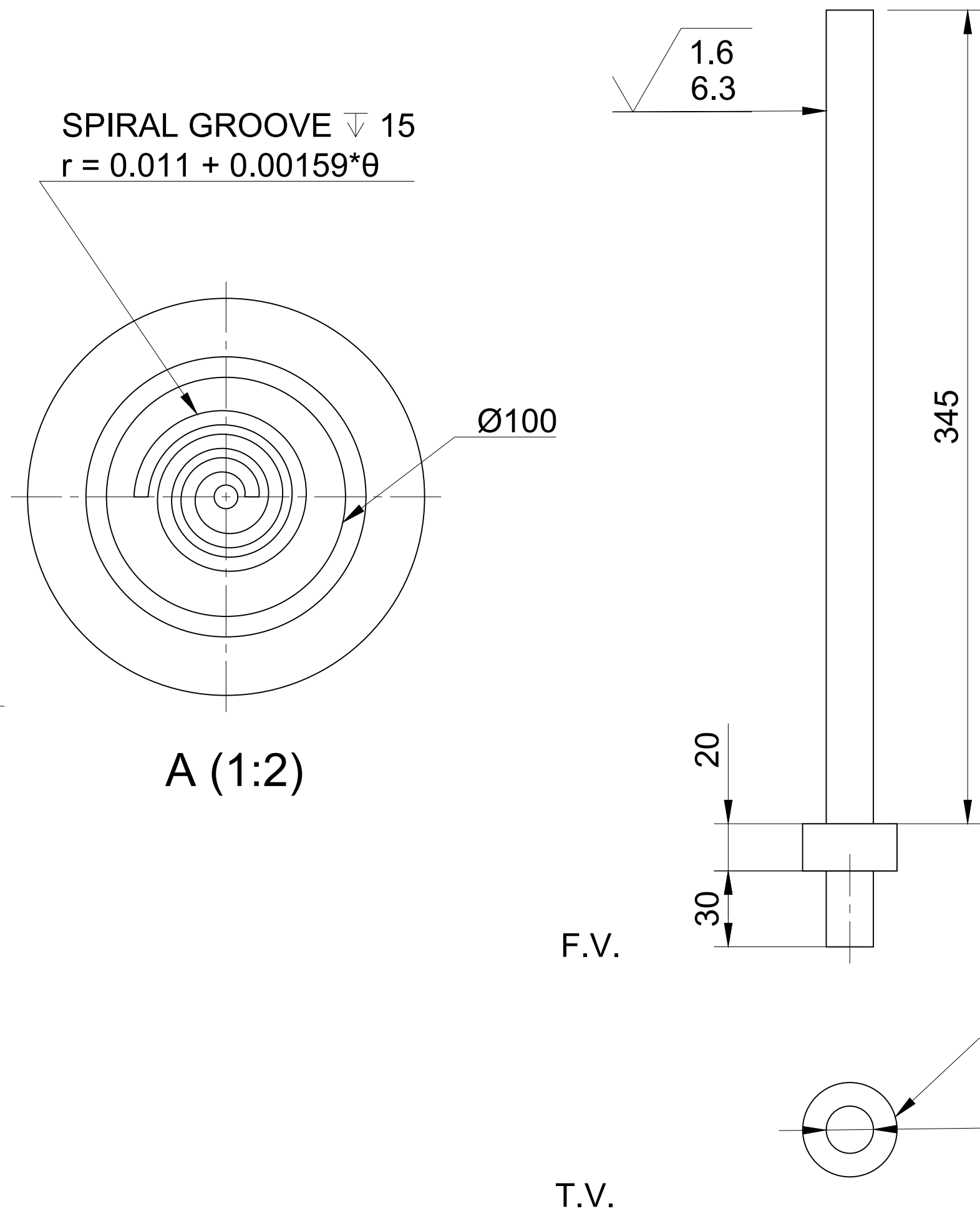


1. SPIRAL GROOVE PLATE (1:3)

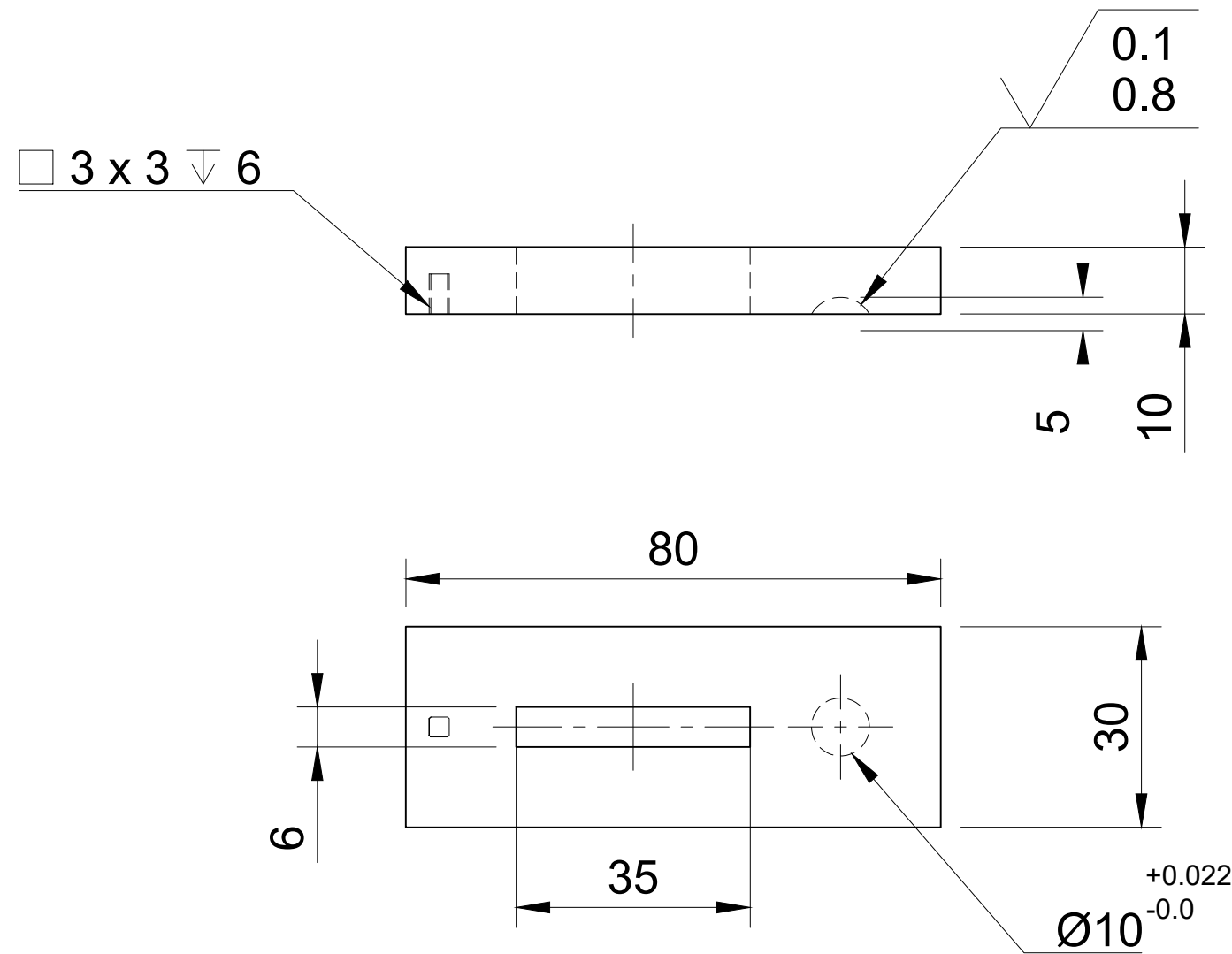


5. TABLE (1:2)

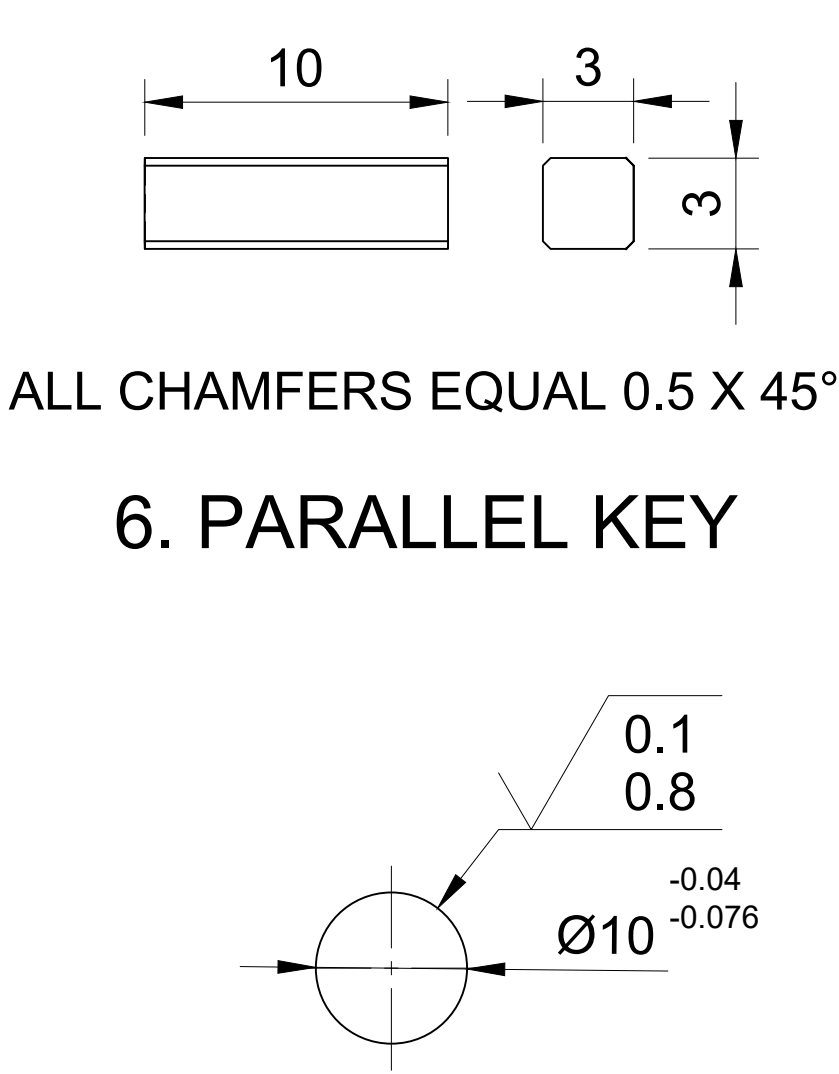
NOTES:
1. ALL DIMENSIONS ARE IN mm.
2. ALL CHAMFERS EQUAL 10 X 45° UNLESS SPECIFIED
3. ALL FILLET RADIUS EQUAL 15 mm UNLESS SPECIFIED
4. SURFACE FINISH HIGHER THAN OR EQUAL TO 1.6 - 6.3 UNLESS SPECIFIED



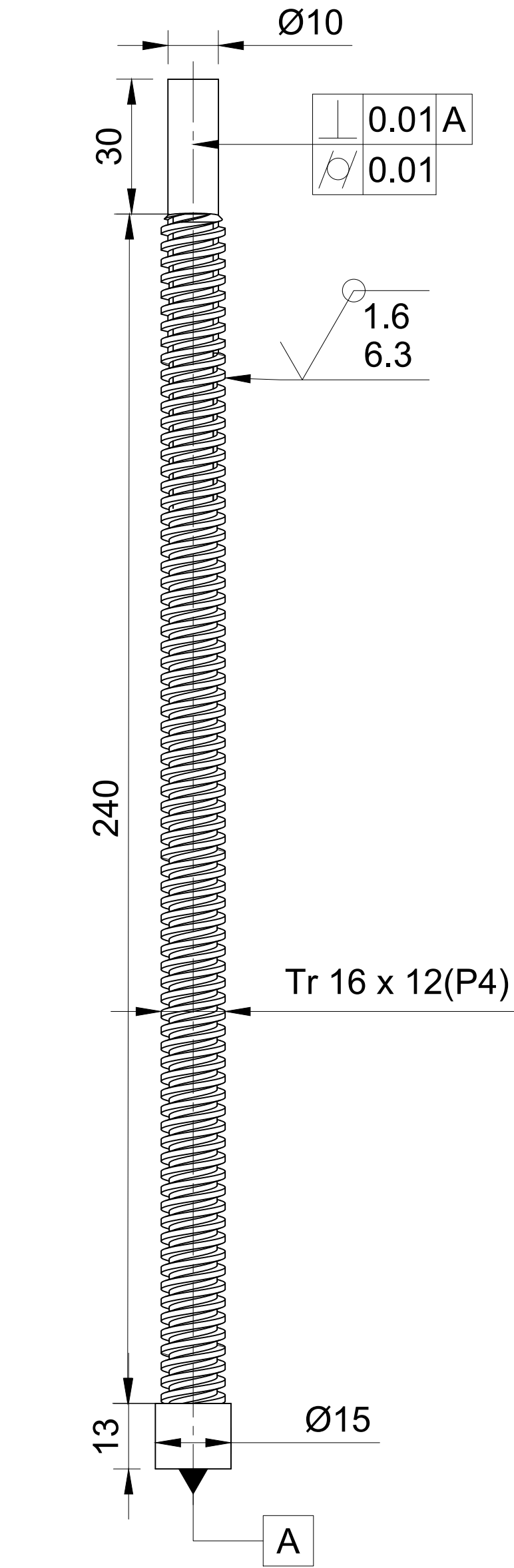
9. FRAME SHAFT (1:2)



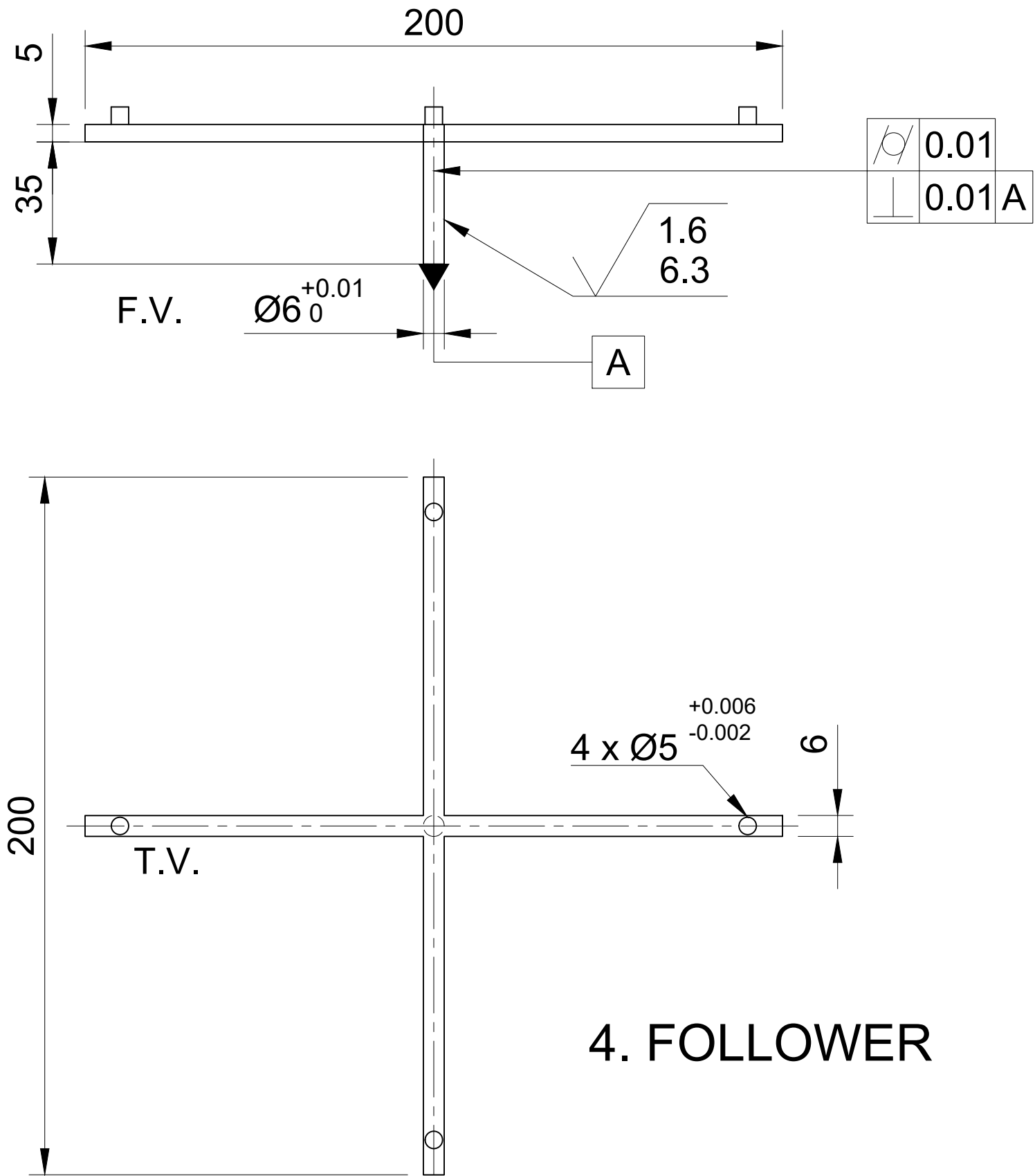
2. ROTATING SLOT (1:1)



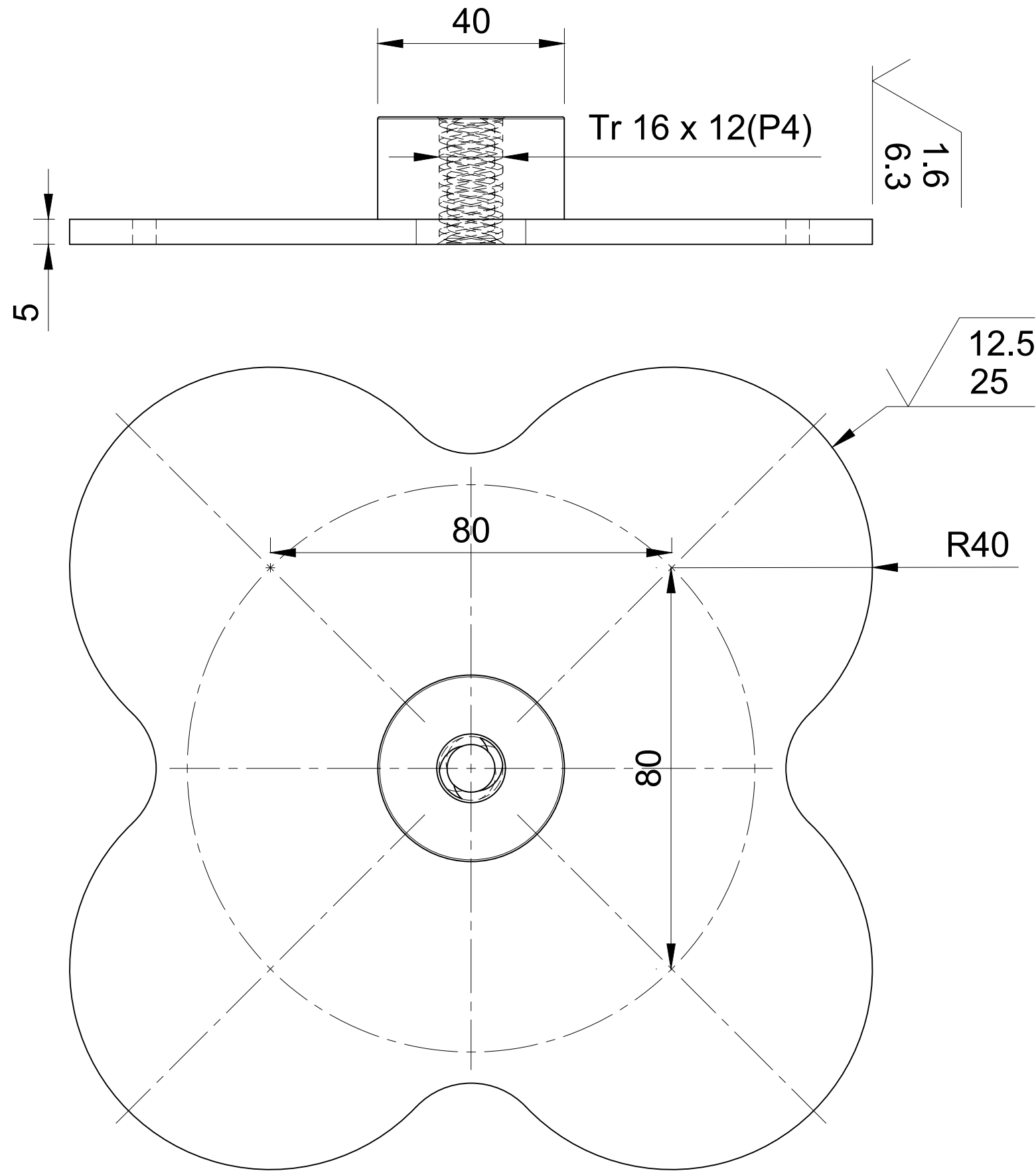
6. PARALLEL KEY



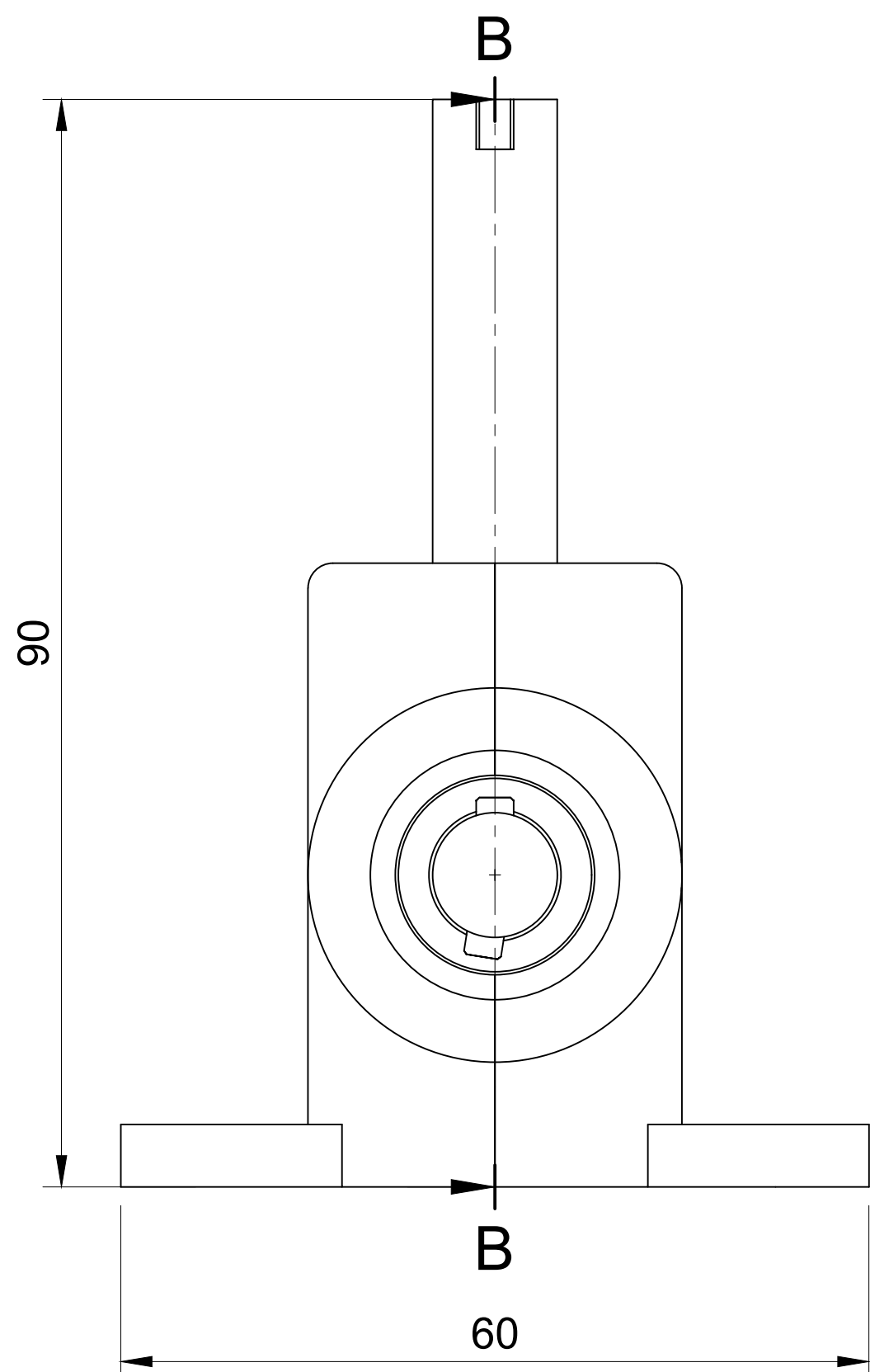
12. LEAD SCREW



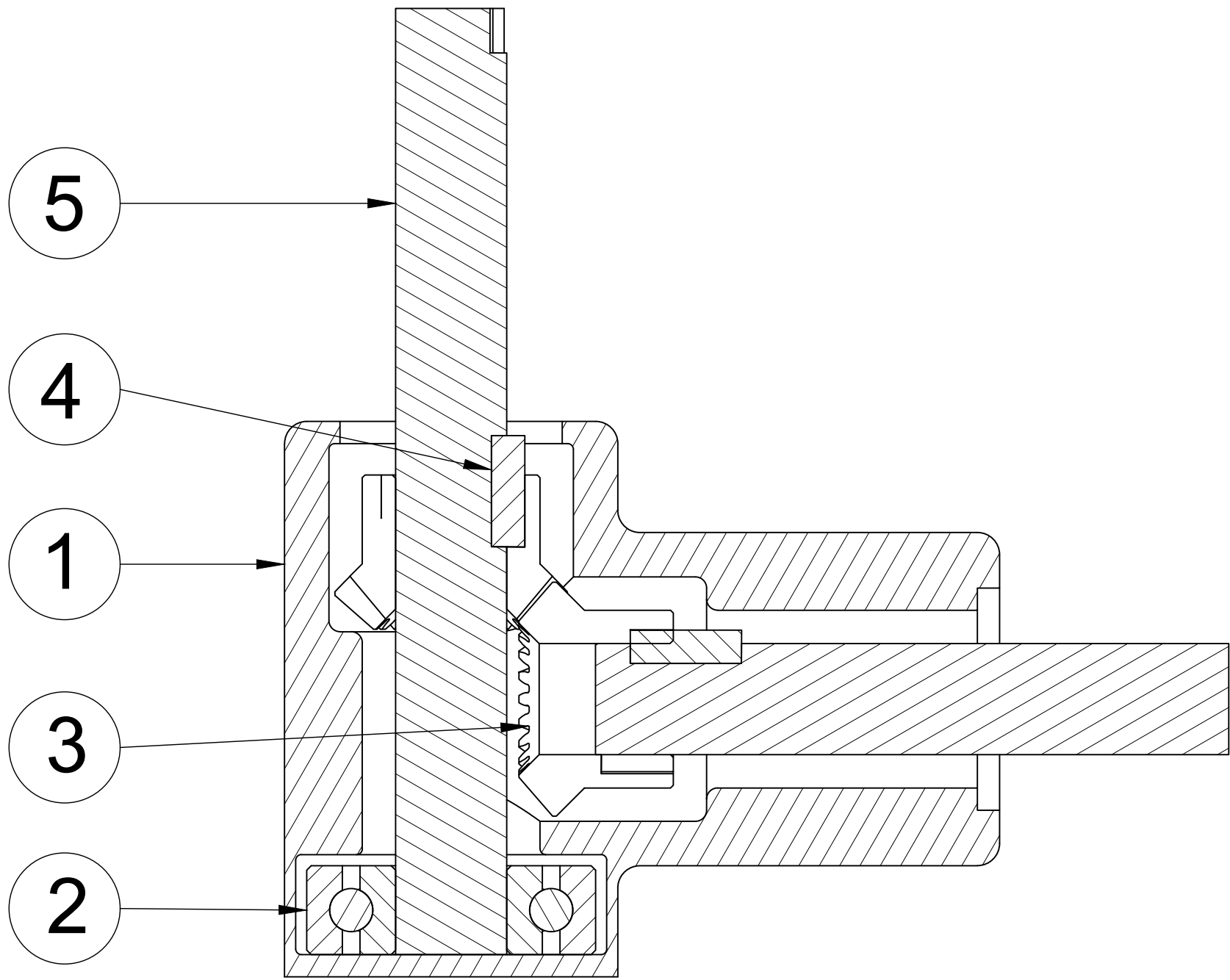
4. FOLLOWER



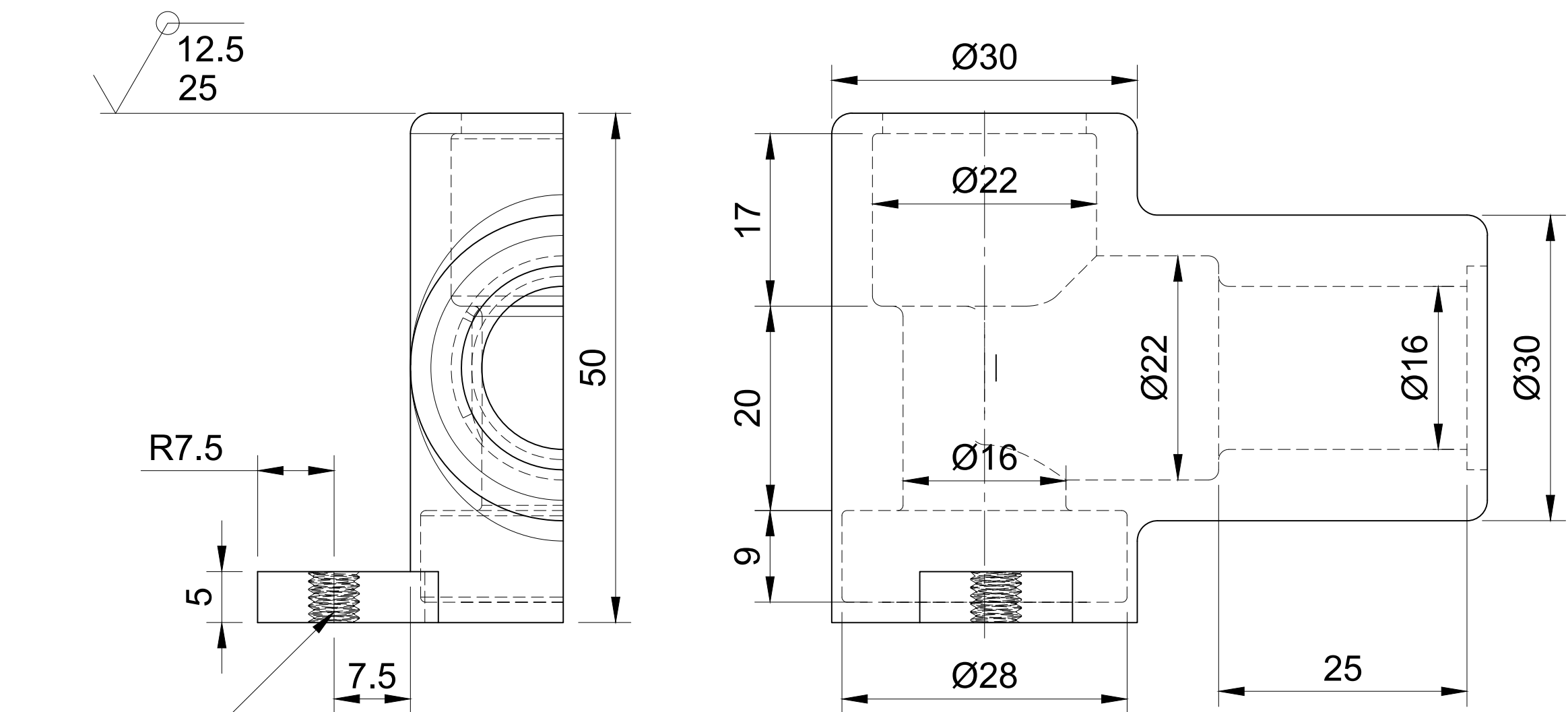
14. LEAD SCREW NUT



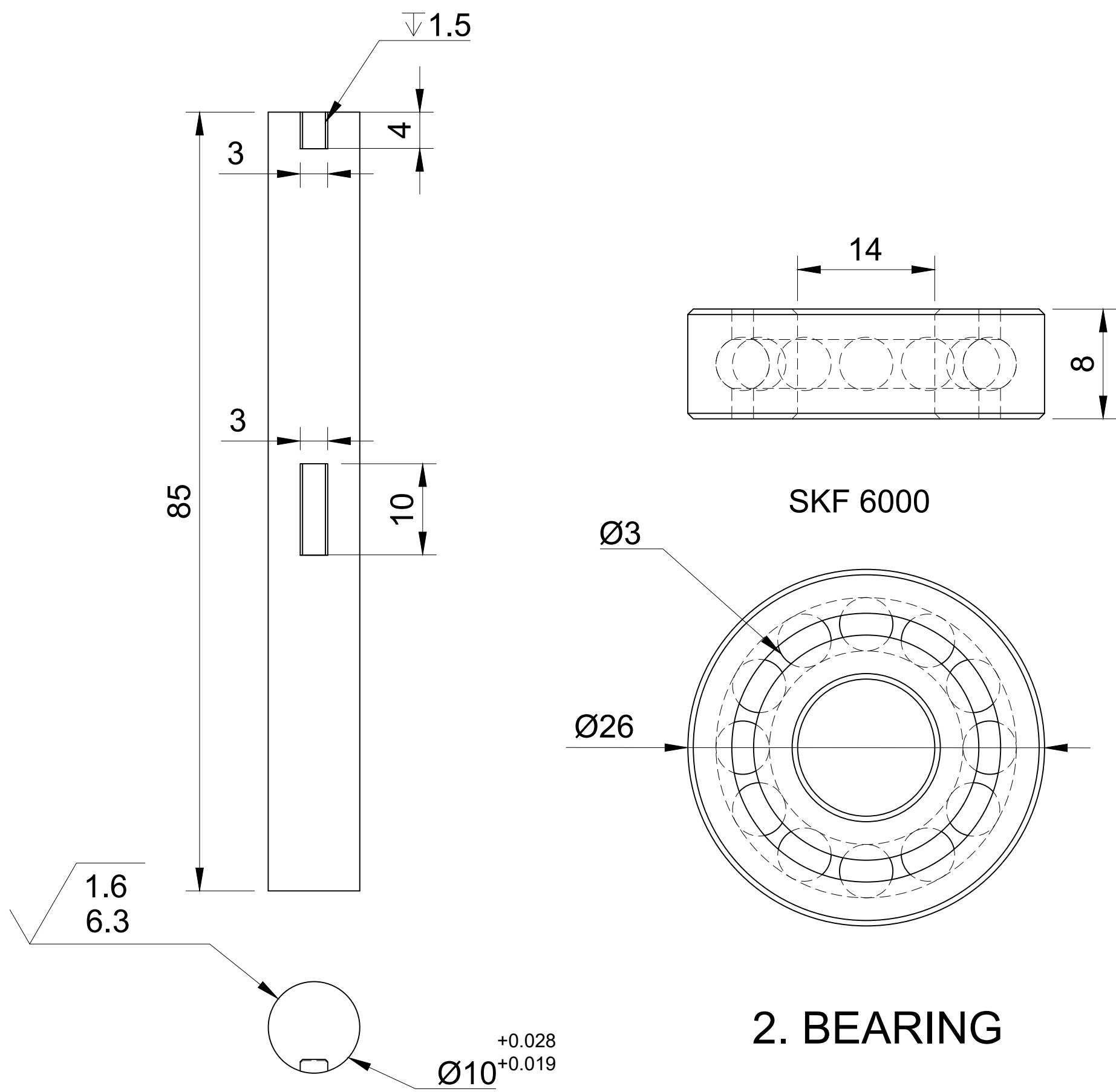
F.V



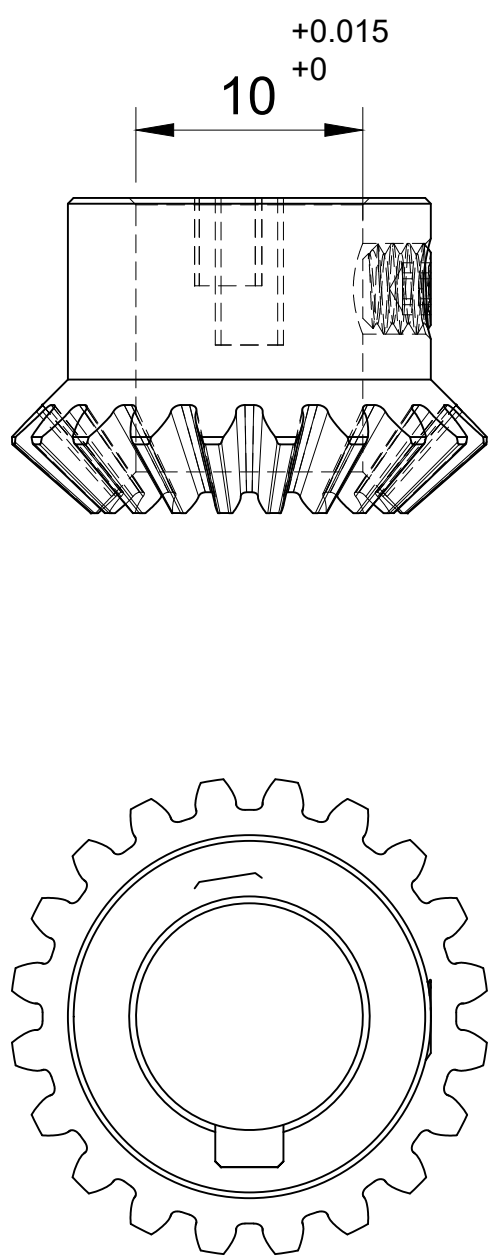
L.H.S.V



1. CASING



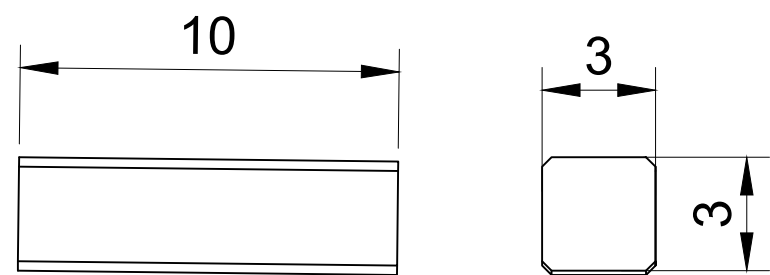
2. BEARING



3. MITER GEAR

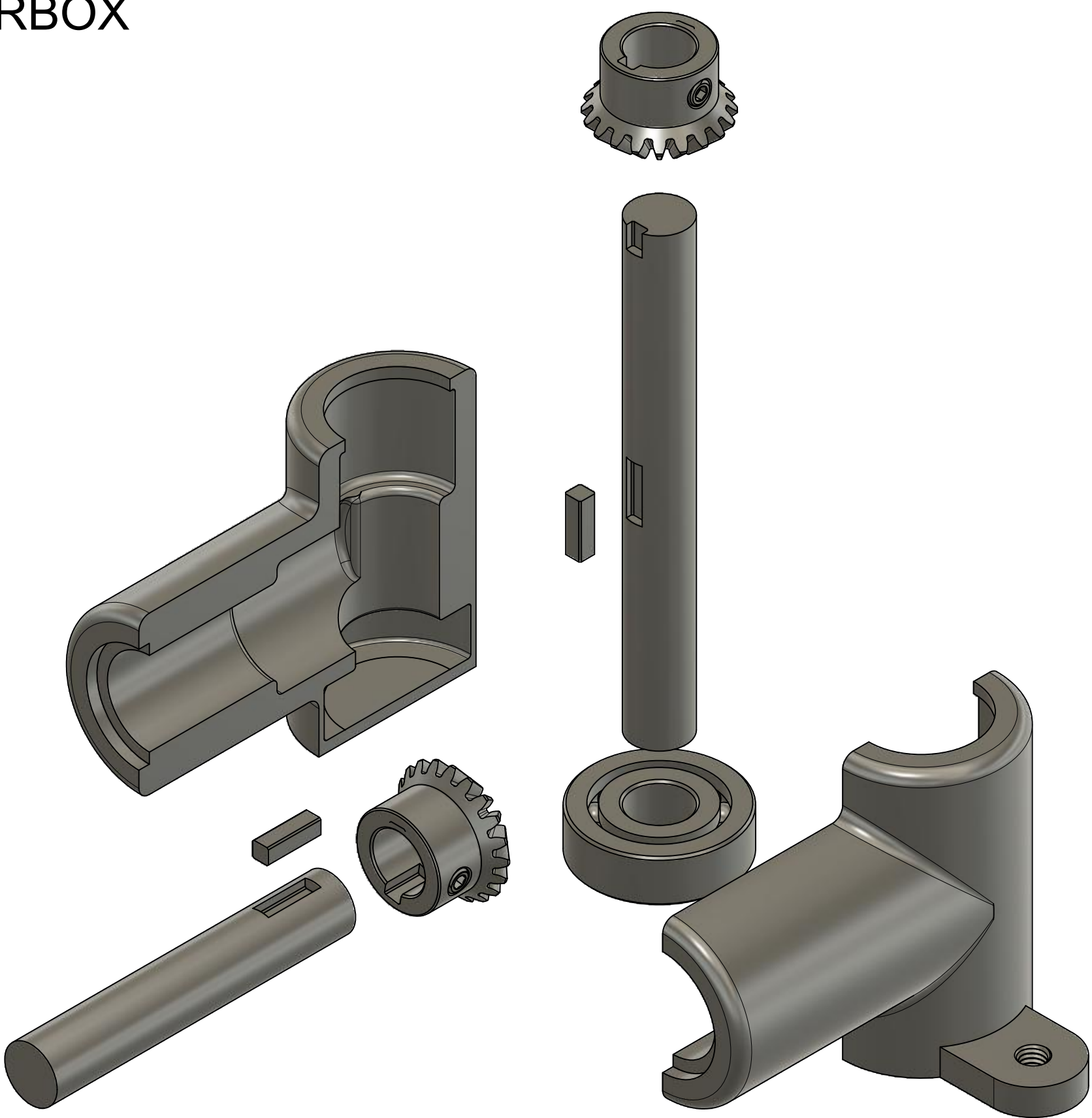
Module	1
Teeth	20
Pressure angle	20°
Overall diameter	21.4 mm
Face width	5
Overall width	14
Shaft diameter	10

5. SHAFT



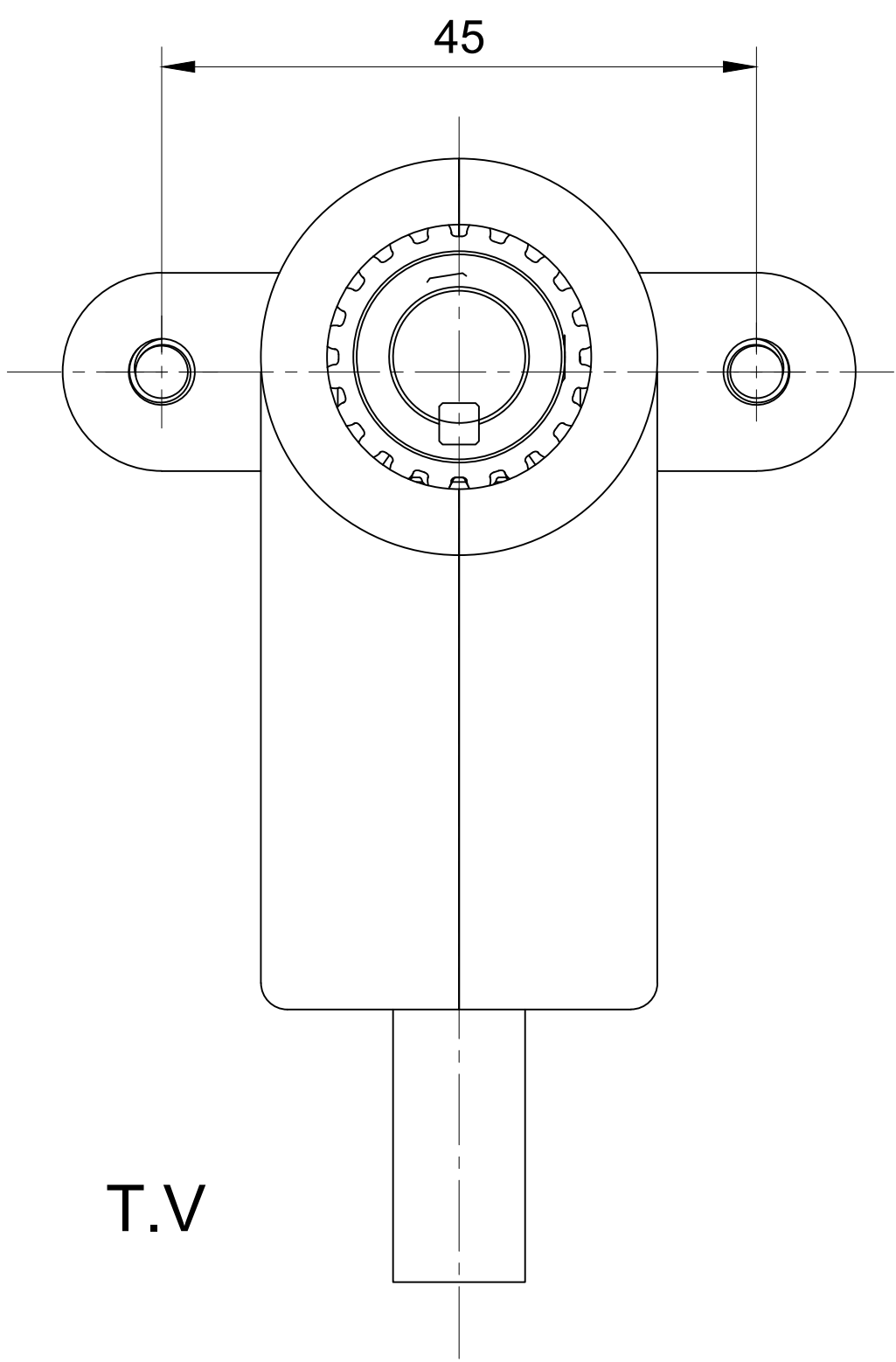
4. PARALLEL KEY

ALL CHAMFERS EQUAL 0.25 X 45°



EXPLODED VIEW

7. GEARBOX



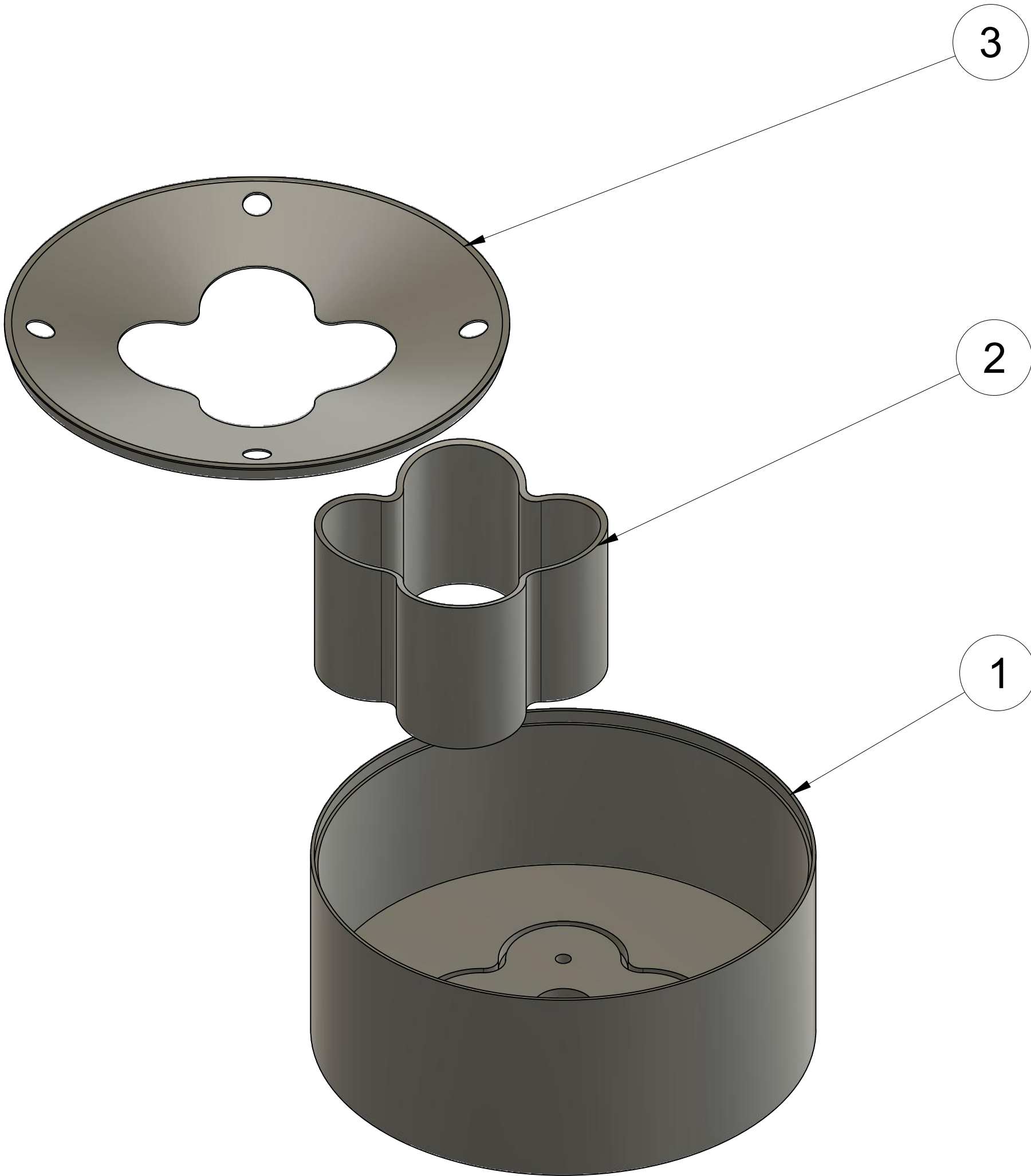
T.V

NOTES:

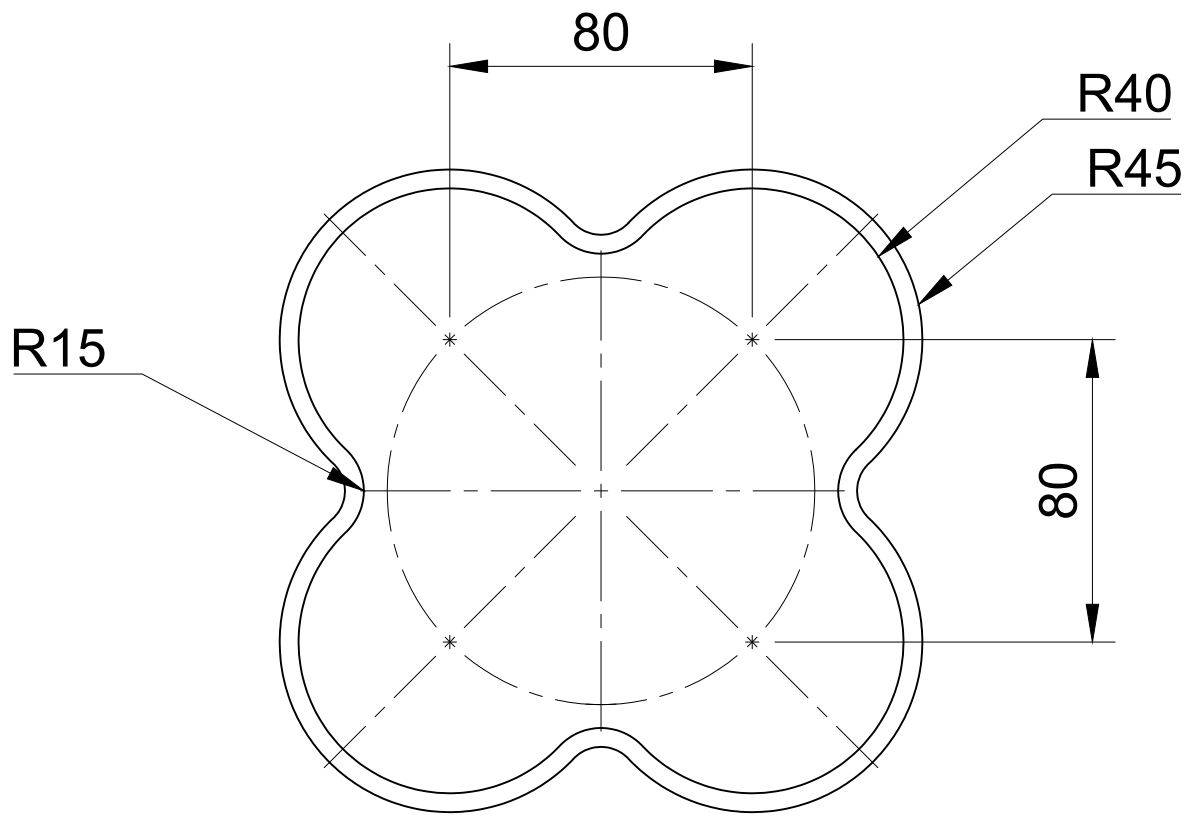
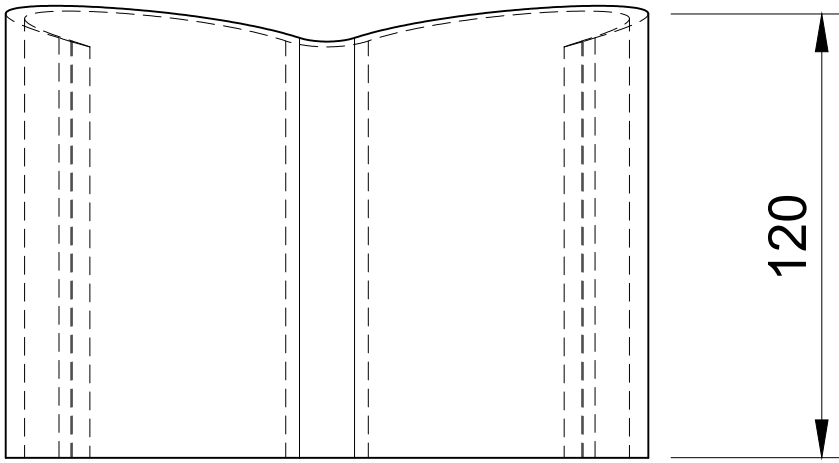
1. ALL DIMENSIONS ARE IN mm.
2. ALL CHAMFERS EQUAL 10 X 45° UNLESS SPECIFIED
3. ALL FILLET RADIUS EQUAL 15 mm UNLESS SPECIFIED
4. SURFACE FINISH HIGHER THAN OR EQUAL TO 1.6 - 6.3 UNLESS SPECIFIED

5	2	Shaft	Ø 10
4	2	Parallel key	Parallel key 3x3x10
3	2	Miter gear	
2	1	Bearing	SKF 6300
1	2	Casing	
Item	Qty	Part name	Description
Parts List			

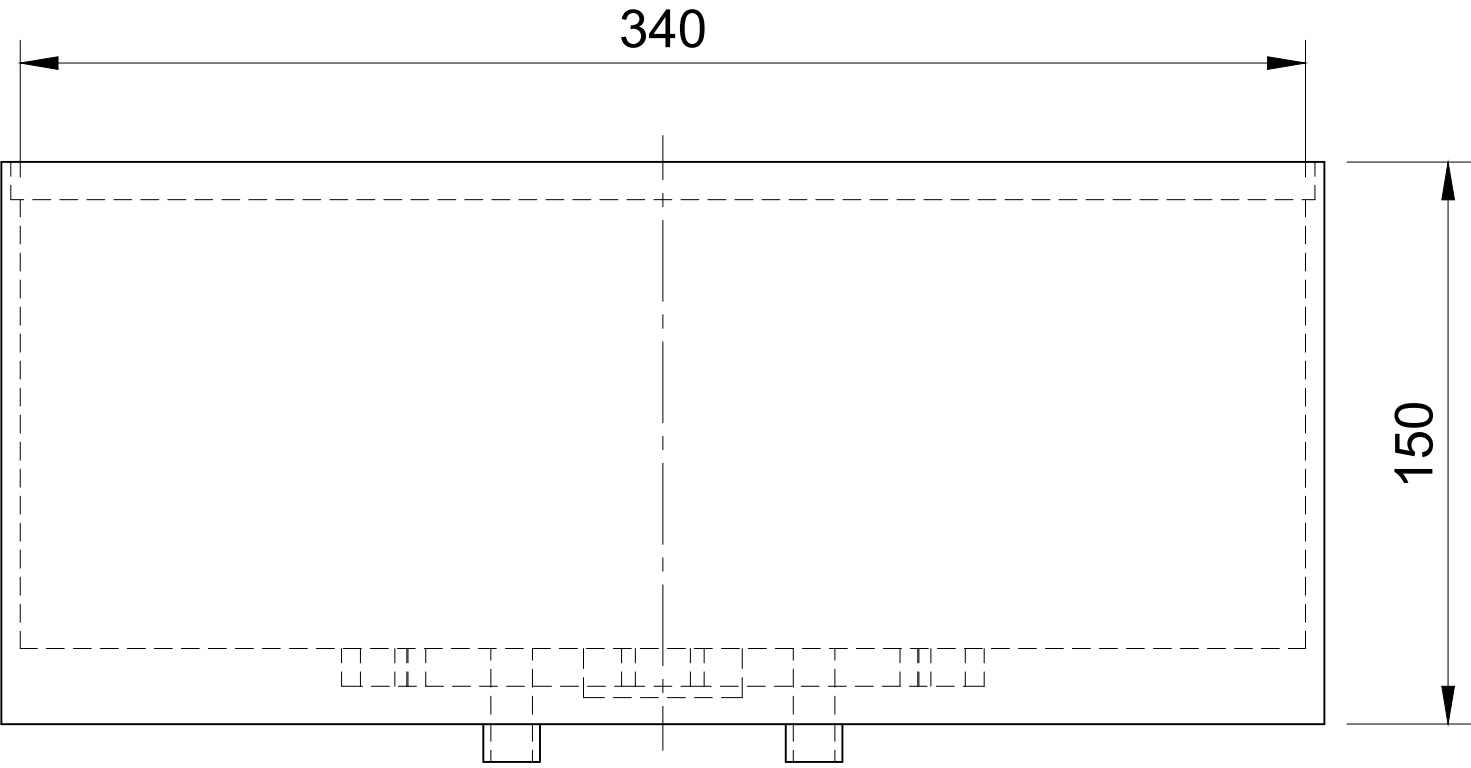
3	1	Ramp
2	1	Inner container
1	1	Outer container
Item	Qty	Parts
Parts List		



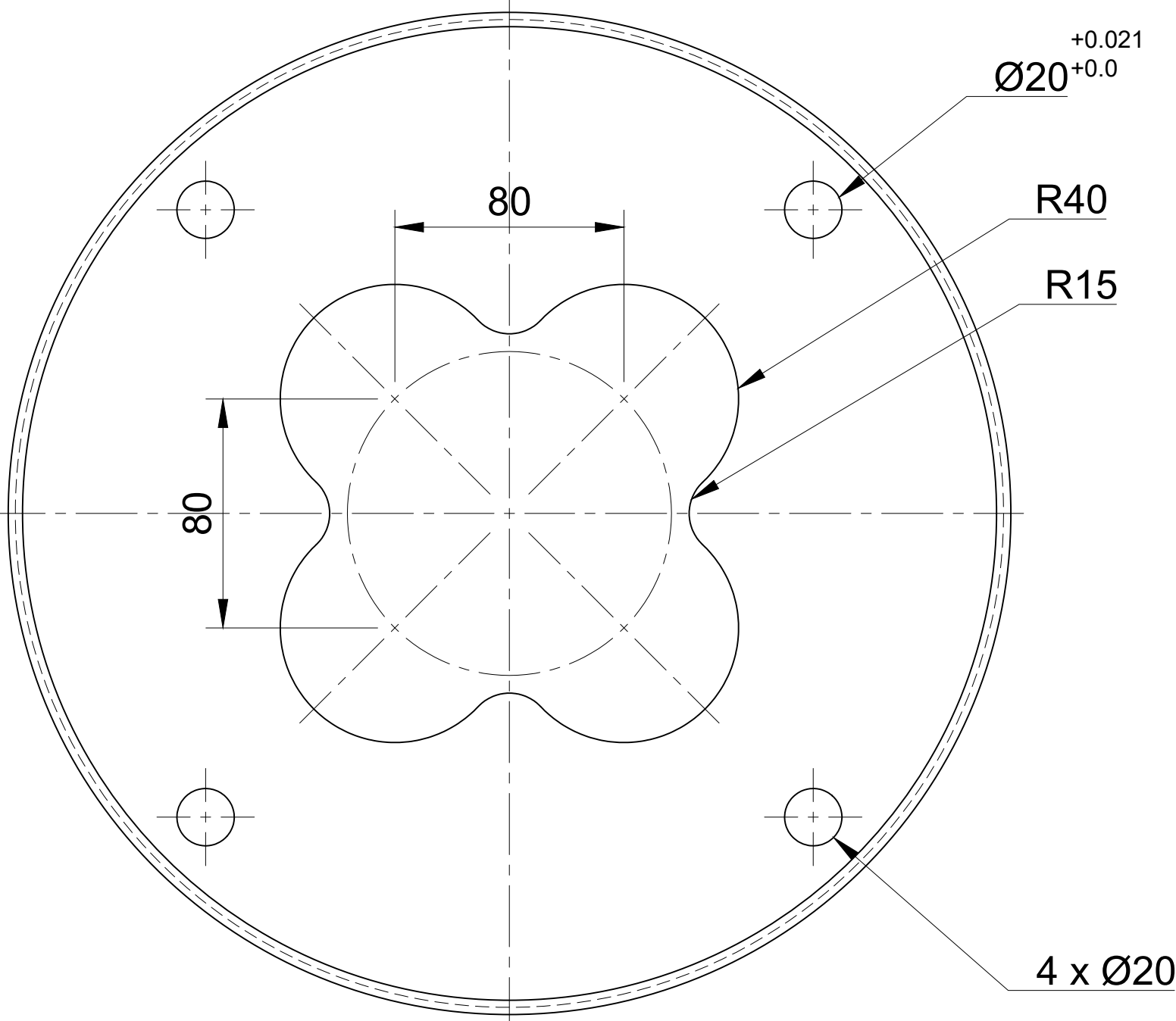
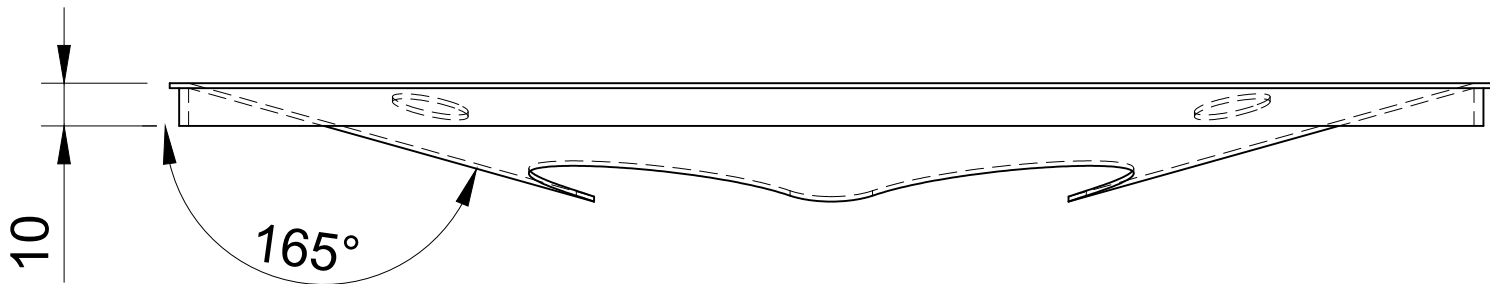
11. CONTAINER



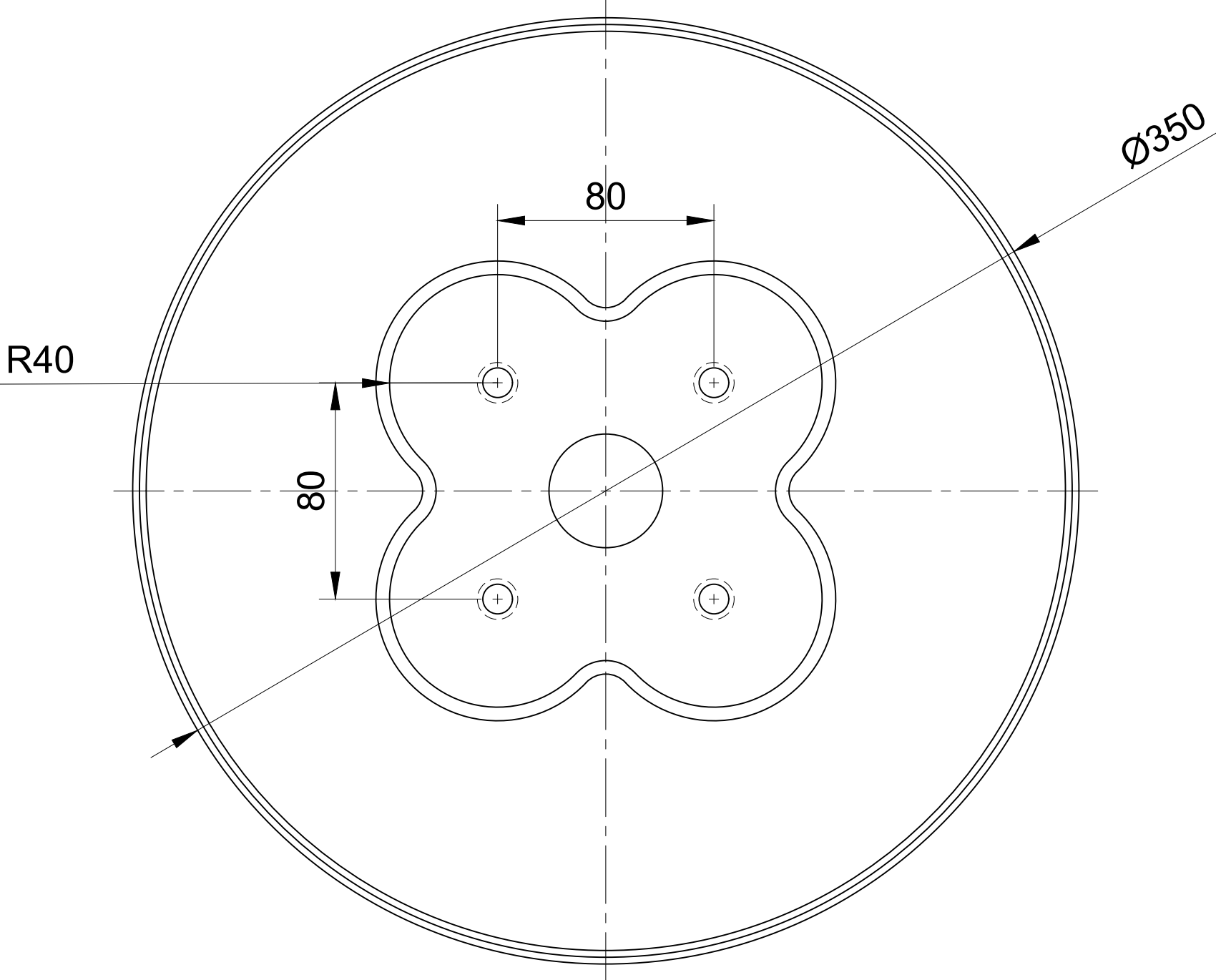
2. INNER CONTAINER



1. OUTER CONTAINER



3. RAMP



NOTES:
1. ALL DIMENSIONS ARE IN mm.
2. ALL CHAMFERS EQUAL 10 X 45° UNLESS SPECIFIED
3. ALL FILLET RADIUS EQUAL 15 mm UNLESS SPECIFIED
4. SURFACE FINISH HIGHER THAN OR EQUAL TO 1.6 - 6.3 UNLESS SPECIFIED