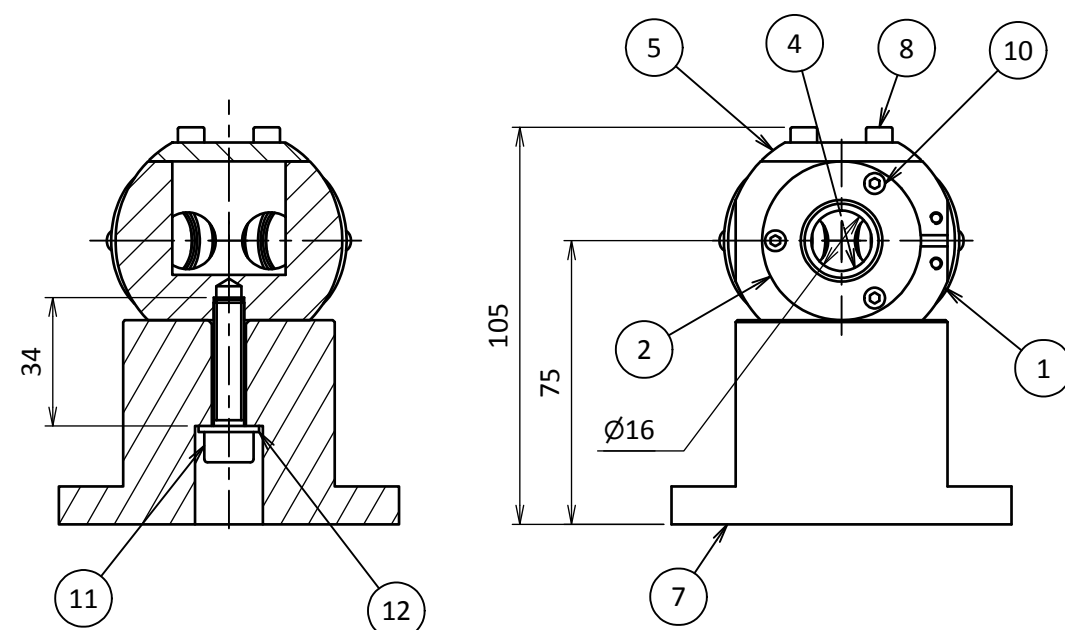
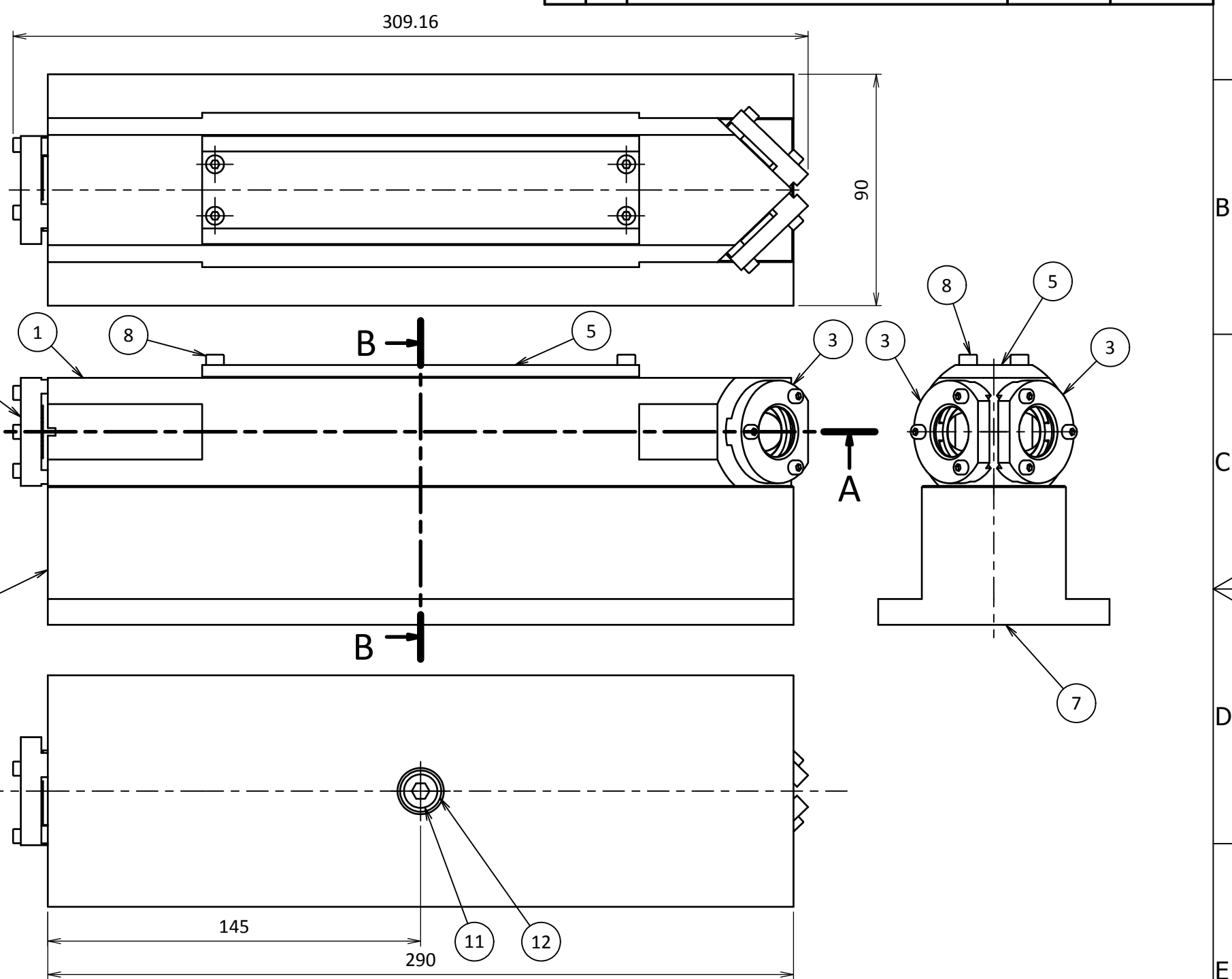
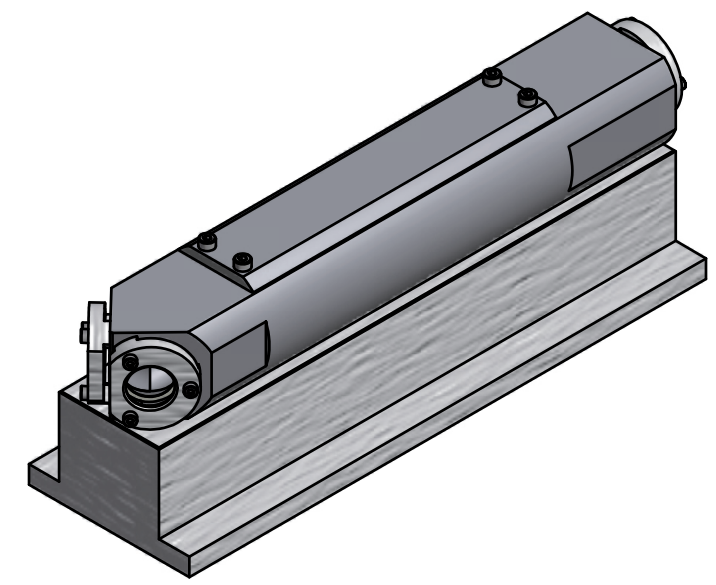


PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
A 1	1	Spacer, Mode Cleaner	ME-GW-1704002-A-DWG
2	1	Curved Mirror Holder, Mode Cleaner	ME-GW-1704003-A-DWG
3	2	Flat Mirror Holder, Mode Cleaner	ME-GW-1704004-A-DWG
4	1	Piezo Acuator, Mode Cleaner	ME-GW-1704005-A-DWG
5	1	Cover Panel, Mode Cleaner	ME-GW-1704006-A-DWG
6	2	PTFE Sheet, Mode Cleaner	ME-GW-1704007-A-DWG
7	1	Base, Mode Cleaner	ME-GW-1704008-A-DWG
8	4	ISO 4762 - M4 x 12	Hex Socket Head Cap Screw
9	6	ISO 4762 - M3 x 12	Hex Socket Head Cap Screw
10	3	ISO 4762 - M3 x 16	Hex Socket Head Cap Screw
11	1	ISO 4762 - M8 x 35	Hex Socket Head Cap Screw
12	1	ISO 7089 - 8 - 140 HV	Plain washers

REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				



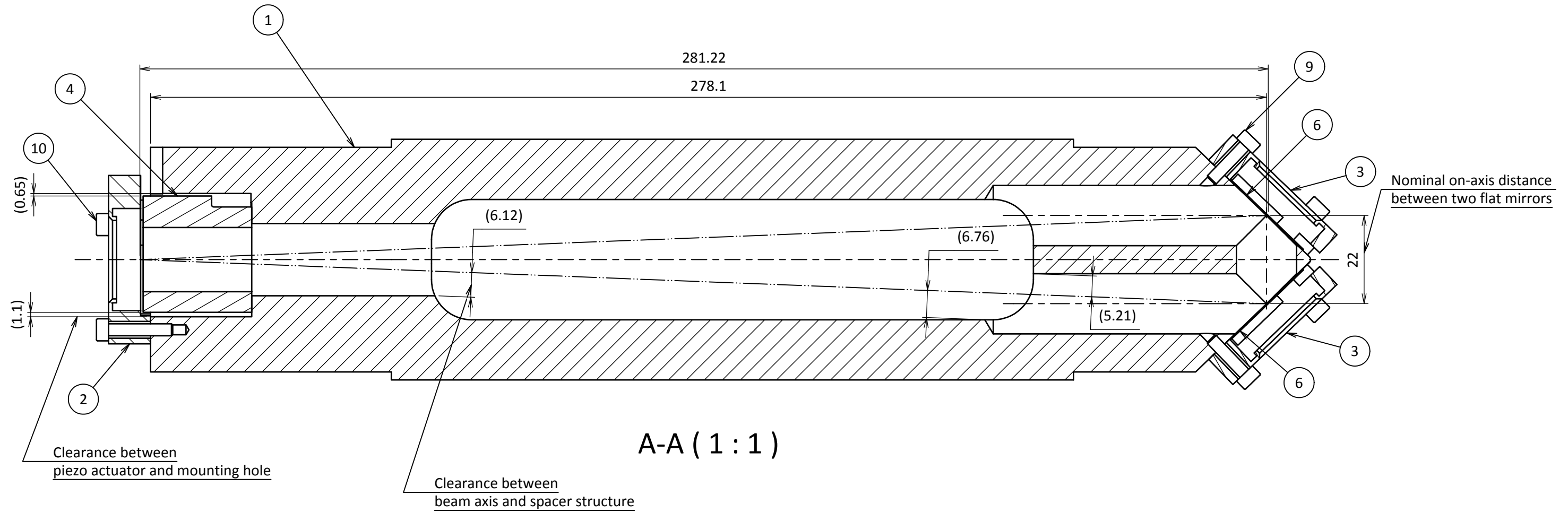
B-B (1 : 2)




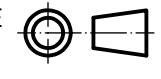
ISOMETRIC VIEW (1:3)

 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN ADVANCED TECHNOLOGY CENTER	UNLESS OTHERWISE STATED:	
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES
PROJECT : GW	MACHINIG FINISH Ra25	JIS B 0419-mH (ISO 2768-mH)
DESIGNED : F.URAGUCHI DATE: 2017/03/15	MATERIAL: INDEF	
DRAWN : F.URAGUCHI DATE: 2017/04/21	FINISH : INDEF	
CHECKED : Y.OBUCHI DATE: 2017/04/22	SCALE : 1/2	SHEET : 1/2
APPROVED : R.FLAMINIO DATE: 2017/04/25	SHEET SIZE : A3	REV : A
THIRD ANGLE PROJECTION	TITLE Mode Cleaner Assembly	
	DWG. NO. ME-GW-1704001-A-DWG	

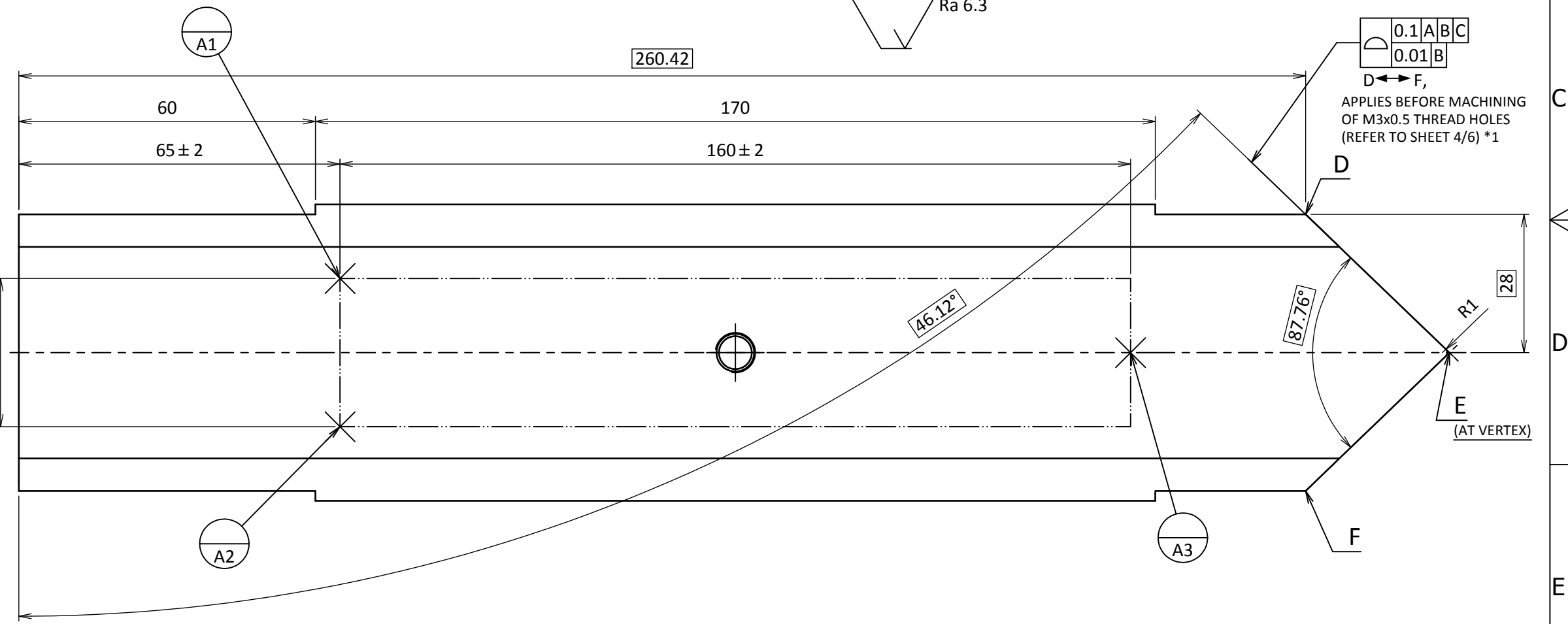
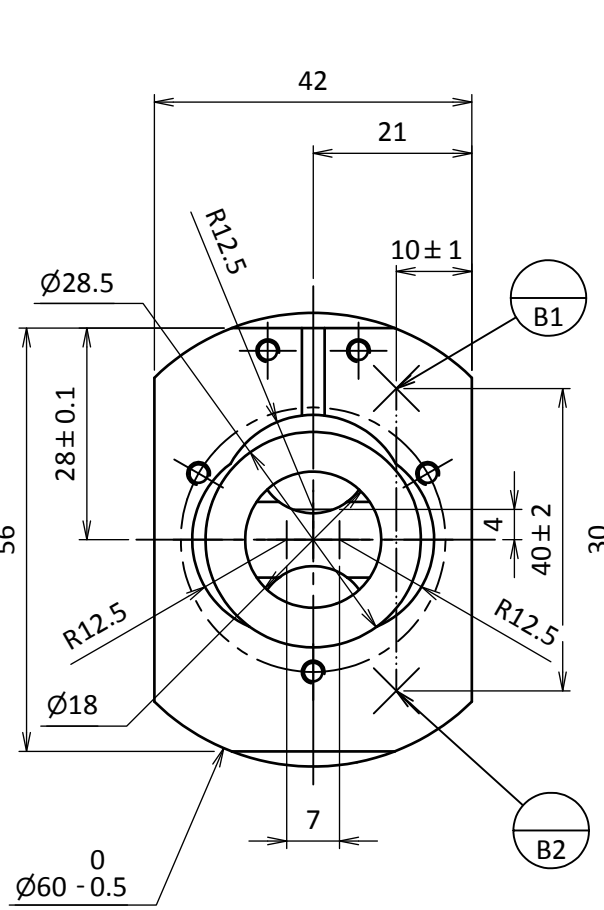
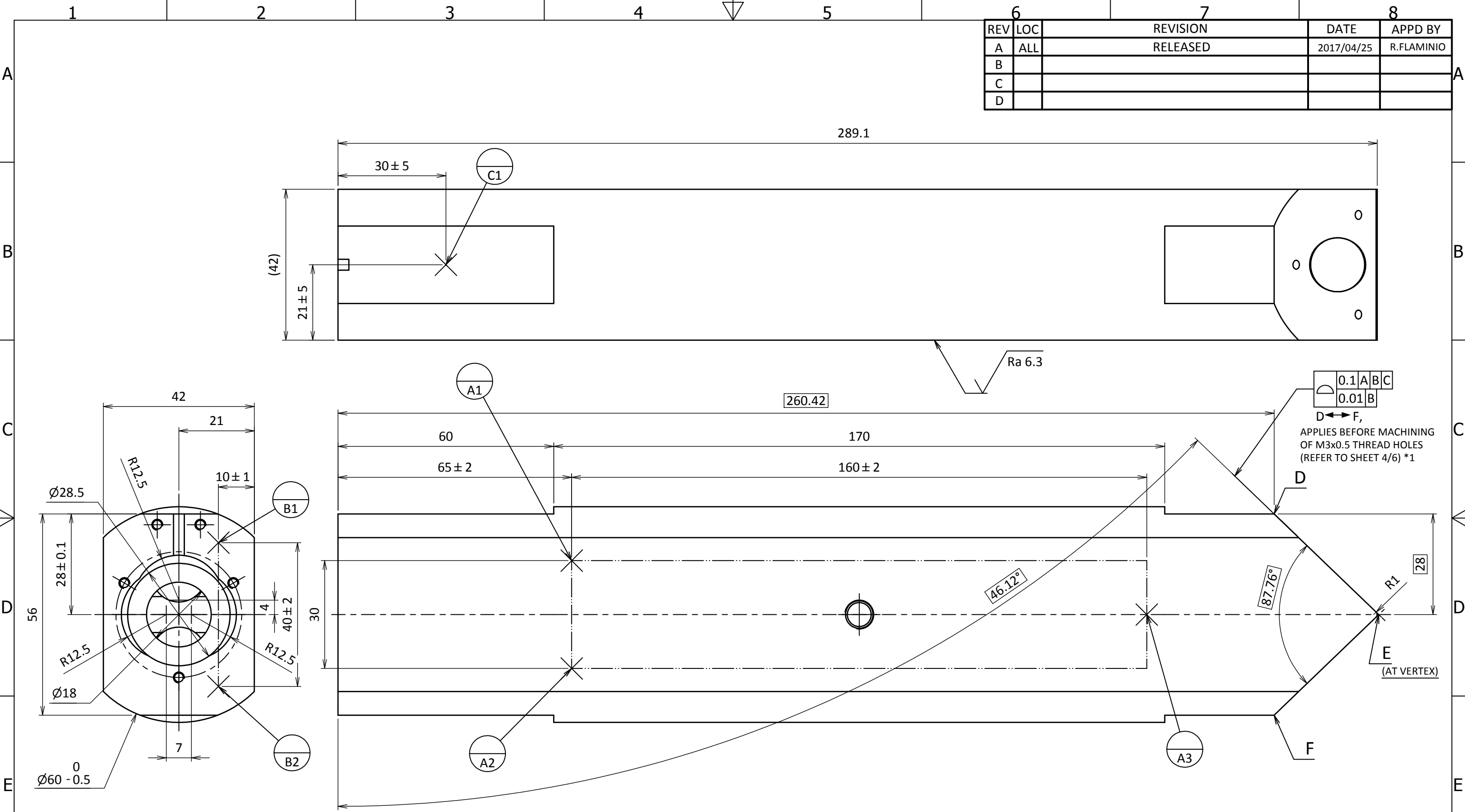
REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				



A-A (1:1)

 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN <small>ADVANCED TECHNOLOGY CENTER</small>	UNLESS OTHERWISE STATED:		
	ALL DIMENSION ARE MILLIMETERS (MM)		TOLERANCES
MACHINIG FINISH Ra25		JIS B 0419-mH (ISO 2768-mH)	
EDGE BREAK 0.2 x 45°			
PROJECT : GW			
DESIGNED : F.URAGUCHI	DATE: 2017/03/15	MATERIAL: INDEF	
DRAWN : F.URAGUCHI	DATE: 2017/04/21	FINISH : INDEF	
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SCALE : 1/2	SHEET : 2/2
APPROVED : R.FLAMINIO	DATE: 2017/04/25	SHEET SIZE : A3	REV : A
THIRD ANGLE PROJECTION		TITLE Mode Cleaner Assembly	
		DWG. NO. ME-GW-1704001-A-DWG	

REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				

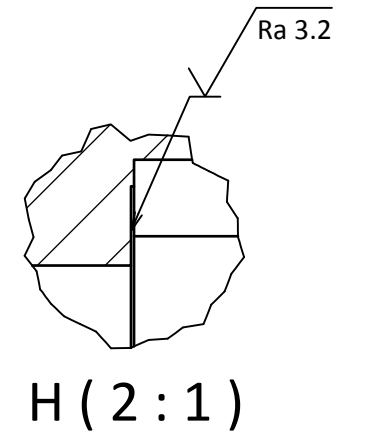
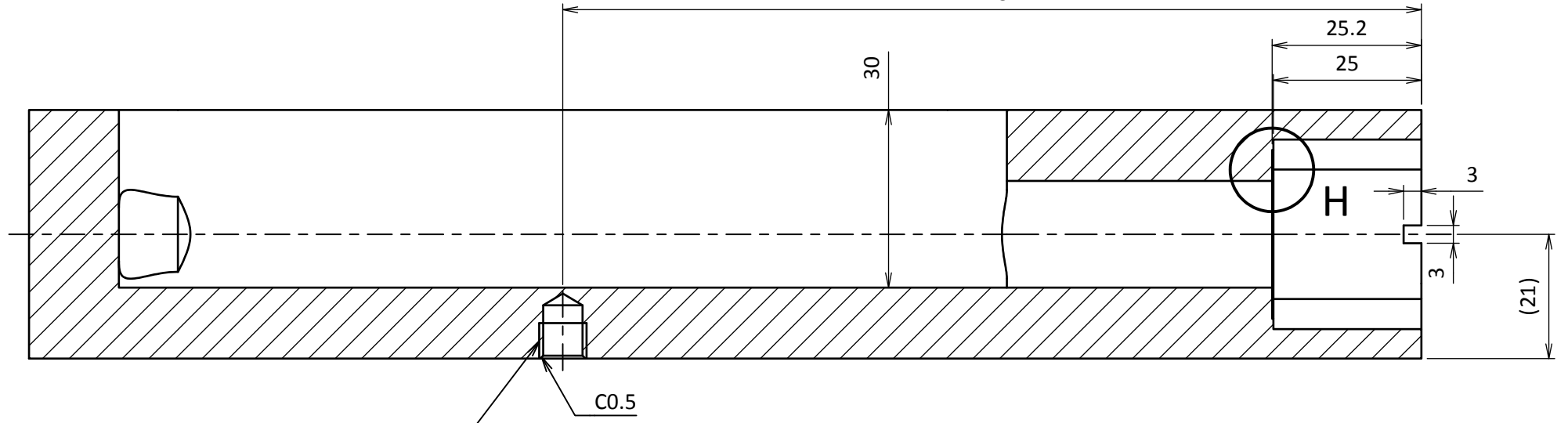
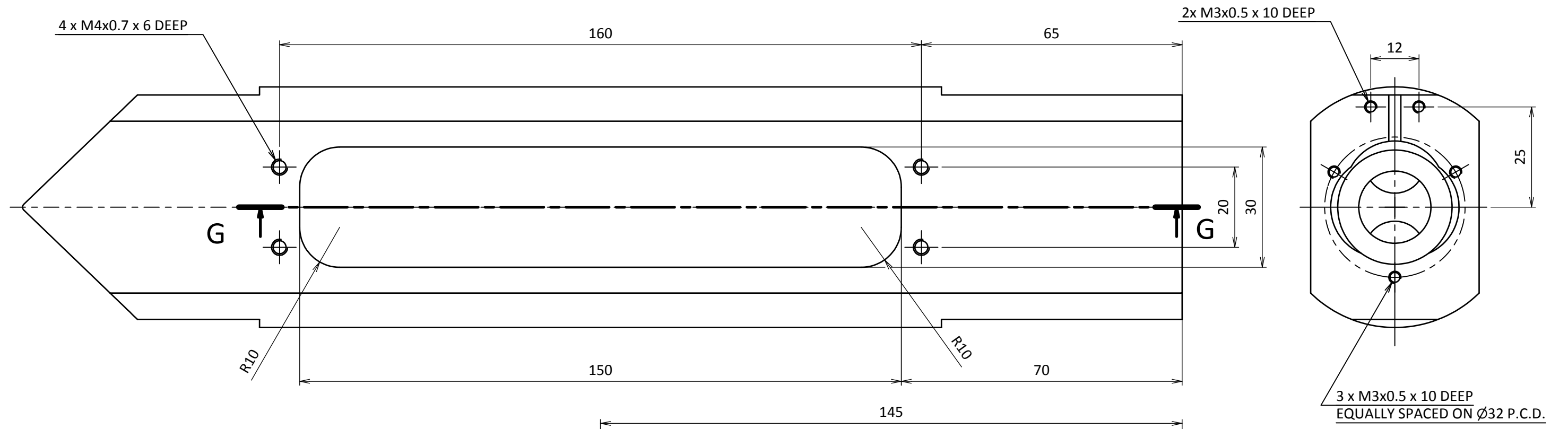


0.1|A|B|C
 0.01|B|
 D ↔ F,
 APPLIES BEFORE MACHINING
 OF M3x0.5 THREAD HOLES
 (REFER TO SHEET 4/6) *1

*1) M3x0.5 (シート4/6を参照) の加工前に適用のこと

NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN ADVANCED TECHNOLOGY CENTER	UNLESS OTHERWISE STATED:	
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES
PROJECT : GW	MACHINING FINISH Ra25	JIS B 0419-mH (ISO 2768-mH)
DESIGNED : F.URAGUCHI DATE: 2017/03/15	MATERIAL: 36 INVAR	
DRAWN : F.URAGUCHI DATE: 2017/04/19	FINISH : AS MACHINED	
CHECKED : Y.OBUCHI DATE: 2017/04/22	SCALE : 1/1	SHEET : 1/6
APPROVED : R.FLAMINIO DATE: 2017/04/25	SHEET SIZE : A3	REV : A
THIRD ANGLE PROJECTION	TITLE Spacer, Mode Cleaner	
	DWG. NO. ME-GW-1704002-A-DWG	

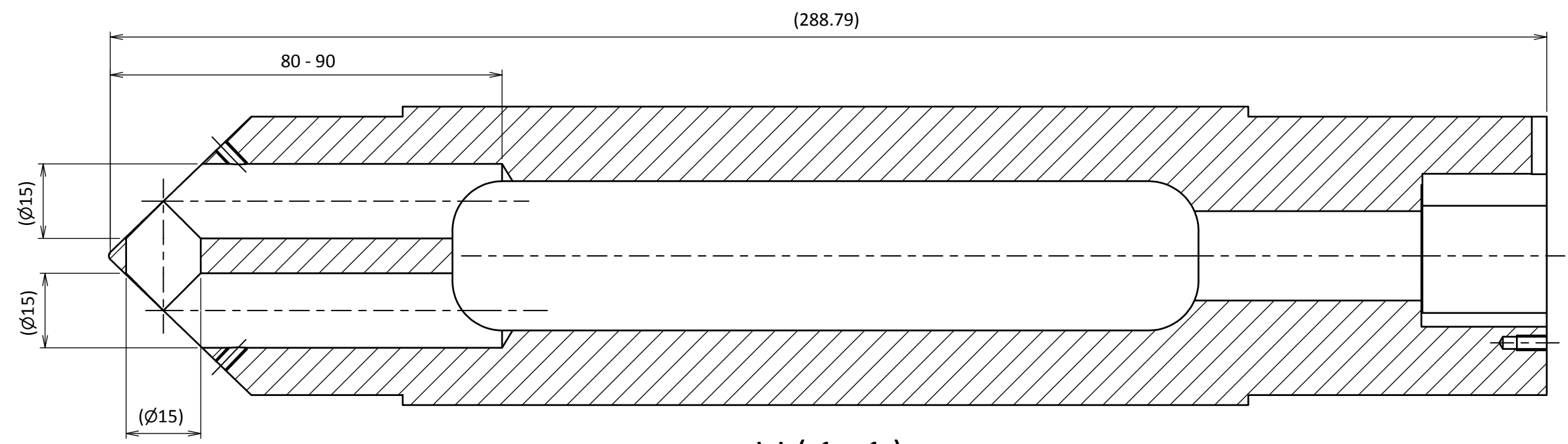
REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				



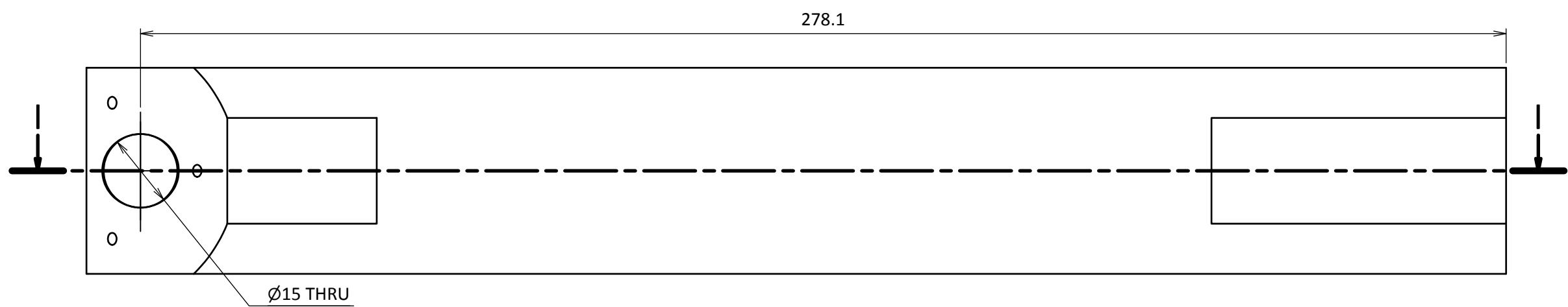
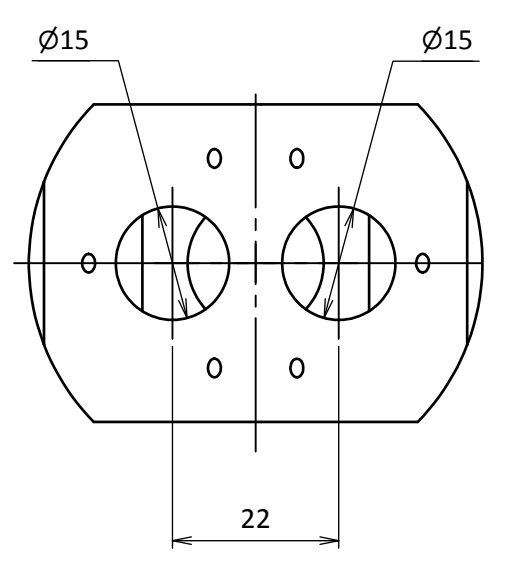
*2) 貫通不可


 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN ADVANCED TECHNOLOGY CENTER	UNLESS OTHERWISE STATED:	
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES
PROJECT : GW	MACHINIG FINISH Ra25	JIS B 0419-mH (ISO 2768-mH)
DESIGNED : F.URAGUCHI	DATE: 2017/03/15	MATERIAL: 36 INVAR
DRAWN : F.URAGUCHI	DATE: 2017/04/19	FINISH : AS MACHINED
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SCALE : 1/1
APPROVED : R.FLAMINIO	DATE: 2017/04/25	SHEET : 2/6
THIRD ANGLE PROJECTION	TITLE	Spacer, Mode Cleaner
	DWG. NO.	ME-GW-1704002-A-DWG

REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				

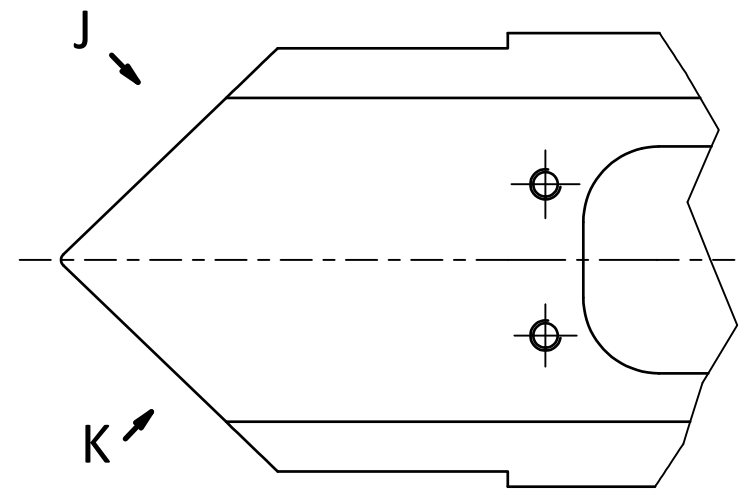
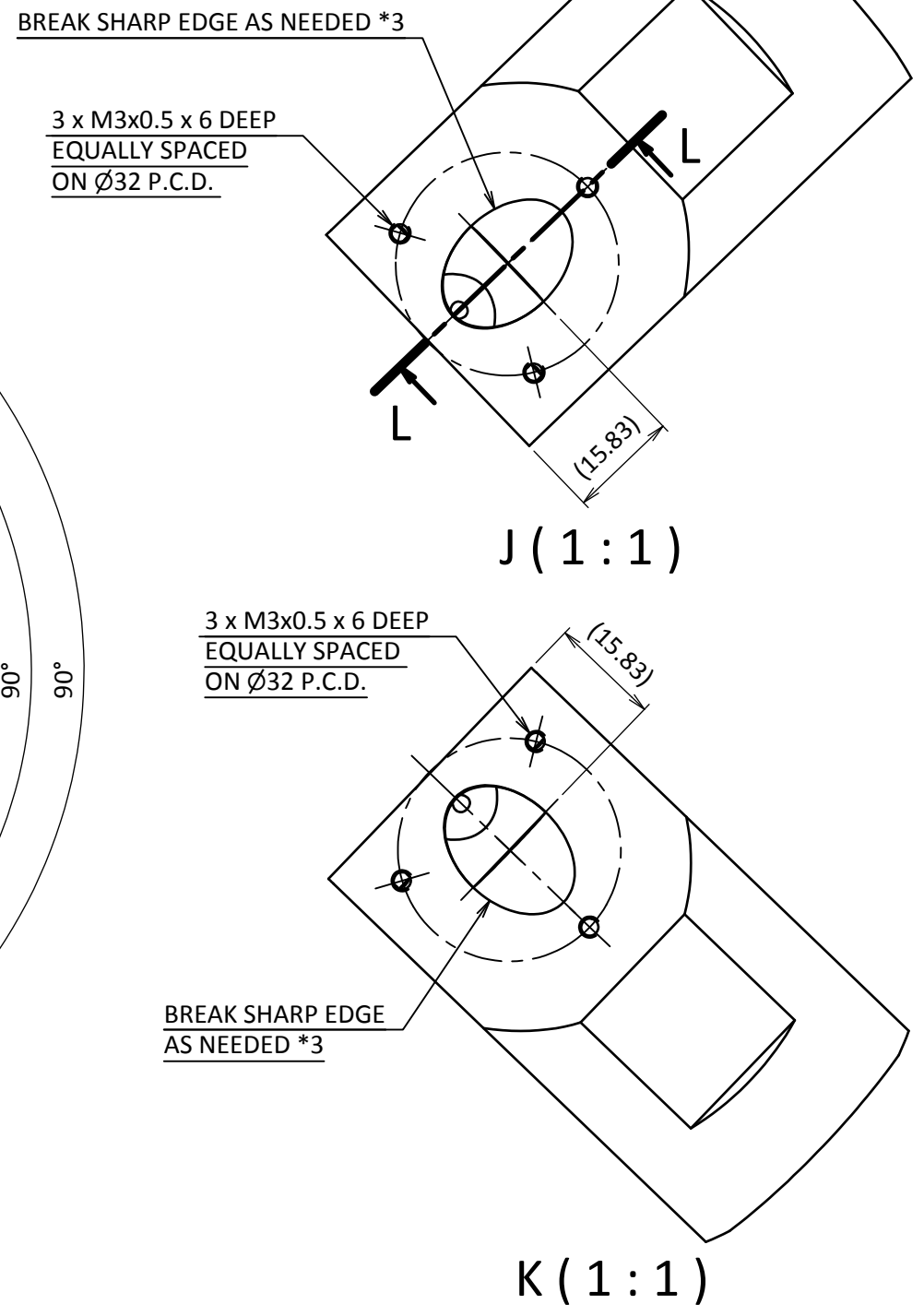
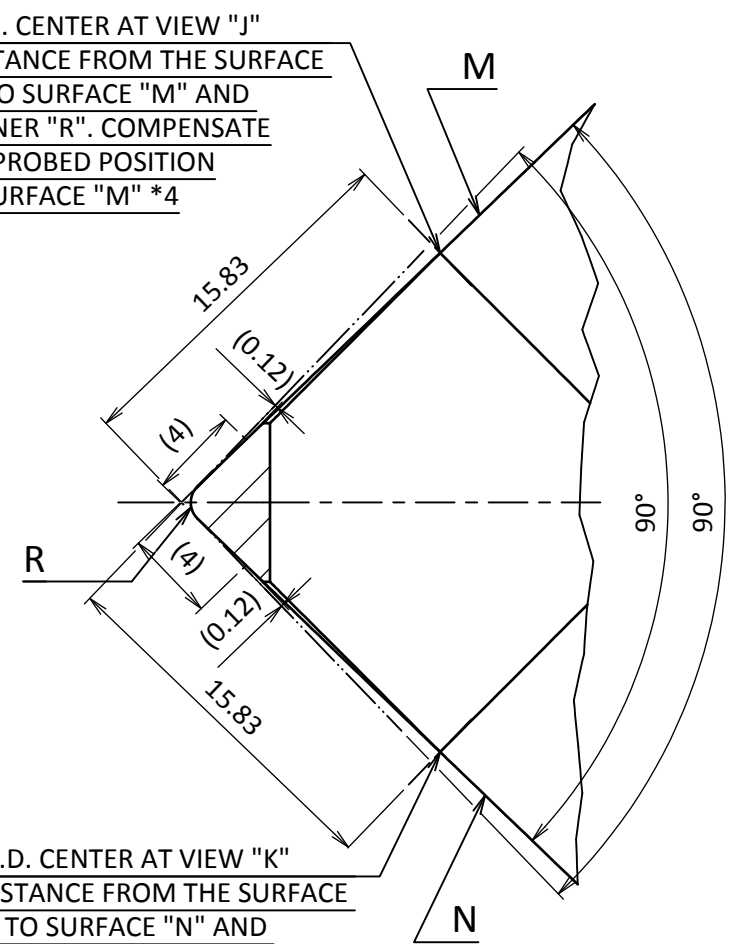


I-I (1:1)



 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN ADVANCED TECHNOLOGY CENTER	UNLESS OTHERWISE STATED:	
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES JIS B 0419-mH (ISO 2768-mH)
PROJECT : GW	DATE: 2017/03/15	MATERIAL: 36 INVAR
DESIGNED : F.URAGUCHI	DATE: 2017/04/19	FINISH : AS MACHINED
DRAWN : F.URAGUCHI	DATE: 2017/04/22	SCALE : 1/1
CHECKED : Y.OBUCHI	DATE: 2017/04/25	SHEET : 3/6
APPROVED : R.FLAMINIO	DATE: 2017/04/25	SHEET SIZE : A3
THIRD ANGLE PROJECTION	TITLE Spacer, Mode Cleaner	
	DWG. NO. ME-GW-1704002-A-DWG	

REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				

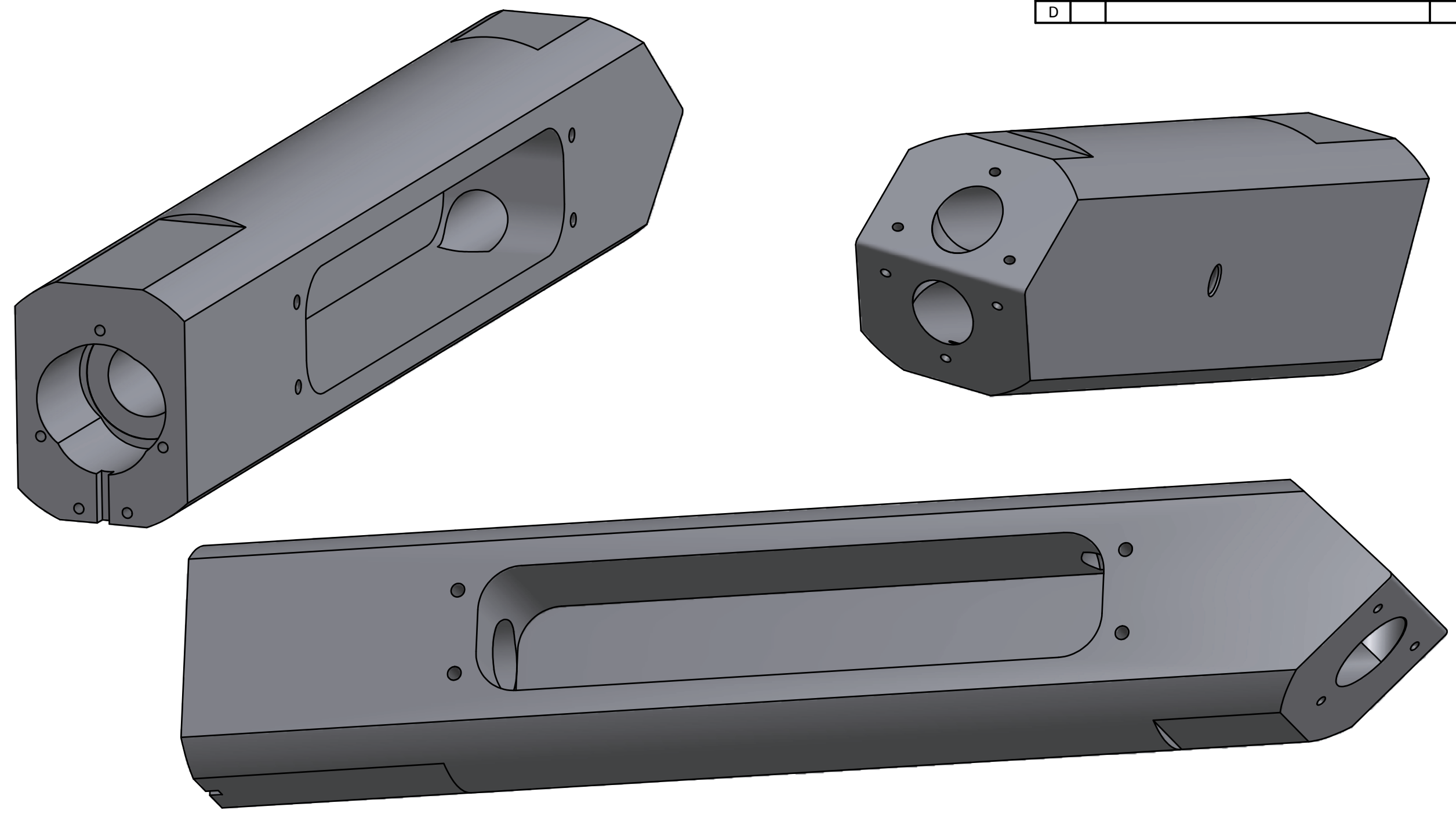


L-L (2:1)


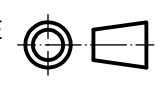
- *3) バリなきこと
- *4) ビュー"J"のPCD中心位置は面Mに垂直かつコーナーRに接する面から測定のこと。
位置測定プローブの位置が面Mより4mm下がった場合の補正量は0.12mmとなる。
- *5) ビュー"K"のPCD中心位置は面Nに垂直かつコーナーRに接する面から測定すること。
位置測定プローブの位置が面Nより4mm下がった場合の補正量は0.12mmとなる。

 <small>NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN</small> <small>ADVANCED TECHNOLOGY CENTER</small>	UNLESS OTHERWISE STATED:	
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES
PROJECT : GW	MACHINIG FINISH Ra25	JIS B 0419-mH (ISO 2768-mH)
DESIGNED : F.URAGUCHI	DATE: 2017/03/15	MATERIAL: 36 INVAR
DRAWN : F.URAGUCHI	DATE: 2017/04/19	FINISH : AS MACHINED
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SCALE : 1/1
APPROVED : R.FLAMINIO	DATE: 2017/04/25	SHEET : 4/6
THIRD ANGLE PROJECTION	TITLE	Spacer, Mode Cleaner
	DWG. NO.	ME-GW-1704002-A-DWG

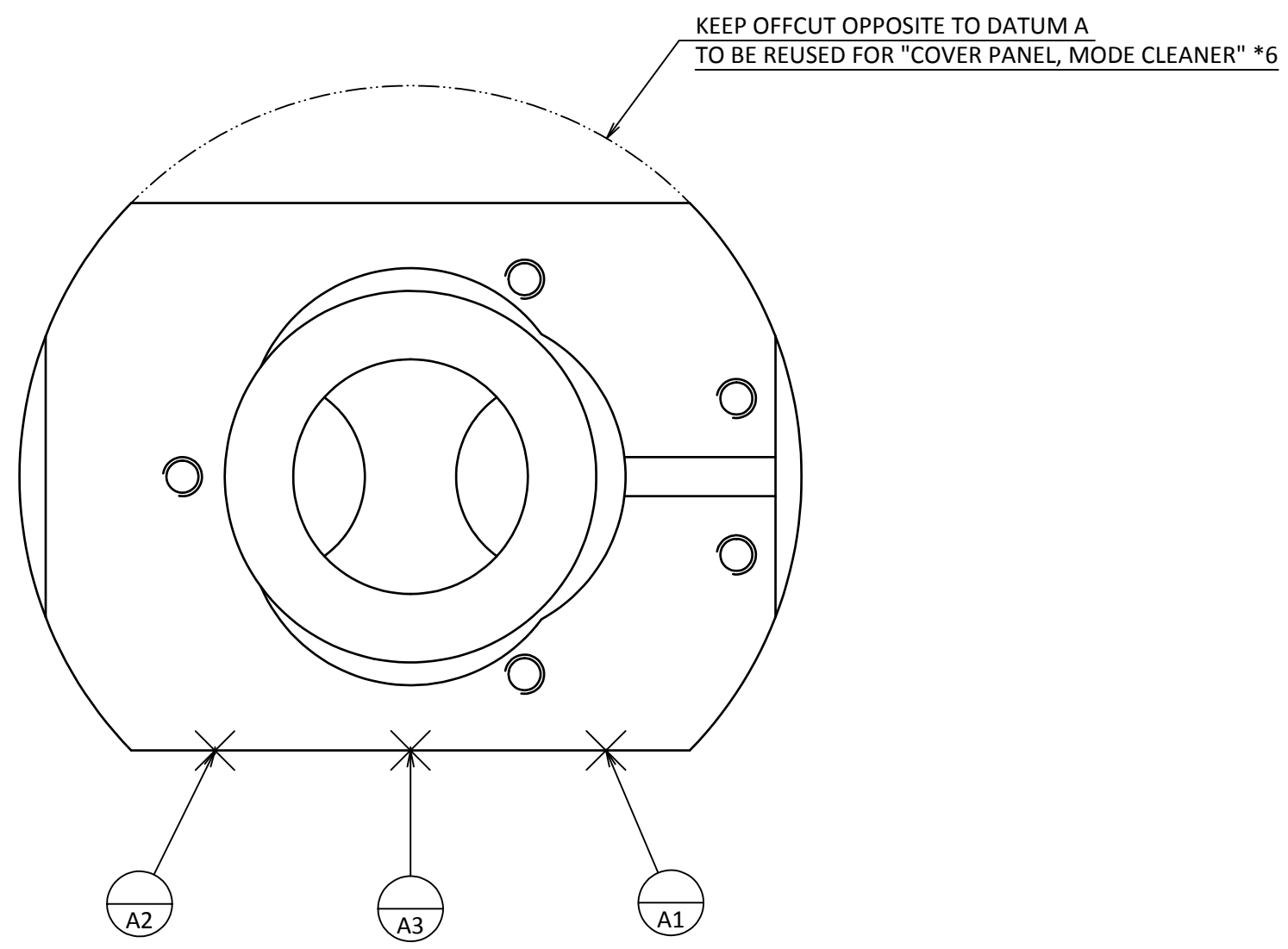
REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				




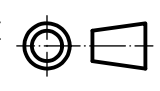
ISOMETRIC VIEW (1 : 1)

 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN <small>ADVANCED TECHNOLOGY CENTER</small>	UNLESS OTHERWISE STATED:		
	ALL DIMENSION ARE MILLIMETERS (MM)		TOLERANCES JIS B 0419-mH (ISO 2768-mH)
PROJECT : GW	MACHINIG FINISH Ra25		EDGE BREAK 0.2 x 45°
DESIGNED : F.URAGUCHI	DATE: 2017/03/15	MATERIAL: 36 INVAR	
DRAWN : F.URAGUCHI	DATE: 2017/04/19	FINISH : AS MACHINED	
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SCALE : 1/1	SHEET : 5/6
APPROVED : R.FLAMINIO	DATE: 2017/04/25	SHEET SIZE : A3	REV : A
THIRD ANGLE PROJECTION		TITLE Spacer, Mode Cleaner	
DWG. NO. ME-GW-1704002-A-DWG			

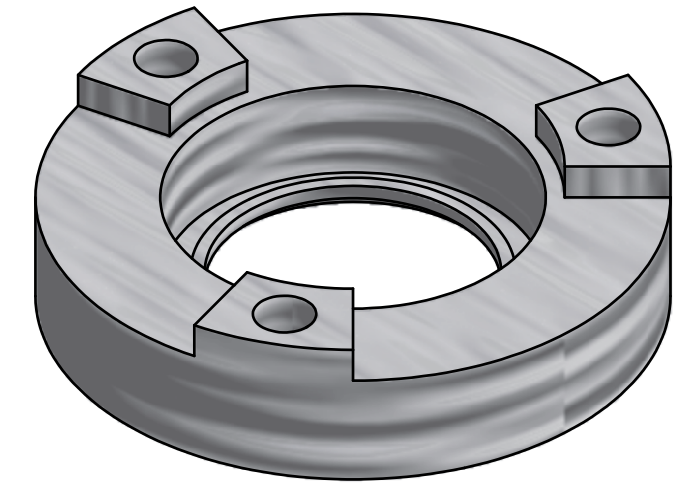
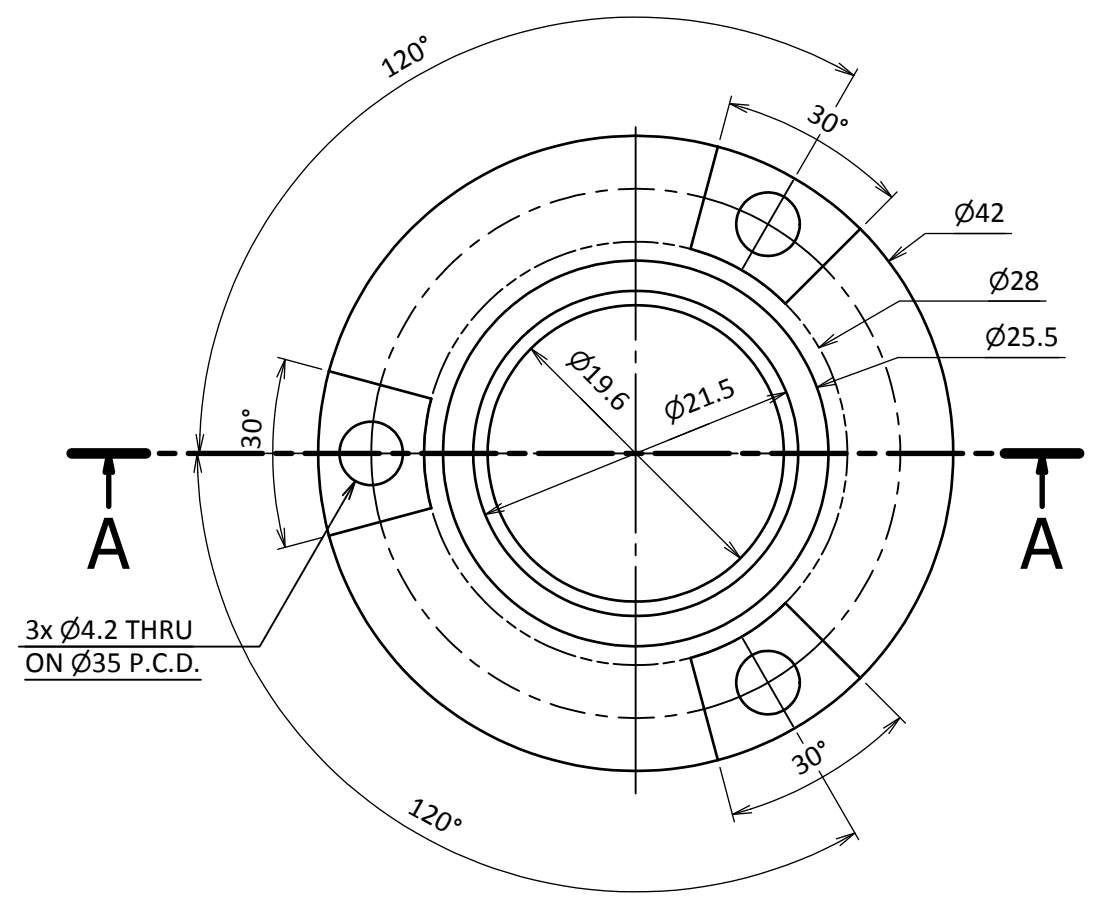
REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				



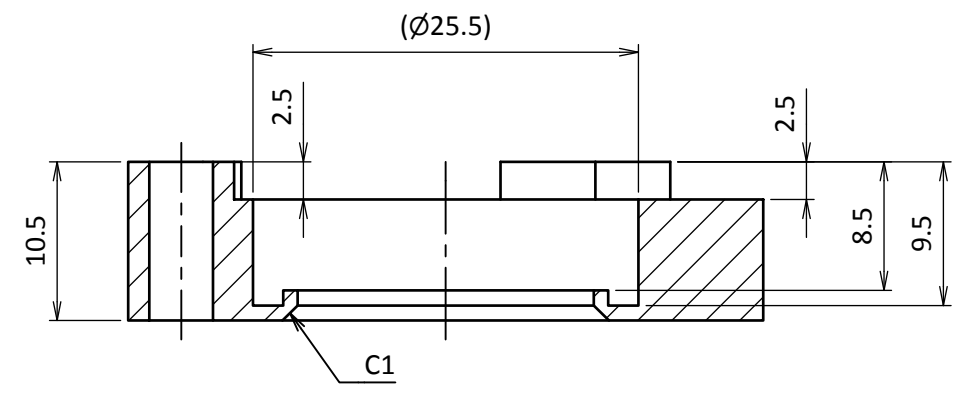
*6) 端材 (データムAの反対側) は"COVER PANEL, MODE CLEANER"に再利用するため保管すること

 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN <small>ADVANCED TECHNOLOGY CENTER</small>	UNLESS OTHERWISE STATED:		
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES JIS B 0419-mH (ISO 2768-mH)	
PROJECT : GW	MATERIAL: 36 INVAR		EDGE BREAK 0.2 x 45°
DESIGNED : F.URAGUCHI	DATE: 2017/03/15	FINISH : AS MACHINED	
DRAWN : F.URAGUCHI	DATE: 2017/04/19	SCALE : 2/1	SHEET : 6/6
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SHEET SIZE : A3	REV : A
APPROVED : R.FLAMINIO	DATE: 2017/04/25		
THIRD ANGLE PROJECTION			TITLE Spacer, Mode Cleaner
			DWG. NO. ME-GW-1704002-A-DWG

REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				



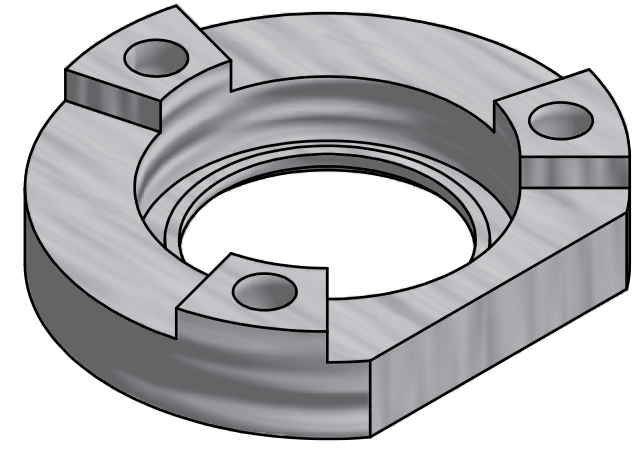
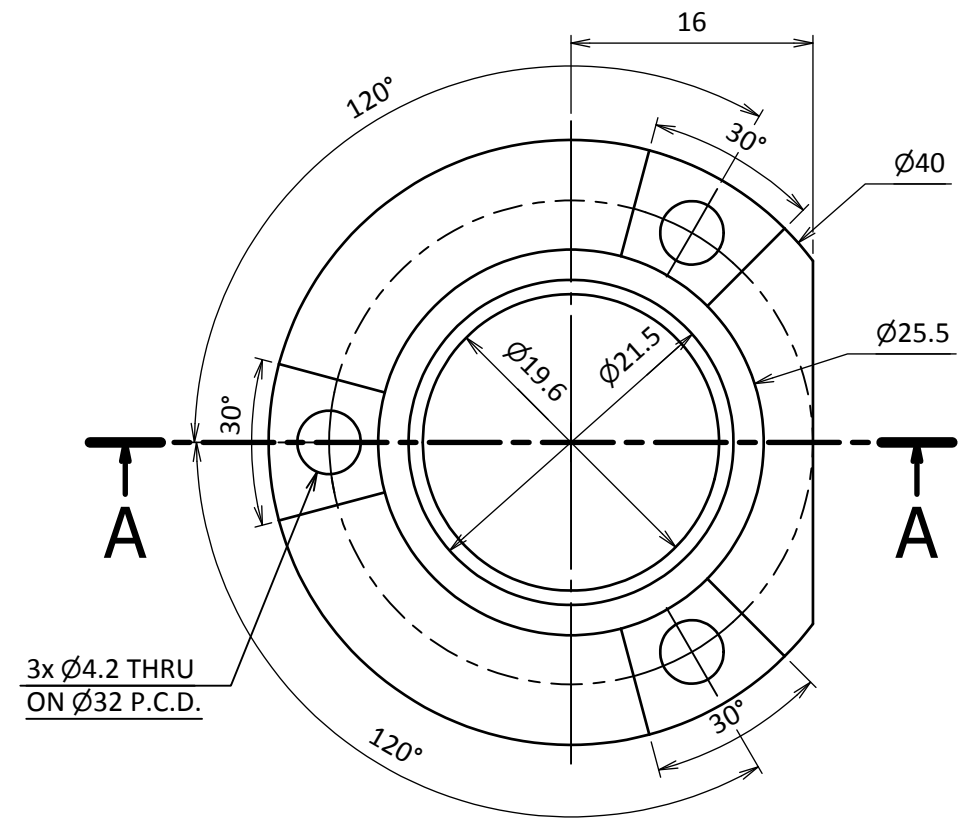
ISOMETRIC VIEW (2 : 1)



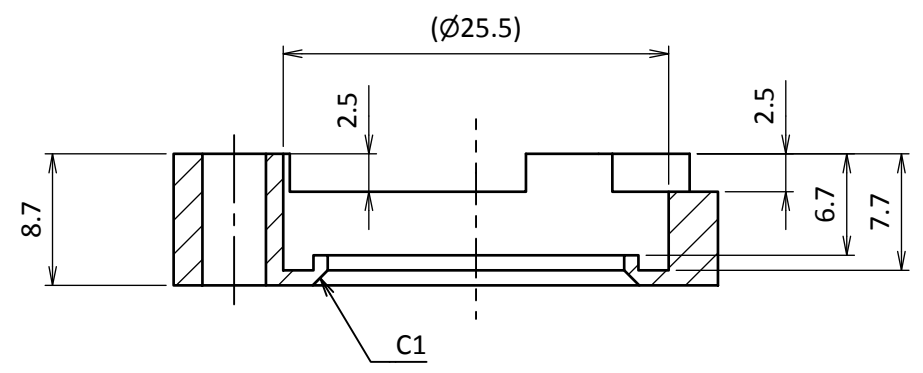
A-A (2 : 1)

 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN ADVANCED TECHNOLOGY CENTER	UNLESS OTHERWISE STATED:		
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES JIS B 0419-mH (ISO 2768-mH)	
PROJECT : GW	MACHINIG FINISH Ra25 EDGE BREAK 0.2 x 45'		
DESIGNED : F.URAGUCHI	DATE: 2016/11/28	MATERIAL: ALUMINUM	
DRAWN : F.URAGUCHI	DATE: 2016/11/28	FINISH : AS MACHINED	
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SCALE : 2/1	SHEET : 1/1
APPROVED : R.FLAMINIO	DATE: 2017/04/25	SHEET SIZE : A3	REV : A
THIRD ANGLE PROJECTION	TITLE Curved Mirror Holder, Mode Cleaner		
	DWG. NO. ME-GW-1704003-A-DWG		


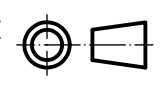
REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				



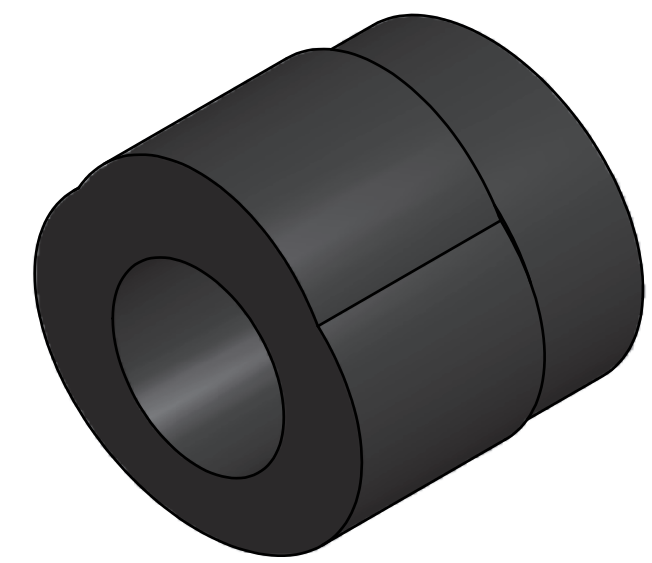
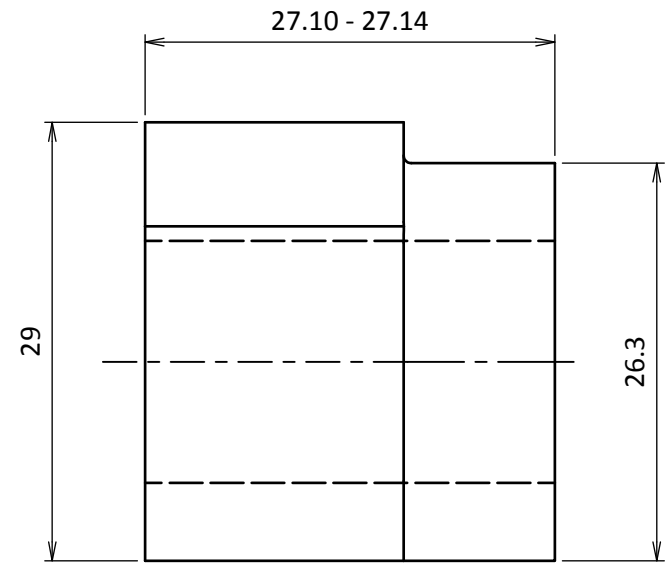
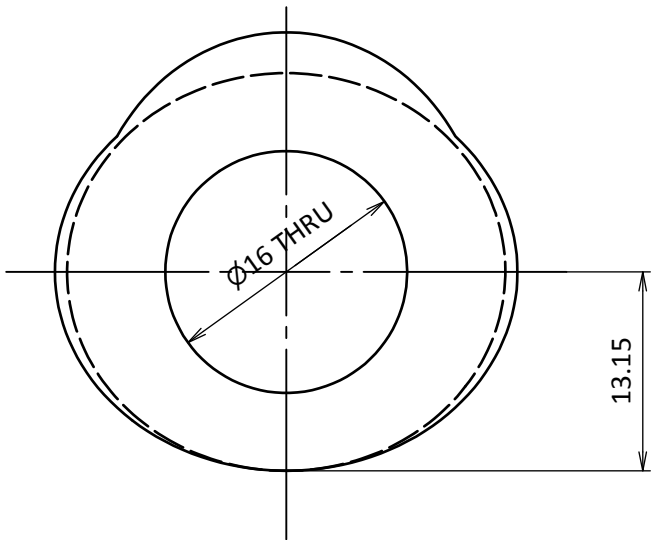
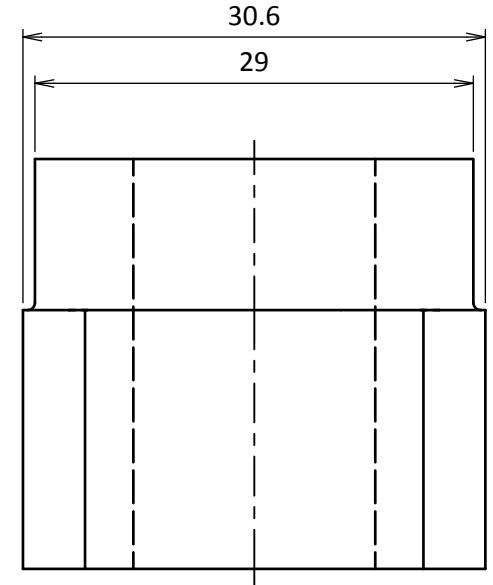
ISOMETRIC VIEW (2 : 1)



A-A (2 : 1)


 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN ADVANCED TECHNOLOGY CENTER	UNLESS OTHERWISE STATED:		
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES JIS B 0419-mH (ISO 2768-mH)	
PROJECT : GW	MACHINIG FINISH Ra25 EDGE BREAK 0.2 x 45°		
DESIGNED : F.URAGUCHI	DATE: 2016/11/28	MATERIAL: ALUMINUM	
DRAWN : F.URAGUCHI	DATE: 2016/11/28	FINISH : AS MACHINED	
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SCALE : 2/1	SHEET : 1/1
APPROVED : R.FLAMINIO	DATE: 2017/04/25	SHEET SIZE : A3	REV : A
THIRD ANGLE PROJECTION		TITLE Flat Mirror Holder, Mode Cleaner	
		DWG. NO. ME-GW-1704004-A-DWG	

REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				

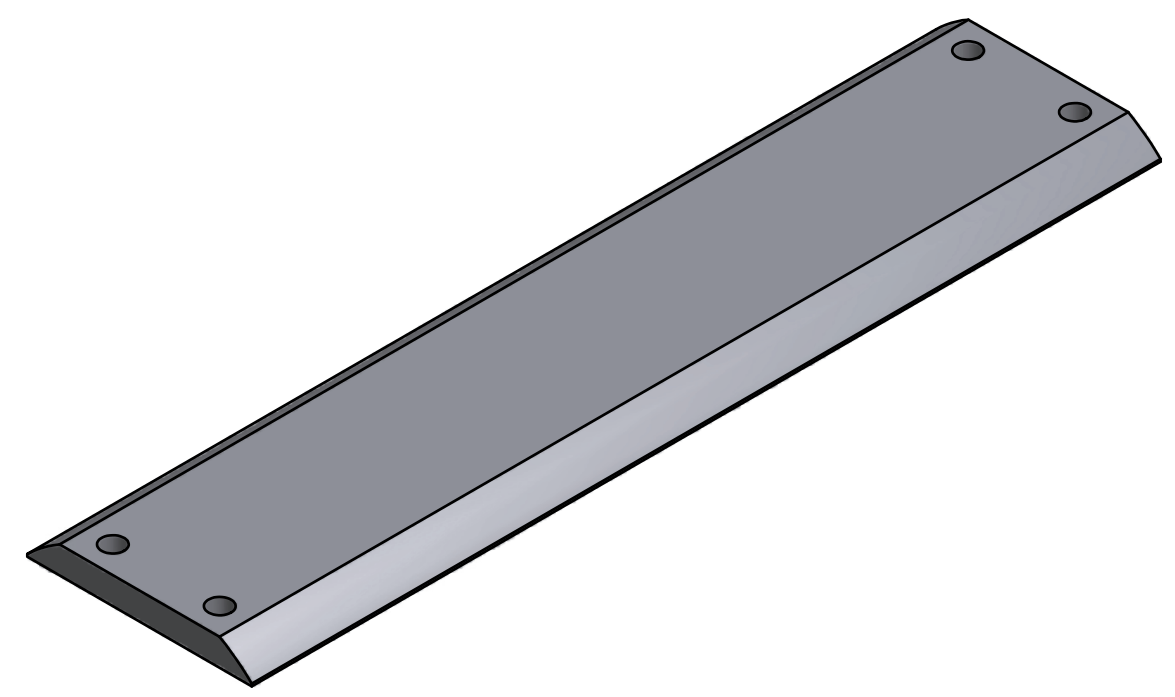
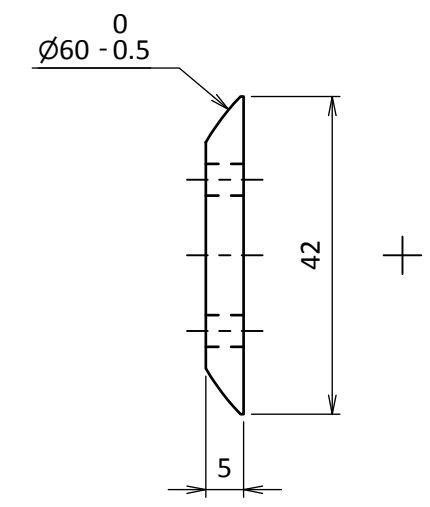
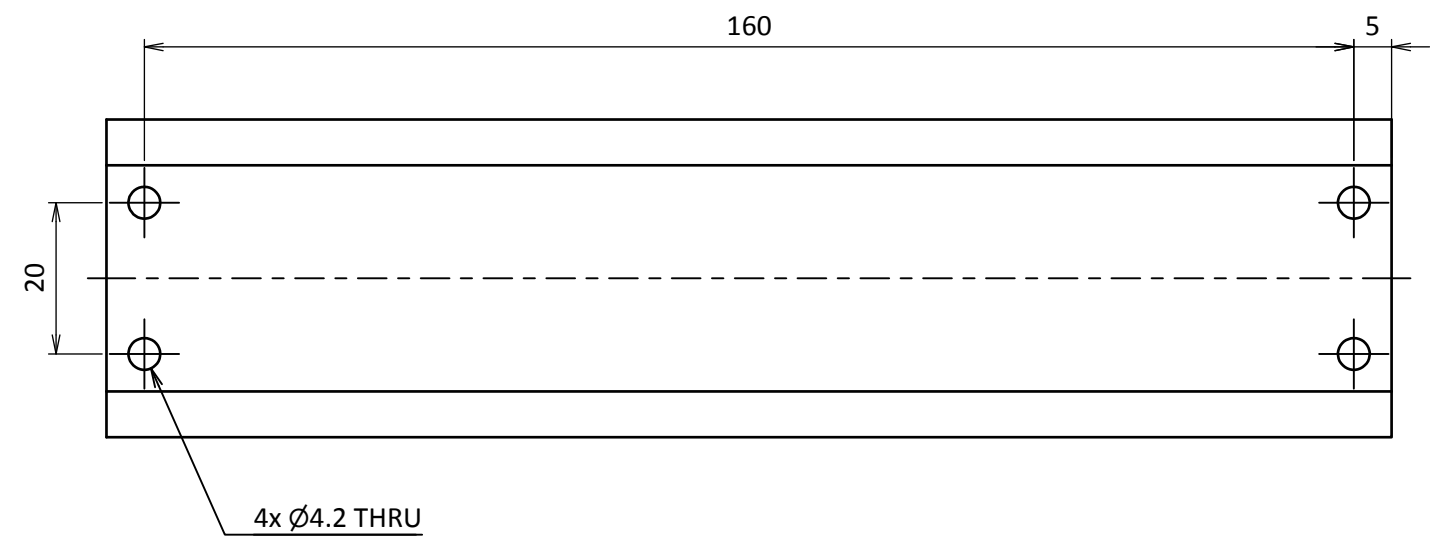


ISOMETRIC VIEW (2 : 1)

NOTE:
 - DIMENSIONS ARE ENVELOPE THAT IS OBTAINED BY ACTUAL MEASUREMENT OF GIVEN PRODUCT, PI P-025.20H, S/N 216021277. NO NEED TO FABRICATE
 (寸法は実測に基づく包絡域。製作の必要なし)

 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN ADVANCED TECHNOLOGY CENTER	UNLESS OTHERWISE STATED:		
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES JIS B 0419-mH (ISO 2768-mH)	
PROJECT : GW	MACHINIG FINISH Ra25 EDGE BREAK 0.2 x 45°		
DESIGNED : F.URAGUCHI	DATE: 2017/03/16	MATERIAL: INDEF	
DRAWN : F.URAGUCHI	DATE: 2017/03/16	FINISH : INDEF	
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SCALE : 2/1	SHEET : 1/1
APPROVED : R.FLAMINIO	DATE: 2017/04/25	SHEET SIZE : A3	REV : A
THIRD ANGLE PROJECTION	TITLE Piezo Actuator, Mode Cleaner		
	DWG. NO. ME-GW-1704005-A-DWG		

REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				

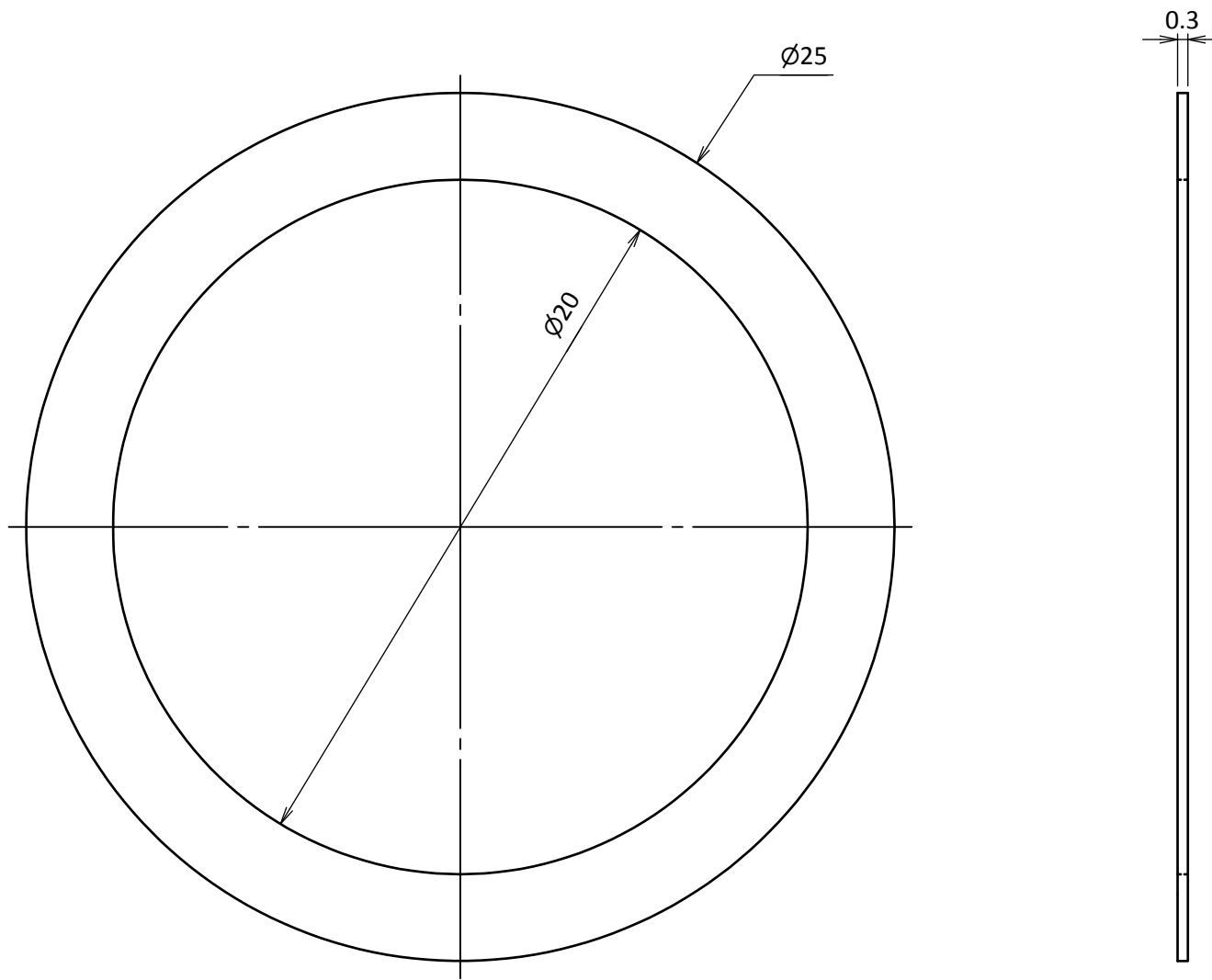



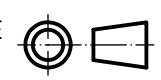
ISOMETRIC VIEW (1 : 1)

NOTE:
 - USE OFFCUT FROM "SPACER, MODE CLEANER".
 DIRECTION IS DESCRIBED IN DRAWING OF "SPACER, MODE CLEANER"
 ("SPACER, MODE CLEANER"の端材を使用のこと。同部品図を参照)

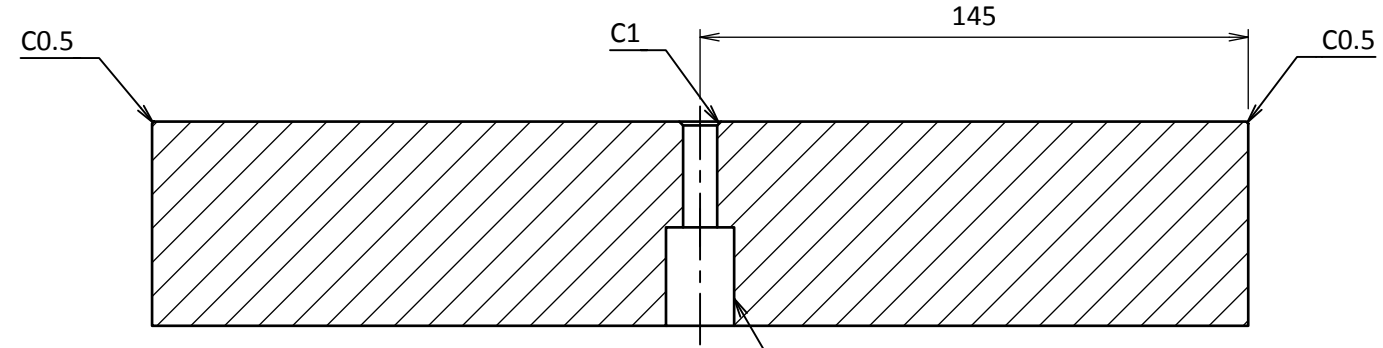
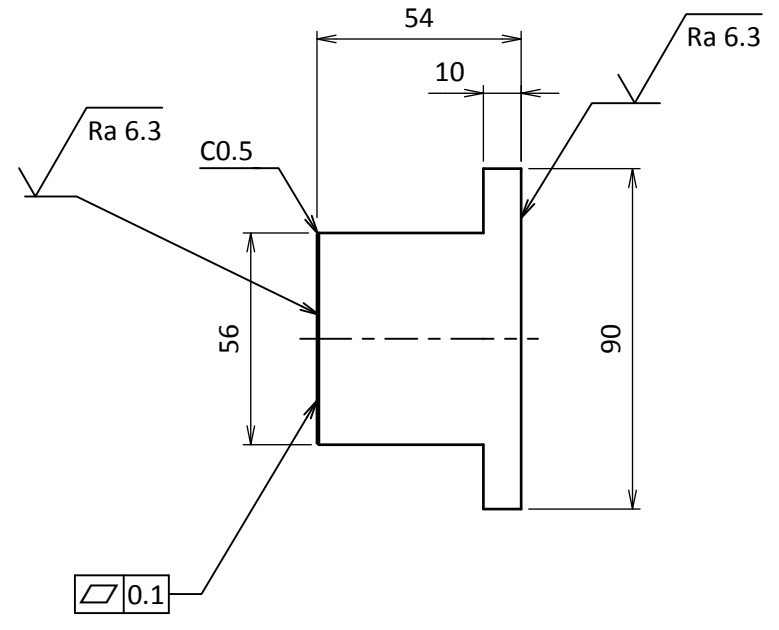
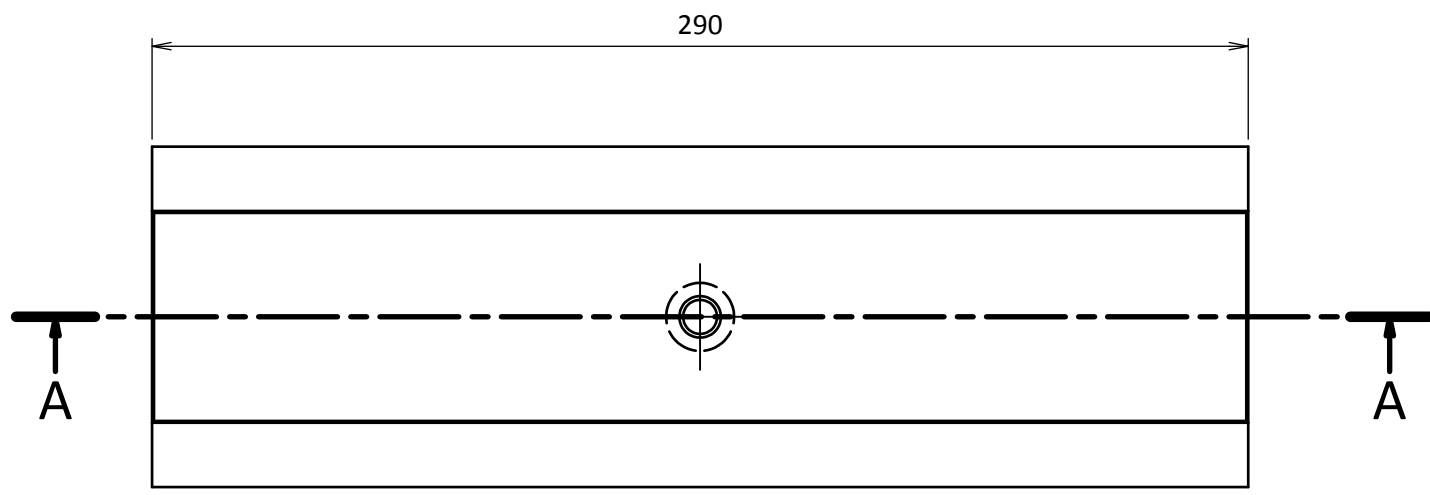
 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN ADVANCED TECHNOLOGY CENTER	UNLESS OTHERWISE STATED:		
	ALL DIMENSION ARE MILLIMETERS (MM)	TOLERANCES JIS B 0419-mH (ISO 2768-mH)	
PROJECT : GW	MATERIAL: 36 INVAR		
DESIGNED : F.URAGUCHI	DATE: 2016/11/28	FINISH : AS MACHINED	
DRAWN : F.URAGUCHI	DATE: 2016/11/28	SCALE : 1/1	SHEET : 1/1
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SHEET SIZE : A3	REV : A
APPROVED : R.FLAMINIO	DATE: 2017/04/25		
THIRD ANGLE PROJECTION	TITLE Cover Panel, Mode Cleaner		
	DWG. NO. ME-GW-1704006-A-DWG		

REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				




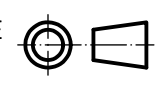
 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN <small>ADVANCED TECHNOLOGY CENTER</small>	UNLESS OTHERWISE STATED:		
	ALL DIMENSION ARE MILLIMETERS (MM)		TOLERANCES JIS B 0419-mH (ISO 2768-mH)
PROJECT : GW	MACHINIG FINISH Ra25		EDGE BREAK 0.2 x 45°
DESIGNED : F.URAGUCHI	DATE: 2017/03/16	MATERIAL: PTFE	
DRAWN : F.URAGUCHI	DATE: 2017/03/16	FINISH : INDEF	
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SCALE : 5/1	SHEET : 1/1
APPROVED : R.FLAMINIO	DATE: 2017/04/25	SHEET SIZE : A3	REV : A
THIRD ANGLE PROJECTION		TITLE PTFE Sheet, Mode Cleaner	
		DWG. NO. ME-GW-1704007-A-DWG	

REV	LOC	REVISION	DATE	APPD BY
A	ALL	RELEASED	2017/04/25	R.FLAMINIO
B				
C				
D				



Ø9 THRU, C'BORE Ø18 DEPTH 26

A-A (1:2)

 NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN ADVANCED TECHNOLOGY CENTER	UNLESS OTHERWISE STATED:		
	ALL DIMENSION ARE MILLIMETERS (MM)		TOLERANCES JIS B 0419-mH (ISO 2768-mH)
PROJECT : GW	MATERIAL: ALUMINUM		EDGE BREAK 0.2 x 45°
DESIGNED : F.URAGUCHI	DATE: 2017/04/21	FINISH : AS MACHINED	
DRAWN : F.URAGUCHI	DATE: 2017/04/21	SCALE : 1/1	SHEET : 1/1
CHECKED : Y.OBUCHI	DATE: 2017/04/22	SHEET SIZE : A3	REV : A
APPROVED : R.FLAMINIO	DATE: 2017/04/25	TITLE Base, Mode Cleaner	
THIRD ANGLE PROJECTION			DWG. NO. ME-GW-1704008-A-DWG