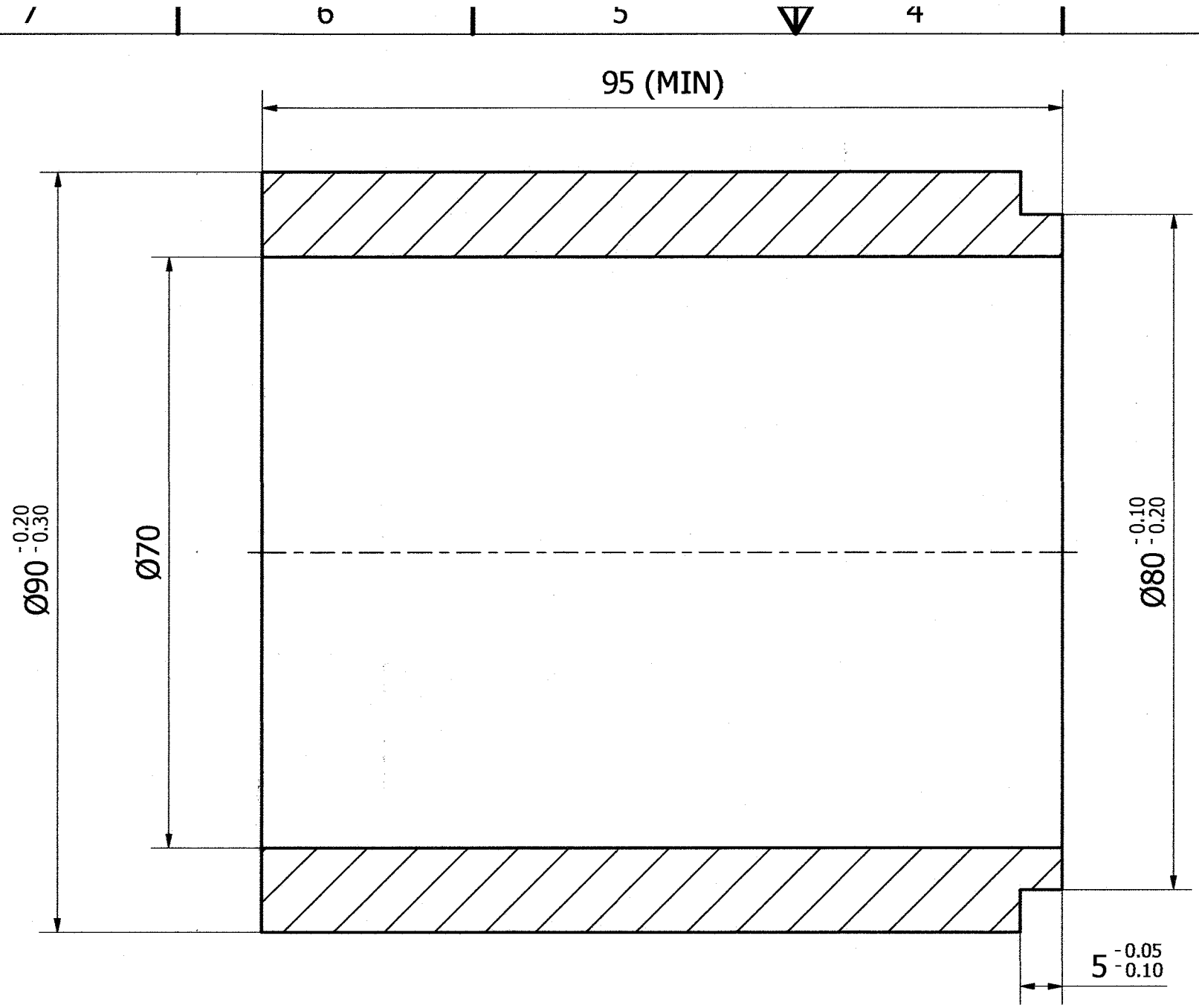


F	LENGTH IN mm OF SHORTER SIDE OF ANGLE	UPTO 6	± 1'
		6 - 30	± 30'
F	LENGTH IN mm OF SHORTER SIDE OF ANGLE	30 - 120	± 20'
		120 - 400	± 10'
D	LENGTH OR DIA	UPTO 6	± 0.1
		6 - 30	± 0.2
D	LENGTH OR DIA	30 - 120	± 0.3
		120 - 315	± 0.5
D	LENGTH OR DIA	315 - 1000	± 0.8
		1000 - 2000	± 1.2
D	LENGTH OR DIA	2000 - 4000	± 2.0
		4000 ABOVE	± 3.0

MACHINING DEVIATION TO IS : 2102 (MEDIUM GRADE) UNLESS SPECIFIED OTHERWISE



SRQA LPSC		LPSC CC RELEASE	
CHKD	<i>[Signature]</i>	CHKD	<i>[Signature]</i>
APPD	<i>[Signature]</i>	APPD	<i>[Signature]</i>

- NOTE**
1. AS MACHINED AT ABSD AS PER DRAWING NO-260-101-17-19-0001.
 2. THE DIMENSIONS GIVEN ARE TO BE MAINTAINED AND SUITED WITH THE HARDWARE SUPPLIED.
 3. LAMINATION SHOULD BE PERPENDICULAR TO THE BORE AXIS.

NEXT ASSEMBLY No: **PL1E60.1321110**

PART No:02

PL1E6-0.1321111.00

DO NOT SCALE THE DRAWING
ASK IF IN DOUBT
ALL DIMENSIONS ARE IN mm.

MATERIAL
SILICA PHENOLIC

SURFACE TREATMENT



TITLE
LB 150A CHAMBER SUB ASSEMBLY
TOP LINER

CONCENTRICITY
PERPENDICULARITY
ANGULARITY
PARALLELISM

General tolerance _____
Thread tolerance _____
Thread chamfer & under cut. _____

SURFACE FINISH
(Ra in μm)
3.2

QTY PER ASSY
1

DGN.	<i>[Signature]</i>	817003
D.CHD.	<i>[Signature]</i>	
DRN.	<i>[Signature]</i>	
CHD.	<i>[Signature]</i>	
APPD.	<i>[Signature]</i>	
SIGN.	DATE	

GOVERNMENT OF INDIA
INDIAN SPACE RESEARCH ORGANISATION
LIQUID PROPULSION SYSTEMS CENTRE
VALIAMALA TRIVANDRUM-695547

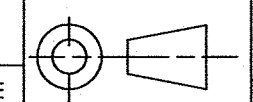
PREG(LV)

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Radii not specified _____
Chamfers not specified _____

MARKING
PART No. BY ENGRAVING

CALCULATED MASS (kg)
0.42



DRAWING No.
5610-R1-561A-07A

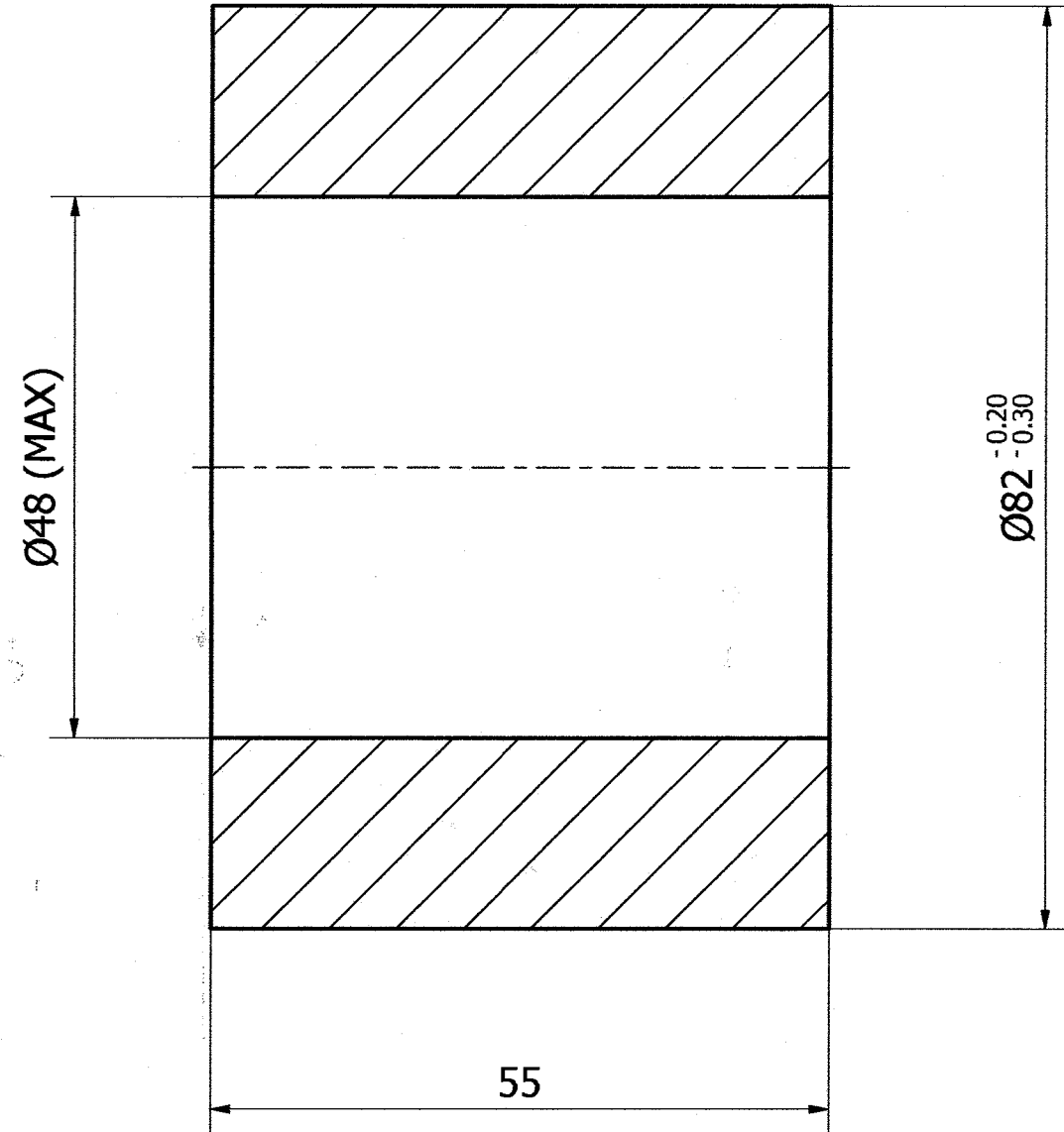
REV. No.
01

FORMAT
A3

SCALE **3:2**

SHEET **1 OF 1**

SRQA LPSC		LPSC CC RELEASE	
CHKD	<i>[Signature]</i>	CHKD	<i>[Signature]</i>
APPD	<i>[Signature]</i>	APPD	<i>[Signature]</i>



- NOTE**
1. AS MACHINED AT ABSD AS PER DRAWING NO-260-101-17-19-0002.
 2. THE DIMENSIONS GIVEN ARE TO BE MAINTAINED AND SUITED WITH THE HARDWARE SUPPLIED.
 3. LAMINATION SHOULD BE PERPENDICULAR TO THE BORE AXIS.

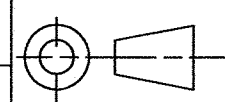
LENGTH OR DIA	LENGTH IN mm OF SHORTER SIDE OF ANGLE	
	UPTO 6	6 - 30
UPTO 6	± 0.1	± 0.30'
6 - 30	± 0.2	± 20'
30 - 120	± 0.3	± 30'
120 - 315	± 0.5	± 20'
315 - 1000	± 0.8	± 30'
1000 - 2000	± 1.2	± 20'
2000 - 4000	± 2.0	± 30'
4000 ABOVE	± 3.0	± 20'

MACHINING DEVIATION TO IS : 2102 (MEDIUM GRADE) UNLESS SPECIFIED OTHERWISE

NEXT ASSEMBLY No: PL1E6-0.1321120
PART No:02 PL1E6-0.1321121.00

DO NOT SCALE THE DRAWING ASK IF IN DOUBT ALL DIMENSIONS ARE IN mm.	MATERIAL SILICA PHENOLIC	SURFACE TREATMENT
CONCENTRICITY PERPENDICULARITY ANGULARITY PARALLELISM	General tolerance _____ Thread tolerance _____ Thread chamfer & under cut. _____	SURFACE FINISH (Ra in μm) 3.2
THIS DRAWING IS AN EXCLUSIVE PROPERTY OF ISRO AND SHALL NOT BE COPIED, REPRODUCED OR COMMUNICATED TO OTHERS WITHOUT PROPER AUTHORISATION	Radii not specified _____ Chamfers not specified _____	MARKING PART No. BY ENGRAVING

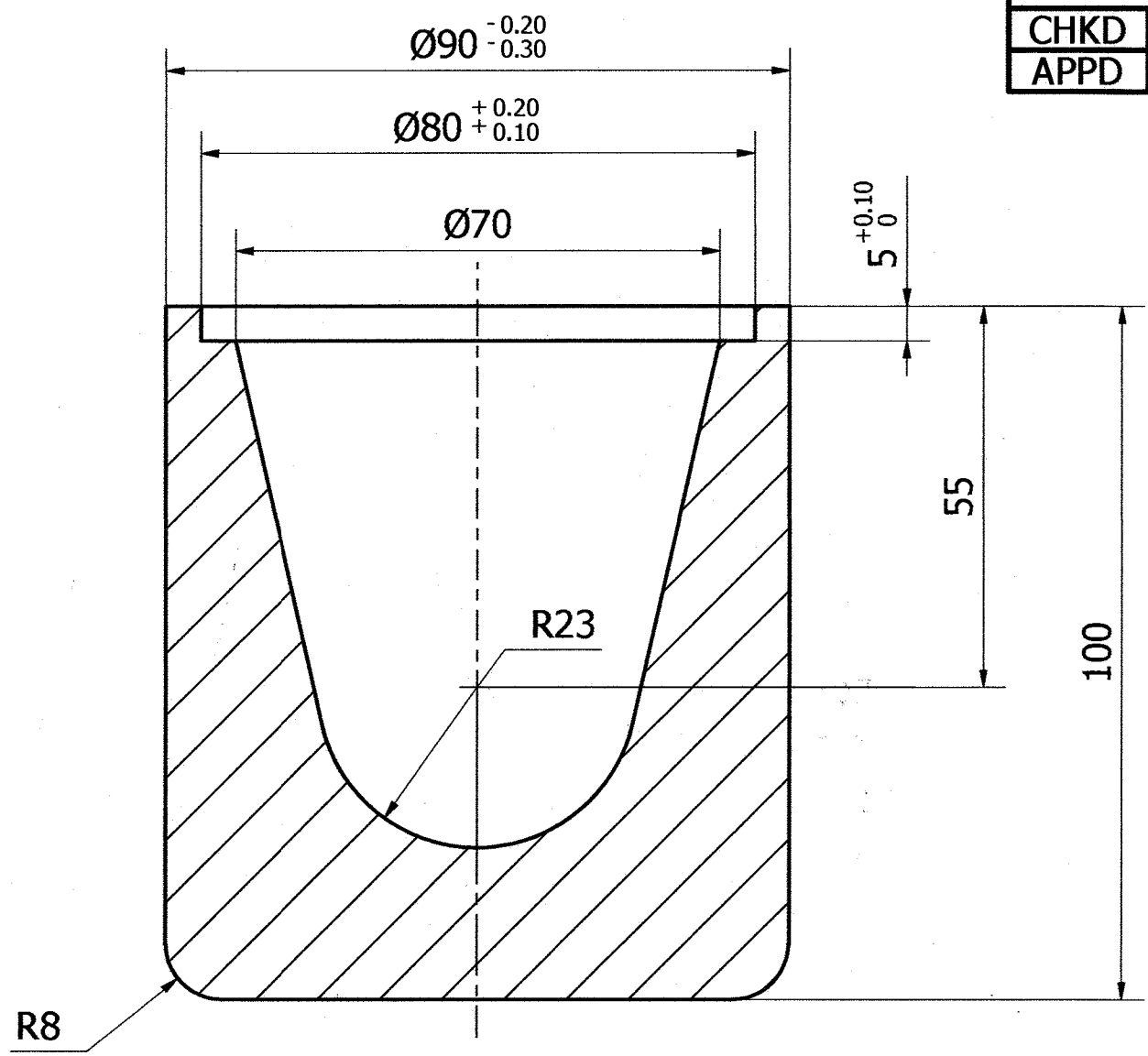
	TITLE LB 150A CHAMBER SUB ASSEMBLY THROAT BACKUP LINER	
	GOVERNMENT OF INDIA INDIAN SPACE RESEARCH ORGANISATION LIQUID PROPULSION SYSTEMS CENTRE VALIAMALA TRIVANDRUM-695547	
	DGN. <i>[Signature]</i> D.CHD. <i>[Signature]</i> DRN. <i>[Signature]</i> CHD. <i>[Signature]</i> APPD. <i>[Signature]</i> SIGN. <i>[Signature]</i>	DATE 30.07.18
	DRAWING No. 5610-R1-561A-08A	REV. No. 01



SCALE 3:2	SHEET 1 OF 1	FORMAT A3
------------------	---------------------	---------------------

8 7 6 5 4 3 2 1

SRQA LPSC		LPSC CC RELEASE	
CHKD	<i>[Signature]</i>	CHKD	<i>[Signature]</i>
APPD	<i>[Signature]</i> 21/7/18	APPD	<i>[Signature]</i> 21/08/18



F	LENGTH IN mm OF SHORTER SIDE OF ANGLE	UPTO 6	6 - 30	30 - 120	120 - 400
		± 1'	± 30'	± 20'	± 10'
E	4000 ABOVE	2000	4000	1000	2000
		± 2.0	± 3.0	± 1.2	± 1.2
D	315	1000	1000	315	1000
		± 0.8	± 0.8	± 0.5	± 0.5
C	120	315	120	30	120
		± 0.3	± 0.3	± 0.2	± 0.2
B	UPTO 6	6	30	6	30
		± 0.1	± 0.1	± 0.1	± 0.1
A	LENGTH OR DIA	6	30	6	30
		± 0.1	± 0.1	± 0.1	± 0.1

MACHINING DEVIATION TO IS : 2102 (MEDIUM GRADE) UNLESS SPECIFIED OTHERWISE

NOTE

1. AS MACHINED AT ABSD AS PER DRAWING NO-260-101-17-19-0003.
2. THE DIMENSIONS GIVEN ARE TO BE MAINTAINED AND SUITED WITH THE HARDWARE SUPPLIED.
3. LAMINATION SHOULD BE PERPENDICULAR TO THE BORE AXIS.

NEXT ASSEMBLY No: **PL1E6-0.1321110**

PART No:03

PL1E6-0.1321112.00

DO NOT SCALE THE DRAWING
ASK IF IN DOUBT
ALL DIMENSIONS ARE IN mm.

MATERIAL
SILICA PHENOLIC

SURFACE TREATMENT



TITLE
LB 150A CHAMBER SUB ASSEMBLY
BOTTOM LINER

CONCENTRICITY
PERPENDICULARITY
ANGULARITY
PARALLELISM

General tolerance _____
Thread tolerance _____
Thread chamfer & under cut. _____

SURFACE FINISH
(Ra in μm)
3.2

QTY PER ASSY
1

DGN.	<i>[Signature]</i>	30.07.2018
D.CHD.	<i>[Signature]</i>	
DRN.	<i>[Signature]</i>	
CHD.	<i>[Signature]</i>	
APPD.	<i>[Signature]</i>	
SIGN.	<i>[Signature]</i>	DATE

GOVERNMENT OF INDIA
INDIAN SPACE RESEARCH ORGANISATION
LIQUID PROPULSION SYSTEMS CENTRE
VALIAMALA TRIVANDRUM-695547

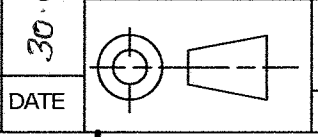
PREG(LV)

THIS DRAWING IS AN EXCLUSIVE PROPERTY
OF ISRO AND SHALL NOT BE COPIED,
REPRODUCED OR COMMUNICATED TO OTHERS
WITHOUT PROPER AUTHORISATION

Radii not specified _____
Chamfers not specified _____

MARKING
PART No. BY ENGRAVING

CALCULATED MASS (kg)
0.8



DRAWING No.
5610-R1-561A-09A

REV. No.
01

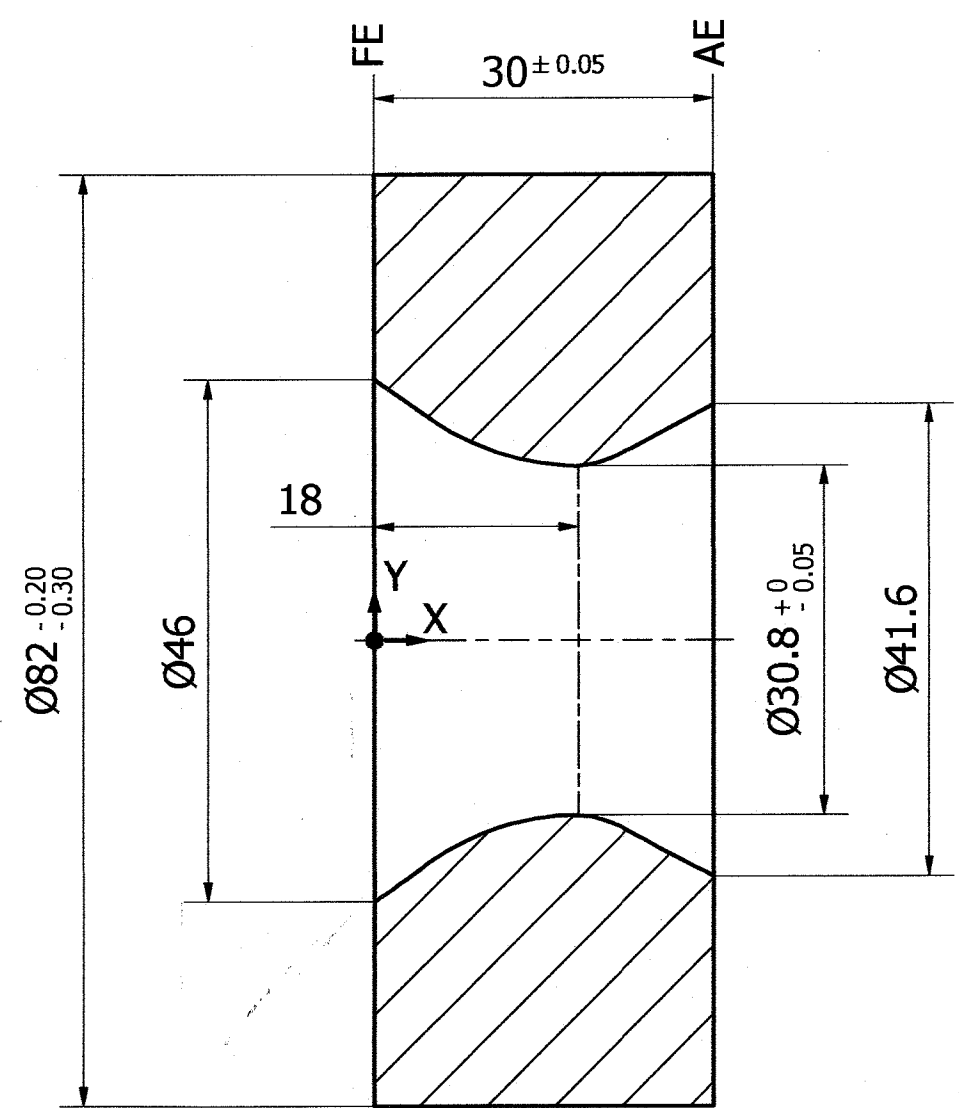
SCALE **1:1**

SHEET **1 OF 1**

FORMAT
A3

8 7 6 5 4 3 2 1

SRQA LPSC		LPSC CC RELEASE	
CHKD	<i>[Signature]</i>	CHKD	<i>[Signature]</i>
APPD	<i>[Signature]</i> 3/7/18	APPD	<i>[Signature]</i> 3/7/18



COORDINATES	
X	Y
0.00	23.00
2.00	21.60
4.00	20.15
6.00	18.78
8.00	17.68
10.00	16.84
12.00	16.20
14.00	15.75
16.00	15.48
18.00	15.40
20.00	15.74
22.00	16.55
24.00	17.61
26.00	18.67
28.00	19.74
30.00	20.80

NOTE

1. AS MACHINED AT ABSD AS PER DRAWING NO-260-101-17-19-0004.
2. THE DIMENSIONS GIVEN ARE TO BE MAINTAINED AND SUITED WITH THE HARDWARE SUPPLIED.
3. LAMINATION SHOULD BE PERPENDICULAR TO THE BORE AXIS.

LENGTH OR DIA	UPTO 6		6 - 30		30 - 120		120 - 400	
	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2.0	±3.0
LENGTH IN mm OF SHORTER SIDE OF ANGLE	UPTO 6		6 - 30		30 - 120		120 - 400	
	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2.0	±3.0

MACHINING DEVIATION TO IS : 2102 (MEDIUM GRADE) UNLESS SPECIFIED OTHERWISE

NEXT ASSEMBLY No: **PL1E6-0.1321100**

PART No:02

PL1E6-0.1321101.00

DO NOT SCALE THE DRAWING
ASK IF IN DOUBT
ALL DIMENSIONS ARE IN mm.

MATERIAL
SILICA PHENOLIC

SURFACE TREATMENT



TITLE
LB 150A CHAMBER SUB ASSEMBLY
THROAT INSERT

CONCENTRICITY
PERPENDICULARITY
ANGULARITY
PARALLELISM

General tolerance _____
Thread tolerance _____
Thread chamfer & under cut. _____

SURFACE FINISH
(Ra in µm)
3.2

QTY PER ASSY
1

DGN.	<i>[Signature]</i>
D.CHD.	<i>[Signature]</i>
DRN.	<i>[Signature]</i>
CHD.	<i>[Signature]</i>
APPD.	<i>[Signature]</i>
SIGN.	<i>[Signature]</i>

GOVERNMENT OF INDIA
INDIAN SPACE RESEARCH ORGANISATION
LIQUID PROPULSION SYSTEMS CENTRE
VALIAMALA TRIVANDRUM-695547

PREG(LV)

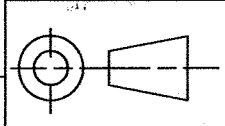
THIS DRAWING IS AN EXCLUSIVE PROPERTY OF ISRO AND SHALL NOT BE COPIED, REPRODUCED OR COMMUNICATED TO OTHERS WITHOUT PROPER AUTHORISATION

Radii not specified _____
Chamfers not specified _____

MARKING
PART No. BY ENGRAVING

CALCULATED MASS (kg)
0.8

DATE	30.07.18
------	----------



DRAWING No.
5610-R1-561A-10A

SCALE **3:2**

REV. No.
01

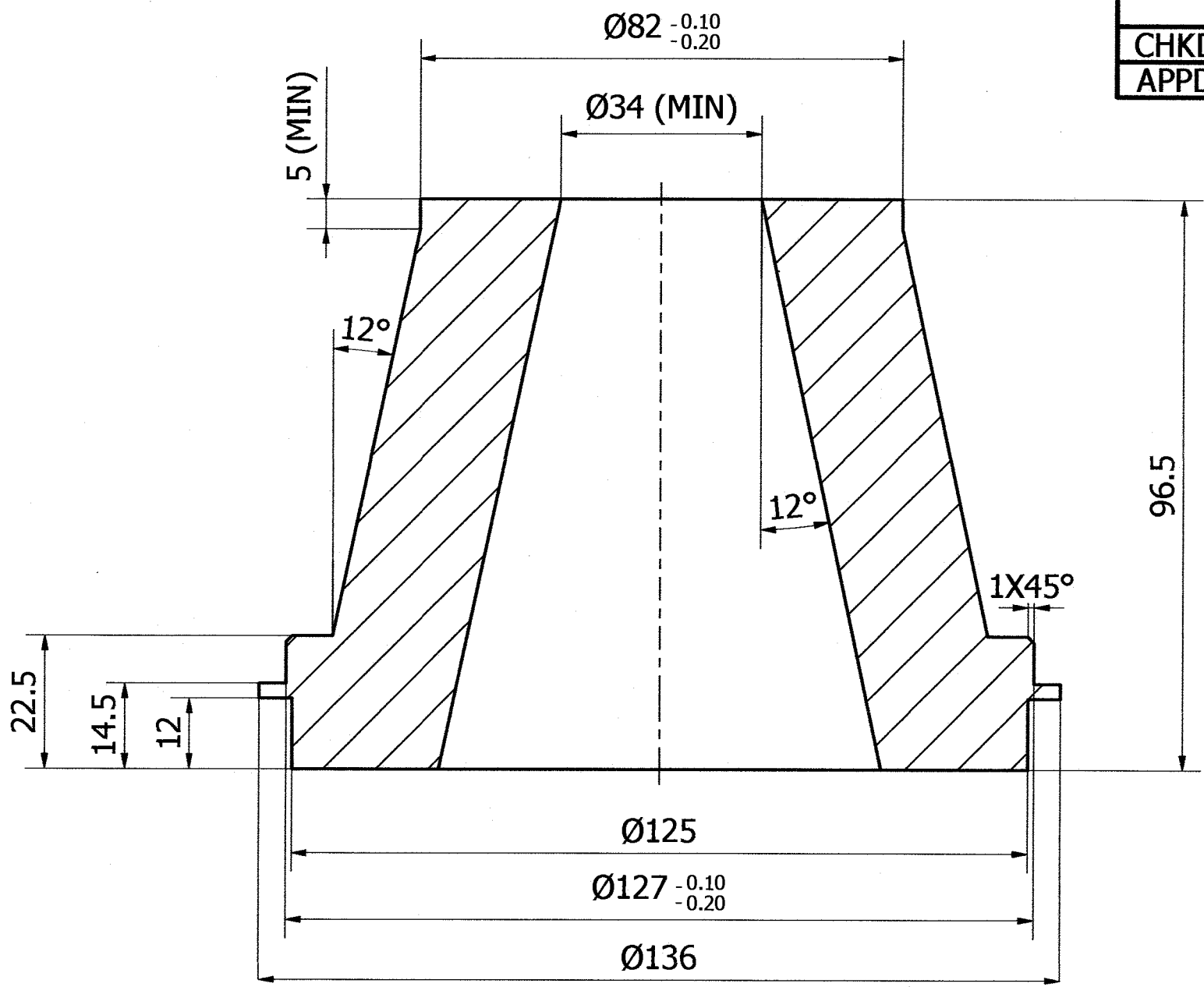
FORMAT
A3

SHEET **1** OF **1**

F	LENGTH IN mm OF SHORTER SIDE OF ANGLE	UPTO 6	6 - 30	30 - 120	120 - 400
		± 1'	± 30'	± 20'	± 10'
E	4000 ABOVE	2000	4000	1000	2000
		± 2.0	± 3.0	± 1.2	± 1.2
D	315	1000	1000	315	1000
		± 0.8	± 0.8	± 0.5	± 0.5
C	UPTO 6	6	30	30	120
		± 0.2	± 0.3	± 0.3	± 0.5
B	LENGTH OR DIA	6	30	30	120
		± 0.1	± 0.3	± 0.3	± 0.5

MACHINING DEVIATION TO IS : 2102 (MEDIUM GRADE) UNLESS SPECIFIED OTHERWISE

SRQA LPSC		LPSC CC RELEASE	
CHKD	<i>[Signature]</i>	CHKD	<i>[Signature]</i>
APPD	<i>[Signature]</i>	APPD	<i>[Signature]</i>



- NOTE**
1. AS MACHINED AT ABSD AS PER DRAWING NO-260-101-17-19-0005. R2
 2. THE DIMENSIONS GIVEN ARE TO BE MAINTAINED AND SUITED WITH THE HARDWARE SUPPLIED.
 3. LAMINATION SHOULD BE PERPENDICULAR TO THE BORE AXIS.

NEXT ASSEMBLY No: **PL1E6-0.1321200**

PART No: **03**

PL1E6-0.1321203.00

DO NOT SCALE THE DRAWING
ASK IF IN DOUBT
ALL DIMENSIONS ARE IN mm.

MATERIAL
SILICA PHENOLIC

SURFACE TREATMENT



TITLE
LB 150A CHAMBER SUB ASSEMBLY
DIVERGENT LINER

CONCENTRICITY
PERPENDICULARITY
ANGULARITY
PARALLELISM

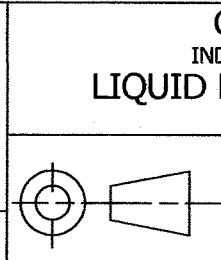
General tolerance _____
Thread tolerance _____
Thread chamfer & under cut. _____

SURFACE FINISH
(Ra in μm)
3.2

QTY PER ASSY
1

DGN. *[Signature]*
D.CHD. *[Signature]*
DRN. *[Signature]*
CHD. *[Signature]*
APPD. *[Signature]*
SIGN. *[Signature]*

DATE
30.07.2018



GOVERNMENT OF INDIA
INDIAN SPACE RESEARCH ORGANISATION
LIQUID PROPULSION SYSTEMS CENTRE
VALIAMALA TRIVANDRUM-695547

PREG(LV)

THIS DRAWING IS AN EXCLUSIVE PROPERTY OF ISRO AND SHALL NOT BE COPIED, REPRODUCED OR COMMUNICATED TO OTHERS WITHOUT PROPER AUTHORISATION

Radii not specified _____
Chamfers not specified _____

MARKING
PART No. BY ENGRAVING

CALCULATED MASS (kg)
0.95

DRAWING No.
5610-R1-561A-11A

REV. No.
01

FORMAT
A3

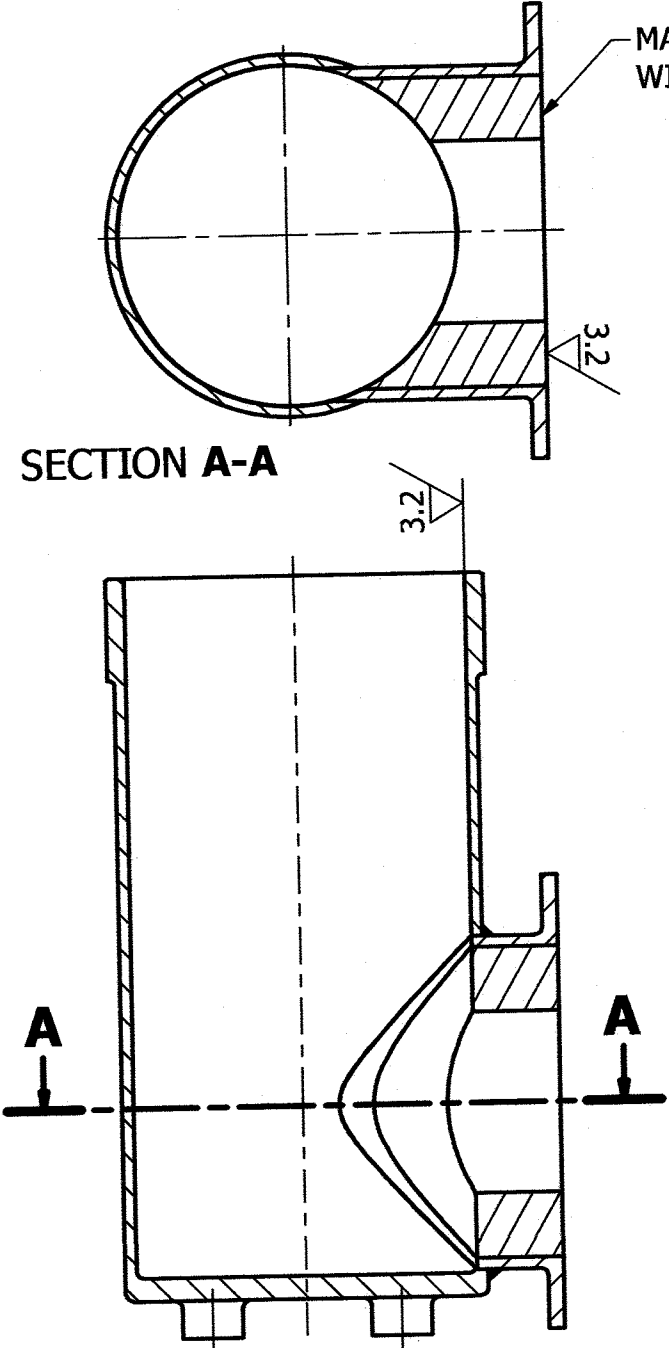
SCALE **3:2**

SHEET **1** OF **1**

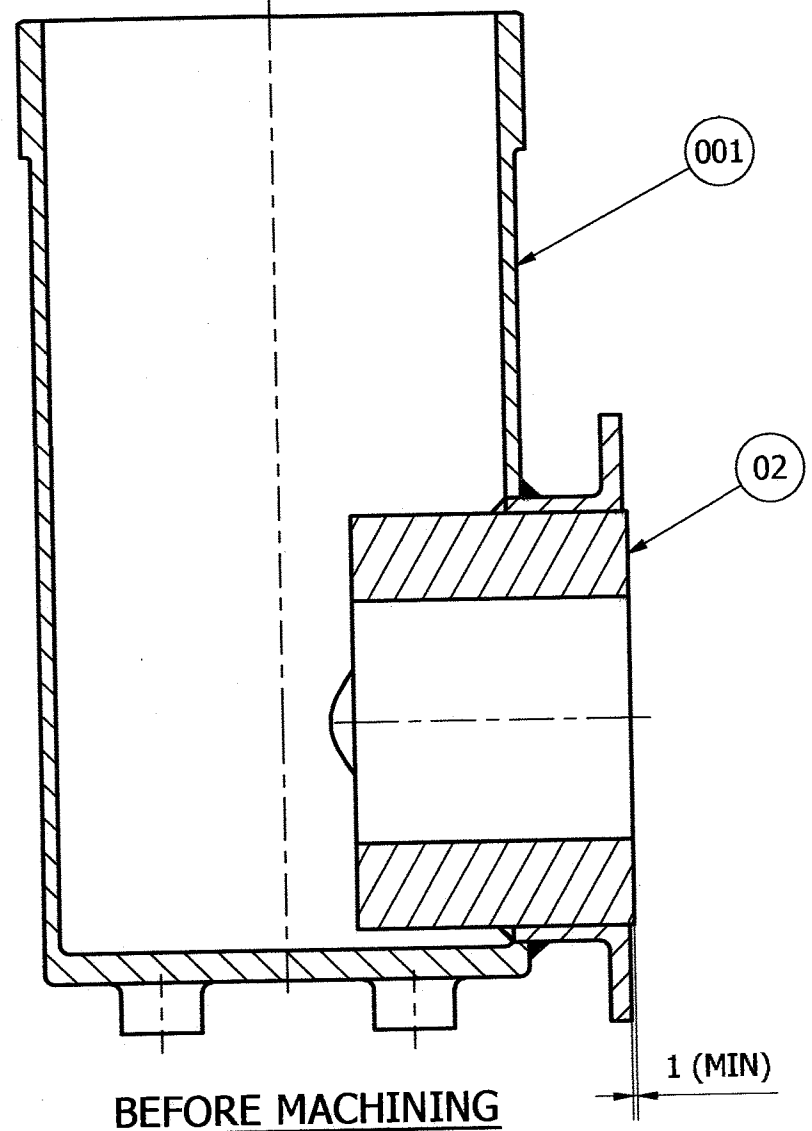
8 7 6 5 4 3 2 1

SRQA LPSC		LPSC CC RELEASE	
CHKD	<i>[Signature]</i>	CHKD	<i>[Signature]</i>
APPD	<i>[Signature]</i> 31/7/18	APPD	<i>[Signature]</i> 01/08/18

LENGTH IN mm OF SHORTER SIDE OF ANGLE	UPTO 6	± 1'
	6 - 30	± 30'
	30 - 120	± 20'
	120 - 400	± 10'
LENGTH OR DIA	UPTO 6	± 0.1
	6 - 30	± 0.2
	30 - 120	± 0.3
	120 - 315	± 0.5
	315 - 1000	± 0.8
	1000 - 2000	± 1.2
	2000 - 4000	± 2.0
	4000 ABOVE	± 3.0



MACHINE THIS LINER FACE IN FLUSH WITH CHAMBER HARDWARE



ITEM	DESCRIPTION	DRAWING NUMBER	QTY	MATERIAL
001	CHAMBER SUB ASSEMBLY-MACHINING DETAILS	5610-R1-561A-30C	1	AISI 304
02	THROAT BACKUP LINER	5610-R1-561A-08A	1	SILICA PHENOLIC

NOTE
 1. TO BE MADE AS PER ABSD DRAWING NO-260-101-17-19-0006.
 2. THE DIMENSIONS GIVEN ARE TO BE MAINTAINED AND SUITED WITH THE HARDWARE SUPPLIED.

NEXT ASSEMBLY No: **PL1E6-0.1321110**

PART No: **001** **PL1E6-0.1321120.00**

DO NOT SCALE THE DRAWING ASK IF IN DOUBT ALL DIMENSIONS ARE IN mm.	MATERIAL	SURFACE TREATMENT
CONCENTRICITY PERPENDICULARITY ANGULARITY PARALLELISM	General tolerance _____ Thread tolerance _____ Thread chamfer & under cut. _____ Radii not specified _____ Chamfers not specified _____	SURFACE FINISH
THIS DRAWING IS AN EXCLUSIVE PROPERTY OF ISRO AND SHALL NOT BE COPIED, REPRODUCED OR COMMUNICATED TO OTHERS WITHOUT PROPER AUTHORISATION		MARKING PART No. BY ENGRAVING



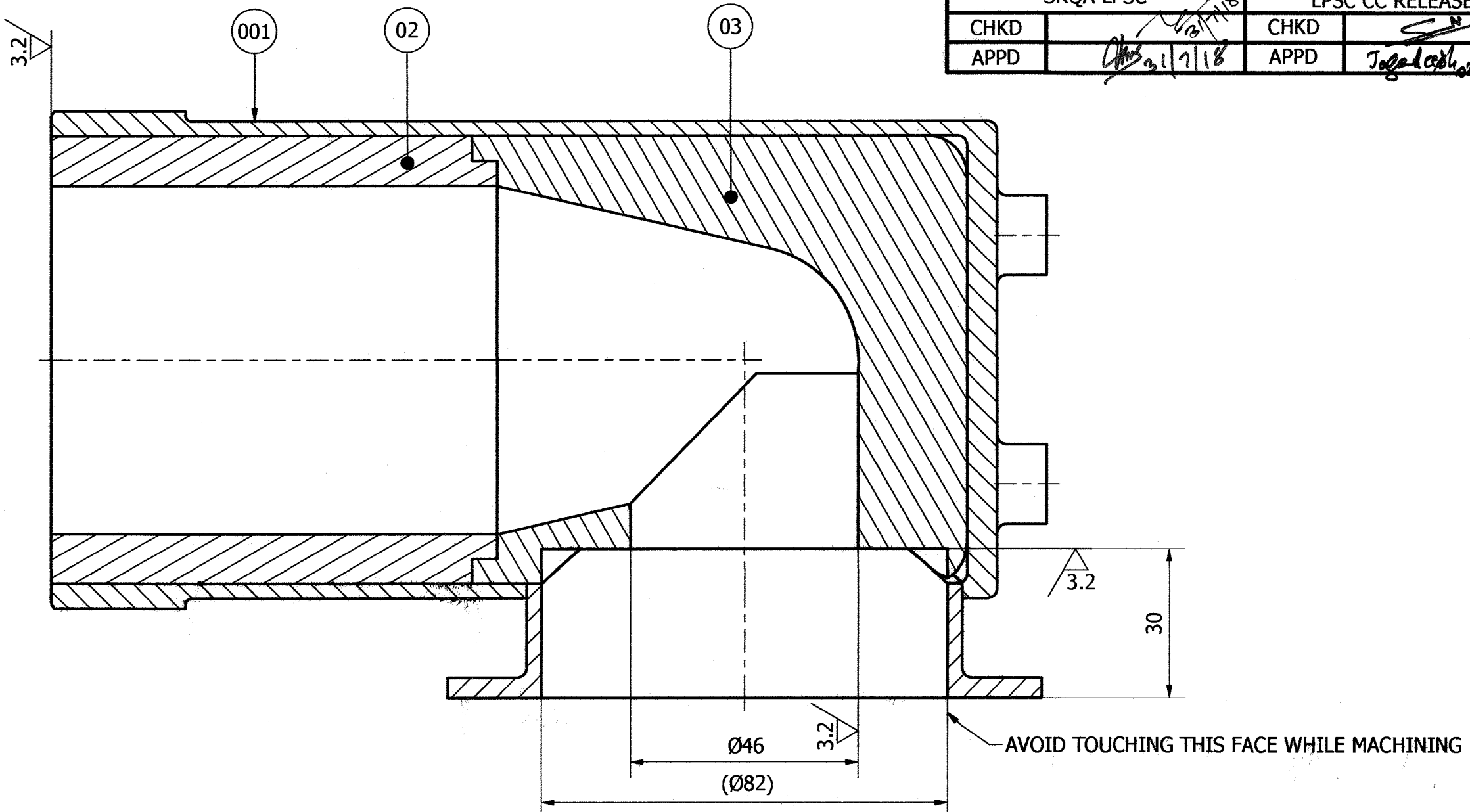
TITLE
LB 150A CHAMBER SUB ASSEMBLY
LINER SUB ASSEMBLY-I

DGN.	<i>[Signature]</i>
D.CHD.	<i>[Signature]</i>
DRN.	<i>[Signature]</i>
CHD.	<i>[Signature]</i>
APPD.	<i>[Signature]</i>
SIGN.	<i>[Signature]</i>

DATE
30.07.2018

GOVERNMENT OF INDIA INDIAN SPACE RESEARCH ORGANISATION LIQUID PROPULSION SYSTEMS CENTRE VALIAMALA TRIVANDRUM-695547		PREG(LV)
DRAWING No. 5610-R1-561A-12	REV. No. 00	
SCALE 3:2	SHEET 1 OF 1	FORMAT A3

SRQA LPSC		LPSC CC RELEASE	
CHKD	<i>[Signature]</i>	CHKD	<i>[Signature]</i>
APPD	<i>[Signature]</i> 21/7/18	APPD	<i>[Signature]</i>



ITEM	DESCRIPTION	QTY	DRAWING NUMBER
001	CHAMBER SUB ASSEMBLY-LINER SUB ASSEMBLY-I	1	5610-R1-561A-12
02	CHAMBER SUB ASSEMBLY- TOP LINER	1	5610-R1-561A-07A
03	CHAMBER SUB ASSEMBLY- BOTTOM LINER	1	5610-R1-561A-09A


LENGTH IN mm OF SHORTER SIDE OF ANGLE	UPTO 6	6 - 30	30 - 120	120 - 400
	±1'	±30'	±20'	±10'
4000 ABOVE	2000	1000	315	120
	±2.0	±1.2	±0.8	±0.5
315	1000	315	120	30
	±0.8	±0.5	±0.3	±0.2
6	30	6	30	UPTO 6
	±0.2	±0.1	±0.1	±0.1
LENGTH OR DIA	MACHINING DEVIATION TO IS : 2102 (MEDIUM GRADE) UNLESS SPECIFIED OTHERWISE			

NOTE
1. TO BE MADE AS PER ABSD DRAWING NO-260-101-17-19-0007.

NEXT ASSEMBLY No: **PL1E6-0.1321100**

PART No: **001** **PL1E6-0.132110.00**

DO NOT SCALE THE DRAWING ASK IF IN DOUBT ALL DIMENSIONS ARE IN mm.	MATERIAL	SURFACE TREATMENT
CONCENTRICITY PERPENDICULARITY ANGULARITY PARALLELISM	General tolerance _____ Thread tolerance _____ Thread chamfer & under cut. _____ Radii not specified _____ Chamfers not specified _____	SURFACE FINISH QTY PER ASSY 1
THIS DRAWING IS AN EXCLUSIVE PROPERTY OF ISRO AND SHALL NOT BE COPIED, REPRODUCED OR COMMUNICATED TO OTHERS WITHOUT PROPER AUTHORISATION	MARKING PART No. BY ENGRAVING	CALCULATED MASS (kg) 3.15



ENGINEERING ACCESS TO SPACE
INDIAN SPACE RESEARCH ORGANISATION
LPSC
ENABLING SPACE OPERATIONS

TITLE
**LB 150A CHAMBER SUB ASSEMBLY
LINER SUB ASSEMBLY-II**

GOVERNMENT OF INDIA
INDIAN SPACE RESEARCH ORGANISATION
LIQUID PROPULSION SYSTEMS CENTRE
VALIAMALA TRIVANDRUM-695547

PREG(LV)

DGN. *[Signature]*
D.CHD. *[Signature]*
DRN. *[Signature]*
CHD. *[Signature]*
APPD. *[Signature]*
SIGN. *[Signature]*

DATE
20-07-2018

DRAWING No.
5610-R1-561A-13

REV. No.
00

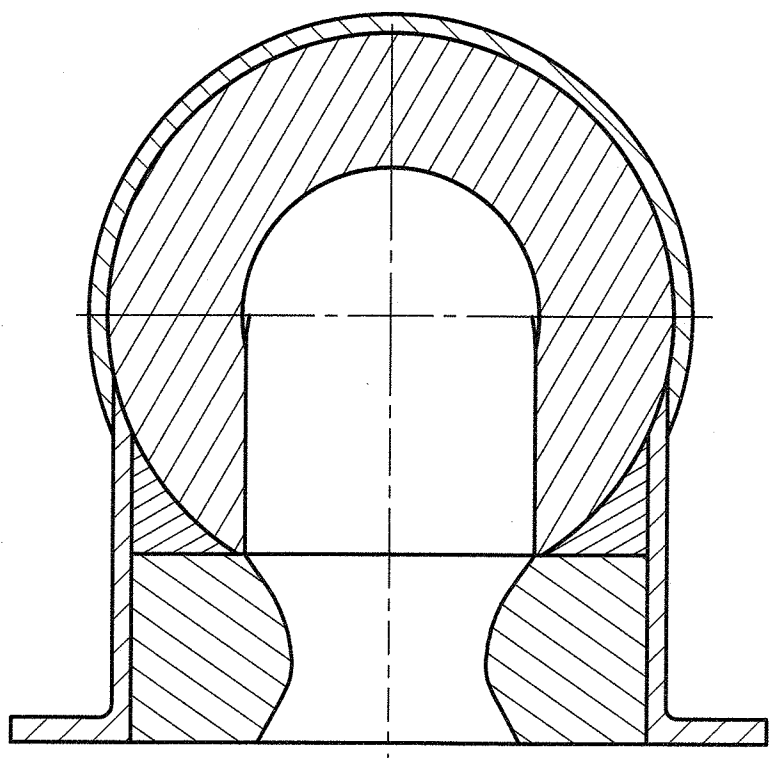
FORMAT
A3

SCALE **3:2**

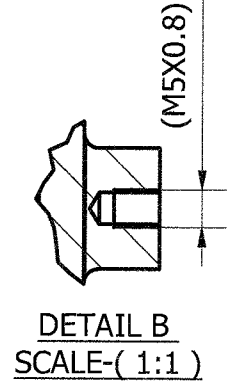
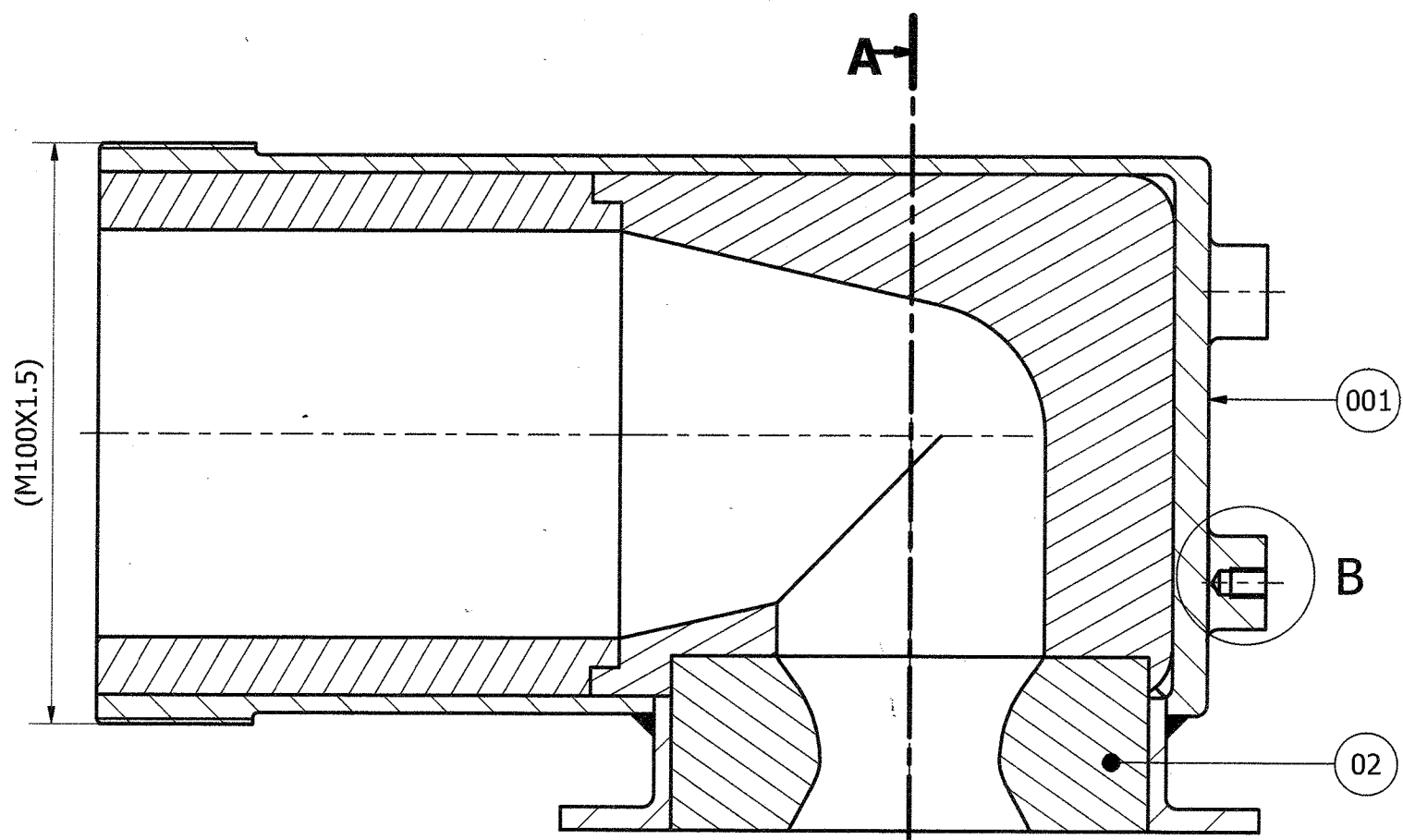
SHEET **1 OF 1**

SRQA LPSC		LPSC CC RELEASE	
CHKD		CHKD	
APPD	<i>[Signature]</i>	APPD	<i>[Signature]</i>

LENGTH IN mm OF SHORTER SIDE OF ANGLE	UPTO 6	6 - 30	30 - 120	120 - 400
	± 1'	± 30'	± 20'	± 10'
LENGTH OR DIA	UPTO 6	6 - 30	30 - 120	120 - 400
	± 0.1	± 0.2	± 0.3	± 0.5
MACHINING DEVIATION TO IS : 2102 (MEDIUM GRADE) UNLESS SPECIFIED OTHERWISE	UPTO 6	6 - 30	30 - 120	120 - 400
	± 0.1	± 0.2	± 0.3	± 0.5



SECTION A-A



DETAIL B
SCALE-(1:1)

ITEM	DESCRIPTION	QTY	MATERIAL	DRAWING NUMBER
001	CHAMBER ASSEMBLY-LINER SUB ASSEMBLY-II	1	AISI 304	5610-R1-561-13
02	CHAMBER SUB ASSEMBLY-THROAT INSERT	1	SILICA PHENOLIC	5610-R1-561A-10A

NOTE

- AS DELIVERED FROM ABSD AS PER DRAWING NO-260-101-17-19-0008.
- ENSURE THE M100X1.5 AND M5X0.8 THREADS ARE FREE FROM DAMAGE AND DRY ARALDITE.

NEXT ASSEMBLY No: **PL1E6-0.1321000**

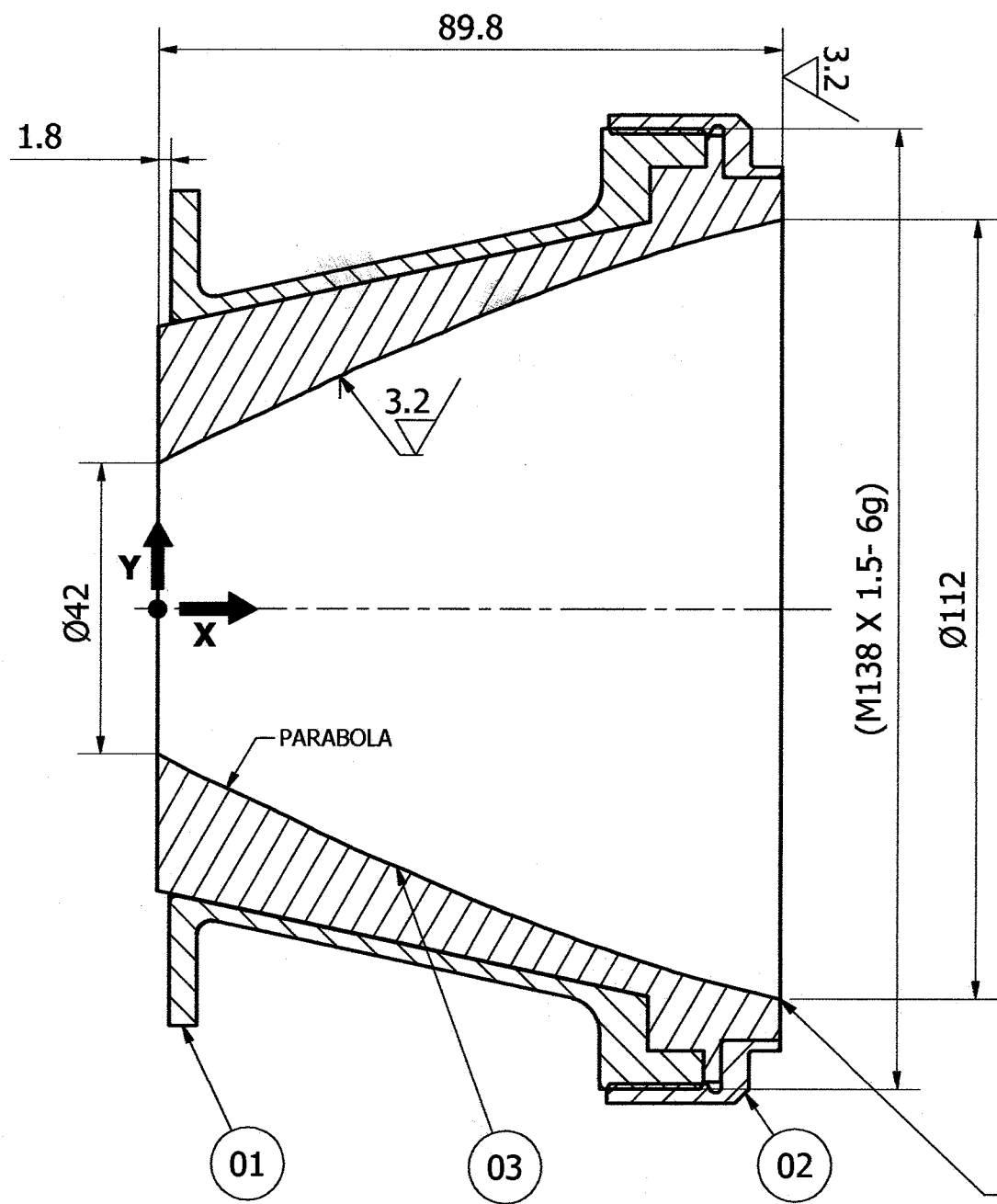
PART No: 001	PL1E6-0.13201100
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DO NOT SCALE THE DRAWING ASK IF IN DOUBT ALL DIMENSIONS ARE IN mm.	MATERIAL	SURFACE TREATMENT
CONCENTRICITY PERPENDICULARITY ANGULARITY PARALLELISM	General tolerance _____ Thread tolerance _____ Thread chamfer & under cut. _____	SURFACE FINISH
THIS DRAWING IS AN EXCLUSIVE PROPERTY OF ISRO AND SHALL NOT BE COPIED, REPRODUCED OR COMMUNICATED TO OTHERS WITHOUT PROPER AUTHORISATION	Radii not specified _____ Chamfers not specified _____	MARKING PART No. BY ENGRAVING

	TITLE LB 150A CHAMBER SUB ASSEMBLY LINER SUB ASSEMBLY-III	
	GOVERNMENT OF INDIA INDIAN SPACE RESEARCH ORGANISATION LIQUID PROPULSION SYSTEMS CENTRE VALIAMALA TRIVANDRUM-695547	PREG(LV)
DGN. <i>[Signature]</i> D.CHD. <i>[Signature]</i> DRN. <i>[Signature]</i> CHD. <i>[Signature]</i> APPD. <i>[Signature]</i> SIGN. <i>[Signature]</i>	DATE: 30.07.18	DRAWING No. 5610-R1-561 A-35 A SCALE 1:1
CALCULATED MASS (kg) 3.4	REV. No. 01	FORMAT A3
SHEET 1 OF 2		SHEET 1 OF 2

F	LENGTH IN mm OF SHORTER SIDE OF ANGLE	UPTO 6	± 1'
		6 - 30	± 30'
E	LENGTH IN mm OF SHORTER SIDE OF ANGLE	30 - 120	± 20'
		120 - 400	± 10'
D	LENGTH OR DIA	UPTO 6	± 0.1
		6 - 30	± 0.2
C	LENGTH OR DIA	30 - 120	± 0.3
		120 - 315	± 0.5
B	LENGTH OR DIA	315 - 1000	± 0.8
		1000 - 2000	± 1.2
A	LENGTH OR DIA	2000 - 4000	± 2.0
		4000 ABOVE	± 3.0

MACHINING DEVIATION TO IS : 2:102 (MEDIUM GRADE) UNLESS SPECIFIED OTHERWISE



SRQA LPSC		LPSC CC RELEASE	
CHKD	<i>[Signature]</i>	CHKD	<i>[Signature]</i>
APPD	<i>[Signature]</i> 21/7/18	APPD	<i>[Signature]</i> 22/08/18

ITEM	DESCRIPTION	QTY	MATERIAL	DRAWING No
01	CHAMBER SUB ASSEMBLY - DIVERGENT	1	AISI 304	5610-R1-561A-03B
02	DIVERGENT SLEEVE	1	AISI 304	5610-R1-561A-04B
03	DIVERGENT LINER	1	SILICA PHENOLIC	5610-R1-561A-11A

Table	
X	Y
0	21.0
5	23.5
10	25.8
15	28.1
20	30.5
25	32.9
30	35.2
35	37.3
40	39.4
45	41.6
50	43.6
55	45.5
60	47.3
65	49.0
70	50.7
75	52.3
80	53.7
85	54.9
89.8	56.0

MACHINE THIS FACE IN FLUSH WITH THE FULLY TIGHTENED NOZZLE SLEEVE

NOTE


- AS DELIVERED FROM ABSD AS PER DRAWING NO 260-101-17-19-0009 R2.
- ENSURE THE M138X1.5 THREAD IS FREE FROM DAMAGE AND DRY ARALDITE.

NEXT ASSEMBLY No: **PL1E6-0.1321000**

PART No: **002**

PL1E6-0.1321200.00

DO NOT SCALE THE DRAWING ASK IF IN DOUBT ALL DIMENSIONS ARE IN mm.	MATERIAL	SURFACE TREATMENT	
CONCENTRICITY PERPENDICULARITY ANGULARITY PARALLELISM	General tolerance _____ Thread tolerance _____ Thread chamfer & under cut. _____	SURFACE FINISH	QTY PER ASSY 1
THIS DRAWING IS AN EXCLUSIVE PROPERTY OF ISRO AND SHALL NOT BE COPIED, REPRODUCED OR COMMUNICATED TO OTHERS WITHOUT PROPER AUTHORISATION	Radii not specified _____ Chamfers not specified _____	MARKING PART No. BY ENGRAVING	CALCULATED MASS (kg) 1.72



DGN. *[Signature]*
D.CHD. *[Signature]*
DRN. *[Signature]*
CHD. *[Signature]*
APPD. *[Signature]*
SIGN. *[Signature]*

TITLE
**LB 150A CHAMBER SUB ASSEMBLY
DIVERGENT WITH LINING**

GOVERNMENT OF INDIA
INDIAN SPACE RESEARCH ORGANISATION
LIQUID PROPULSION SYSTEMS CENTRE
VALIAMALA TRIVANDRUM-695547

PREG(LV)

DRAWING No.
5610-R1-561A-45 A

REV. No.
01

FORMAT
A3

DATE: 30.07.2018

SCALE: **1:1** SHEET **1** OF **1**