





Ministry of Culture
Government of India
National Council of Science Museums
33 Block GN, Saltlake Sector V
Bidhannagar, Kolkata 700 091

TENDER NO. I-18012/3/23(184)

Drawing & Technical Specification

1) Aluminium Extruded Display Sections (OCTAFORM) – ‘Black Color Powder Coated’

Sl. No.	Particulars	Quantity (Nos.)	Specification
01	Square Vertical SV8	400	<ul style="list-style-type: none"> • Dimension: Strictly as per drawing. • Finish: Powder coated (70 to 100 micron) • Colour: Black (RAL 9005) • Surface should be free from any waviness / dents / patch marks. • Surface should be free from any embossed / etched / watermark / stickers of manufacture’s logo or name. • All sections should be supplied with individual transparent reusable protective wrapper.
02	Octagonal Vertical OV8	60	
03	Horizontal plain H2	300	
04	Horizontal plain H4	300	
05	Horizontal plain H8	100	
06	Horizontal Single web HSW2	100	
07	Horizontal Single web HSW4	100	
08	Horizontal Single web HSW6	100	
09	Horizontal Single web HSW8	40	
10	Nylon Lock Assembly for SIMA	3000	

ANNEXURE F

EXTRUDABLE ALUMINUM ALLOYS

Aluminum Extruded Display Sections:

Technical Parameters of Extruded Aluminum Alloy:

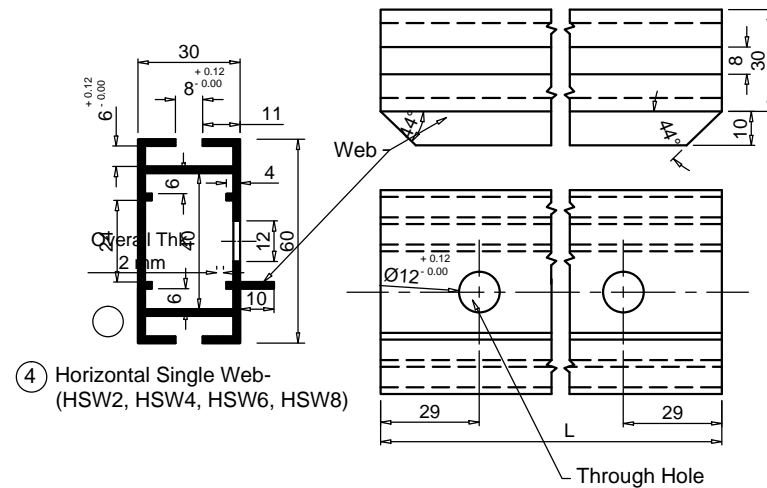
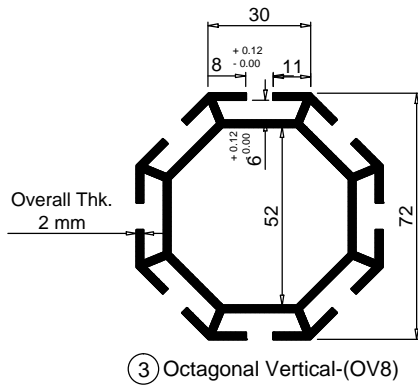
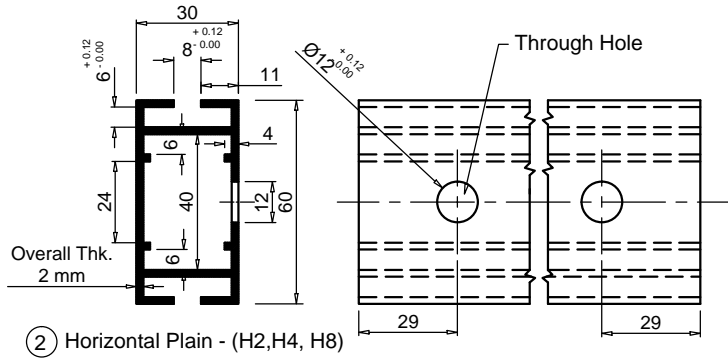
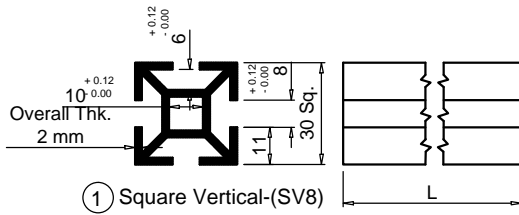
ALUMINUM ALLOY: 6063-T5

Properties	Metric
Density	2.70 g/cc
Hardness, Brinell	60
Ultimate Tensile Strength	186 MPa
Tensile Yield Strength	145 MPa
Elongation at Break (Typical; 1/16 in. (1.6 mm) Thickness)	12.00%
Modulus of Elasticity	68.9 GPa
Poissons Ratio	0.33
Fatigue Strength	68.9 MPa
Electrical Resistivity	0.00000316 ohm-cm @Temperature 20.0°C
Average CTE	23.4 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @Temperature 20.0 - 100°C
Specific Heat Capacity	0.900 J/g-°C
Thermal Conductivity	209 W/m-K
Melting Point	616 - 654 °C

Dated

Official Seal

Signature of the Tenderer/Constituted Attorney



SL.NO.	ITEM.NO.	CODE	SECTION	LENGTH (L)
1	①	SV8	Square Vertical	2440 mm
2	②	H2	Horizontal plain	588 mm
3	②	H4	Horizontal plain	1206 mm
4	②	H8	Horizontal plain	2426 mm
5	③	OV 8	Octagonal Vertical	2440 mm
6	④	HSW2	Horizontal Single Web	588 mm
7	④	HSW4	Horizontal Single Web	1206mm
8	④	HSW6	Horizontal Single Web	1824 mm
9	④	HSW8	Horizontal Single Web	2426mm

Note :

1. All Dimensions are in mm Both
2. end of the section should be free from bars.

NATIONAL COUNCIL OF SCIENCE MUSEUMS



UNIT: C.R.T.L.

PROJ.- CRTL

DRG. NO.

DATE

SCALE

TOLERANCE

MECH-03/07/19

22/08/2023

N.T.S.

± 0.25mm

TITLE:-

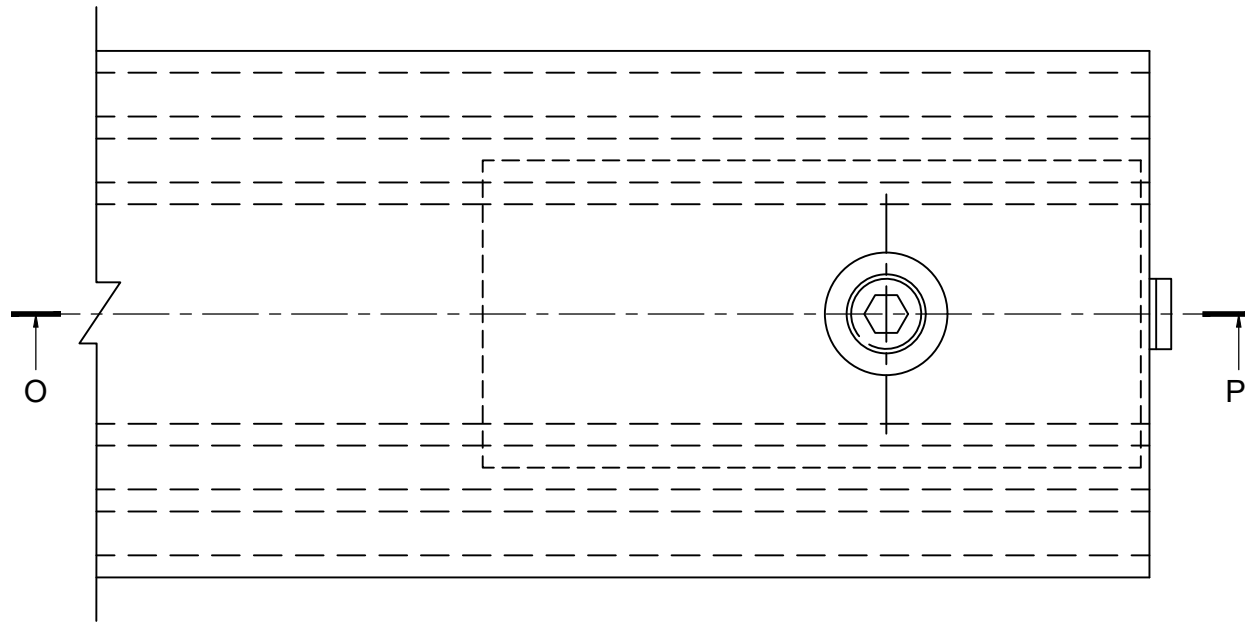
NO OFF.

Aluminum Extruded Section

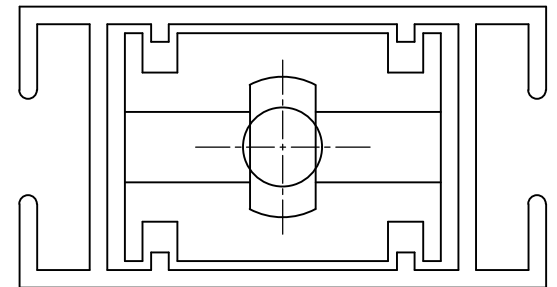
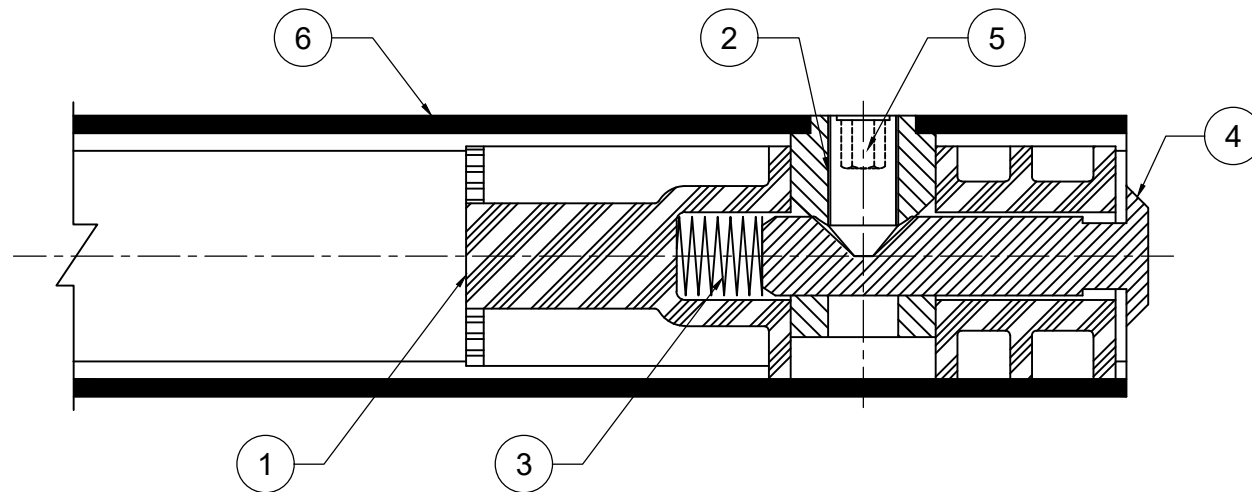
DRN. BY
MINAKSHI DUTTA

CKD. BY


APPRD. BY

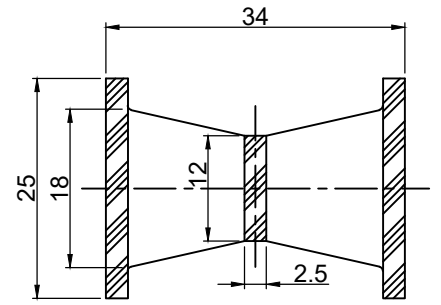
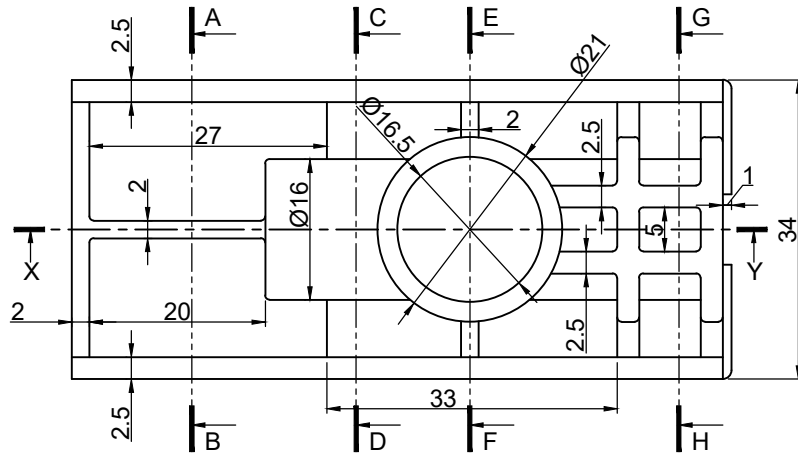


- ① PIN GUIDE
- ② PIN CARRIER
- ③ COMPRESSION SPRING
- ④ PIN
- ⑤ ALLEN HEAD GRUB SCREW
- ⑥ HORIZONTAL BAR

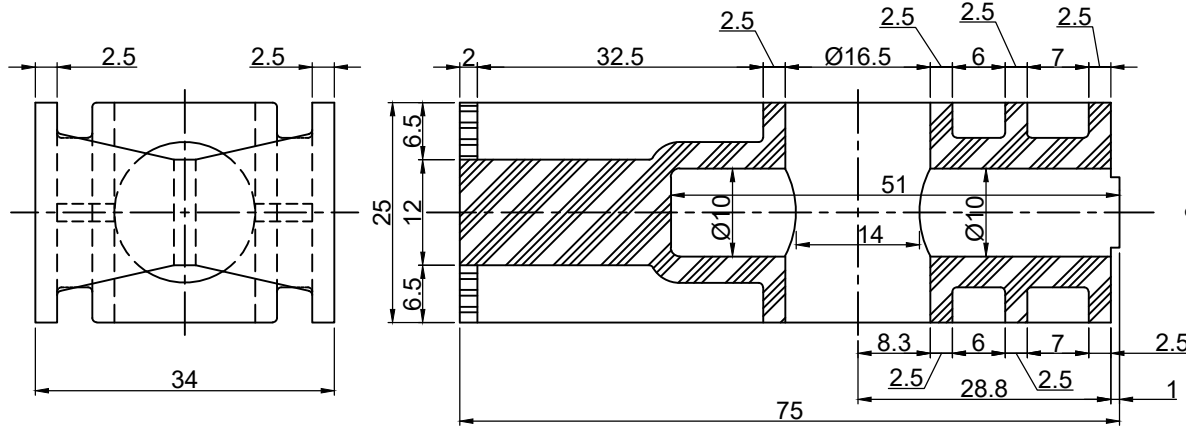


SECTION - OP

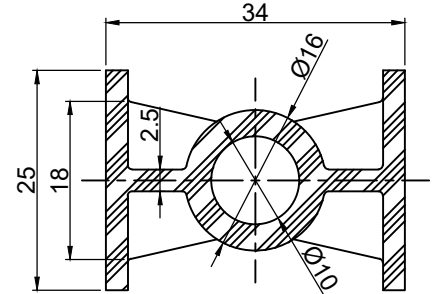
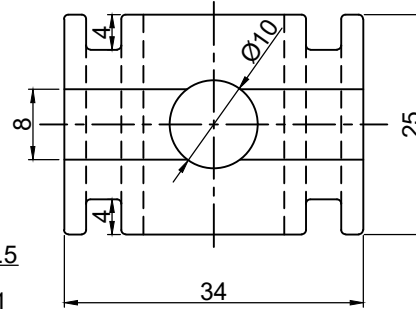
NATIONAL COUNCIL OF SCIENCE MUSEUMS 			
UNIT: C.R.T.L.		PROJ.- CRTL	
DRG. NO. MECH-05/48/15/C	DATE 16/10/15	SCALE 1 : 1	TOLERANCE ± 0.25mm
TITLE:- LOCK ASSEMBLY			NO OFF.
DRN. BY MINAKSHI SUR	CKD. BY	APPRD. BY	



SEC - AB



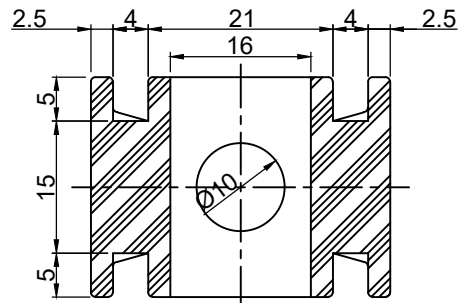
SEC - XY



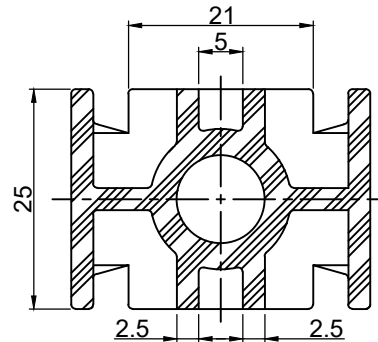
SEC - CD

1 PIN GUIDE


MATERIAL:- DERLIN (WHITE)

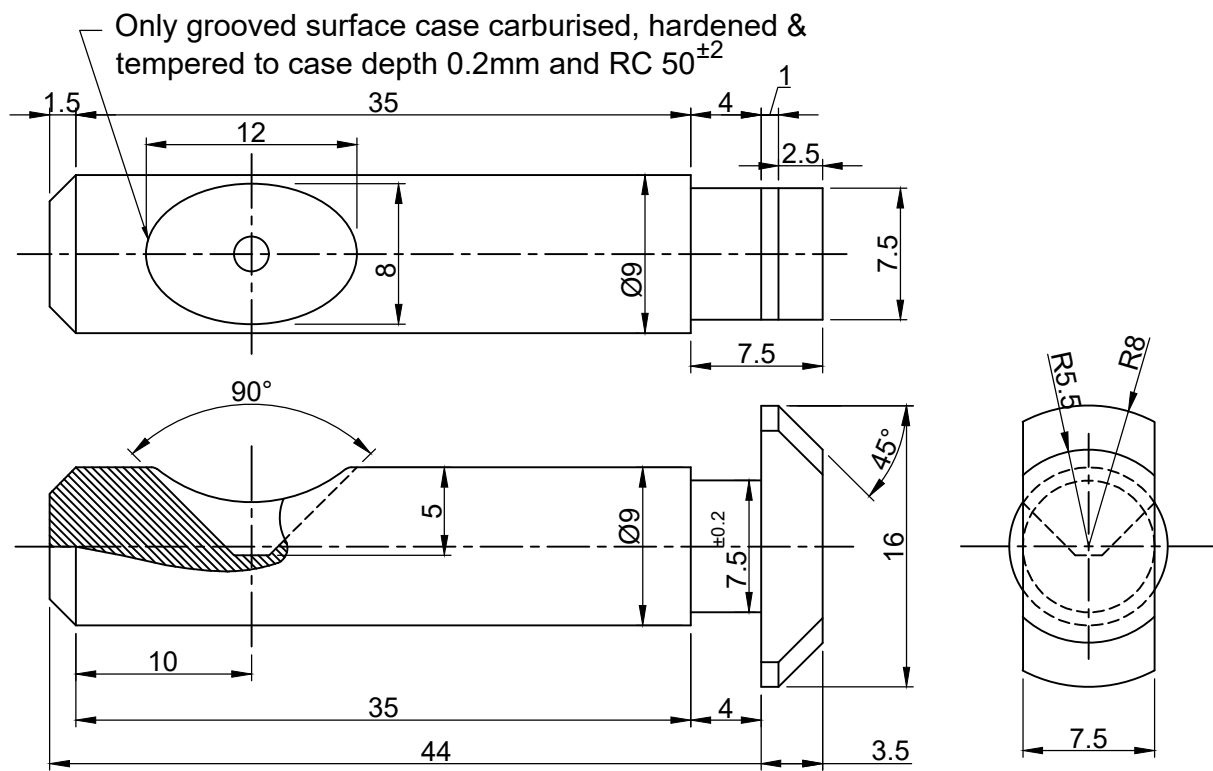


SEC - EF



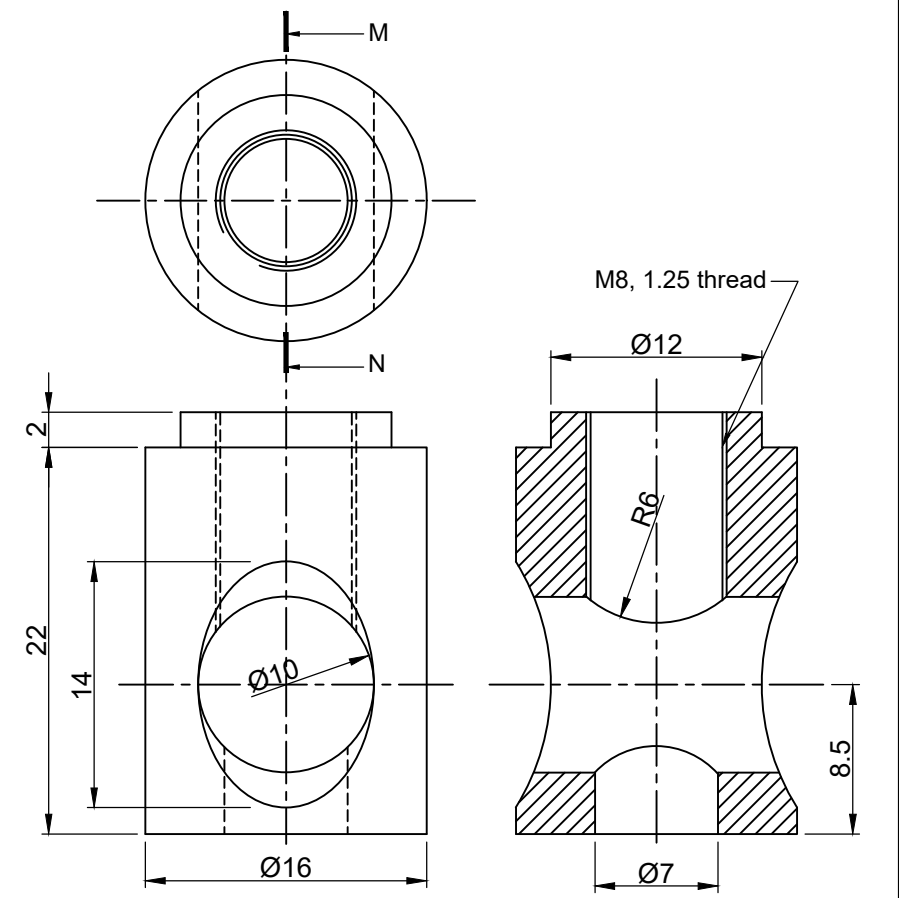
SEC - GH

NATIONAL COUNCIL OF SCIENCE MUSEUMS				
UNIT: C.R.T.L.		PROJ.- CRTL		
DRG. NO. MECH-05/48/15/A	DATE 16/10/15	SCALE 1 : 1	TOLERANCE ± 0.25mm	
TITLE:- LOCK PIN GUIDE Details			NO OFF.	
DRN. BY MINAKSHI SUR	CKD. BY	APPRD. BY		



Material :- EN1A
Zn plated

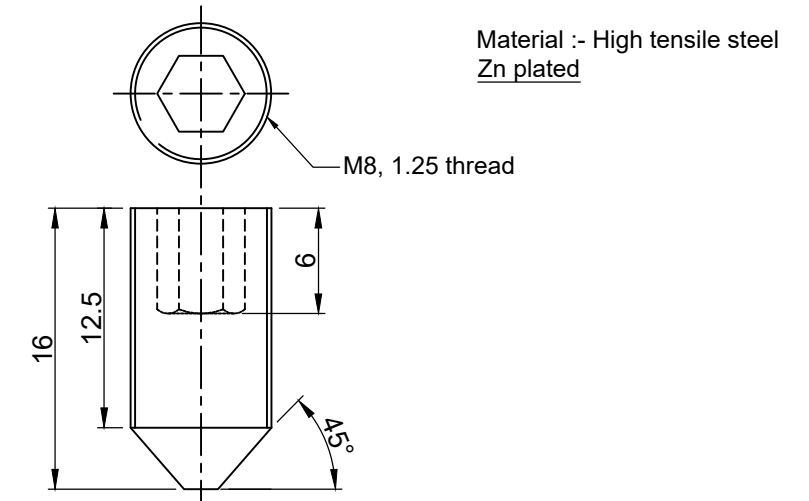
4 PIN



Material:-C.R.M.S.
Zn plated

SEC - MN

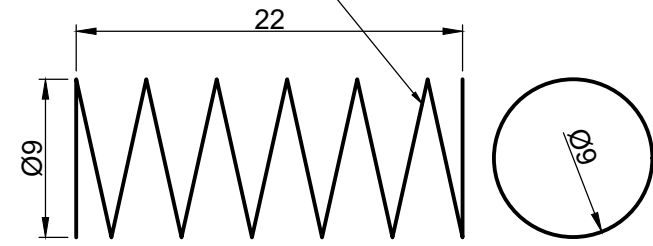
2 PIN CARRIER



5 ALLEN HEAD GRUB SCREW

Material :- Spring steel wire.
Hardened & tempered
Zn plated

Wire dia. - 20 gauge
No. Of coil - 7
Compressive spring



3 COMPRESSION SPRING

NATIONAL COUNCIL OF SCIENCE MUSEUMS			
UNIT: C.R.T.L.		PROJ.- CRTL	
DRG. NO. MECH-05/48/15/B	DATE 16/10/15	SCALE 1 : 1	TOLERANCE ± 0.25mm
TITLE:- LOCK PIN Details			NO OFF.
DRN. BY MINAKSHI SUR	CKD. BY	APPRD. BY	