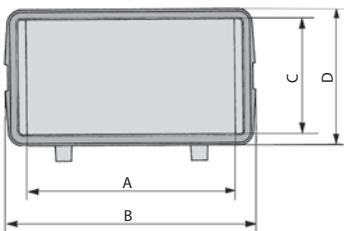


8: Guardbox 33 easy

B



8: Guardbox 33 easy



8.1 Guardbox 33 easy Overview

B | 8_2

8.1.1 Complete Guardbox 33 easy Kit's

B | 8_2

8.2 Bow Handles

B | 8_5

8.2.1 Sliding Blocks for Handle Slots and Feet Slots

B | 8_6

8.2.2 Card Stop Set

B | 8_7

8.2.3 Earthing terminals

B | 8_8

8.3 Dimensions / Technical Information

B | 8_9

8.3.1 Cross Section of Extrusions

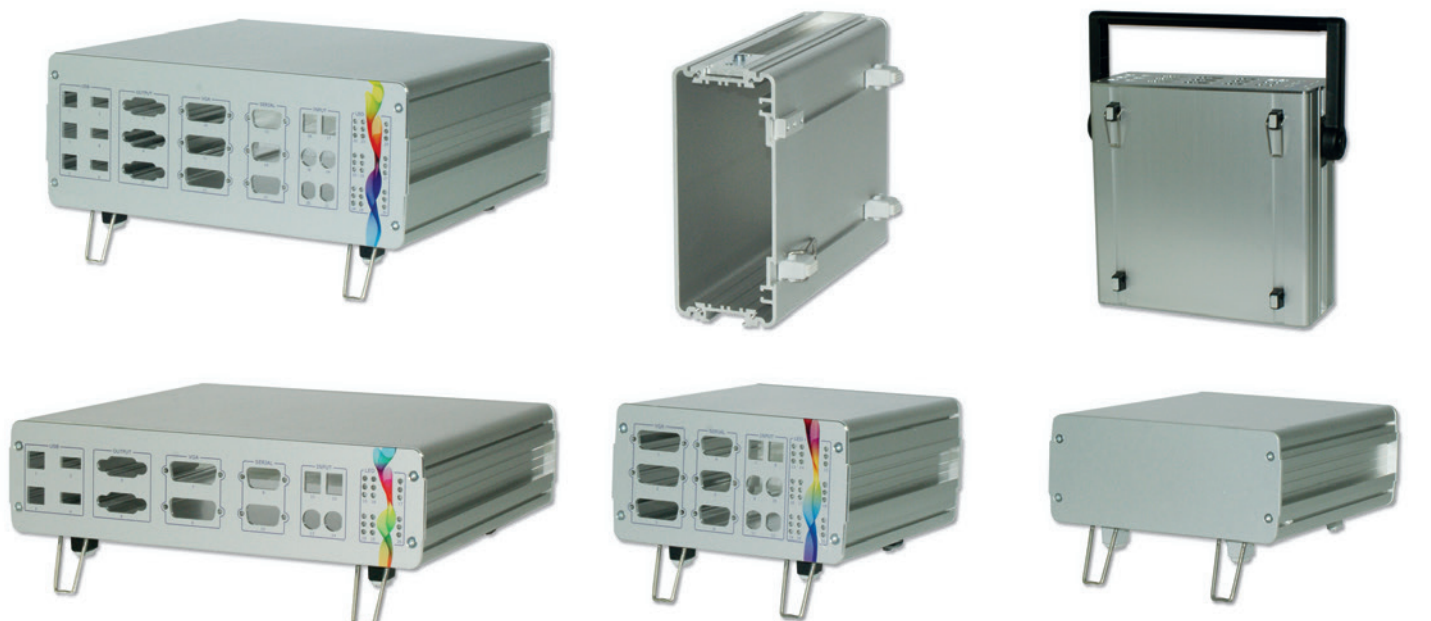
B | 8_9

8.3.2 Line Drawings

B | 8_9

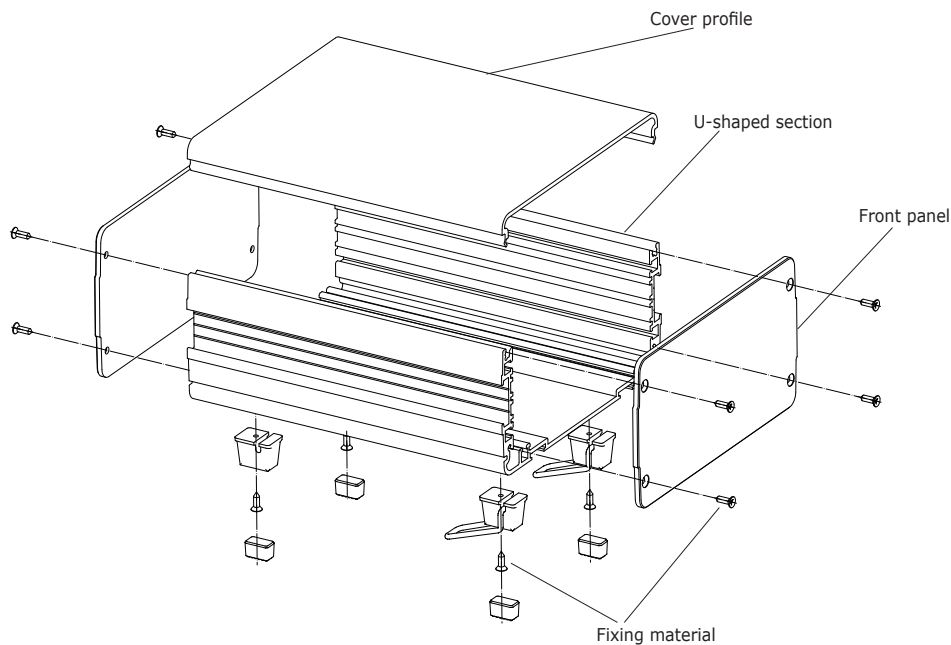
8: Guardbox 33 easy

B

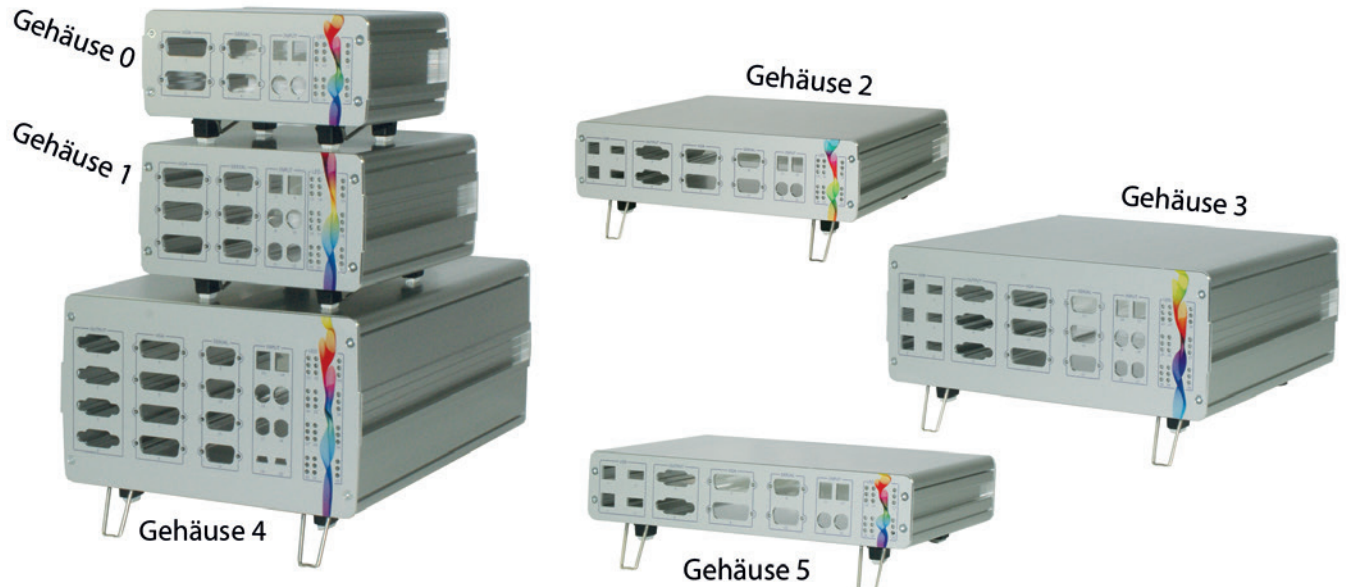


8.1 Guardbox 33 Easy Overview

- The Elma Guardbox 33 Easy is manufactured from 2 aluminium sections only
- A U-shaped section forms the bottom with integrated sides and provides superior strength
- The extruded cover is held in place by the screws used for front/rear panel mounting
- The main features of this vibration-proof case are its rugged construction, ease of assembly and serviceability as well as its modern design
- This compact case is ideally used for test and measurement instruments, drive modules as well as for controls where rugged construction, design, colour and ease of serviceability are important
- The Guardbox 33 Easy can easily accept single and double Eurocards as well as non-standard board sizes or other components



8: Guardbox 33 easy



Sturdy, flexible and portable

Suitable for

- Mounting grooves
- Mounting panels
- Single eurocard
- Double eurocard (direct arrangement with case size 2, 3 and 5)

Application examples

- Measurement, control and test instrumentation
- Laboratory and maintenance equipment
- Equipment on train, trams, etc.

Description

- Sturdy
- Handy
- Ease of service access
- Tilt-up feet
- Optional carrying handle

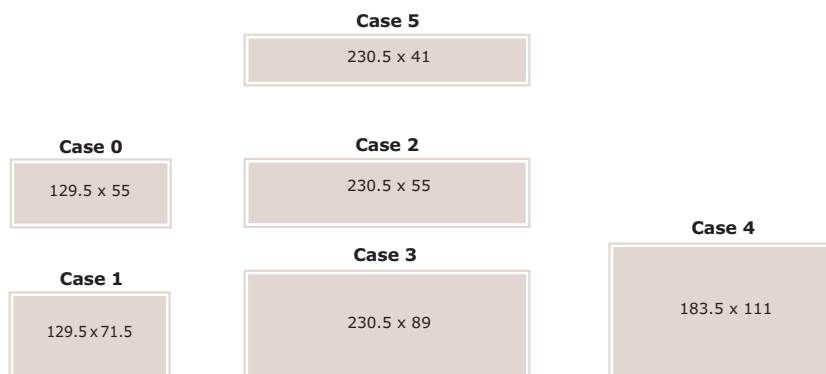
Surface

- Enclosure and front / rear panels are fully anodized



The basic case consists of two aluminium extrusions and guarantees optimal and professional packaging of your boards or components.

Cases and sizes



The Guardbox 33 Easy series comes in 3 different widths and overall 6 different sizes to meet many different requirements.

8: Guardbox 33 easy

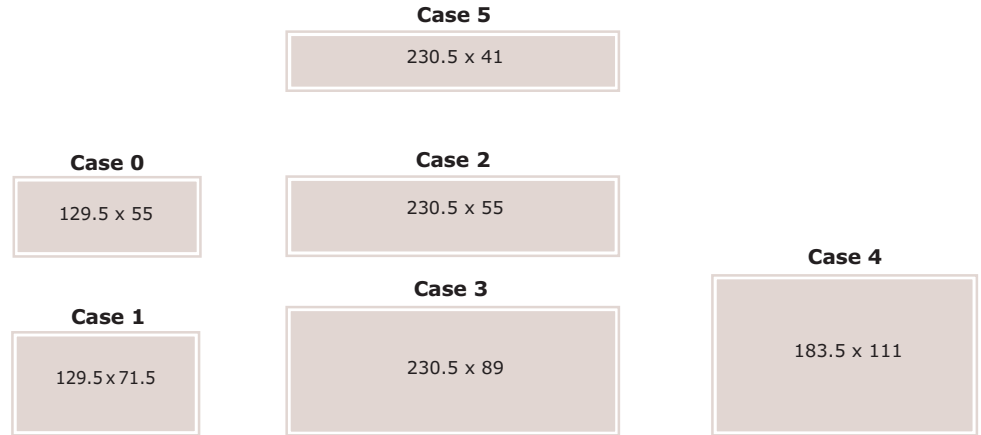
8.1.1 Complete Guardbox 33 Easy Kit's

8.1.1 Guardbox 33 Easy Set

- Scope of delivery:
 - 1 basic case anodized
 - 2 front / rear panels clear anodized
 - 1 set with 4 feet (2 rocking, UL94V-0) incl. screws

Case size	Surface	Depth			
		120 mm 4.72"	180 mm 7.08"	240 mm 9.44"	300 mm 11.81"
0	clear anodized	33-012-55	33-018-55	33-024-55	-
1	clear anodized	33-112-55	33-118-55	33-124-55	-
2	clear anodized	-	-	33-224-55	33-230-55
3	clear anodized	-	-	33-324-55	33-330-55
4	clear anodized	-	33-418-55	33-424-55	33-430-55
5	clear anodized	-	33-518-55	33-524-55	-

Cases and sizes

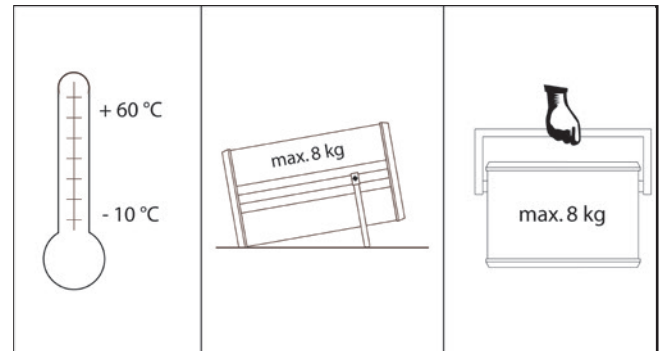


8: Guardbox 33 easy



8.2 Bow Handles

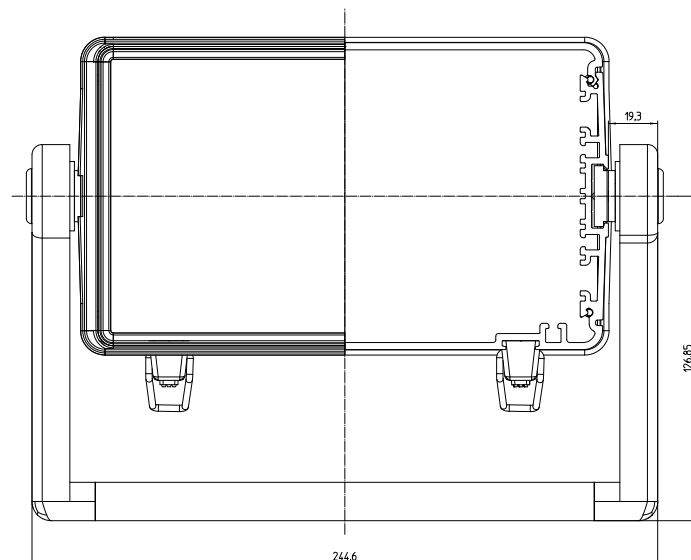
- for Guardbox 33, sizes 1–4
- Side parts made of plastic black or grey
- Handle extrusion in aluminium, anodized black or clear
- The handle can be attached at any position on the lateral groove
- The handle latches every 30 °
- **Scope of delivery:**
 - 1 pre-assembled handle with assembly material



Carrying capacity dependent on distribution of load and handling.
Decreases with dynamic stress

8.2 Bow Handles

Description	Black Part-No.	Grey Part-No.
Bow handle for Guardbox 33, sizes 0 + 1	33-647	33-651
Bow handle for Guardbox 33, sizes 2 + 3	33-648	33-652
Bow handle for Guardbox 33, size 4	33-649	33-653

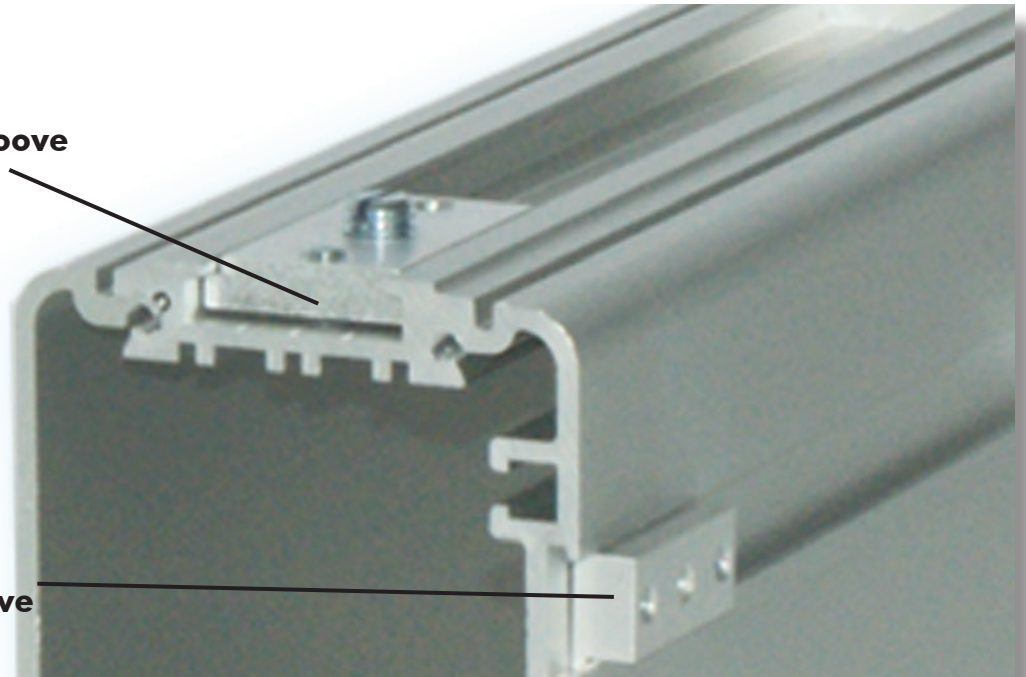


8: Guardbox 33 easy

B

Handle groove

Foot groove



8.2.1 Sliding Blocks for Handle Slots and Feet Slots

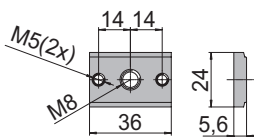
- The sliding blocks (extruded aluminium) provide an optional means of attachment for the Guardbox 33
- The blocks are inserted in the handle slot on the side of the case or in place of the feet
- **Scope of delivery:**
 - Sliding blocks incl. screws

4.2.2 Sliding Blocks for Handle and Feet Slots

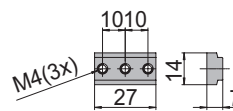
Case Size	Description	Scope of Delivery	Part-No.
0 - 4	Handle groove	1 Stk.	33-665
0 - 5	Foot groove	4 Stk.	33-666



Handle groove slot nut



Foot groove slot nut

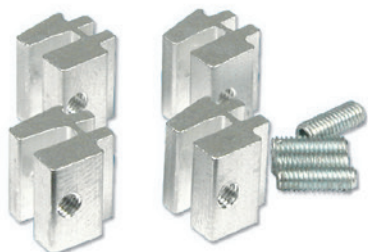




8.2.2 Card Stop Set

- Card stoppers are used for card fixation when direct horizontal inserting of double eurocards (case size 2, 3 and 5) or other inserted cards is required
- **Scope of delivery:**
 - 4 extruded card stoppers
 - 4 hexagon socket set screws
 - 1 hexagon socket key

4.2.3 Card Stop Set



Case Size	Part-No.
0 - 5	33-618

8: Guardbox 33 easy

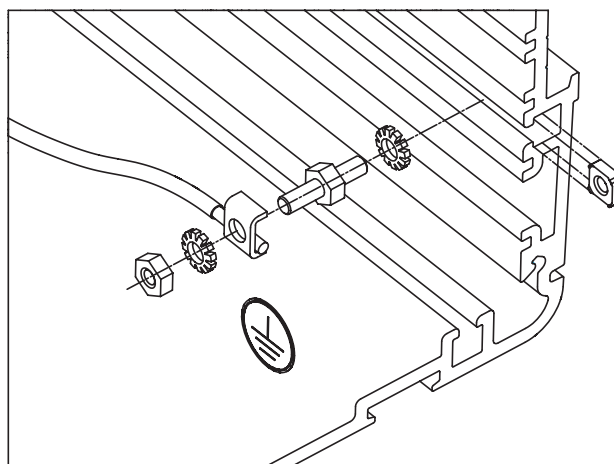
8.2.3 Earthing Terminal

- The earthing terminal facilitates grounding of the Guardbox 33 Easy in accordance with EN / VDE / SEV standard
- **Scope of delivery:**
 - 1 earthing nut M3.5
 - 1 threaded bolt M3.5
 - 1 clamping yoke
 - 2 serrated washers
 - 1 nut M3.5
 - 1 earthing symbol



4.2.4 Earthing Terminal

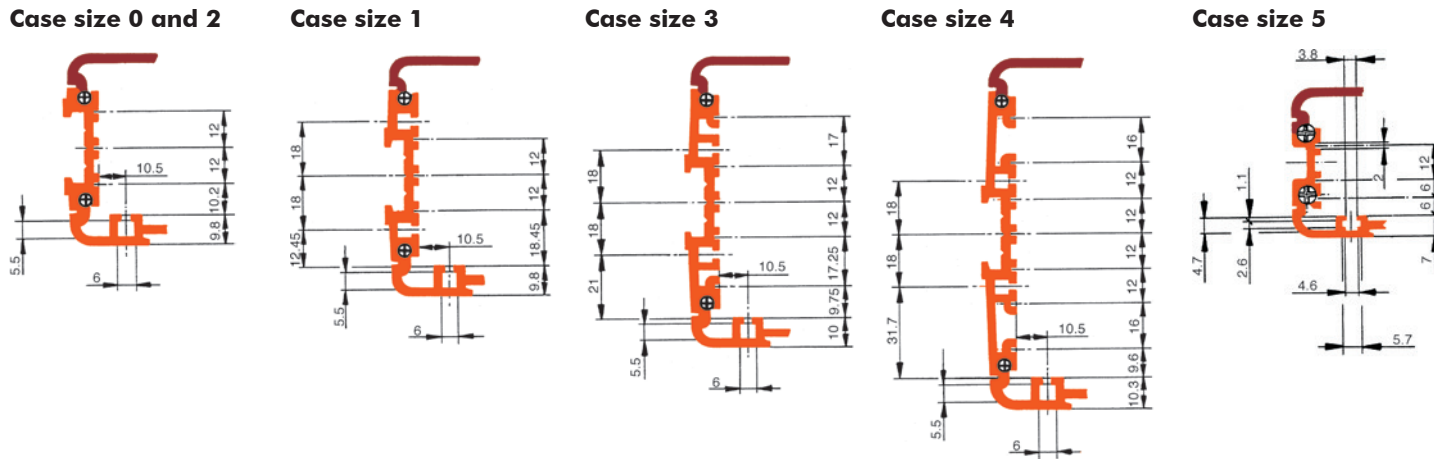
Case Size	Description	Part-No.
0 - 5	Earthing terminal	33-619



8: Guardbox 33 easy

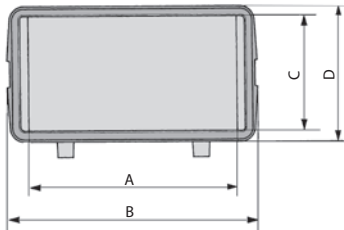
8.3 Dimensions / Technical Information

8.3.1 Cross Sections of Extrusions

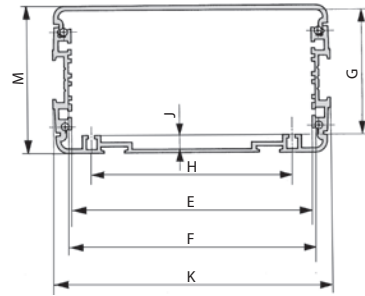


8.3.2 Line Drawings

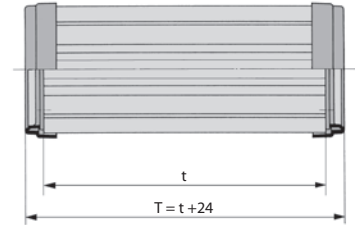
Front View



Internal Dimensions



Side View



Type		A	B	C	D	E	F Intern. Width	F Board Width	G	H	J	K	M±0.5	t=120	t=180	t=240	t=300
														4.72"	7.08"	9.44"	11.81"
0	mm inch	129.5 5.10	155.5 6.12	55 2.16	69 2.71	130 5.12	134 5.27	133 5.23	51.7 2.03	109 4.29	7.5 0.29	151 5.94	64 2.52		✓	✓	
1	mm inch	129.5 5.10	155.5 6.12	71.5 2.81	85.5 3.37	130 5.12	134 5.27	133 5.23	68.4 2.69	109 4.29	7.5 0.29	151 5.94	80.5 3.17	✓	✓	✓	
2	mm inch	230.5 9.07	256.5 10.10	55 2.16	69 2.71	231 9.09	235 9.25	233.35 9.18	51.7 2.03	210 8.26	7.5 0.29	252 9.92	64 2.52			✓	✓
3	mm inch	230.5 9.07	257.5 10.14	89 3.50	103 4.05	231 9.09	235 9.25	233.35 9.18	85.5 3.36	210 8.26	7.5 0.29	253 9.96	98 3.86			✓	✓
4	mm inch	183.5 7.22	210.5 8.29	111 4.37	125 4.92	184 7.24	188 7.40	186.6 7.34	106.9 4.21	163 6.41	7.5 0.29	206 8.11	120 4.72		✓	✓	✓
5	mm inch	230.5 9.07	256.5 10.10	41 1.61	56 2.20	231 9.09	235 9.25	233.35 9.18	43 1.69	210 8.26	4.7 0.18	249.5 9.82	50 1.97		✓	✓	