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NOTICE

UNIVERSAL ALUMINIUM PROJECT BOX CU-N ・ HU-N series Changes to Screw, Washer Material and Washer Thickness

- Affected series / models : See chart below.

Product Name	Series
UNIVERSAL ALUMINUM PROJECT BOX	CU-N series
UNIVERSAL ALUMINUM PROJECT BOX	HU-N Series

- Changes : Material of M3-5 Truss Head Screw
 Material and Thickness of M3 Flat Washer

Current (Old)

Material : Brass ・ Finish : Nickel plated

Washer Thickness : 0.3mm



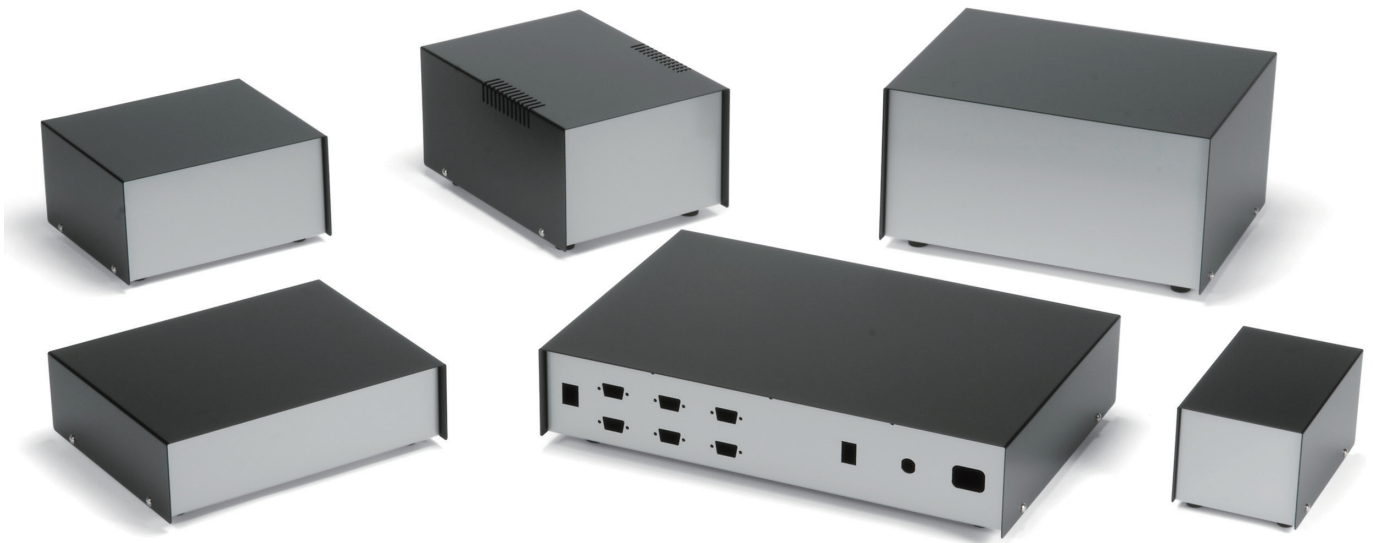
New

Material : Steel ・ Finish : Nickel plated

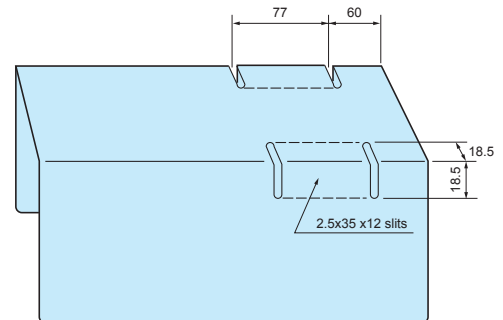
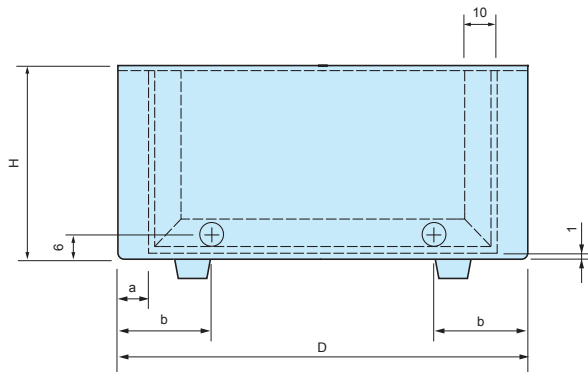
Washer Thickness : 0.5mm

- Purpose: To ensure consistent quality throughout via streamlined supply chain and materials.
- Effective date : Once present inventory has run out / been depleted.
- Note 1: No changes to product's dimensions and surface finish.
- Note 2: No changes to recommended tightening torque.
- Note 3: No changes to item product number or pricing.

Thank you for your understanding.
For more information, kindly contact us at: sales@takachi-el.co.jp



- The internal surface is unfinished, making conductive and grounding possible.



Side view for CU16-5-15, 9-6-11, 12-8-14, and 10-9-17

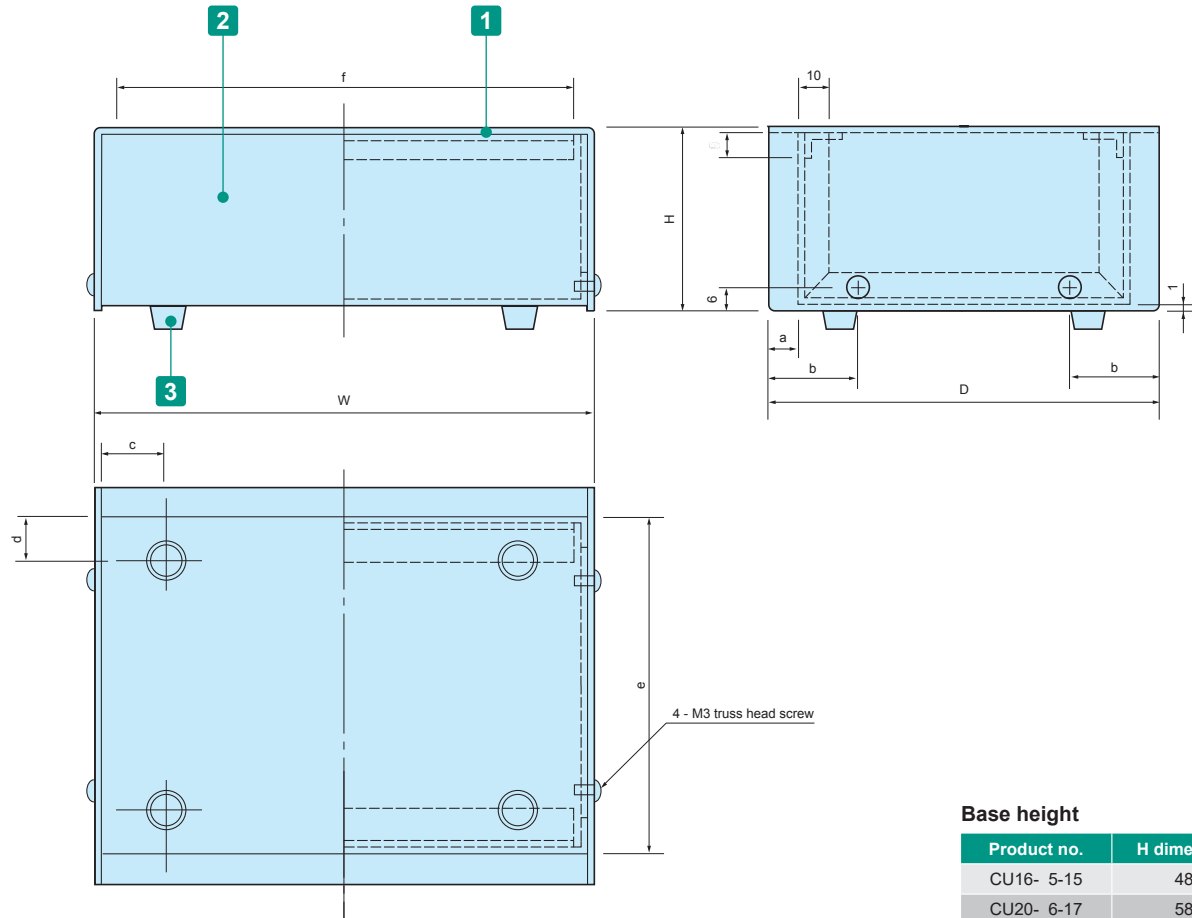
Ventilation slits on CU18-12-25 only

Components

No.	Part name	Pcs	Material	Color / Finish
1	Cover	1	Steel SPCC t=1.0	Black / Painted
2	Base	1	Aluminium A1100P	Metallic silver / Painted : Unfinished internal surface
3	Rubber feet	4	Synthetic rubber	Black

CU-N dimensions

■ Detailed DXF/DWG/PDF/STP drawings available online.



Included screws : Truss head M3-5, Nickel plated x 4 pcs (all models)
M3 flat washer, Nickel plated x 4 pcs (all models)

Pan head M3-8, Trivalent chromate x 4 pcs
(CU16-5-15, 9-6-11, 12-8-14, and 10-9-17)

Pan head M3-10, Trivalent chromate x 4 pcs
(CU20-6-17, 25-7-20, 16-9-15, and 15-9-22)

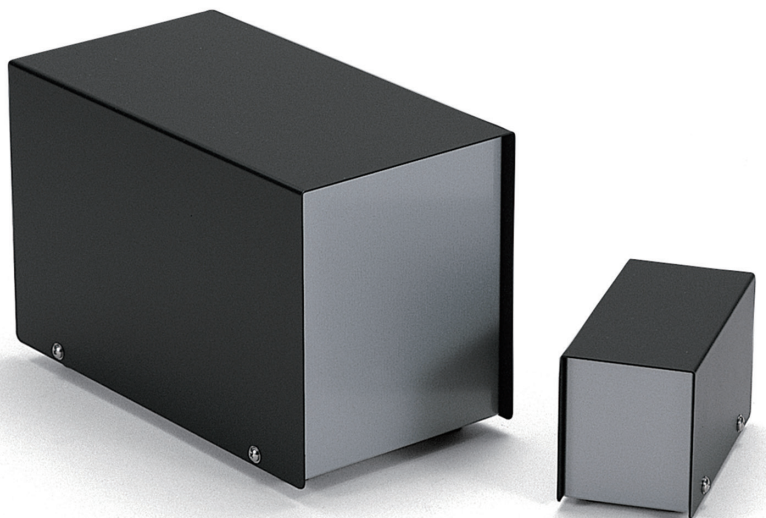
Pan head with washer M3-10, Trivalent chromate x 4 pcs
(CU30-9-22, 35-10-24, 25-12-20, 30-15-23, 18-12-25, and 40-8-27)

Base height

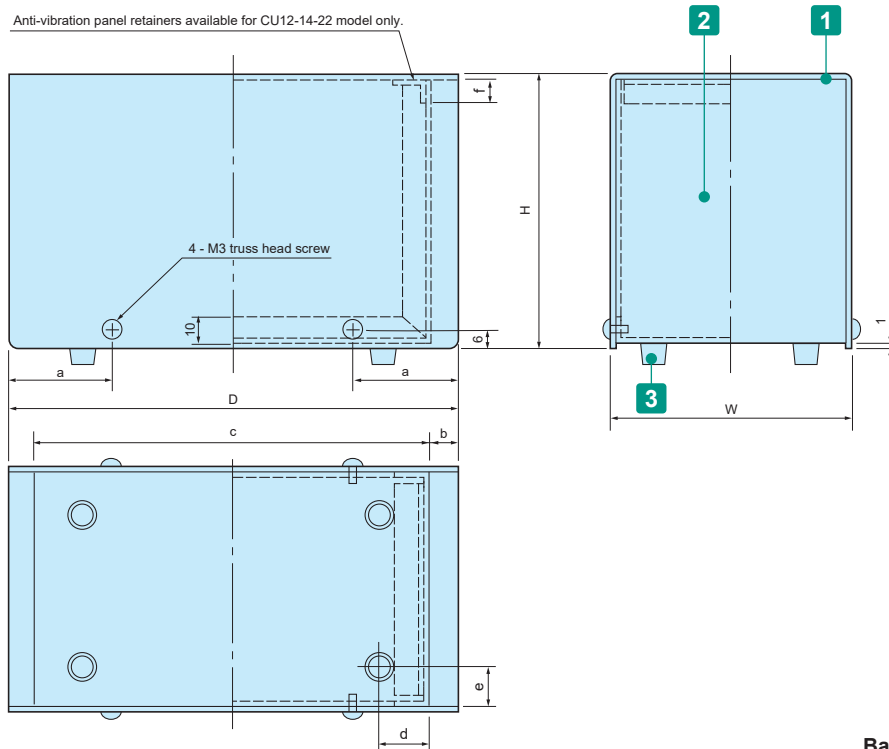
Product no.	H dimension
CU16- 5-15	48
CU20- 6-17	58
CU25- 7-20	68
CU30- 9-22	83
CU35-10-24	97.8
CU 9- 6-11	58
CU12- 8-14	73
CU16- 9-15	88
CU20-10-17	98
CU25-12-20	118
CU30-15-23	148
CU10- 9-17	83
CU15- 9-22	88
CU18-12-25	117.8
CU40- 8-27	77.8

Product no. / Dimensions

Product no.	W	H	D	a	b	c	d	e	f	g	Thickness	Weight (g)
CU16- 5-15	160	50	150	7.5	25	15	15	135	-	-	1.0	415
CU20- 6-17	200	60	170	7.5	30	20	20	155	190	7	1.0	635
CU25- 7-20	250	70	200	10	35	20	20	180	240	7	1.0	905
CU30- 9-22	300	85	220	10	35	25	25	200	290	7	1.2	1,250
CU35-10-24	350	100	240	10	40	25	25	220	340	7	1.2	1,620
CU 9- 6-11	90	60	110	5	20	12	12	100	-	-	1.0	250
CU12- 8-14	120	75	140	5	25	15	15	130	-	-	1.0	400
CU16- 9-15	160	90	150	7.5	25	15	15	135	150	7	1.0	600
CU20-10-17	200	100	170	7.5	30	20	20	155	190	7	1.0	785
CU25-12-20	250	120	200	10	35	25	25	180	240	7	1.2	1,200
CU30-15-23	300	150	225	10	35	25	25	205	290	7	1.2	1,620
CU10- 9-17	100	85	165	5	30	12	15	155	-	-	1.0	450
CU15- 9-22	150	90	220	7.5	35	15	20	205	140	7	1.0	775
CU18-12-25	180	120	250	10	40	20	25	230	170	7	1.2	1,160
CU40- 8-27	400	80	265	10	45	30	30	245	390	7	1.2	1,820

HU-N series**UNIVERSAL PROJECT BOX****HU-N dimensions**

■ Detailed DXF/DWG/PDF/STP drawings available online.



- The internal surface is unfinished, making conductive and grounding possible.

Included screws:

Truss head M3-5, Nickel plated x 4 pcs (all models)
 M3 flat washer, Nickel plated x 4 pcs (all models)
 Pan head M3-10, Trivalent chromate x 4 pcs
 (CU12-14-22 model only)
 Pan head M3-8, Trivalent chromate x 4 pcs
 (CU9-11-17 model only)

Base height

Product no.	H dimension
CU 6- 7-12	68
CU 9-11-17	103
CU12-14-22	138

Components

No.	Part name	Pcs	Material	Color / Finish
1	Cover	1	Steel SPCC t=1.0	Black / Painted
2	Base	1	Aluminium A1100P	Metallic silver / Painted : Unfinished internal surface
3	Rubber feet	4	Synthetic rubber	Black

Product no. / Dimensions

Product no.	W	H	D	a	b	c	d	e	f	Weight (g)
CU 6- 7-12	60	70	120	25	5	110	15	12	-	240
CU 9-11-17	85	105	170	30	5	160	15	12	-	505
CU12-14-22	120	140	220	35	7.5	205	20	15	7	905

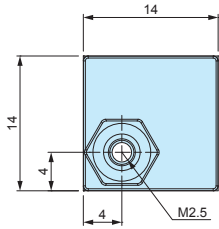
AST series**INSERT NUT ADHESIVE STANDOFF**

- Double-sided adhesive tape allows the standoff to be mounted quickly and easily; allows PCB mounting in non-boss enclosures.
- Convenient for installing PCBs into enclosures without the need for customization.
- Please ensure that surface is cleaned and grease-free before adhering.
- Once removed, it cannot be adhered on again.

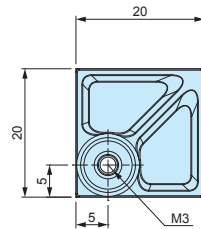
AST dimensions

- DXF/DWG/PDF/STP drawings available on our website.

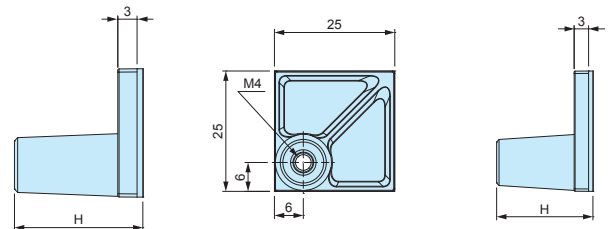
AST2.5-□



AST3-□



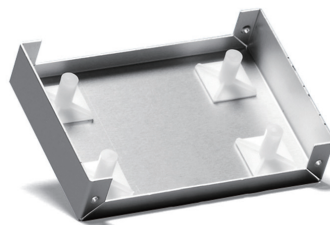
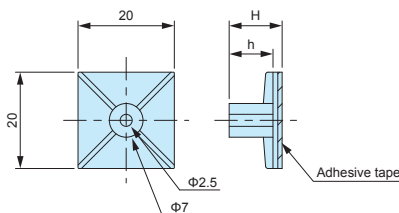
AST4-□

**Product no. / Details****Bulk package**

Product no	H dimension	Included screw	Recommended PCB thickness (mm)	Recommended torque (N · m)	Weight (g)	Pack of	Product no	Pack of
AST2.5-5B	5	M2.5-5 pan head	1.0 ~ 2.0	0.3	0.6 (1 piece)	4	AST2.5-5B-P	100
AST2.5-10B	10	M2.5-5 pan head	1.0 ~ 2.0	0.3	0.8 (1 piece)	4	AST2.5-10B-P	100
AST3-6B	6	M3-6 pan head	1.0 ~ 3.0	0.4	1.5 (1 piece)	4	AST3-6B-P	100
AST3-10B	10	M3-6 pan head	1.0 ~ 3.0	0.4	1.6 (1 piece)	4	AST3-10B-P	100
AST3-15B	15	M3-6 pan head	1.0 ~ 3.0	0.4	1.8 (1 piece)	4	AST3-15B-P	100
AST3-20B	20	M3-6 pan head	1.0 ~ 3.0	0.4	2.1 (1 piece)	4	AST3-20B-P	100
AST4-10.5B	10.5	M4-8 pan head	1.0 ~ 3.5	0.8	2.6 (1 piece)	4	AST4-10.5B-P	50
AST4-20B	20	M4-8 pan head	1.0 ~ 3.5	0.8	3.2 (1 piece)	4	AST4-20B-P	50

- Base material / color : Nylon 66 (UL94V-2) / Black
- Nut • screw material / finish : Steel / Trivalent chromate

- Bulk packaging is available. See "Bulk package" column above.
- Screws are not included for bulk packages.

ASR series**ADHESIVE PCB STANDOFF****ASR dimensions**

- DXF/DWG/PDF drawings available on our website.

Technical Data

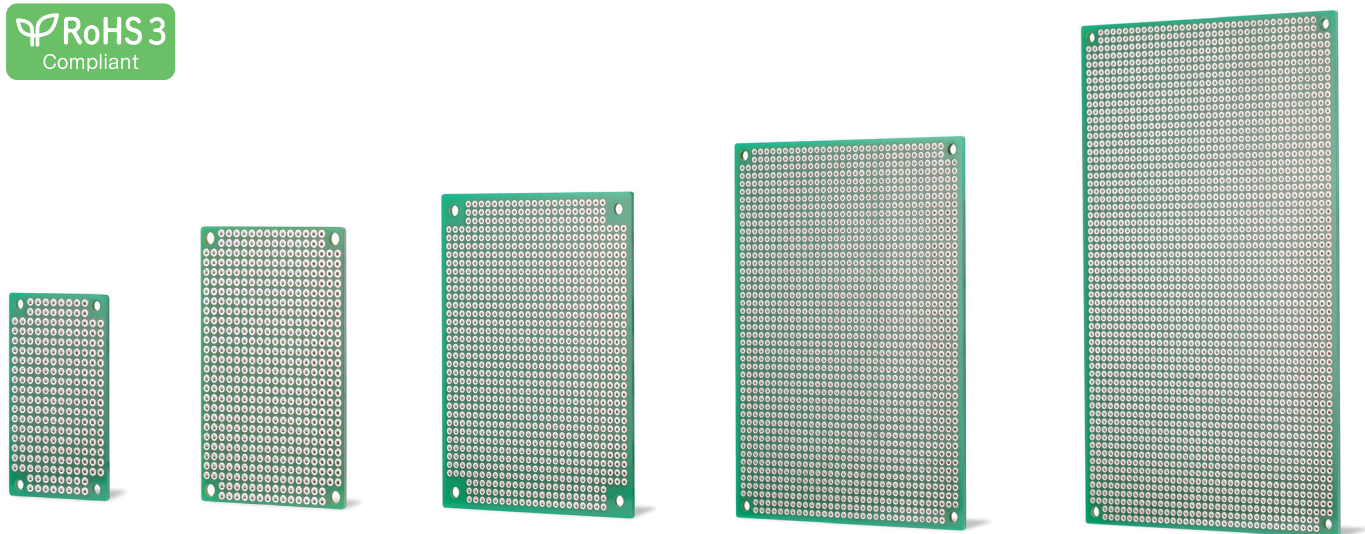
Recommended torque : 0.4N · m

- M3 tapping screw use adhesive standoff.
Recommended to be used with EM-3 or EM-3-6 self-tapping screws (See page 398).
- Please ensure that surface is cleaned and grease-free before adhering.
- Once removed, it cannot be adhered on again.

Product no. / Details

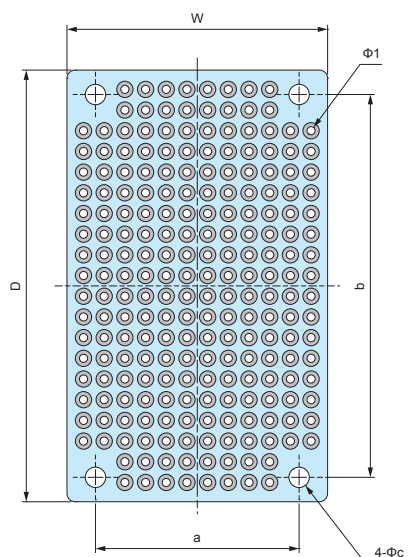
- Material / Color: Nylon 66 (UL94V-2) / Natural

Product no	H	h	Weight (g)	Pack of
ASR- 5	5.1	3.1	0.9 (1 piece)	10
ASR- 6	6.4	4.4	1.0 (1 piece)	10
ASR- 7	7.2	5.1	0.9 (1 piece)	10
ASR- 8	8.1	6.3	0.9 (1 piece)	10
ASR- 9	9	7	1.0 (1 piece)	10
ASR-11	11	9	1.0 (1 piece)	10
ASR-13	12.7	10.7	1.2 (1 piece)	10
ASR-14.5	14.7	12.8	1.1 (1 piece)	10
ASR-16	15.9	13.9	1.3 (1 piece)	10
ASR-19	19.1	17.1	1.4 (1 piece)	10



■ Detailed DXF/DWG/PDF drawings available online.

- Plated Through Holes (PTH) type PCB with a 2.54mm hole-to-hole pitch.
Inexpensive and economical PCB made using robust, heat-resistant and non-conductive glass epoxy.
- Easily mounted onto bosses or standoffs via the mounting holes at each corner.
- Environmentally friendly lead-free solder. RoHS3 compliant.
- 5 different sizes available, with PCB100-160 being of Eurocard (3U) format size.



Accessories (Optional parts)



Adhesive standoff AST series
See page AST-1



Adhesive standoff ASR series
See page ASR-1

Material / Finish : Glass epoxy (FR-4) / Through-hole - Lead-free solder resist

Product no. / Dimensions

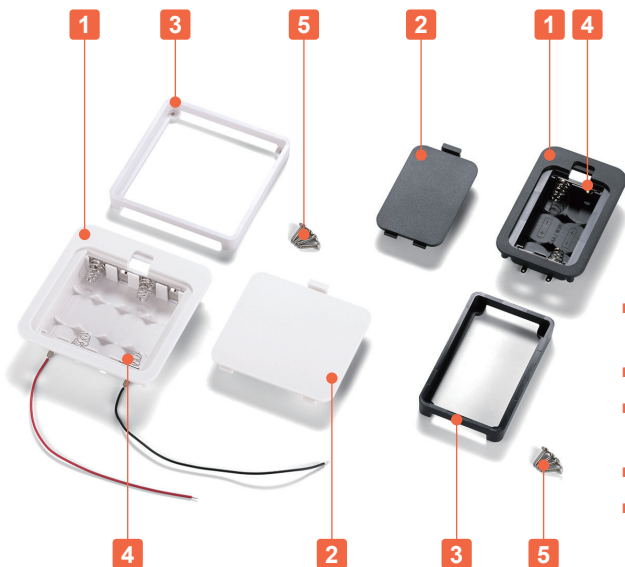
Product no.	W	D	a	b	c	t	Mounting screw	Pack of
PCB 32- 53	32	53	25	47	2.5	1.2	M2 or M2.5	1
PCB 47- 72	47	72	41	66	3.2	1.2	M3	1
PCB 72- 95	72	95	62	85	3.2	1.2	M3	1
PCB 90-120	90	120	82	112	3.2	1.6	M3	1
PCB100-160	100	160	92	152	3.2	1.6	M3	1



Technical Data

Operating temperature: -10°C ~ +60°C

Mount Example



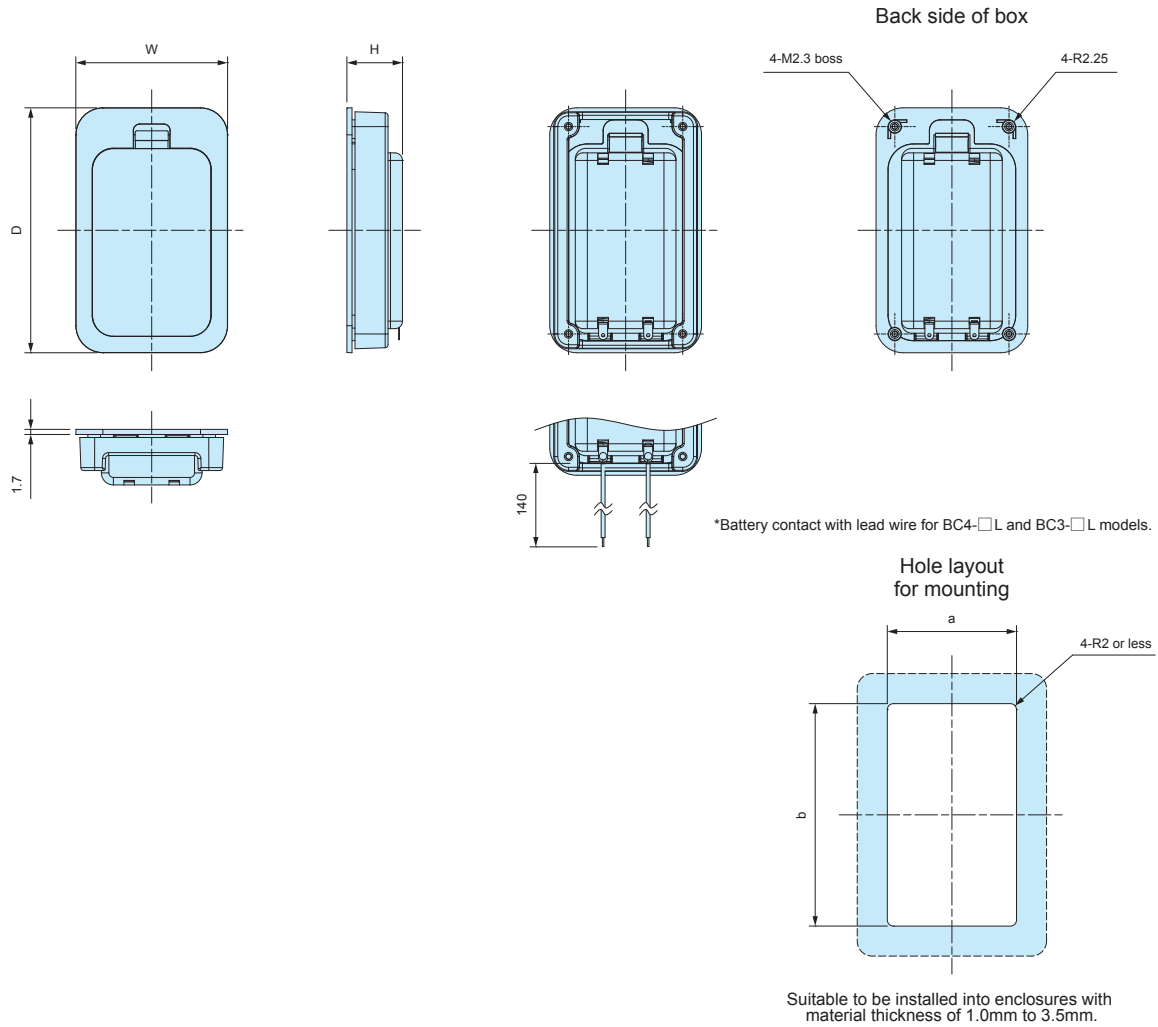
- Suitable to be installed into enclosures with material thickness of 1.0mm to 3.5mm.
- Cover can be opened/closed without any tool for easy battery replacement.
- 5 different battery layouts are available as AA x 2, AA x 3, AA x 4, AAA x 2 and AAA x 4. Each layout comes in 2 models: with lead-wire, and without lead-wire.
- ⊕⊖ markings prevents incorrect placement of battery.
- The dimensions of alkaline or manganese batteries may vary depending on country and brand. Use optional battery cushion sponge to prevent rattling.

Components

No.	Part name	Pcs	Material	Color / Finish
1	Box	1	ABS UL94V-0	Black • Off-white
2	Cover	1	ABS UL94V-0	Black • Off-white
3	Frame	1	ABS UL94V-0	Black • Off-white
4	Battery contact Lead wire (BC-L models)	1 set	Battery contact : Brass & steel wire Lead wire : PVC + Copper wire (UL1007 AWG26)	Nickel plated Black • Red
5	Self-tapping screw	4	Steel	Nickel plated

BC dimensions

- DXF/DWG/PDF/STP drawings available on our website.
- The shape and position of battery contacts vary by model.



Type: Without Lead Wire

Product no. / Details

Product no.		Dimensions					Battery layout	Weight (g)
● Black	● Off-white	W	H	D	a	b		
BC4-2-B	BC4-2-W	40	14.8	78.5	32.5	71	*AAA x 2	24.5
BC4-4-B	BC4-4-W	62	14.8	78.5	54.5	71	*AAA x 4	34.5
BC3-2-B	BC3-2-W	50.5	18.5	81.5	43	74	*AA x 2	31.5
BC3-3-B	BC3-3-W	65.5	18.5	81.5	58	74	*AA x 3	39
BC3-4-B	BC3-4-W	80.5	18.5	81.5	73	74	*AA x 4	46

*Alkaline or manganese batteries

Type: With Lead Wire

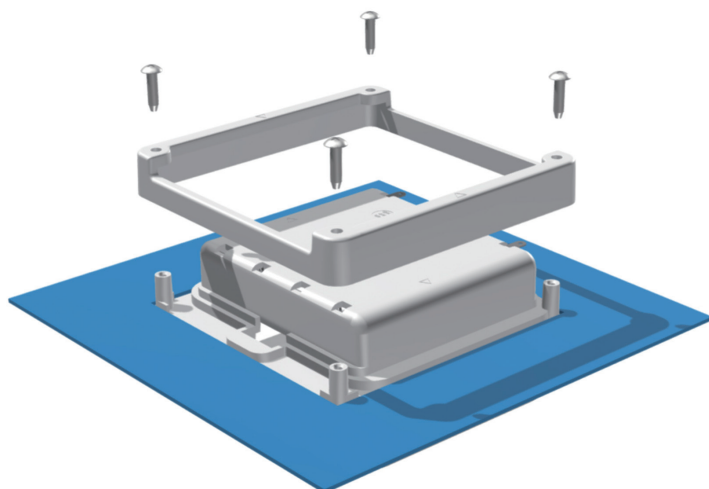
Product no. / Details

Product no.		Dimensions					Battery layout	Weight (g)
● Black	● Off-white	W	H	D	a	b		
BC4-2L-B	BC4-2L-W	40	14.8	78.5	32.5	71	*AAA x 2	25.5
BC4-4L-B	BC4-4L-W	62	14.8	78.5	54.5	71	*AAA x 4	35.5
BC3-2L-B	BC3-2L-W	50.5	18.5	81.5	43	74	*AA x 2	32.5
BC3-3L-B	BC3-3L-W	65.5	18.5	81.5	58	74	*AA x 3	40
BC3-4L-B	BC3-4L-W	80.5	18.5	81.5	73	74	*AA x 4	47

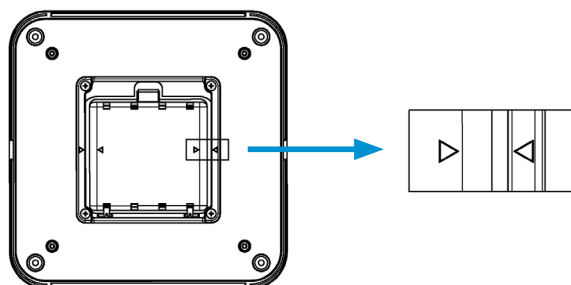
*Alkaline or manganese batteries

How to mount on the enclosures

- Insert battery box into the milled hole first, and fit the frame on the back side. Once mounted, secure the frame with screws.



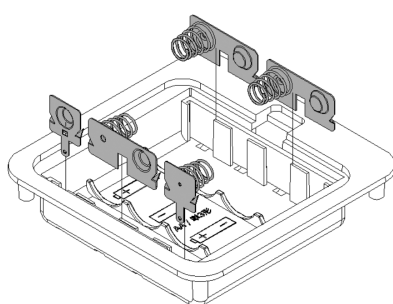
- For BC3-4□ models, ▷ markings are shown on the frame. Install by matching the markings.



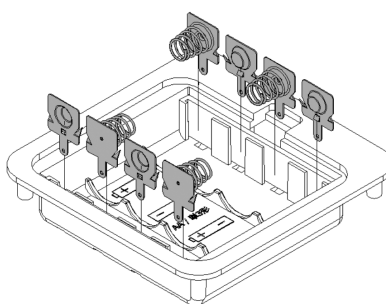
Parallel circuit conversion on BC series battery box

- BC-3□ models can be converted from a series to a parallel circuit. See below illustration for further details.
- IT series (IT-3 models) optional battery contacts can be used for parallel circuit conversion. (See website for more information)
- Use caution when installing or replacing the terminals to avoid the damage to the material.
- Parallel series conversion is available via our customization services.

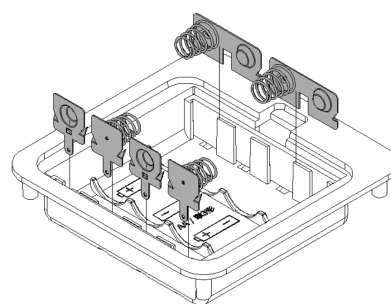
Conversion Example



Series Circuit (Standard)

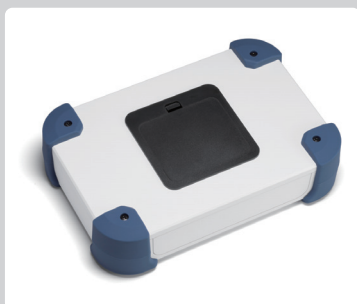


Parallel Circuit (4 batteries)



Parallel Circuit (2 batteries x 2)

Customization Available



For more information, contact us here:

Online form: https://www.takachi-enclosure.com/contact/form_contact
E-mail : sales@takachi-el.co.jp