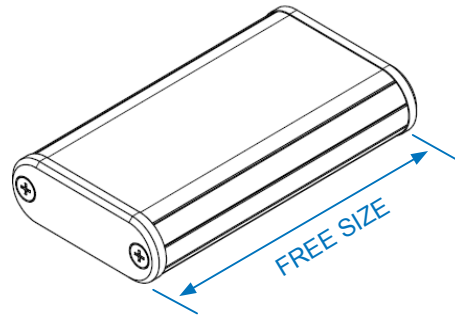
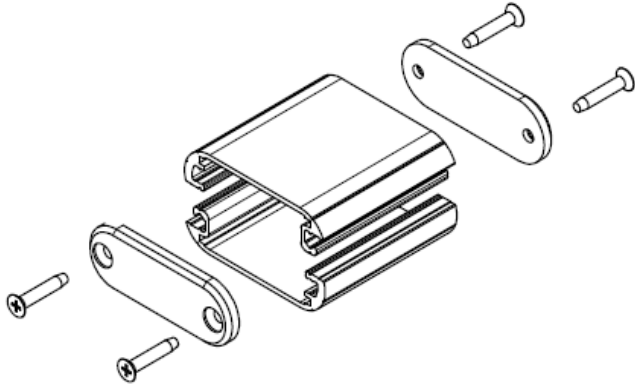


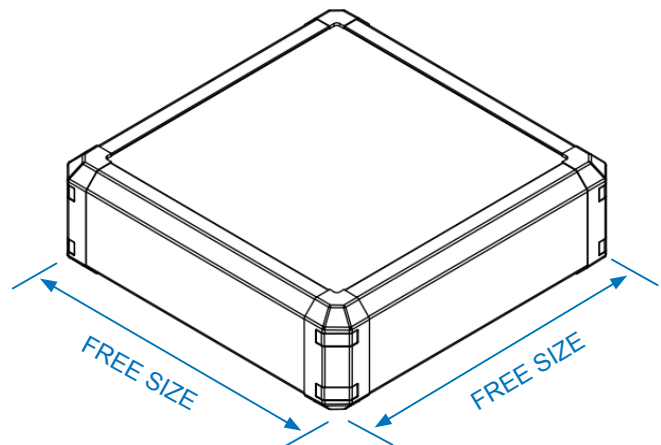
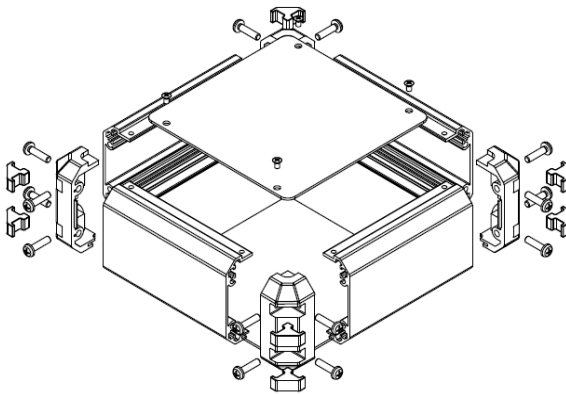
## VARIETY OF CUSTOM SIZED ENCLOSURES

Extruded models are adjustable in extrusion length (depth) in 0.1mm or 1.0mm intervals.  
Sheet-metal models are adjustable in W/D/H dimensions in 1.0mm intervals.

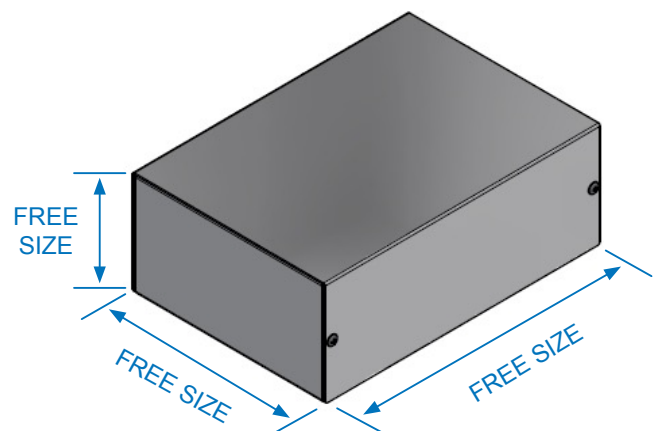
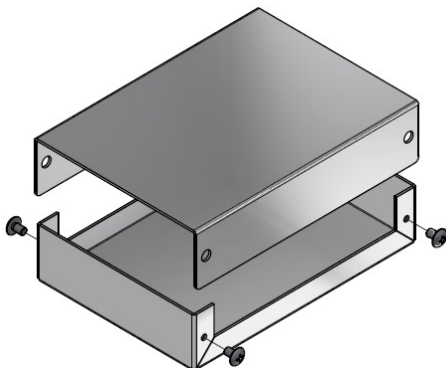
### EXTRUDED ALUMINIUM MODEL



### 4 SIDE-EXTRUDED ALUMINIUM MODEL



### SHEET METAL MODEL



**More custom sized models are available.**

[https://www.takachi-enclosure.com/cat/flexible\\_size](https://www.takachi-enclosure.com/cat/flexible_size)

# INQUIRING CUSTOM SIZED ENCLOSURES

- 1 Navigate to the free-size product page you wish to inquire on our website and click on the button indicated by the  arrow.



Custom sized shock-proof design instrument enclosure.  
Corner guards are designed to be both aesthetically pleasing, and impact resistant.

Selectable 22 different Width/Height profiles and specified length (depth) from 40 to 500mm in 1mm intervals.  
16 different color combinations can be specified.

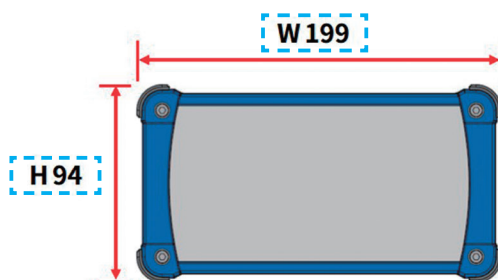


|                                  |                       |                          |
|----------------------------------|-----------------------|--------------------------|
| <b>CUSTOM SIZE WEB QUOTATION</b> | 3D View - Silver/Navy | 3D View - 16 color types |
| 3D View - With tilt legs         | Exploded view         | Color code               |

■ If there is no "WEB QUOTATION" click button, please send us your inquiry from the "INQUIRY FORM" on the CONTACT tab on our website.

- 2 Go to the CUSTOM SIZE WEB QUOTATION page and enter your preferred dimensions.

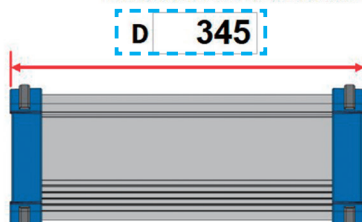
## STEP1 Select required width / height.



| Select                   | W   | H  | Select                              | W   | H   |
|--------------------------|-----|----|-------------------------------------|-----|-----|
| <input type="checkbox"/> | 69  | 34 | <input type="checkbox"/>            | 151 | 81  |
| <input type="checkbox"/> | 69  | 44 | <input type="checkbox"/>            | 151 | 101 |
| <input type="checkbox"/> | 69  | 59 | <input type="checkbox"/>            | 199 | 56  |
| <input type="checkbox"/> | 89  | 39 | <input type="checkbox"/>            | 199 | 74  |
| <input type="checkbox"/> | 89  | 49 | <input checked="" type="checkbox"/> | 199 | 94  |
| <input type="checkbox"/> | 89  | 64 | <input type="checkbox"/>            | 199 | 119 |
| <input type="checkbox"/> | 116 | 41 | <input type="checkbox"/>            | 244 | 64  |
| <input type="checkbox"/> | 116 | 56 | <input type="checkbox"/>            | 244 | 89  |
| <input type="checkbox"/> | 116 | 71 | <input type="checkbox"/>            | 244 | 114 |
| <input type="checkbox"/> | 151 | 46 | <input type="checkbox"/>            | 300 | 90  |
| <input type="checkbox"/> | 151 | 61 | <input type="checkbox"/>            | 300 | 140 |

## STEP2 Specify size D(depth) ... Enter dimensions in 1mm intervals.

Available from 40 to 500mm



\*NOTE: Specified size D(depth)  $\neq$  available internal dimension

Available internal dimension = **D dimension - 20mm**

Please take caution when calculating required D dimension.

- 3 After entering the quantity, click on the button indicated by the → arrow to generate a Product No.

**STEP4** **Quantity** ※Quantity can be specified up to 5 slots.

pcs

▶Add quantity



▶ **GENERATE PRODUCT NO.**

Product No. **EXPS199 – 94 – 345SN** ※Please use this model number when ordering.

- 4 After entering your details and the message in our INQUIRY FORM, click on the CONFIRM button.

**STEP5** **INQUIRY FORM**

Fill out the inquiry form and send it. We will give you quotation by Email.  
Inquiry from the country where the distributor is located will be answered by the distributor.

Fields marked with ★ are required

Product No. **EXPS199-94-345SN** Quantity ★

E-mail ★

Company ★

Your name ★ ☐ Mr. ☒ Ms. First name  Last name

Country ★

Message

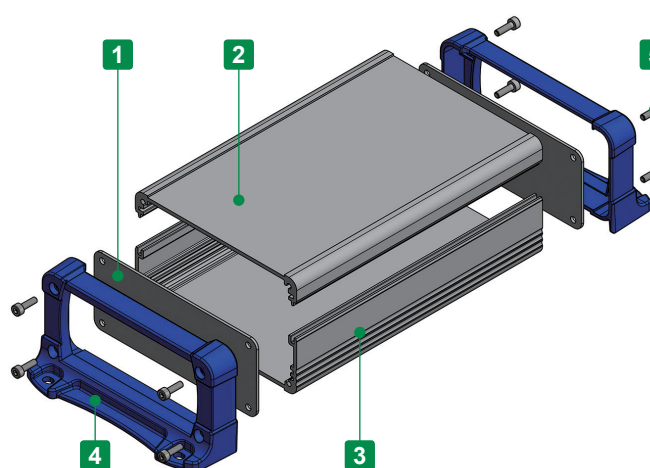


▶ **CONFIRM**

Our privacy policy have been designed to ensure that personal information is not misused or used for purposes other than it is intended for.  
[PRIVACY POLICY](#)

- 5 A TAKACHI sales representative will get in touch with you with a quote via e-mail.





- Equipped with flanged frame for easy wall mounting.
- Selectable in 20 different Width/Height types, with adjustable length (depth) in 1mm intervals from 40 to 500mm.
- 6 different color combinations available by combining a black or silver Top/Bottom covers with 3 different flanged frame colors.

## Included screws

EXPFS66-□, 86-□ models : M2.5-8 x 8 pcs

EXPFS113-□, 148-□ models : M3-10 x 8 pcs

EXPFS195-□ models : M4-12 x 8 pcs

EXPFS240-□ models : M5-12 x 8 pcs

※Hexagonal wrench included.

## Components

| No. | Part name         | Pcs | Material                     | Color / Finish                               |
|-----|-------------------|-----|------------------------------|----------------------------------------------|
| 1   | Panel             | 2   | Aluminium A1100P             | Silver / Anodized • Black / Painted          |
| 2   | Top cover         | 1   | Extruded aluminium A6063S-T5 | Silver • Black / Anodized with clear coating |
| 3   | Bottom cover      | 1   | Extruded aluminium A6063S-T5 | Silver • Black / Anodized with clear coating |
| 4   | Flanged frame     | 2   | PC+ABS Flame-resistant       | Black • Gray / Unpainted<br>Navy / Painted   |
| 5   | Screw (Hexagonal) | 8   | Stainless steel              | Unfinished                                   |

■ See page EX-Cover-1 ~ EX-Cover-4 for Top / Bottom cover dimensions.

## Lead Time

Custom Size Only  
Custom Size + Hole Milling

4 business days (1 ~ 3 pcs)  
9 business days (1 ~ 3 pcs)

## Order Inquiry

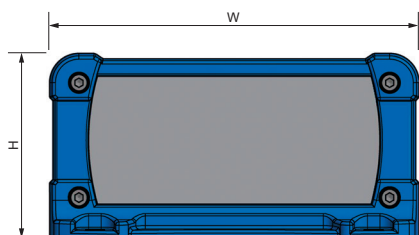
For more information, contact us here at [sales@takachi-el.co.jp](mailto:sales@takachi-el.co.jp)



## 1 Dimensions

To select W-H dimensions from the table below, and D length in 1mm intervals.

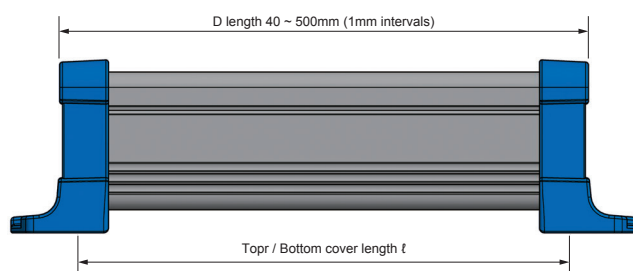
Width-Height dimensions



| W-H No. | W   | H    |
|---------|-----|------|
| 66- 34  | 66  | 34   |
| 66- 44  | 66  | 44   |
| 66- 59  | 66  | 59   |
| 86- 39  | 86  | 39   |
| 86- 49  | 86  | 49   |
| 86- 64  | 86  | 64   |
| 113- 42 | 113 | 41.5 |
| 113- 57 | 113 | 56.5 |
| 113- 72 | 113 | 71.5 |
| 148- 47 | 148 | 47   |

| W-H No. | W   | H   |
|---------|-----|-----|
| 148- 62 | 148 | 62  |
| 148- 82 | 148 | 82  |
| 148-102 | 148 | 102 |
| 195- 57 | 195 | 57  |
| 195- 75 | 195 | 75  |
| 195- 95 | 195 | 95  |
| 195-120 | 195 | 120 |
| 240- 65 | 240 | 65  |
| 240- 90 | 240 | 90  |
| 240-115 | 240 | 115 |

D length



| W-H No. | ℓ    |
|---------|------|
| 66-□    | D-14 |
| 86-□    | D-14 |
| 113-□   | D-16 |
| 148-□   | D-17 |
| 195-□   | D-20 |
| 240-□   | D-23 |

■ D length can be requested in 0.1mm intervals, but with higher tolerances ( $\pm 0.3$ mm).

■ See page EX-Cover-1 ~ EX-Cover-4 for Top/Bottom cover dimensions.

## 2 Color

To select color code from the table below.

※ Flanged frame color : Black • Gray / Unpainted - Navy / Painted

| Code  | S B Silver / Black | S G Silver / Gray | S N Silver / Navy |
|-------|--------------------|-------------------|-------------------|
| Color |                    |                   |                   |
| Code  | B B Black / Black  | B G Black / Gray  | B N Black / Navy  |
| Color |                    |                   |                   |

### Product Number

To determine a product number, fill W-H, D length and select Color code in the following blank boxes.

Product no. EXPFS

-

-

**1** W-H

**1** D length

**2** Color code

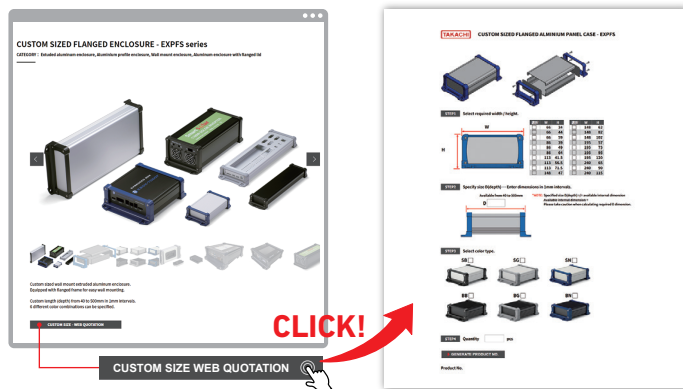
Numbering example: W-H:113-57 x D:234 and BN color code → **EXPFS113-57-234BN**

## CUSTOM SIZE WEB QUOTATION

Send your inquiry via our online form now!

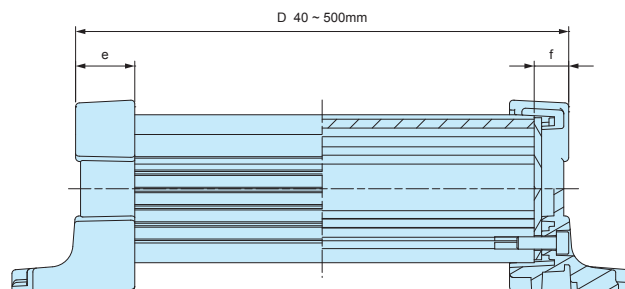
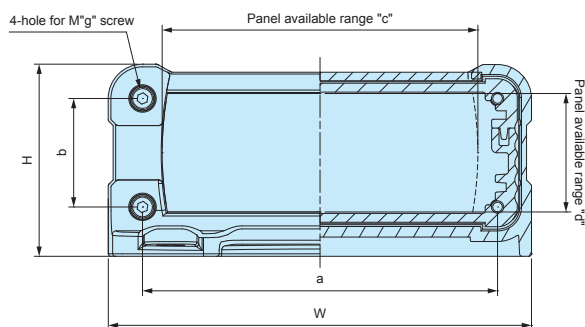
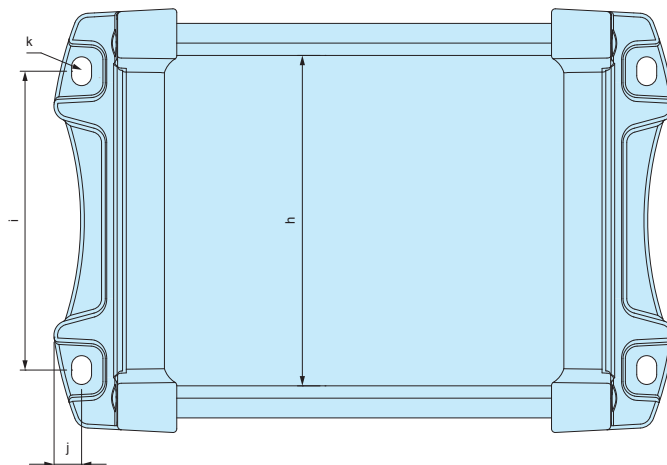
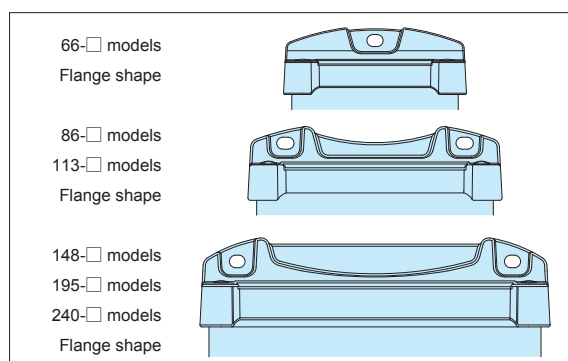
Visit the EXPFS product page on our website, click on the "CUSTOM SIZE WEB QUOTATION" button, and fill in the required details.

The product number will be generated, and once your information have been filled in, simply click on SUBMIT and await for our sales team's contact!

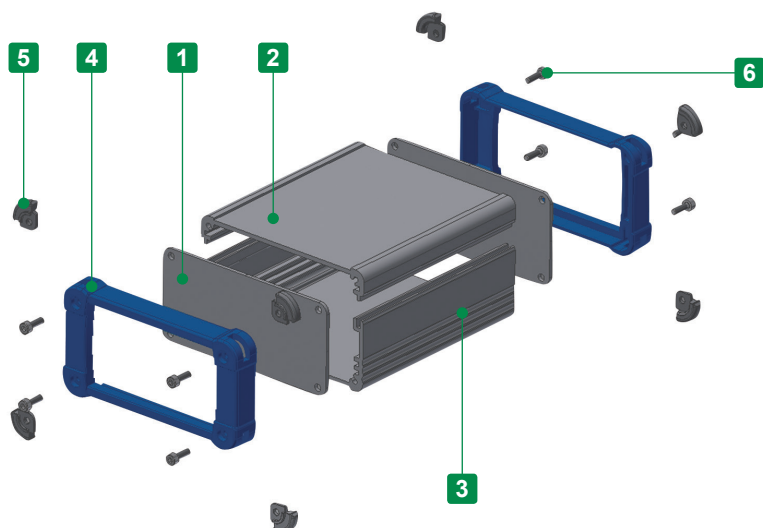


## EXPFS dimensions

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



| Product no.    | W   | H    | a   | b  | c     | d    | e  | f    | g   | h   | i     | j   | k       |
|----------------|-----|------|-----|----|-------|------|----|------|-----|-----|-------|-----|---------|
| EXPFS 66- 34-□ | 66  | 34   | 52  | 17 | 41.8  | 19.6 | 12 | 7    | 2.5 | 47  | —     | 4.5 | 4.5×6   |
| EXPFS 66- 44-□ | 66  | 44   | 52  | 27 | 41.5  | 29.6 | 12 | 7    | 2.5 | 47  | —     | 4.5 | 4.5×6   |
| EXPFS 66- 59-□ | 66  | 59   | 52  | 42 | 41.2  | 44.6 | 12 | 7    | 2.5 | 47  | —     | 4.5 | 4.5×6   |
| EXPFS 86- 39-□ | 86  | 39   | 72  | 22 | 61.6  | 23.5 | 12 | 7    | 2.5 | 67  | 60.6  | 5.6 | 4.2×6   |
| EXPFS 86- 49-□ | 86  | 49   | 72  | 32 | 61.3  | 33.5 | 12 | 7    | 2.5 | 67  | 60.6  | 5.6 | 4.2×6   |
| EXPFS 86- 64-□ | 86  | 64   | 72  | 47 | 61    | 48.5 | 12 | 7    | 2.5 | 67  | 60.6  | 5.6 | 4.2×6   |
| EXPFS113- 42-□ | 113 | 41.5 | 95  | 20 | 82.8  | 23.8 | 16 | 8    | 3   | 89  | 85.2  | 7.4 | 4.6×6   |
| EXPFS113- 57-□ | 113 | 56.5 | 95  | 35 | 83.2  | 38.8 | 16 | 8    | 3   | 89  | 85.2  | 7.4 | 4.6×6   |
| EXPFS113- 72-□ | 113 | 71.5 | 95  | 50 | 82.8  | 52.5 | 16 | 8    | 3   | 89  | 85.2  | 7.4 | 4.6×6   |
| EXPFS148- 47-□ | 148 | 47   | 130 | 25 | 107.4 | 23.7 | 18 | 8.5  | 3   | 124 | 116.2 | 9.9 | 5.5×7   |
| EXPFS148- 62-□ | 148 | 62   | 130 | 40 | 107.4 | 38.7 | 18 | 8.5  | 3   | 124 | 116.2 | 9.9 | 5.5×7   |
| EXPFS148- 82-□ | 148 | 82   | 130 | 60 | 107.4 | 58.7 | 18 | 8.5  | 3   | 124 | 116.2 | 9.9 | 5.5×7   |
| EXPFS148-102-□ | 148 | 102  | 130 | 80 | 107.4 | 78.7 | 18 | 8.5  | 3   | 124 | 116.2 | 9.9 | 6.5×8.5 |
| EXPFS195- 57-□ | 195 | 57   | 173 | 30 | 132   | 35   | 20 | 10   | 4   | 162 | 160   | 12  | 6.5×8.5 |
| EXPFS195- 75-□ | 195 | 75   | 173 | 48 | 132   | 53   | 20 | 10   | 4   | 162 | 160   | 12  | 6.5×8.5 |
| EXPFS195- 95-□ | 195 | 95   | 173 | 68 | 132   | 73   | 20 | 10   | 4   | 162 | 160   | 12  | 6.5×8.5 |
| EXPFS195-120-□ | 195 | 120  | 173 | 93 | 132   | 98   | 20 | 10   | 4   | 162 | 160   | 12  | 6.5×8.5 |
| EXPFS240- 65-□ | 240 | 65   | 218 | 38 | 177   | 43   | 23 | 11.5 | 5   | 207 | 205   | 12  | 6.5×8.5 |
| EXPFS240- 90-□ | 240 | 90   | 218 | 63 | 177   | 68   | 23 | 11.5 | 5   | 207 | 205   | 12  | 6.5×8.5 |
| EXPFS240-115-□ | 240 | 115  | 218 | 88 | 177   | 93   | 23 | 11.5 | 5   | 207 | 205   | 12  | 6.5×8.5 |



- Corner guards are designed to be both aesthetically pleasing, and impact resistant.
- 2 new Width/Height types added. Selectable in 22 different Width/Height types, with adjustable length (depth) in 1mm intervals from 40 to 500mm.
- 16 different color combinations possible by combining a black or silver Top/Bottom covers with 8 different exterior frame colors.

## Included screws

EXPS69-□, 89-□ models : M2.5-8 x 8 pcs  
 EXPS116-□, 151-□ models : M3-10 x 8 pcs  
 EXPS199-□ models : M4-12 x 8 pcs  
 EXPS244-□, 300-□ models : M5-12 x 8 pcs  
 ※Hexagonal wrench included.

## Components

| No. | Part name         | Pcs | Material                     | Color / Finish                                                                     |
|-----|-------------------|-----|------------------------------|------------------------------------------------------------------------------------|
| 1   | Panel             | 2   | Aluminium A1100P             | Silver / Anodized • Black / Painted                                                |
| 2   | Top cover         | 1   | Extruded aluminium A6063S-T5 | Silver • Black / Anodized with clear coating                                       |
| 3   | Bottom cover      | 1   | Extruded aluminium A6063S-T5 | Silver • Black / Anodized with clear coating                                       |
| 4   | Exterior frame    | 2   | PC+ABS Flame-resistant       | Black • Gray / Unpainted<br>Indigo • Navy • Lime • Yellow • Orange • Red / Painted |
| 5   | Corner guard      | 8   | Silicone                     | Dark gray • Black                                                                  |
| 6   | Screw (Hexagonal) | 8   | Stainless steel              | Unfinished                                                                         |

■ See page EX-Cover-1 ~ EX-Cover-4 for Top / Bottom cover dimensions.

## Lead Time

Custom Size Only  
 Custom Size + Hole Milling

4 business days (1 ~ 10 pcs)  
 9 business days (1 ~ 10 pcs)

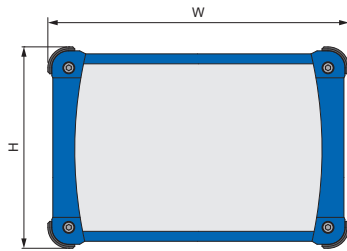
## Order Inquiry

For more information, contact us here at [sales@takachi-el.co.jp](mailto:sales@takachi-el.co.jp)

## 1 Dimensions

To select W-H dimensions from the table below, and D length in 1mm intervals.

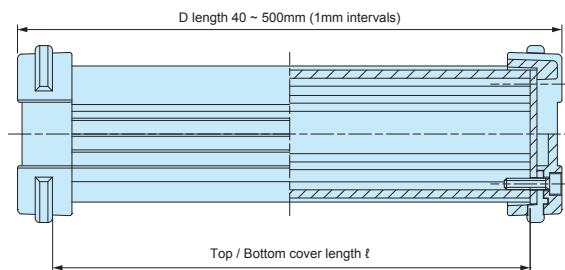
Width-Height dimensions



| W-H No. | W   | H  |
|---------|-----|----|
| 69- 34  | 69  | 34 |
| 69- 44  | 69  | 44 |
| 69- 59  | 69  | 59 |
| 89- 39  | 89  | 39 |
| 89- 49  | 89  | 49 |
| 89- 64  | 89  | 64 |
| 116- 41 | 116 | 41 |
| 116- 56 | 116 | 56 |
| 116- 71 | 116 | 71 |
| 151- 46 | 151 | 46 |
| 151- 61 | 151 | 61 |

| W-H No.            | W   | H   |
|--------------------|-----|-----|
| 151- 81            | 151 | 81  |
| 151-101            | 151 | 101 |
| 199- 56            | 199 | 56  |
| 199- 74            | 199 | 74  |
| 199- 94            | 199 | 94  |
| 199-119            | 199 | 119 |
| 244- 64            | 244 | 64  |
| 244- 89            | 244 | 89  |
| 244-114            | 244 | 114 |
| <b>NEW</b> 300- 90 | 300 | 90  |
| <b>NEW</b> 300-140 | 300 | 140 |

D length



| W-H No. | ℓ    |
|---------|------|
| 69-□    | D-14 |
| 89-□    | D-14 |
| 116-□   | D-16 |
| 151-□   | D-17 |
| 199-□   | D-20 |
| 244-□   | D-23 |
| 300-□   | D-22 |

■ D length can be requested in 0.1mm intervals, but with higher tolerances (±0.3mm).

■ See page EX-Cover-1 ~ EX-Cover-4 for Top/Bottom cover dimensions.

## 2 Color

To select color code from the table below.

Exterior frame color : Black • Gray / Unpainted - Other colors / Painted

| Code  | S B Silver / Black | S G Silver / Gray   | S I Silver / Indigo | S N Silver / Navy |
|-------|--------------------|---------------------|---------------------|-------------------|
| Color |                    |                     |                     |                   |
| Code  | S L Silver / Lime  | S Y Silver / Yellow | S O Silver / Orange | S R Silver / Red  |
| Color |                    |                     |                     |                   |
| Code  | B B Black / Black  | B G Black / Gray    | B I Black / Indigo  | B N Black / Navy  |
| Color |                    |                     |                     |                   |
| Code  | B L Black / Lime   | B Y Black / Yellow  | B O Black / Orange  | B R Black / Red   |
| Color |                    |                     |                     |                   |

## Product Number

To determine a product number, fill W-H, D length and select Color code in the following blank boxes.

Product no. EXPS

-

-

**1** W-H

**1** D length

**2** Color code

Numbering example: W-H:116-56 x D:234 and BL color code → **EXPS116-56-234BL**

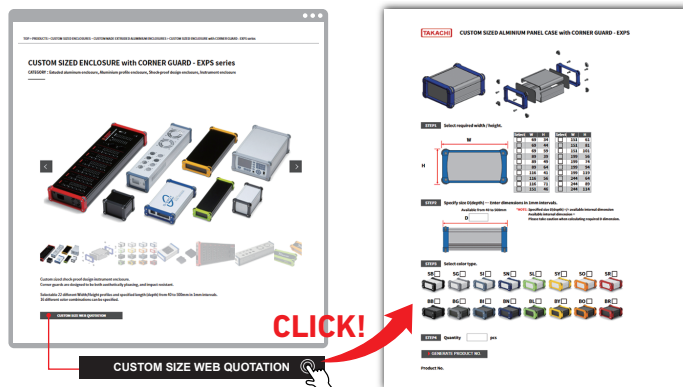


## CUSTOM SIZE WEB QUOTATION

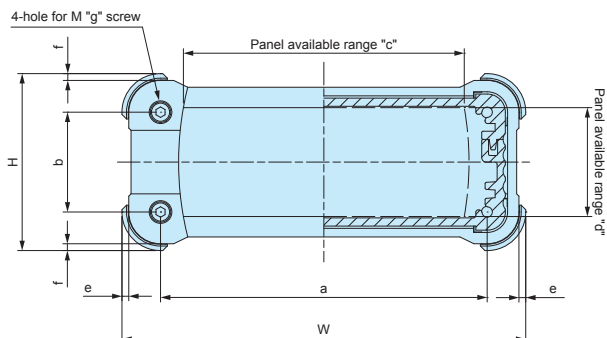
Send your inquiry via our online form now!

Visit the EXPS product page on our website, click on the "CUSTOM SIZE WEB QUOTATION" button, and fill in the required details.

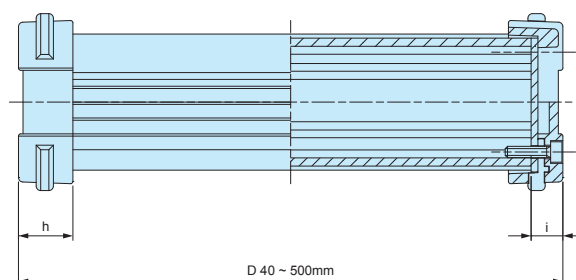
The product number will be generated, and once your information have been filled in, simply click on SUBMIT and await for our sales team's contact!



## EXPS dimensions



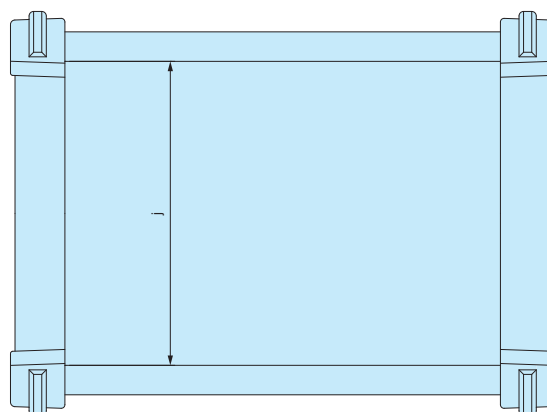
■ DXF/DWG/PDF drawings available on our website.



## Accessories (Optional parts)



Tilt leg TLW series  
See page 222

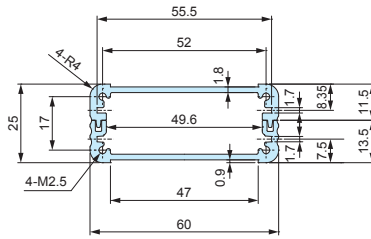


| Product no.   | W   | H   | a   | b   | c     | d    | e    | f    | g   | h  | i    | j   |
|---------------|-----|-----|-----|-----|-------|------|------|------|-----|----|------|-----|
| EXPS 69- 34-□ | 69  | 34  | 52  | 17  | 41.8  | 19.6 | 1.5  | 1.5  | 2.5 | 12 | 7    | 47  |
| EXPS 69- 44-□ | 69  | 44  | 52  | 27  | 41.5  | 29.6 | 1.5  | 1.5  | 2.5 | 12 | 7    | 47  |
| EXPS 69- 59-□ | 69  | 59  | 52  | 42  | 41.2  | 44.6 | 1.5  | 1.5  | 2.5 | 12 | 7    | 47  |
| EXPS 89- 39-□ | 89  | 39  | 72  | 22  | 61.6  | 23.5 | 1.5  | 1.5  | 2.5 | 12 | 7    | 67  |
| EXPS 89- 49-□ | 89  | 49  | 72  | 32  | 61.3  | 33.5 | 1.5  | 1.5  | 2.5 | 12 | 7    | 67  |
| EXPS 89- 64-□ | 89  | 64  | 72  | 47  | 61    | 48.5 | 1.5  | 1.5  | 2.5 | 12 | 7    | 67  |
| EXPS116- 41-□ | 116 | 41  | 95  | 20  | 82.8  | 23.8 | 1.75 | 1.75 | 3   | 16 | 8    | 89  |
| EXPS116- 56-□ | 116 | 56  | 95  | 35  | 83.2  | 38.8 | 1.75 | 1.75 | 3   | 16 | 8    | 89  |
| EXPS116- 71-□ | 116 | 71  | 95  | 50  | 82.8  | 52.5 | 1.75 | 1.75 | 3   | 16 | 8    | 89  |
| EXPS151- 46-□ | 151 | 46  | 130 | 25  | 106.8 | 23.7 | 1.75 | 1.75 | 3   | 18 | 8.5  | 124 |
| EXPS151- 61-□ | 151 | 61  | 130 | 40  | 106.8 | 38.7 | 1.75 | 1.75 | 3   | 18 | 8.5  | 124 |
| EXPS151- 81-□ | 151 | 81  | 130 | 60  | 106.8 | 58.7 | 1.75 | 1.75 | 3   | 18 | 8.5  | 124 |
| EXPS151-101-□ | 151 | 101 | 130 | 80  | 106.8 | 78.7 | 1.75 | 1.75 | 3   | 18 | 8.5  | 124 |
| EXPS199- 56-□ | 199 | 56  | 173 | 30  | 131   | 35   | 2    | 2    | 4   | 20 | 10   | 162 |
| EXPS199- 74-□ | 199 | 74  | 173 | 48  | 131   | 53   | 2    | 2    | 4   | 20 | 10   | 162 |
| EXPS199- 94-□ | 199 | 94  | 173 | 68  | 131   | 73   | 2    | 2    | 4   | 20 | 10   | 162 |
| EXPS199-119-□ | 199 | 119 | 173 | 93  | 131   | 98   | 2    | 2    | 4   | 20 | 10   | 162 |
| EXPS244- 64-□ | 244 | 64  | 218 | 38  | 176   | 43   | 2    | 2    | 5   | 23 | 11.5 | 207 |
| EXPS244- 89-□ | 244 | 89  | 218 | 63  | 176   | 68   | 2    | 2    | 5   | 23 | 11.5 | 207 |
| EXPS244-114-□ | 244 | 114 | 218 | 88  | 176   | 93   | 2    | 2    | 5   | 23 | 11.5 | 207 |
| EXPS300- 90-□ | 300 | 90  | 272 | 62  | 230   | 66   | 2    | 2    | 5   | 27 | 11   | 262 |
| EXPS300-140-□ | 300 | 140 | 272 | 112 | 230   | 116  | 2    | 2    | 5   | 27 | 11   | 262 |

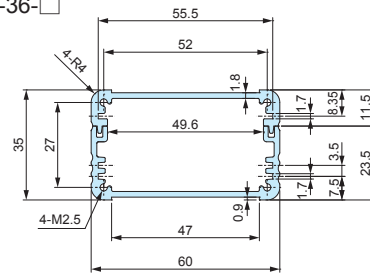
## Cross-section view of top & bottom covers

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

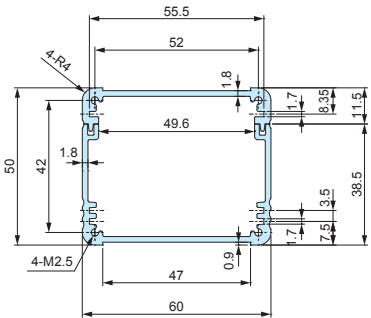
EXPS • EXWS 69-34-□  
EXPFS • EXWFS 66-34-□  
EXS 61-26-□



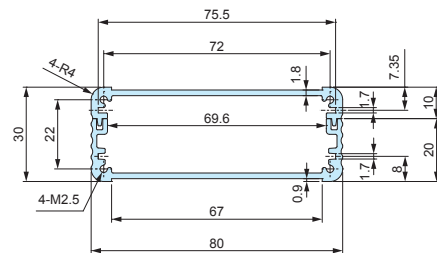
EXPS • EXWS 69-44-□  
EXPFS • EXWFS 66-44-□  
EXS 61-36-□



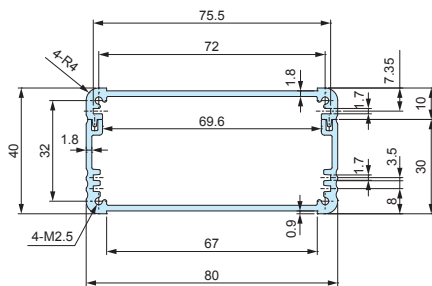
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EXPFS • EXWFS 66-59-□  
EXS 61-51-□



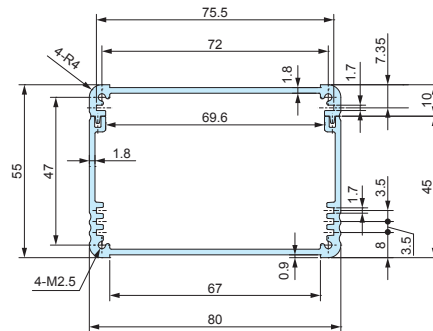
EXPS • EXWS 89-39-□  
EXPFS • EXWFS 86-39-□  
EXS 81-31-□



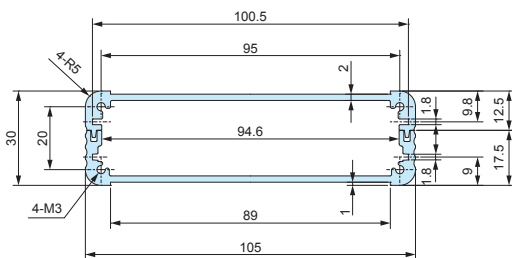
EXPS • EXWS 89-49-□  
EXPFS • EXWFS 86-49-□  
EXS 81-41-□



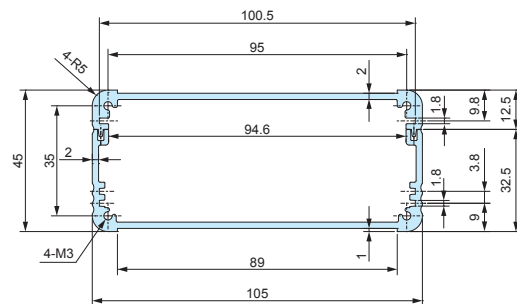
EXPS • EXWS 89-64-□  
EXPFS • EXWFS 86-64-□  
EXS 81-56-□



EXPS • EXWS 116-41-□  
EXPFS • EXWFS 113-42-□  
EXS 106-31-□



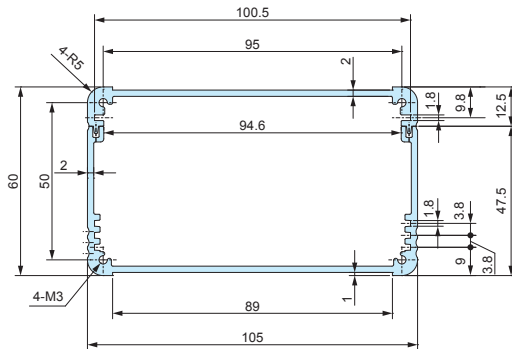
EXPS • EXWS 116-56-□  
EXPFS • EXWFS 113-57-□  
EXS 106-46-□



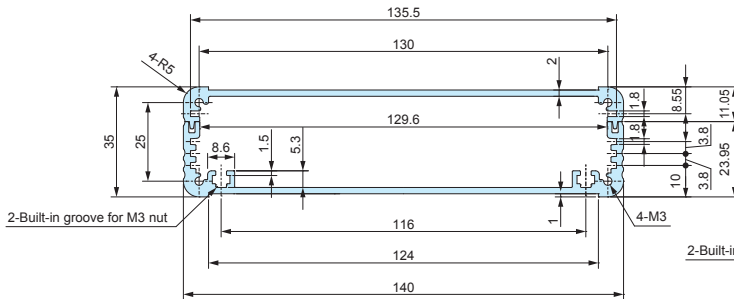
## Cross-section view of top & bottom covers

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

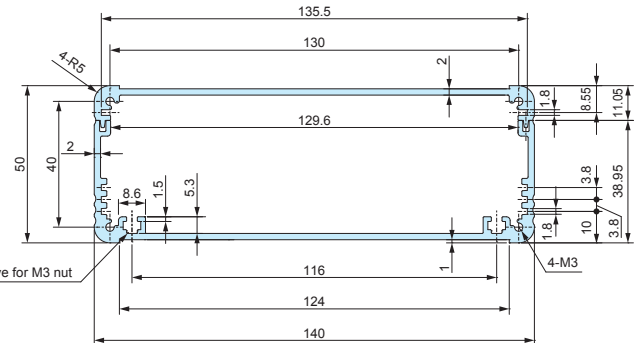
EXPS • EXWS 116-71-□  
EXPFS • EXWFS 113-72-□  
EXS 106-61-□



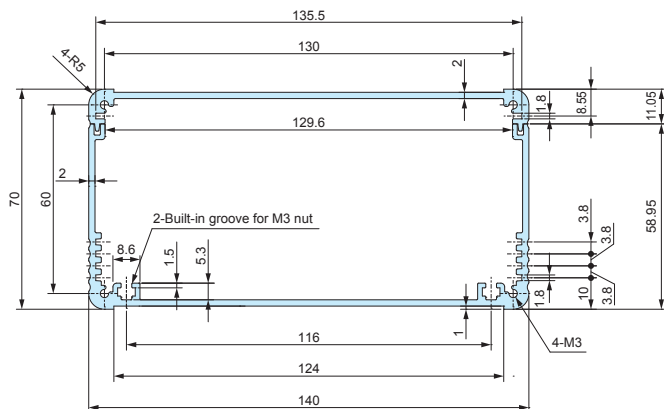
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EXPFS • EXWFS 148-47-□  
EXS 141-36-□



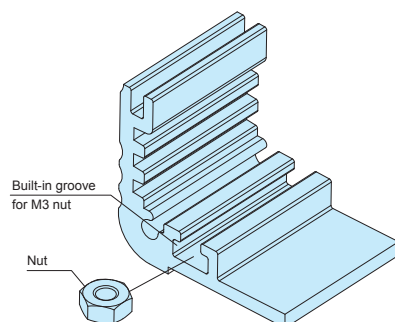
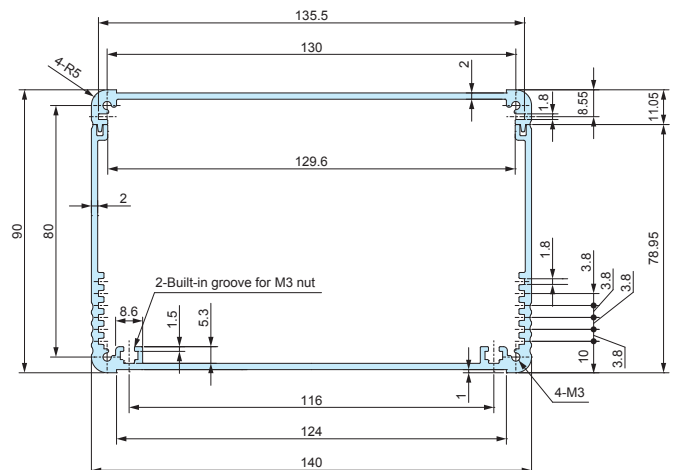
EXPS • EXWS 151-61-□  
EXPFS • EXWFS 148-62-□  
EXS 141-51-□



EXPS • EXWS 151-81-□  
EXPFS • EXWFS 148-82-□  
EXS 141-71-□



EXPS • EXWS 151-101-□  
EXPFS • EXWFS 148-102-□  
EXS 141-91-□



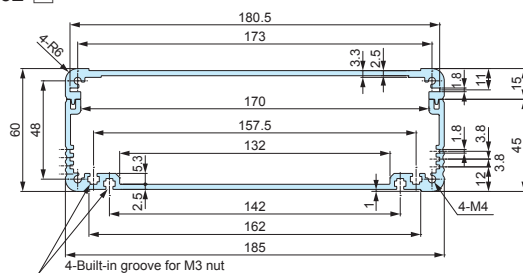
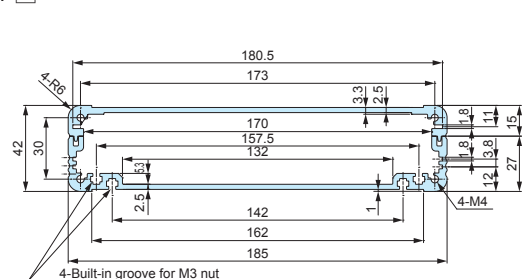
■ Optional M3 nut is available.  
Sliding nut can be used on EXPS • EXPFS • EXWS • EXWFS • EXS models with width 140mm or larger bottom covers and with width 230mm and 285mm top covers.  
See page EF-36 • MT-3N for MT-3N optional M3 nut.

### Cross-section view of top & bottom covers

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

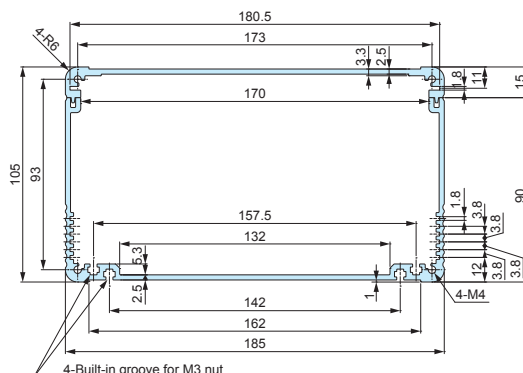
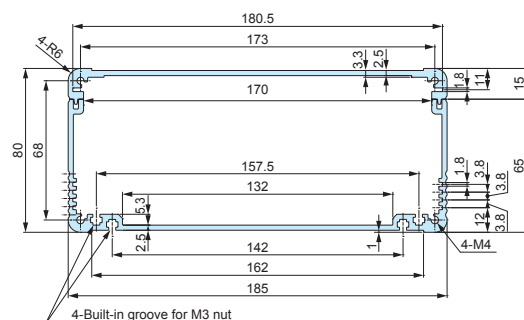
EXPS 199-56-☐  
EXPFS • EXWFS 195-57-☐  
EXS 187-44-☐

EXPS 199-74-☐  
EXPFS • EXWFS 195-75-☐  
EXS 187-62-☐

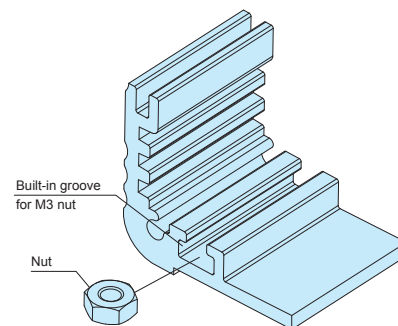
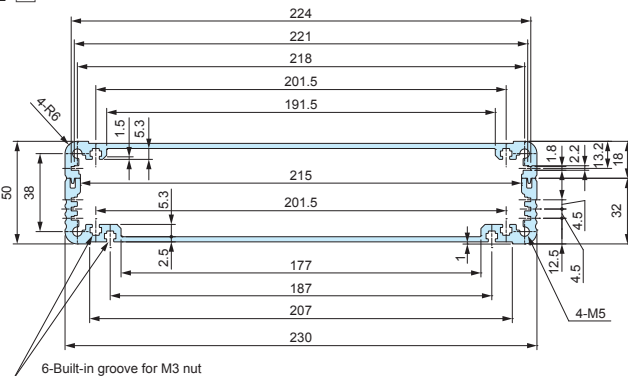


EXPS 199-94-☐  
EXPFS • EXWFS 195-95-☐  
EXS 187-82-☐

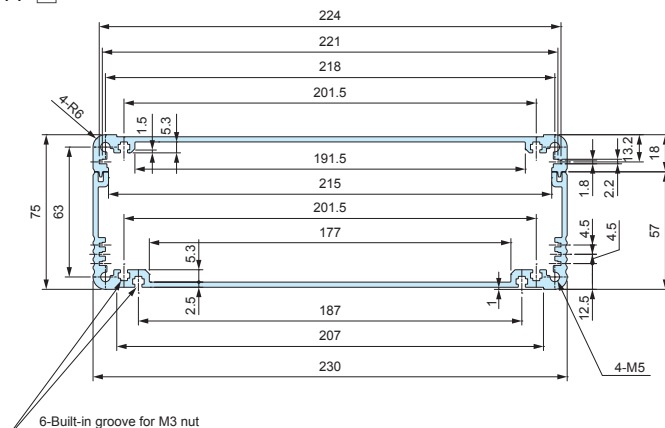
EXPS 199-119-☐  
EXPFS • EXWFS 195-120-☐  
EXS 187-107-☐



EXPS 244-64-☐  
EXPFS • EXWFS 240-65-☐  
EXS 232-52-☐



EXPS 244-89-☐  
EXPFS • EXWFS 240-90-☐  
EXS 232-77-☐



■ Optional M3 nut is available.

Sliding nut can be used on EXPS • EXPFS • EXWS • EXWFS • EXS models with width 140mm or larger bottom covers and with width 230mm and 285mm top covers.

See page EF-36 • MT-3N for MT-3N optional M3 nut.



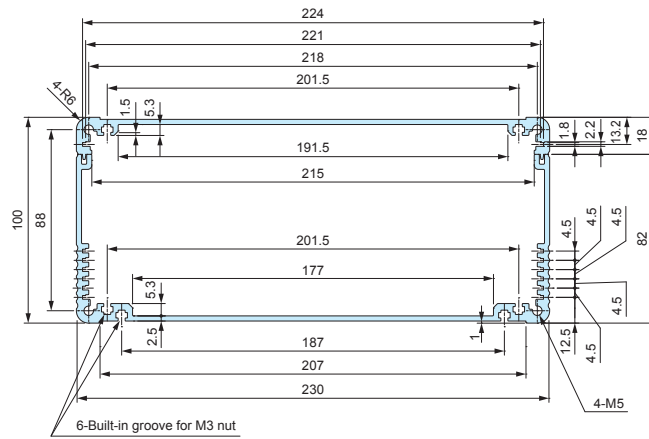
## Cross-section view of top & bottom covers

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

EXPS 244-114-□

EXPFS • EXWFS 240-115-□

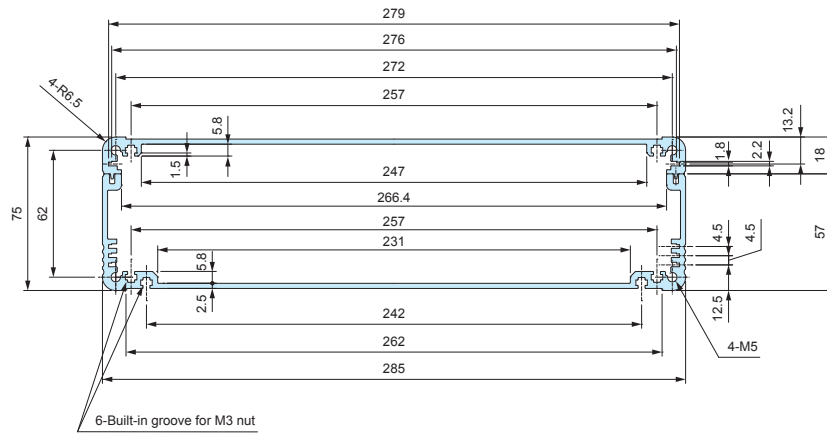
EXS 232-102-□



EXPS 300-90-□

EXWFS 298-93-□

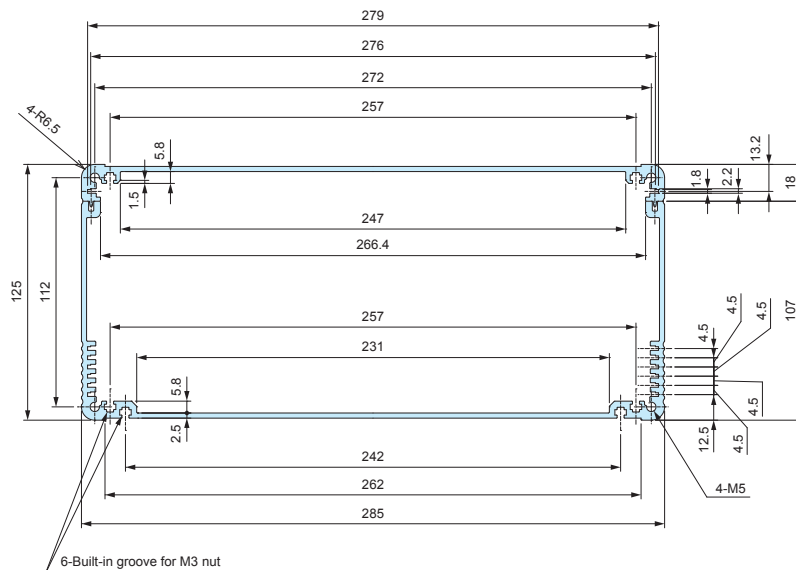
EXS 288-78-□



EXPS 300-140-□

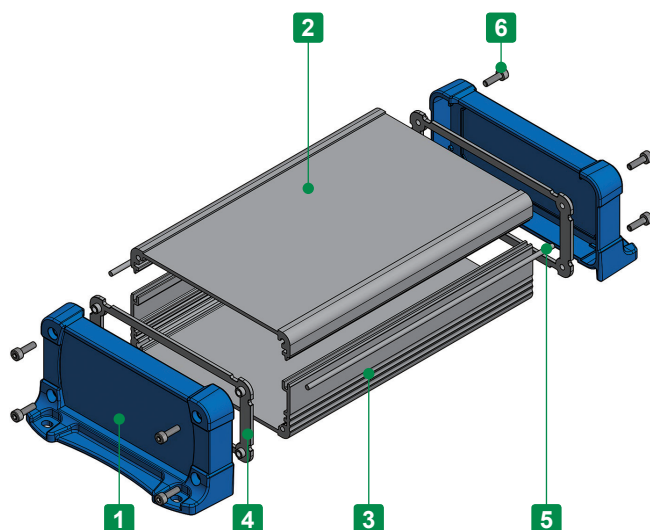
EXWFS 298-143-□

EXS 288-128-□





IP65 IP54



## Technical Data

Protection class : IP65 / IP54 \*Protection class varies by size.

■ Not suitable for environments with direct rainfall.

\*IP protection is not applicable if D = 400mm or more.

Operating temperature: -10°C ~ +60°C

- IP65 / IP54 is made possible by the sealing of between Top/ Bottom covers and flanged panels with gaskets.
- Selectable in 22 different Width/Height types, with adjustable length (depth) in 1mm intervals from 40 to 500mm.
- 6 different color combinations possible by combining a black or silver Top/Bottom covers with 3 different flanged panel colors.

## Included screws

EXWFS66-□, 86-□ models : M2.5-8 x 8 pcs

EXWFS113-□, 148-□ models : M3-10 x 8 pcs

EXWFS195-□ models : M4-12 x 8 pcs

EXWFS240-□, 298-□ models : M5-12 x 8 pcs

※Hexagonal wrench included.

## Components

| No. | Part name         | Pcs | Material                     | Color / Finish                               |
|-----|-------------------|-----|------------------------------|----------------------------------------------|
| 1   | Flanged panel     | 2   | PC+ABS Flame-resistant       | Black • Gray / Unpainted<br>Navy / Painted   |
| 2   | Top cover         | 1   | Extruded aluminium A6063S-T5 | Silver • Black / Anodized with clear coating |
| 3   | Bottom cover      | 1   | Extruded aluminium A6063S-T5 | Silver • Black / Anodized with clear coating |
| 4   | Panel gasket      | 2   | Silicone • EPDM sponge       | Black                                        |
| 5   | Cover gasket      | 2   | Silicone sponge              | White gray                                   |
| 6   | Screw (Hexagonal) | 8   | Stainless steel              | Unfinished                                   |
| —   | O-ring            | 8   | NBR                          | Black                                        |

■ See page EX-Cover-1 ~ EX-Cover-4 for Top / Bottom cover dimensions.

■ Panel gasket material : Silicone : EXWFS66-□ ~ 148-□ models • EPDM sponge : EXWFS195-□ ~ 298-□ models.

■ O-ring is only available for EXWFS195-□, 240-□, and 298-□ models.

## Lead Time

Custom Size Only  
Custom Size + Hole Milling4 business days (1 ~ 3 pcs)  
9 business days (1 ~ 3 pcs)

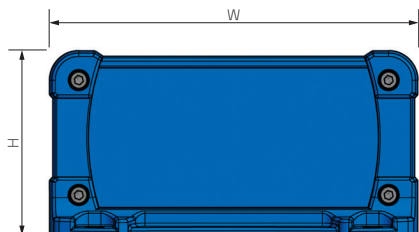
## Order Inquiry

For more information, contact us here at [sales@takachi-el.co.jp](mailto:sales@takachi-el.co.jp)

## 1 Dimensions

To select W-H dimensions from the table below, and D length in 1mm intervals.

Width-Height dimensions

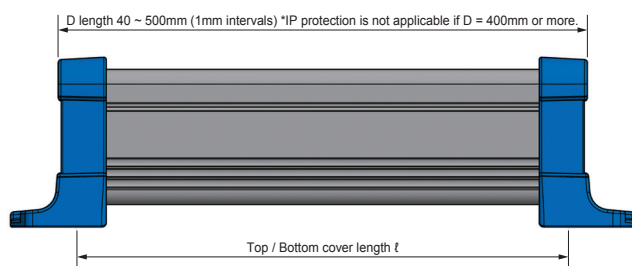


| W-H No. | IP Code | W   | H    |
|---------|---------|-----|------|
| 66- 34  | IP65    | 66  | 34   |
| 66- 44  | IP65    | 66  | 44   |
| 66- 59  | IP65    | 66  | 59   |
| 86- 39  | IP65    | 86  | 39   |
| 86- 49  | IP65    | 86  | 49   |
| 86- 64  | IP65    | 86  | 64   |
| 113- 42 | IP65    | 113 | 41.5 |
| 113- 57 | IP65    | 113 | 56.5 |
| 113- 72 | IP65    | 113 | 71.5 |
| 148- 47 | IP65    | 148 | 47   |
| 148- 62 | IP65    | 148 | 62   |

| W-H No.            | IP Code | W   | H   |
|--------------------|---------|-----|-----|
| 148- 82            | IP65    | 148 | 82  |
| 148-102            | IP65    | 148 | 102 |
| 195- 57            | IP54    | 195 | 57  |
| 195- 75            | IP54    | 195 | 75  |
| 195- 95            | IP54    | 195 | 95  |
| 195-120            | IP54    | 195 | 120 |
| 240- 65            | IP54    | 240 | 65  |
| 240- 90            | IP54    | 240 | 90  |
| 240-115            | IP54    | 240 | 115 |
| <b>NEW</b> 298- 93 | IP54    | 298 | 93  |
| <b>NEW</b> 298-143 | IP54    | 298 | 143 |

■ Protection class varies by size.

D length



| W-H No. | ℓ    |
|---------|------|
| 66-□    | D-11 |
| 86-□    | D-12 |
| 113-□   | D-13 |
| 148-□   | D-13 |
| 195-□   | D-18 |
| 240-□   | D-18 |
| 298-□   | D-19 |

■ D length can be requested in 0.1mm intervals, but with higher tolerances ( $\pm 0.3\text{mm}$ ).  
 \*D length may vary due to expansion and contraction of gasket from screw tightening

■ See page EX-Cover-1 ~ EX-Cover-4 for Top/Bottom cover dimensions.

## 2 Color

To select color code from the table below.

Panel color : Black • Gray / Unpainted - Navy / Painted

| Code  | S B Silver / Black | S G Silver / Gray | S N Silver / Navy |
|-------|--------------------|-------------------|-------------------|
| Color |                    |                   |                   |
| Code  | B B Black / Black  | B G Black / Gray  | B N Black / Navy  |
| Color |                    |                   |                   |

## Product Number

To determine a product number, fill W-H, D length and select Color code in the following blank boxes.

Product no. EXWFS

-

-

1 W-H

1 D length

2 Color code

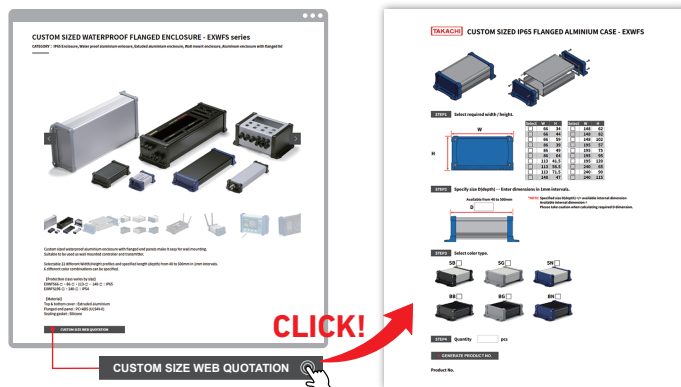
Numbering example: W-H:113-57 x D:345 and SN color code → **EXWFS113-57-345SN**

## CUSTOM SIZE WEB QUOTATION

Send your inquiry via our online form now!

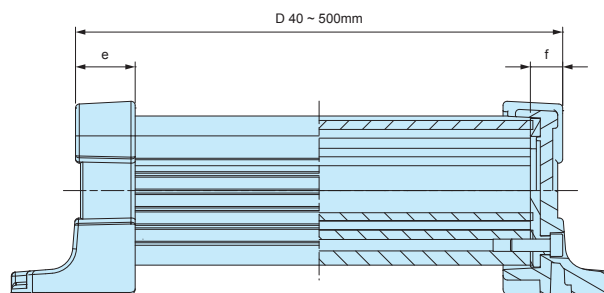
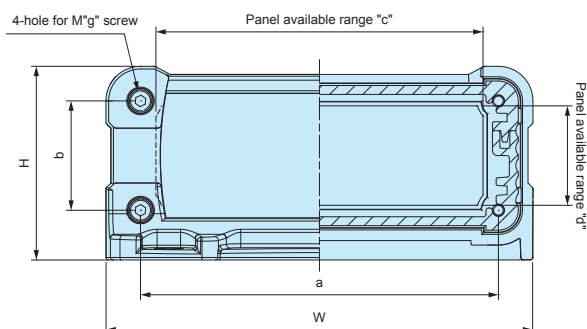
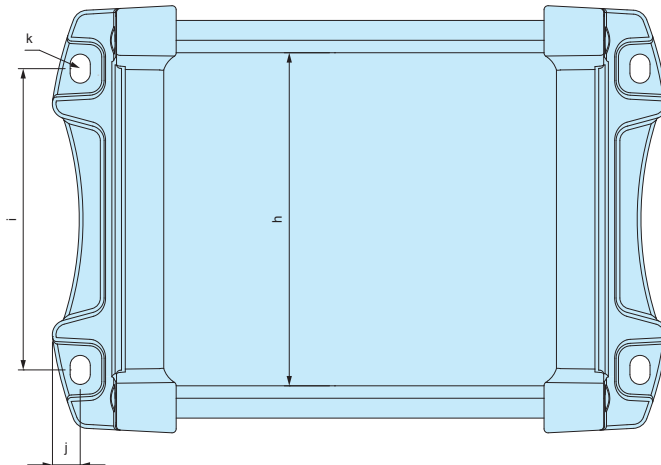
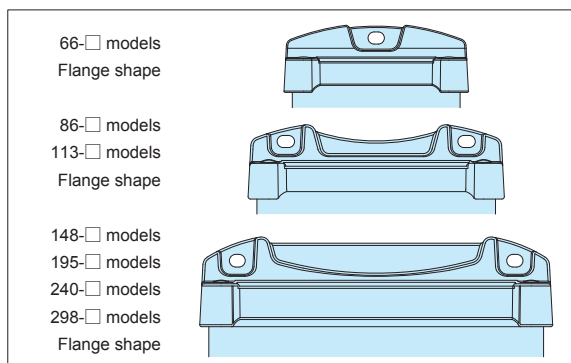
Visit the EXWFS product page on our website, click on the "CUSTOM SIZE WEB QUOTATION" button, and fill in the required details.

The product number will be generated, and once your information have been filled in, simply click on SUBMIT and await for our sales team's contact!

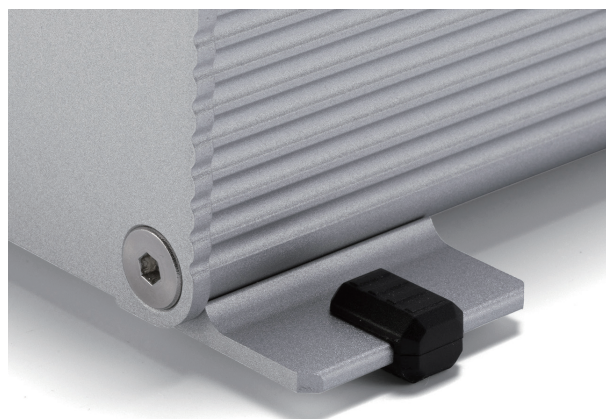
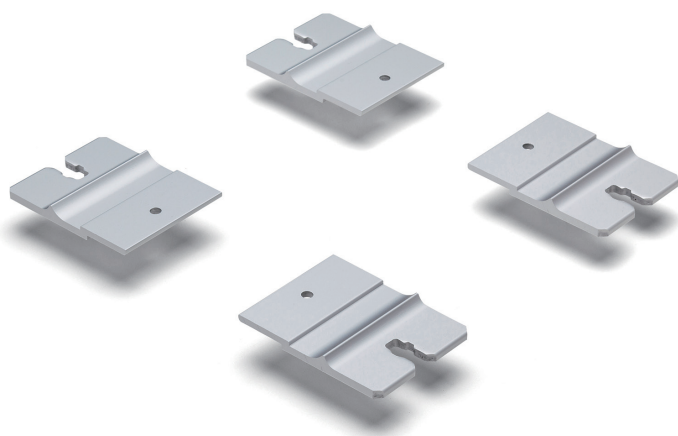


## EXWFS dimensions

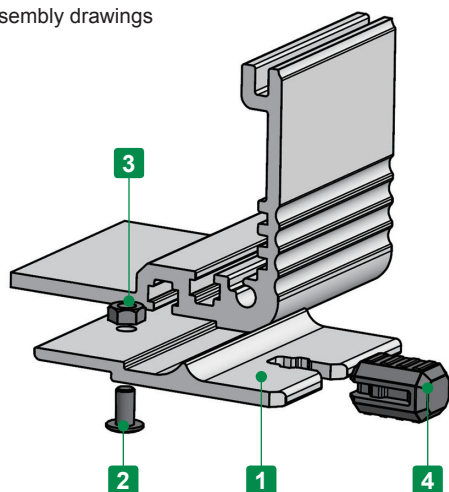
■ DXF/DWG/PDF drawings available on our website.



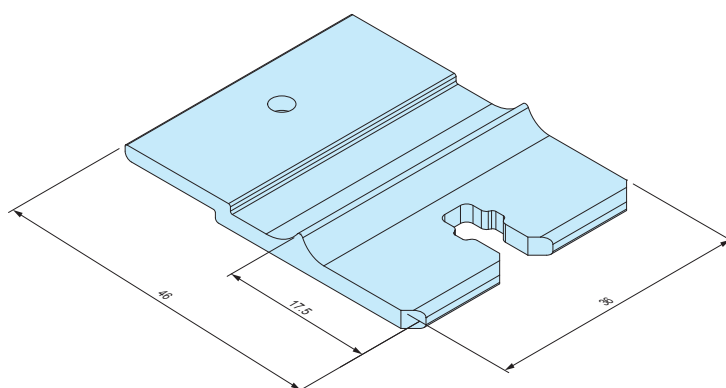
| Product no.    | W   | H    | a   | b   | c     | d    | e  | f   | g   | h   | i     | j   | k       |
|----------------|-----|------|-----|-----|-------|------|----|-----|-----|-----|-------|-----|---------|
| EXWFS 66- 34-□ | 66  | 34   | 52  | 17  | 46    | 16   | 12 | 5.5 | 2.5 | 47  | —     | 4.5 | 4.5×6   |
| EXWFS 66- 44-□ | 66  | 44   | 52  | 27  | 46    | 24   | 12 | 5.5 | 2.5 | 47  | —     | 4.5 | 4.5×6   |
| EXWFS 66- 59-□ | 66  | 59   | 52  | 42  | 46    | 41   | 12 | 5.5 | 2.5 | 47  | —     | 4.5 | 4.5×6   |
| EXWFS 86- 39-□ | 86  | 39   | 72  | 22  | 65.8  | 20   | 12 | 6   | 2.5 | 67  | 60.6  | 5.6 | 4.2×6   |
| EXWFS 86- 49-□ | 86  | 49   | 72  | 32  | 65.8  | 30   | 12 | 6   | 2.5 | 67  | 60.6  | 5.6 | 4.2×6   |
| EXWFS 86- 64-□ | 86  | 64   | 72  | 47  | 65.8  | 45   | 12 | 6   | 2.5 | 67  | 60.6  | 5.6 | 4.2×6   |
| EXWFS113- 42-□ | 113 | 41.5 | 95  | 20  | 89.6  | 18   | 16 | 6.5 | 3   | 89  | 85.2  | 7.4 | 4.6×6   |
| EXWFS113- 57-□ | 113 | 56.5 | 95  | 35  | 89.6  | 33   | 16 | 6.5 | 3   | 89  | 85.2  | 7.4 | 4.6×6   |
| EXWFS113- 72-□ | 113 | 71.5 | 95  | 50  | 89.6  | 48   | 16 | 6.5 | 3   | 89  | 85.2  | 7.4 | 4.6×6   |
| EXWFS148- 47-□ | 148 | 47   | 130 | 25  | 103.4 | 18.2 | 18 | 6.5 | 3   | 124 | 116.2 | 9.9 | 5.5×7   |
| EXWFS148- 62-□ | 148 | 62   | 130 | 40  | 103.4 | 33.2 | 18 | 6.5 | 3   | 124 | 116.2 | 9.9 | 5.5×7   |
| EXWFS148- 82-□ | 148 | 82   | 130 | 60  | 103.4 | 53.2 | 18 | 6.5 | 3   | 124 | 116.2 | 9.9 | 5.5×7   |
| EXWFS148-102-□ | 148 | 102  | 130 | 80  | 103.4 | 73.2 | 18 | 6.5 | 3   | 124 | 116.2 | 9.9 | 5.5×7   |
| EXWFS195- 57-□ | 195 | 57   | 173 | 30  | 124.5 | 27.5 | 20 | 9   | 4   | 162 | 160   | 12  | 6.5×8.5 |
| EXWFS195- 75-□ | 195 | 75   | 173 | 48  | 124.5 | 45.5 | 20 | 9   | 4   | 162 | 160   | 12  | 6.5×8.5 |
| EXWFS195- 95-□ | 195 | 95   | 173 | 68  | 124.5 | 65.5 | 20 | 9   | 4   | 162 | 160   | 12  | 6.5×8.5 |
| EXWFS195-120-□ | 195 | 120  | 173 | 93  | 124.5 | 90.5 | 20 | 9   | 4   | 162 | 160   | 12  | 6.5×8.5 |
| EXWFS240- 65-□ | 240 | 65   | 218 | 38  | 166   | 33.5 | 23 | 9   | 5   | 207 | 205   | 12  | 6.5×8.5 |
| EXWFS240- 90-□ | 240 | 90   | 218 | 63  | 166   | 58.5 | 23 | 9   | 5   | 207 | 205   | 12  | 6.5×8.5 |
| EXWFS240-115-□ | 240 | 115  | 218 | 88  | 166   | 83.5 | 23 | 9   | 5   | 207 | 205   | 12  | 6.5×8.5 |
| EXWFS298- 93-□ | 298 | 93   | 272 | 62  | 218   | 56.5 | 27 | 9.5 | 5   | 262 | 263   | 12  | 6.5×8.5 |
| EXWFS298-143-□ | 298 | 143  | 272 | 112 | 218   | 106  | 27 | 9.5 | 5   | 262 | 263   | 12  | 6.5×8.5 |

**EF-36** series**WALL MOUNTING BRACKET for EXS • EXHS**

Assembly drawings



Utilize rubber feet inserts when placing on tables or flat surfaces.

**EF-36 dimensions**

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

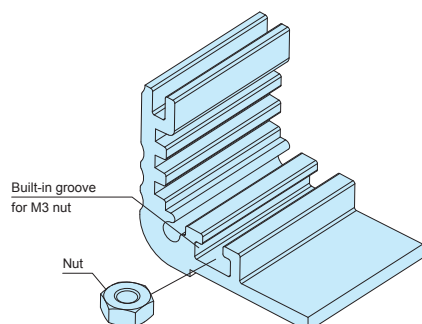
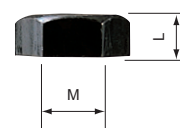
**Components**

| No. | Part name              | Pcs | Material                     | Color / Finish                               |
|-----|------------------------|-----|------------------------------|----------------------------------------------|
| 1   | Bracket                | 4   | Extruded aluminium A6063S-T5 | Metallic silver / Painted : Black / Anodized |
| 2   | Screw (Slim head M3-6) | 4   | Steel                        | Black trivalent chromate                     |
| 3   | Nut (For M3 screw)     | 4   | Steel                        | Black trivalent chromate                     |
| 4   | Insert rubber feet     | 4   | Silicone                     | Black                                        |

**Product no.**

| Product no.                 |                    |
|-----------------------------|--------------------|
| ● Metallic silver / Painted | ● Black / Anodized |
| EF-36S                      | EF-36B             |

■ Applicable to be used on EXS series with 185mm or larger bottom covers, and EXHS series with 187mm or larger bottom covers.

**MT-3N****SLIDING NUT for EXPS • EXPFS • EXWS • EXWFS • EXS • EXHS****MT-3N dimensions****Product no. / Dimensions**

| Product no. | M | L   | Material | Finish                   | Pack of |
|-------------|---|-----|----------|--------------------------|---------|
| MT-3N       | 3 | 2.4 | Steel    | Black trivalent chromate | 50      |

■ Sliding nut can be used on all EXPS • EXPFS • EXWS • EXWFS • EXS models with width 140mm or larger bottom covers and with width 230mm and 285mm top covers, as well as on all EXHS models with width 140mm or larger bottom covers and on all heat-sink top cover sizes.



## TLW series

## TILT LEG



APPLICATION EXAMPLE

- Double shot injection molded feet with soft and well-designed rounded shape.
- Non-slip design with Elastomer (TPE) pad.
- Available in 3 different color patterns (2 color patterns for TLW-70 models).
- TLW-70E models are exclusively for use with width 185mm or larger bottom covers of EXP • EXPE • EXW • EX • EXH • EXHE aluminium enclosures.

## Technical Data

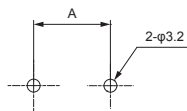
Max load : 7kg

## Components

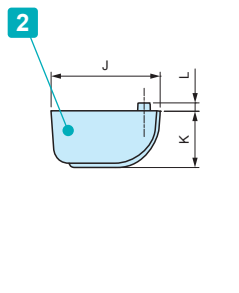
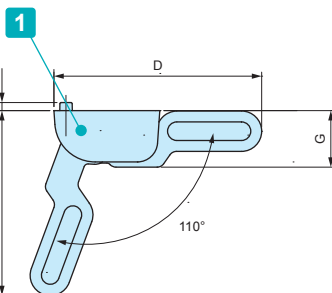
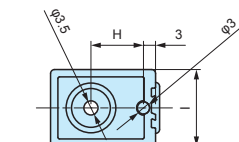
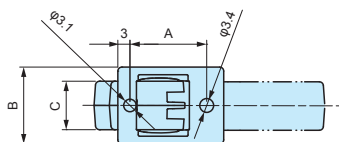
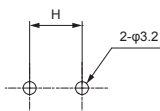
| No. | Part name  | Pcs | Material               | Color / Finish                                  |
|-----|------------|-----|------------------------|-------------------------------------------------|
| 1   | Front foot | 2   | PC + ABS UL94V-0 • TPE | Black & Black • Navy & Gray • Light gray & Gray |
| 2   | Rear foot  | 2   | PC + ABS UL94V-0 • TPE | Black & Black • Navy & Gray • Light gray & Gray |
| -   | Screw      | 4   | Steel M3-8 pan head    | Black trivalent chromate                        |
| -   | Nut        | 4   | Steel M3               | Black trivalent chromate                        |

## TLW dimensions

Mounting hole (Front)



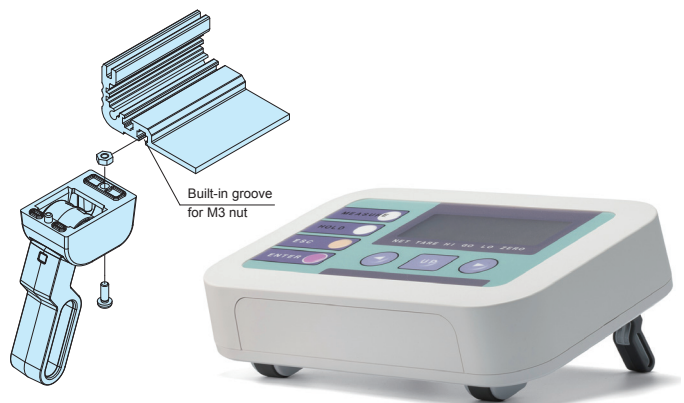
Mounting hole (Rear)



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

- TLW-70E□□ models are for installation (with M3 nut) into the built-in grooves on bottom-covers of EXP • EXPE 20-6, EXH • EXHE • EX 19-4 or larger models.

- Hole milling is required to install TLW-46□□ and TLW-70□□ models.
- Max installation panel thickness : t = 3.5mm



## Product no. / Details

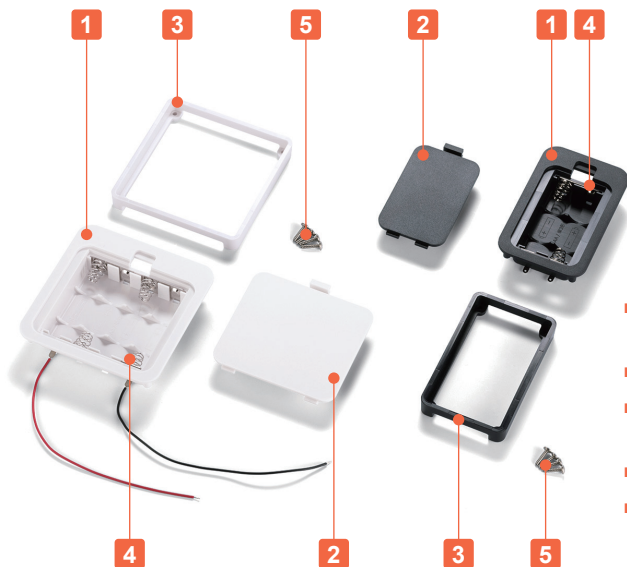
| Product no. | A  | B  | C  | D    | E    | F | G    | H  | I  | J  | K    | L | Color (plastic) | Color (TPE) | Weight (g) |
|-------------|----|----|----|------|------|---|------|----|----|----|------|---|-----------------|-------------|------------|
| TLW-46BB    | 19 | 19 | 12 | 51.2 | 45.9 | 2 | 14   | 13 | 19 | 27 | 14   | 2 | Black           | Black       | 23         |
| TLW-46NG    | 19 | 19 | 12 | 51.2 | 45.9 | 2 | 14   | 13 | 19 | 27 | 14   | 2 | Navy            | Gray        | 23         |
| TLW-46LG    | 19 | 19 | 12 | 51.2 | 45.9 | 2 | 14   | 13 | 19 | 27 | 14   | 2 | Light gray      | Gray        | 23         |
| TLW-70EBB   | -  | 25 | 16 | 75.4 | 69   | 3 | 21.5 | -  | 25 | 39 | 21.5 | 3 | Black           | Black       | 59         |
| TLW-70ENG   | -  | 25 | 16 | 75.4 | 69   | 3 | 21.5 | -  | 25 | 39 | 21.5 | 3 | Navy            | Gray        | 59         |
| TLW-70ELG   | -  | 25 | 16 | 75.4 | 69   | 3 | 21.5 | -  | 25 | 39 | 21.5 | 3 | Light gray      | Gray        | 59         |
| TLW-70BB    | 30 | 25 | 16 | 75.4 | 69   | 2 | 21.5 | 20 | 25 | 39 | 21.5 | 2 | Black           | Black       | 59         |
| TLW-70LG    | 30 | 25 | 16 | 75.4 | 69   | 2 | 21.5 | 20 | 25 | 39 | 21.5 | 2 | Light gray      | Gray        | 59         |



## Technical Data

Operating temperature: -10°C ~ +60°C

## Mount Example



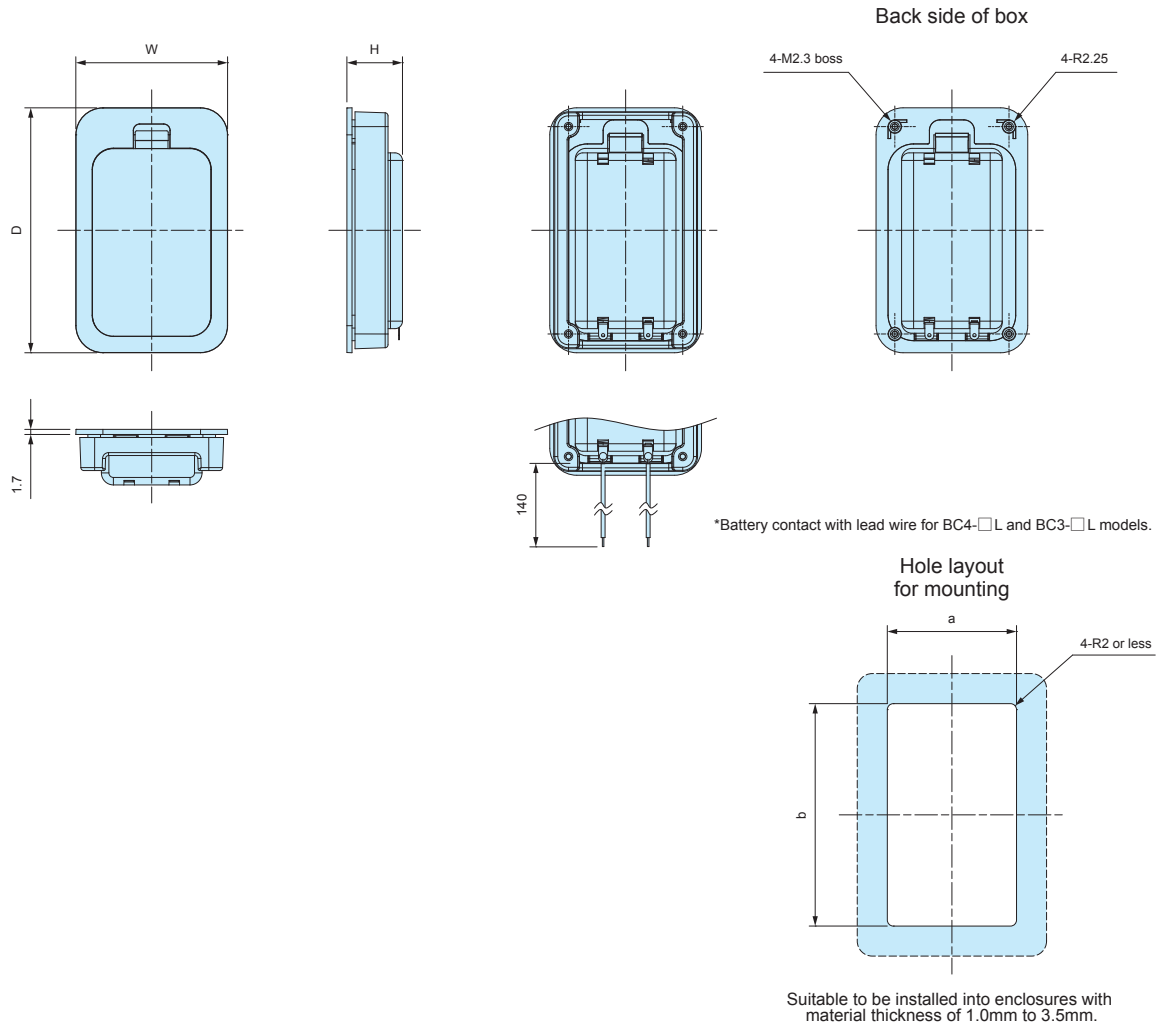
- Suitable to be installed into enclosures with material thickness of 1.0mm to 3.5mm.
- Cover can be opened/closed without any tool for easy battery replacement.
- 5 different battery layouts are available as AA x 2, AA x 3, AA x 4, AAA x 2 and AAA x 4. Each layout comes in 2 models: with lead-wire, 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<br>Lead wire (BC-L models) | 1 set | Battery contact : Brass & steel wire<br>Lead wire : PVC + Copper wire (UL1007 AWG26) | Nickel plated<br>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

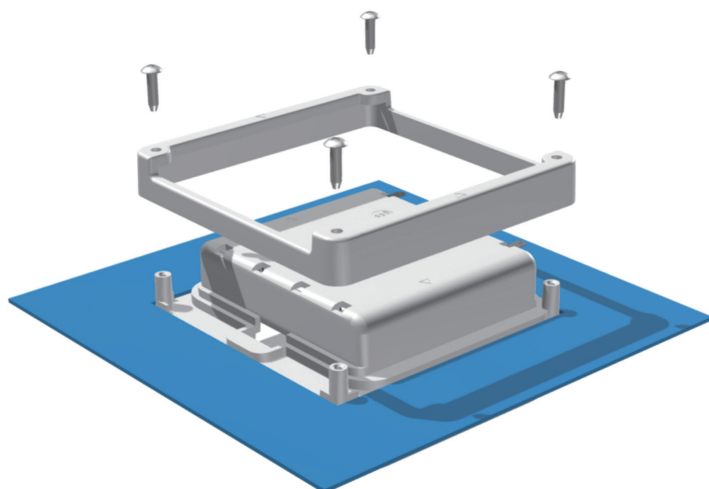
### Product no. / Details

| 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         |

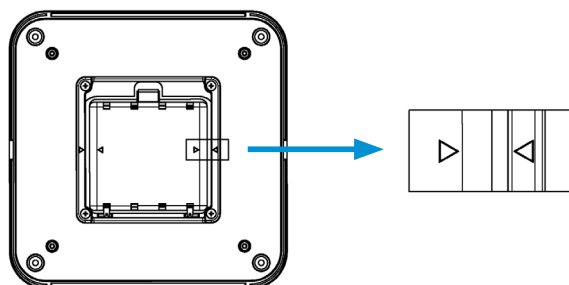
\*Alkaline or manganese batteries

# 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.



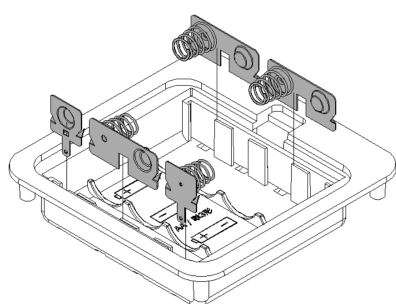
- For BC3-4□ models, ▷ markings are shown on the frame. Install by matching the markings.



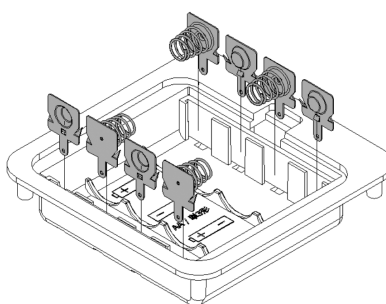
## Parallel circuit conversion on BC series battery box

- 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.

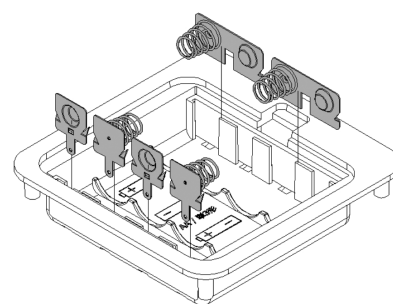
## Conversion Example



Series Circuit (Standard)

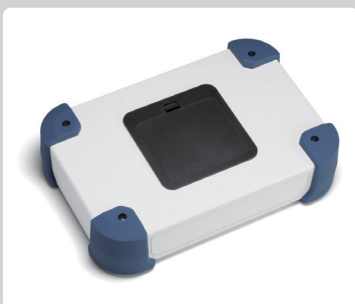


Parallel Circuit (4 batteries)



Parallel Circuit (2 batteries x 2)

## Customization Available



For more information, contact us here:

Online form: [https://www.takachi-enclosure.com/contact/form\\_contact](https://www.takachi-enclosure.com/contact/form_contact)  
E-mail : [sales@takachi-el.co.jp](mailto:sales@takachi-el.co.jp)