

MULTI-FUNCTION EXTRUDED ALUMINIUM CASE

EXPT • EXP • EXPE • EXW • EXPF • EXEF • EXWF series

The following series, by utilizing similar extrusion frames, are available in 7 different types, such as IP65-rated, EMC-shielded versions, and more. 73 different sizes are available.

CORNER GUARD

EXP series Page 225 ~ 226



FLANGED

EXPF series Page 233 ~ 234



IP65 CORNER GUARD

EXW series Page 169 ~ 170



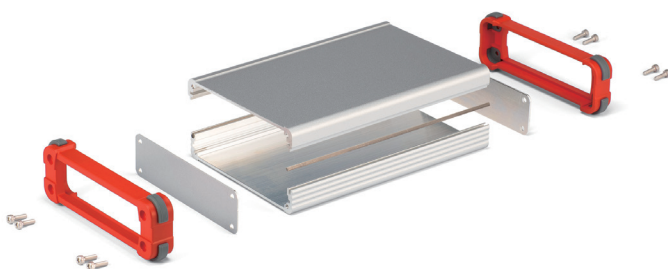
IP65 FLANGED

EXWF series Page 167 ~ 168



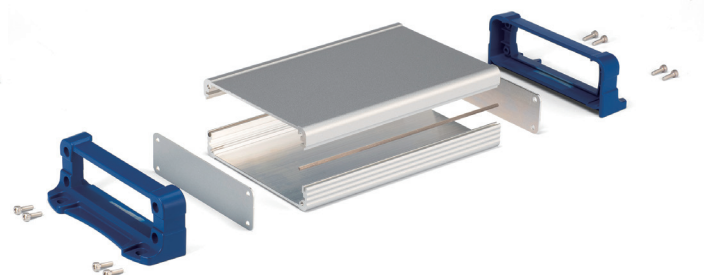
EMC CORNER GUARD

EXPE series Page 227 ~ 228



EMC FLANGED

EXEF series Page 235 ~ 236



WITH TILT LEG

EXPT series Page 229 ~ 230



Custom length available in 0.1mm intervals



16 COLOR COMBINATIONS

EXP series is available in 2 different body frame and 8 different exterior frame colors for a total of 16 different color types.



APPLICATION EXAMPLE

Measuring Instrument



Accessories (Optional parts)
Tilt leg TLW series
See page 239

Network / Communication Box



Controller



Ultrasonic Thickness Gauge



Radio Communication Tester

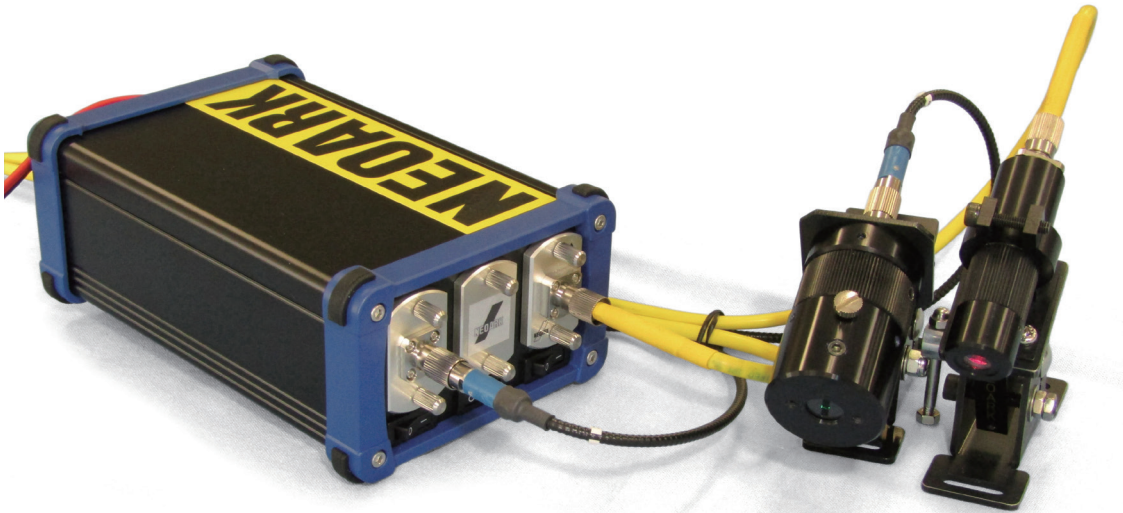
Tank Gauging System Interface Unit



Battery Monitoring System



Fiber Laser Projector



Desktop Load Cell Amplifier



ORAC Controller



Peristaltic DC Pump



Multi-Show Controller





- Corner guards are designed to be both aesthetically pleasing and impact resistant.
- Available in 73 different sizes and 16 different color combinations.
- Custom length is available.

Components

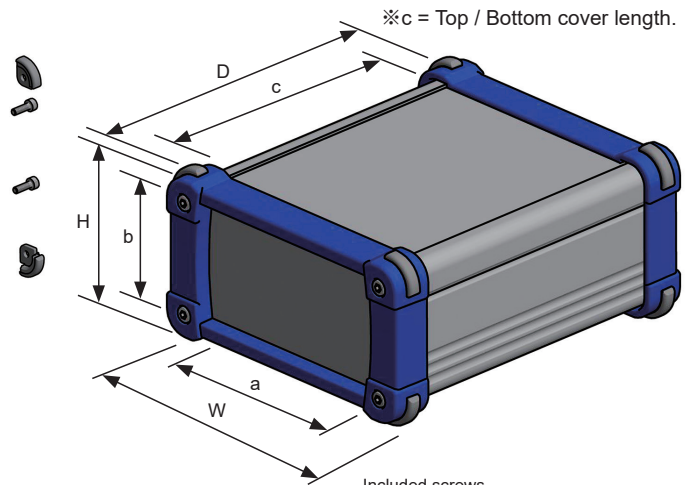
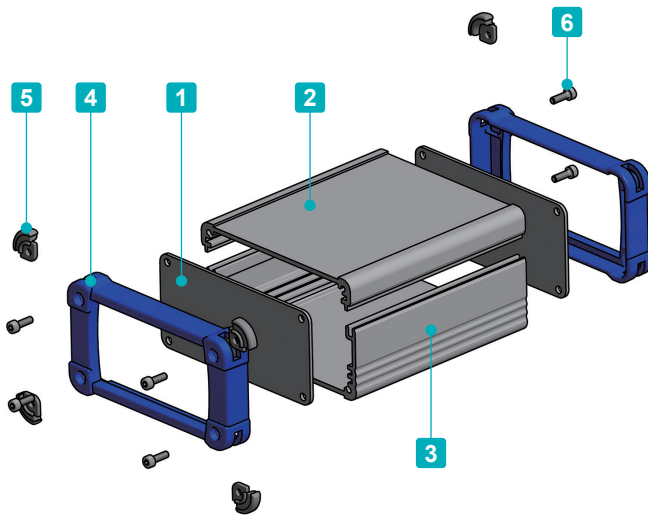
No.	Part name	Pcs	Material	Color / Finish
1	Panel	2	Aluminium A1100P	Silver / Anodized • Black / Painted
2	Top cover	1	Extruded aluminium A6063S-T5	Silver • Black / Anodized with clear coating
3	Bottom cover	1	Extruded aluminium A6063S-T5	Silver • Black / Anodized with clear coating
4	Exterior frame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

Color Type

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				

EXP dimensions

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



Included screws
 EXP7-□, 9-□ models : M2.5-8 x 8 pcs
 EXP12-□, 15-□ models : M3-10 x 8 pcs
 EXP20-□ models : M4-12 x 8 pcs
 EXP24-□, 30-□ models : M5-12 x 8 pcs
 ※Hexagonal wrench included

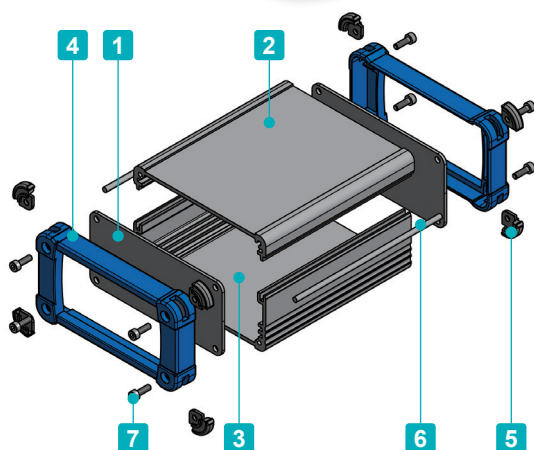
Product no. / Details

■ Please suffix color code at the end of the product number.

Product no.	External dimensions			Internal dimensions		
	W	H	D	a	b	c
EXP 7- 3- 6□□	69	34	60	46	19.6	46
EXP 7- 3- 9□□	69	34	87	46	19.6	73
EXP 7- 3-11□□	69	34	110	46	19.6	96
EXP 7- 4- 6□□	69	44	60	46	29.6	46
EXP 7- 4- 9□□	69	44	87	46	29.6	73
EXP 7- 4-11□□	69	44	110	46	29.6	96
EXP 7- 6- 6□□	69	59	60	46	44.6	46
EXP 7- 6- 9□□	69	59	87	46	44.6	73
EXP 7- 6-11□□	69	59	110	46	44.6	96
EXP 9- 4- 7□□	89	39	70	66	24.6	56
EXP 9- 4-10□□	89	39	100	66	24.6	86
EXP 9- 4-13□□	89	39	130	66	24.6	116
EXP 9- 5- 7□□	89	49	70	66	34.6	56
EXP 9- 5-10□□	89	49	100	66	34.6	86
EXP 9- 5-13□□	89	49	130	66	34.6	116
EXP 9- 6- 7□□	89	64	70	66	49.6	56
EXP 9- 6-10□□	89	64	100	66	49.6	86
EXP 9- 6-13□□	89	64	130	66	49.6	116
EXP12- 4- 9□□	116	41	90	88	24	74
EXP12- 4-13□□	116	41	130	88	24	114
EXP12- 4-18□□	116	41	176	88	24	160
EXP12- 6- 9□□	116	56	90	88	39	74
EXP12- 6-13□□	116	56	130	88	39	114
EXP12- 6-18□□	116	56	176	88	39	160
EXP12- 7- 9□□	116	71	90	88	54	74
EXP12- 7-13□□	116	71	130	88	54	114
EXP12- 7-18□□	116	71	176	88	54	160
EXP15- 5-11□□	151	46	110	106.8	29	93
EXP15- 5-15□□	151	46	150	106.8	29	133
EXP15- 5-20□□	151	46	200	106.8	29	183
EXP15- 6-11□□	151	61	110	106.8	44	93
EXP15- 6-15□□	151	61	150	106.8	44	133
EXP15- 6-20□□	151	61	200	106.8	44	183
EXP15- 8-11□□	151	81	110	106.8	64	93
EXP15- 8-15□□	151	81	150	106.8	64	133
EXP15- 8-20□□	151	81	200	106.8	64	183
EXP15-10-11□□	151	101	110	106.8	84	93
EXP15-10-15□□	151	101	150	106.8	84	133
EXP15-10-20□□	151	101	200	106.8	84	183

■ Custom length is available

Product no.	External dimensions			Internal dimensions		
	W	H	D	a	b	c
EXP20- 6-14□□	199	56	140	131	35	120
EXP20- 6-19□□	199	56	192	131	35	172
EXP20- 6-25□□	199	56	245	131	35	225
EXP20- 6-30□□	199	56	300	131	35	280
EXP20- 7-14□□	199	74	140	131	53	120
EXP20- 7-19□□	199	74	192	131	53	172
EXP20- 7-25□□	199	74	245	131	53	225
EXP20- 7-30□□	199	74	300	131	53	280
EXP20- 9-14□□	199	94	140	131	73	120
EXP20- 9-19□□	199	94	192	131	73	172
EXP20- 9-25□□	199	94	245	131	73	225
EXP20- 9-30□□	199	94	300	131	73	280
EXP20-12-14□□	199	119	140	131	98	120
EXP20-12-19□□	199	119	192	131	98	172
EXP20-12-25□□	199	119	245	131	98	225
EXP20-12-30□□	199	119	300	131	98	280
EXP24- 6-17□□	244	64	170	176	43	147
EXP24- 6-23□□	244	64	230	176	43	207
EXP24- 6-29□□	244	64	290	176	43	267
EXP24- 6-35□□	244	64	350	176	43	327
EXP24- 9-17□□	244	89	170	176	68	147
EXP24- 9-23□□	244	89	230	176	68	207
EXP24- 9-29□□	244	89	290	176	68	267
EXP24- 9-35□□	244	89	350	176	68	327
EXP24-11-17□□	244	114	170	176	93	147
EXP24-11-23□□	244	114	230	176	93	207
EXP24-11-29□□	244	114	290	176	93	267
EXP24-11-35□□	244	114	350	176	93	327
EXP30- 9-25□□	300	90	250	230	68	228
EXP30- 9-32□□	300	90	320	230	68	298
EXP30- 9-40□□	300	90	400	230	68	378
EXP30-14-25□□	300	140	250	230	118	228
EXP30-14-32□□	300	140	320	230	118	298
EXP30-14-40□□	300	140	400	230	118	378

EMC
Shielding

- Corner guards are designed to be both aesthetically pleasing and impact resistant.
- Available in 73 different sizes and 8 different color combinations.
- EMC shielding is achieved by having the unfinished inner sides of the top/bottom covers and panels, as well as the fabric-over-foam gasket in contact with one another.

Included screws

EXPE7-□, 9-□ models : M2.5-8 x 8 pcs

EXPE12-□, 15-□ models : M3-10 x 8 pcs

EXPE20-□ models : M4-12 x 8 pcs

EXPE24-□, 30-□ models : M5-12 x 8 pcs

※ Hexagonal wrench included

Components

No.	Part name	Pcs	Material	Color / Finish
1	Panel	2	Aluminium A1100P	Metallic silver / Painted (Conductive inside)
2	Top cover	1	Extruded aluminium A6063S-T5	Metallic silver / Painted (Unfinished inside)
3	Bottom cover	1	Extruded aluminium A6063S-T5	Metallic silver / Painted (Unfinished inside)
4	Exterior frame	2	PC+ABS Flame-resistant	Black • Gray / Unpainted Indigo • Navy • Lime • Yellow • Orange • Red / Painted
5	Corner guard	8	Silicone	Dark gray • Black
6	Fabric-over-foam gasket	2	Conductive fabric : TPE	Metallic gray
7	Screw (Hexagonal)	8	Stainless steel	Unfinished

Color Type

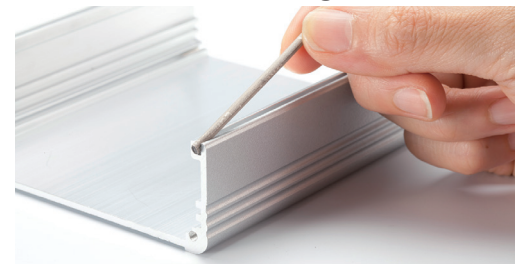
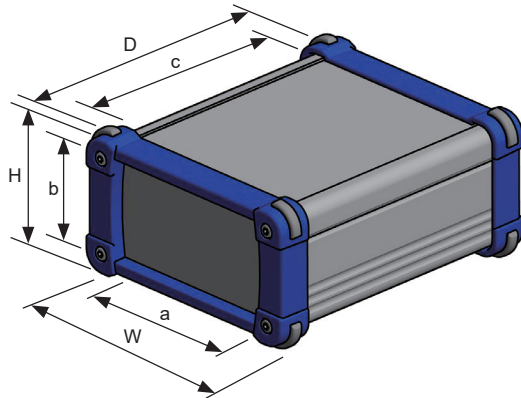
Code	[S] [B] Silver / Black	[S] [G] Silver / Gray	[S] [I] Silver / Indigo	[S] [N] Silver / Navy
Color				
Code	[S] [L] Silver / Lime	[S] [Y] Silver / Yellow	[S] [O] Silver / Orange	[S] [R] Silver / Red
Color				

EXPE dimensions

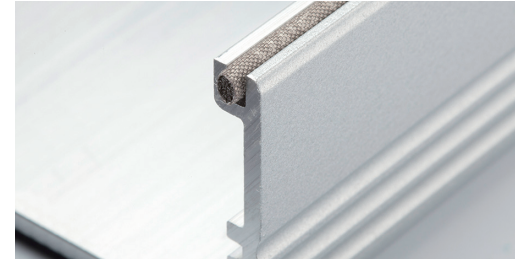
■ DXF/DWG/PDF/STP drawings available on our website.

How to install shield gaskets

※c = Top / Bottom cover length.



■ Insert fabric-over-foam gaskets into the joint-grooves on both sides of the bottom cover.



■ Ensure that a small portion of the fabric-over-foam gasket protrudes out in order to maintain connections with the end panels.

Product no. / Details

■ Please suffix color code at the end of the product number.

Product no.	External dimensions			Internal dimensions		
	W	H	D	a	b	c
EXPE 7- 3- 6□□	69	34	60	46	19.6	46
EXPE 7- 3- 9□□	69	34	87	46	19.6	73
EXPE 7- 3-11□□	69	34	110	46	19.6	96
EXPE 7- 4- 6□□	69	44	60	46	29.6	46
EXPE 7- 4- 9□□	69	44	87	46	29.6	73
EXPE 7- 4-11□□	69	44	110	46	29.6	96
EXPE 7- 6- 6□□	69	59	60	46	44.6	46
EXPE 7- 6- 9□□	69	59	87	46	44.6	73
EXPE 7- 6-11□□	69	59	110	46	44.6	96
EXPE 9- 4- 7□□	89	39	70	66	24.6	56
EXPE 9- 4-10□□	89	39	100	66	24.6	86
EXPE 9- 4-13□□	89	39	130	66	24.6	116
EXPE 9- 5- 7□□	89	49	70	66	34.6	56
EXPE 9- 5-10□□	89	49	100	66	34.6	86
EXPE 9- 5-13□□	89	49	130	66	34.6	116
EXPE 9- 6- 7□□	89	64	70	66	49.6	56
EXPE 9- 6-10□□	89	64	100	66	49.6	86
EXPE 9- 6-13□□	89	64	130	66	49.6	116
EXPE12- 4- 9□□	116	41	90	88	24	74
EXPE12- 4-13□□	116	41	130	88	24	114
EXPE12- 4-18□□	116	41	176	88	24	160
EXPE12- 6- 9□□	116	56	90	88	39	74
EXPE12- 6-13□□	116	56	130	88	39	114
EXPE12- 6-18□□	116	56	176	88	39	160
EXPE12- 7- 9□□	116	71	90	88	54	74
EXPE12- 7-13□□	116	71	130	88	54	114
EXPE12- 7-18□□	116	71	176	88	54	160
EXPE15- 5-11□□	151	46	110	106.8	29	93
EXPE15- 5-15□□	151	46	150	106.8	29	133
EXPE15- 5-20□□	151	46	200	106.8	29	183
EXPE15- 6-11□□	151	61	110	106.8	44	93
EXPE15- 6-15□□	151	61	150	106.8	44	133
EXPE15- 6-20□□	151	61	200	106.8	44	183
EXPE15- 8-11□□	151	81	110	106.8	64	93
EXPE15- 8-15□□	151	81	150	106.8	64	133
EXPE15- 8-20□□	151	81	200	106.8	64	183
EXPE15-10-11□□	151	101	110	106.8	84	93
EXPE15-10-15□□	151	101	150	106.8	84	133
EXPE15-10-20□□	151	101	200	106.8	84	183

Product no.	External dimensions			Internal dimensions		
	W	H	D	a	b	c
EXPE20- 6-14□□	199	56	140	131	35	120
EXPE20- 6-19□□	199	56	192	131	35	172
EXPE20- 6-25□□	199	56	245	131	35	225
EXPE20- 6-30□□	199	56	300	131	35	280
EXPE20- 7-14□□	199	74	140	131	53	120
EXPE20- 7-19□□	199	74	192	131	53	172
EXPE20- 7-25□□	199	74	245	131	53	225
EXPE20- 7-30□□	199	74	300	131	53	280
EXPE20- 9-14□□	199	94	140	131	73	120
EXPE20- 9-19□□	199	94	192	131	73	172
EXPE20- 9-25□□	199	94	245	131	73	225
EXPE20- 9-30□□	199	94	300	131	73	280
EXPE20-12-14□□	199	119	140	131	98	120
EXPE20-12-19□□	199	119	192	131	98	172
EXPE20-12-25□□	199	119	245	131	98	225
EXPE20-12-30□□	199	119	300	131	98	280
EXPE24- 6-17□□	244	64	170	176	43	147
EXPE24- 6-23□□	244	64	230	176	43	207
EXPE24- 6-29□□	244	64	290	176	43	267
EXPE24- 6-35□□	244	64	350	176	43	327
EXPE24- 9-17□□	244	89	170	176	68	147
EXPE24- 9-23□□	244	89	230	176	68	207
EXPE24- 9-29□□	244	89	290	176	68	267
EXPE24- 9-35□□	244	89	350	176	68	327
EXPE24-11-17□□	244	114	170	176	93	147
EXPE24-11-23□□	244	114	230	176	93	207
EXPE24-11-29□□	244	114	290	176	93	267
EXPE24-11-35□□	244	114	350	176	93	327
EXPE30- 9-25□□	300	90	250	230	68	228
EXPE30- 9-32□□	300	90	320	230	68	298
EXPE30- 9-40□□	300	90	400	230	68	378
EXPE30-14-25□□	300	140	250	230	118	228
EXPE30-14-32□□	300	140	320	230	118	298
EXPE30-14-40□□	300	140	400	230	118	378



Following models are suitable for Mini-ITX board size.

EXPE20-7-19□□

EXPE20-9-19□□

EXPE20-12-19□□

EXPT series**ALUMINIUM PANEL CASE with TILT LEG**

■ Aluminium enclosure with tilt leg for measuring instrument use. Available in 30 different sizes and 16 different color combinations.

Components

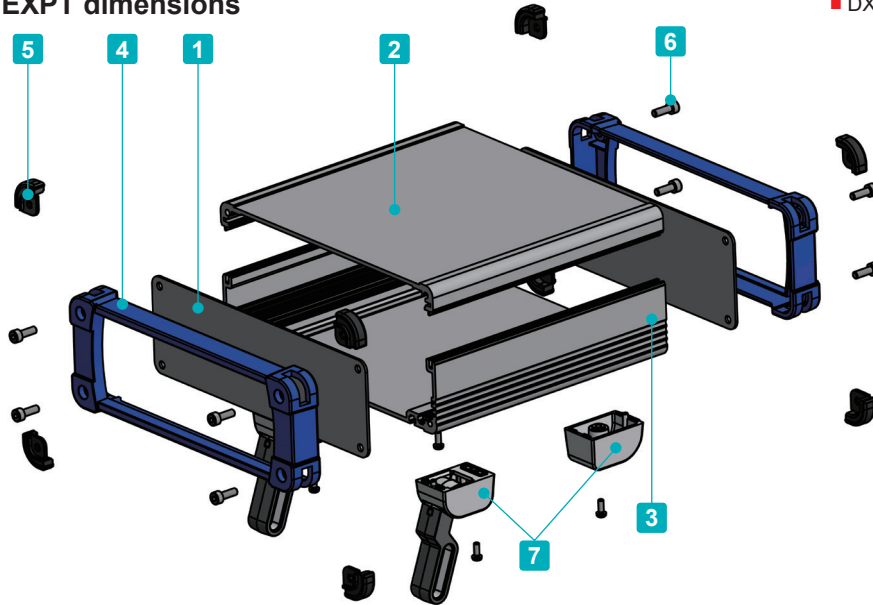
No.	Part name	Pcs	Material	Color / Finish
1	Panel	2	Aluminium A1100P	Silver / Anodized • Black / Painted
2	Top cover	1	Extruded aluminium A6063S-T5	Silver • Black / Anodized with clear coating
3	Bottom cover	1	Extruded aluminium A6063S-T5	Silver • Black / Anodized with clear coating
4	Exterior frame	2	PC+ABS Flame-resistant	Black • Gray / Unpainted Indigo • Navy • Lime • Yellow • Orange • Red / Painted
5	Corner guard	8	Silicone	Dark gray • Black
6	Screw (Hexagonal)	8	Stainless steel	Unfinished
7	Tilt leg	1 set	PC+ABS UL94V-0, TPE	Black & Black • Navy & Gray • Light gray & Gray

Color Type

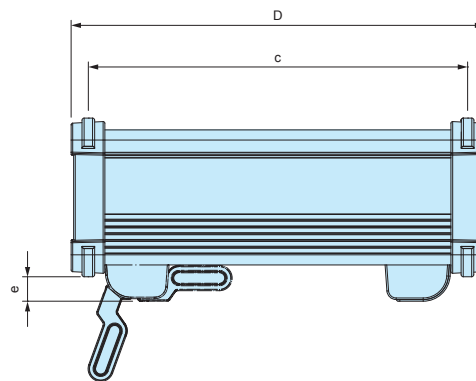
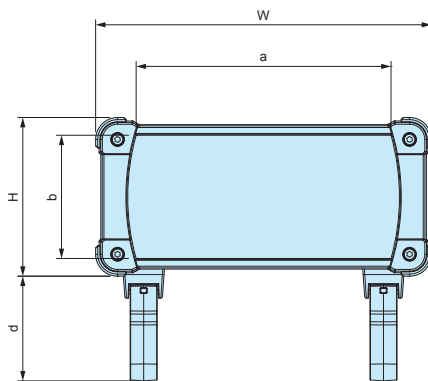
Code	[S][B] Silver / Black	[S][G] Silver / Gray	[S][I] Silver / Indigo	[S][N] Silver / Navy
Color				
Code	[S][L] Silver / Lime	[S][Y] Silver / Yellow	[S][O] Silver / Orange	[S][R] Silver / Red
Color				
Code	[B][B] Black / Black	[B][G] Black / Gray	[B][I] Black / Indigo	[B][N] Black / Navy
Color			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

EXPT dimensions

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



Included screws
 EXPT20-□ models : M4-12 x 8 pcs
 EXPT24-□, 30-□ models : M5-12 x 8 pcs
 ※Hexagonal wrench included



※c = Top / Bottom cover length.

Product no. / Details

■ Please suffix color code at the end of the product number.

Product no.	External dimensions			Internal dimensions				
	W	H	D	a	b	c	d	e
EXPT20- 6-19□□	199	56	192	131	35	172	62	14.5
EXPT20- 6-25□□	199	56	245	131	35	225	62	14.5
EXPT20- 6-30□□	199	56	300	131	35	280	62	14.5
EXPT20- 7-19□□	199	74	192	131	53	172	62	14.5
EXPT20- 7-25□□	199	74	245	131	53	225	62	14.5
EXPT20- 7-30□□	199	74	300	131	53	280	62	14.5
EXPT20- 9-19□□	199	94	192	131	73	172	62	14.5
EXPT20- 9-25□□	199	94	245	131	73	225	62	14.5
EXPT20- 9-30□□	199	94	300	131	73	280	62	14.5
EXPT20-12-19□□	199	119	192	131	98	172	62	14.5
EXPT20-12-25□□	199	119	245	131	98	225	62	14.5
EXPT20-12-30□□	199	119	300	131	98	280	62	14.5
EXPT24- 6-17□□	244	64	170	176	43	147	62	14.5
EXPT24- 6-23□□	244	64	230	176	43	207	62	14.5
EXPT24- 6-29□□	244	64	290	176	43	267	62	14.5
EXPT24- 6-35□□	244	64	350	176	43	327	62	14.5
EXPT24- 9-17□□	244	89	170	176	68	147	62	14.5
EXPT24- 9-23□□	244	89	230	176	68	207	62	14.5
EXPT24- 9-29□□	244	89	290	176	68	267	62	14.5
EXPT24- 9-35□□	244	89	350	176	68	327	62	14.5
EXPT24-11-17□□	244	114	170	176	93	147	62	14.5
EXPT24-11-23□□	244	114	230	176	93	207	62	14.5
EXPT24-11-29□□	244	114	290	176	93	267	62	14.5
EXPT24-11-35□□	244	114	350	176	93	327	62	14.5
EXPT30- 9-25□□	300	90	250	230	68	228	61.5	14
EXPT30- 9-32□□	300	90	320	230	68	298	61.5	14
EXPT30- 9-40□□	300	90	400	230	68	378	61.5	14
EXPT30-14-25□□	300	140	250	230	118	228	61.5	14
EXPT30-14-32□□	300	140	320	230	118	298	61.5	14
EXPT30-14-40□□	300	140	400	230	118	378	61.5	14



- Equipped with flanged frame for easy wall mounting.
- Available in 67 different sizes and 6 different color combinations by 2 body frame and 3 end panel colors.
- Custom length is available.

Included screws

EXPF 7-□, 9-□ models : M2.5-8 x 8 pcs

EXPF11-□, 15-□ models : M3-10 x 8 pcs

EXPF20-□ models : M4-12 x 8 pcs

EXPF24-□ models : M5-12 x 8 pcs

※Hexagonal wrench included

Components

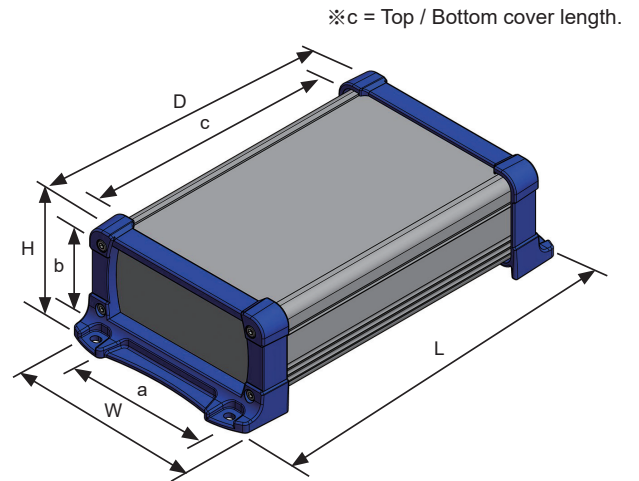
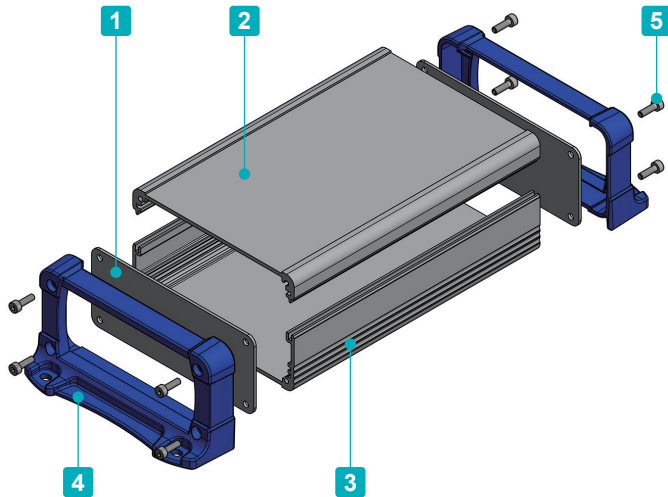
No.	Part name	Pcs	Material	Color / Finish
1	Panel	2	Aluminium A1100P	Silver / Anodized • Black / Painted
2	Top cover	1	Extruded aluminium A6063S-T5	Silver • Black / Anodized with clear coating
3	Bottom cover	1	Extruded aluminium A6063S-T5	Silver • Black / Anodized with clear coating
4	Flanged frame	2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

Color Type

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			

EXPF dimensions

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



Product no. / Details

■ Please suffix color code at the end of the product number.

Product no.	External dimensions				Internal dimensions		
	W	H	D	L	a	b	c
EXPF 7- 3- 6□□	66	34	60	84	46	19.6	46
EXPF 7- 3- 9□□	66	34	87	111	46	19.6	73
EXPF 7- 3-11□□	66	34	110	134	46	19.6	96
EXPF 7- 4- 6□□	66	44	60	84	46	29.6	46
EXPF 7- 4- 9□□	66	44	87	111	46	29.6	73
EXPF 7- 4-11□□	66	44	110	134	46	29.6	96
EXPF 7- 6- 6□□	66	59	60	84	46	44.6	46
EXPF 7- 6- 9□□	66	59	87	111	46	44.6	73
EXPF 7- 6-11□□	66	59	110	134	46	44.6	96
EXPF 9- 4- 7□□	86	39	70	95.8	66	24.6	56
EXPF 9- 4-10□□	86	39	100	125.8	66	24.6	86
EXPF 9- 4-13□□	86	39	130	155.8	66	24.6	116
EXPF 9- 5- 7□□	86	49	70	95.8	66	34.6	56
EXPF 9- 5-10□□	86	49	100	125.8	66	34.6	86
EXPF 9- 5-13□□	86	49	130	155.8	66	34.6	116
EXPF 9- 6- 7□□	86	64	70	95.8	66	49.6	56
EXPF 9- 6-10□□	86	64	100	125.8	66	49.6	86
EXPF 9- 6-13□□	86	64	130	155.8	66	49.6	116
EXPF11- 4- 9□□	113	41.5	90	121.8	88	24	74
EXPF11- 4-13□□	113	41.5	130	161.8	88	24	114
EXPF11- 4-18□□	113	41.5	176	207.8	88	24	160
EXPF11- 6- 9□□	113	56.5	90	121.8	88	39	74
EXPF11- 6-13□□	113	56.5	130	161.8	88	39	114
EXPF11- 6-18□□	113	56.5	176	207.8	88	39	160
EXPF11- 7- 9□□	113	71.5	90	121.8	88	54	74
EXPF11- 7-13□□	113	71.5	130	161.8	88	54	114
EXPF11- 7-18□□	113	71.5	176	207.8	88	54	160
EXPF15- 5-11□□	148	47	110	149.2	106.8	29	93
EXPF15- 5-15□□	148	47	150	189.2	106.8	29	133
EXPF15- 5-20□□	148	47	200	239.2	106.8	29	183
EXPF15- 6-11□□	148	62	110	149.2	106.8	44	93
EXPF15- 6-15□□	148	62	150	189.2	106.8	44	133
EXPF15- 6-20□□	148	62	200	239.2	106.8	44	183
EXPF15- 8-11□□	148	82	110	149.2	106.8	64	93
EXPF15- 8-15□□	148	82	150	189.2	106.8	64	133
EXPF15- 8-20□□	148	82	200	239.2	106.8	64	183
EXPF15-10-11□□	148	102	110	149.2	106.8	84	93
EXPF15-10-15□□	148	102	150	189.2	106.8	84	133
EXPF15-10-20□□	148	102	200	239.2	106.8	84	183

Product no.	External dimensions				Internal dimensions		
	W	H	D	L	a	b	c
EXPF20- 6-14□□	195	57	140	188.6	131	35	120
EXPF20- 6-19□□	195	57	192	240.6	131	35	172
EXPF20- 6-25□□	195	57	245	293.6	131	35	225
EXPF20- 6-30□□	195	57	300	348.6	131	35	280
EXPF20- 8-14□□	195	75	140	188.6	131	53	120
EXPF20- 8-19□□	195	75	192	240.6	131	53	172
EXPF20- 8-25□□	195	75	245	293.6	131	53	225
EXPF20- 8-30□□	195	75	300	348.6	131	53	280
EXPF20-10-14□□	195	95	140	188.6	131	73	120
EXPF20-10-19□□	195	95	192	240.6	131	73	172
EXPF20-10-25□□	195	95	245	293.6	131	73	225
EXPF20-10-30□□	195	95	300	348.6	131	73	280
EXPF20-12-14□□	195	120	140	188.6	131	98	120
EXPF20-12-19□□	195	120	192	240.6	131	98	172
EXPF20-12-25□□	195	120	245	293.6	131	98	225
EXPF20-12-30□□	195	120	300	348.6	131	98	280
EXPF24- 7-17□□	240	65	170	218.6	176	43	147
EXPF24- 7-23□□	240	65	230	278.6	176	43	207
EXPF24- 7-29□□	240	65	290	338.6	176	43	267
EXPF24- 7-35□□	240	65	350	398.6	176	43	327
EXPF24- 9-17□□	240	90	170	218.6	176	68	147
EXPF24- 9-23□□	240	90	230	278.6	176	68	207
EXPF24- 9-29□□	240	90	290	338.6	176	68	267
EXPF24- 9-35□□	240	90	350	398.6	176	68	327
EXPF24-12-17□□	240	115	170	218.6	176	93	147
EXPF24-12-23□□	240	115	230	278.6	176	93	207
EXPF24-12-29□□	240	115	290	338.6	176	93	267
EXPF24-12-35□□	240	115	350	398.6	176	93	327

■ Custom length is available.



Following models are suitable for Mini-ITX board size.

EXPF20-8-19□□

EXPF20-10-19□□

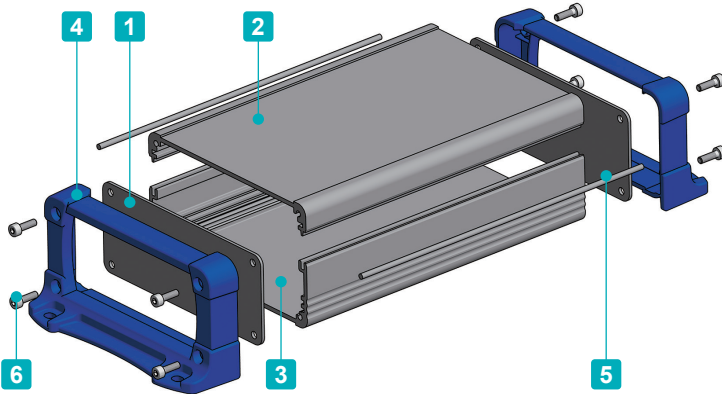
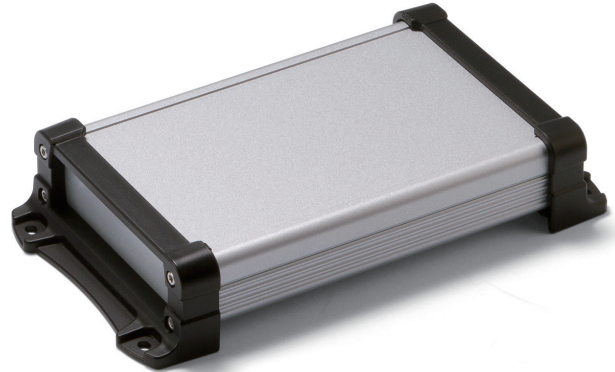
EXPF20-12-19□□

EXEF series

FLANGED ALUMINIUM EMC SHIELDED CASE



EMC
Shielding



- EMC shielding is achieved by having the unfinished inner sides of the top/bottom covers and panels, as well as the fabric-over-foam gasket in contact with one another.
- Equipped with flanged frame for easy wall mounting.
- Available in 67 different sizes and 3 different color combinations.

Included screws
 EXEF7-□, 9-□ models : M2.5-8 x 8 pcs
 EXEF11-□, 15-□ models : M3-10 x 8 pcs
 EXEF20-□ models : M4-12 x 8 pcs
 EXEF24-□ models : M5-12 x 8 pcs
 ※ Hexagonal wrench included

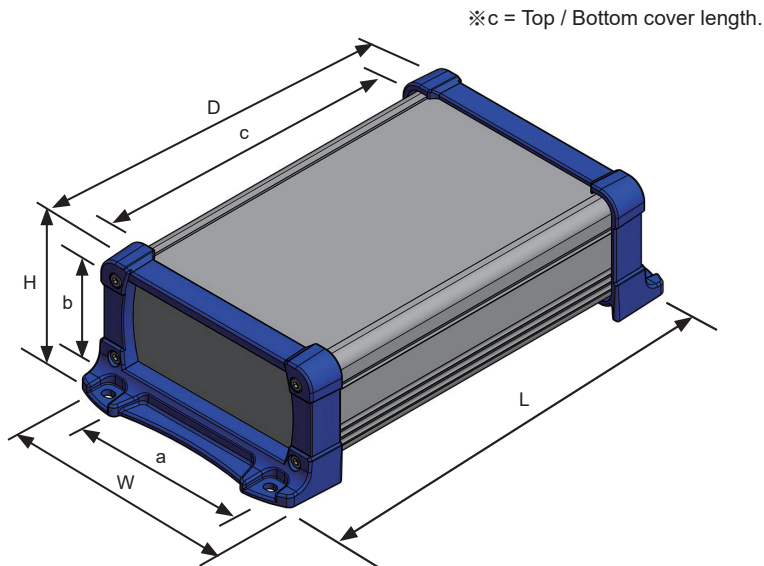
Components

No.	Part name	Pcs	Material	Color / Finish
1	Panel	2	Aluminium A1100P	Metallic silver / Painted (Conductive inside)
2	Top cover	1	Extruded aluminium A6063S-T5	Metallic silver / Painted (Unfinished inside)
3	Bottom cover	1	Extruded aluminium A6063S-T5	Metallic silver / Painted (Unfinished inside)
4	Flanged frame	2	PC+ABS Flame-resistant	Black • Gray / Unpainted Navy / Painted
5	Fabric-over-foam gasket	2	Conductive fabric : TPE	Metallic gray
6	Screw (Hexagonal)	8	Stainless steel	Unfinished

Color Type

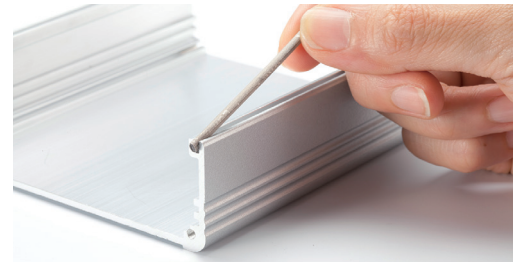
Code	S B Silver / Black	S G Silver / Gray	S N Silver / Navy
Color			

EXEF dimensions

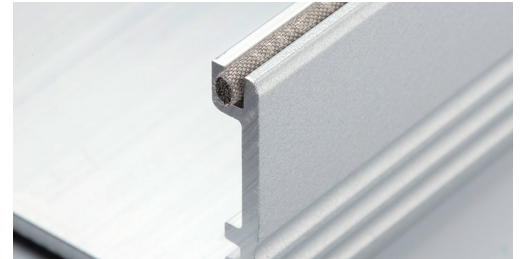


■ DXF/DWG/PDF/STP drawings available on our website.

How to install shield gaskets



■ Insert fabric-over-foam gaskets into the joint-grooves on both sides of the bottom cover.



■ Ensure that a small portion of the fabric-over-foam gaskets protrude out in order to maintain connections with the end panels.

Product no. / Details

■ Please suffix color code at the end of the product number.

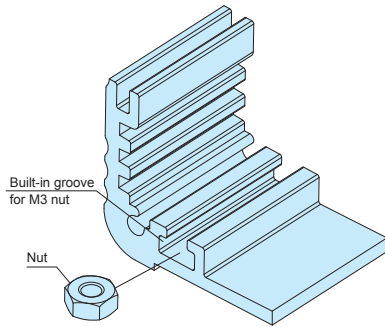
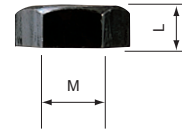
Product no.	External dimensions				Internal dimensions		
	W	H	D	L	a	b	c
EXEF 7- 3- 6□□	66	34	60	84	46	19.6	46
EXEF 7- 3- 9□□	66	34	87	111	46	19.6	73
EXEF 7- 3-11□□	66	34	110	134	46	19.6	96
EXEF 7- 4- 6□□	66	44	60	84	46	29.6	46
EXEF 7- 4- 9□□	66	44	87	111	46	29.6	73
EXEF 7- 4-11□□	66	44	110	134	46	29.6	96
EXEF 7- 6- 6□□	66	59	60	84	46	44.6	46
EXEF 7- 6- 9□□	66	59	87	111	46	44.6	73
EXEF 7- 6-11□□	66	59	110	134	46	44.6	96
EXEF 9- 4- 7□□	86	39	70	95.8	66	24.6	56
EXEF 9- 4-10□□	86	39	100	125.8	66	24.6	86
EXEF 9- 4-13□□	86	39	130	155.8	66	24.6	116
EXEF 9- 5- 7□□	86	49	70	95.8	66	34.6	56
EXEF 9- 5-10□□	86	49	100	125.8	66	34.6	86
EXEF 9- 5-13□□	86	49	130	155.8	66	34.6	116
EXEF 9- 6- 7□□	86	64	70	95.8	66	49.6	56
EXEF 9- 6-10□□	86	64	100	125.8	66	49.6	86
EXEF 9- 6-13□□	86	64	130	155.8	66	49.6	116
EXEF11- 4- 9□□	113	41.5	90	121.8	88	24	74
EXEF11- 4-13□□	113	41.5	130	161.8	88	24	114
EXEF11- 4-18□□	113	41.5	176	207.8	88	24	160
EXEF11- 6- 9□□	113	56.5	90	121.8	88	39	74
EXEF11- 6-13□□	113	56.5	130	161.8	88	39	114
EXEF11- 6-18□□	113	56.5	176	207.8	88	39	160
EXEF11- 7- 9□□	113	71.5	90	121.8	88	54	74
EXEF11- 7-13□□	113	71.5	130	161.8	88	54	114
EXEF11- 7-18□□	113	71.5	176	207.8	88	54	160
EXEF15- 5-11□□	148	47	110	149.2	106.8	29	93
EXEF15- 5-15□□	148	47	150	189.2	106.8	29	133
EXEF15- 5-20□□	148	47	200	239.2	106.8	29	183
EXEF15- 6-11□□	148	62	110	149.2	106.8	44	93
EXEF15- 6-15□□	148	62	150	189.2	106.8	44	133
EXEF15- 6-20□□	148	62	200	239.2	106.8	44	183
EXEF15- 8-11□□	148	82	110	149.2	106.8	64	93
EXEF15- 8-15□□	148	82	150	189.2	106.8	64	133
EXEF15- 8-20□□	148	82	200	239.2	106.8	64	183
EXEF15-10-11□□	148	102	110	149.2	106.8	84	93
EXEF15-10-15□□	148	102	150	189.2	106.8	84	133
EXEF15-10-20□□	148	102	200	239.2	106.8	84	183

Product no.	External dimensions				Internal dimensions		
	W	H	D	L	a	b	c
EXEF20- 6-14□□	195	57	140	188.6	131	35	120
EXEF20- 6-19□□	195	57	192	240.6	131	35	172
EXEF20- 6-25□□	195	57	245	293.6	131	35	225
EXEF20- 6-30□□	195	57	300	348.6	131	35	280
EXEF20- 8-14□□	195	75	140	188.6	131	53	120
EXEF20- 8-19□□	195	75	192	240.6	131	53	172
EXEF20- 8-25□□	195	75	245	293.6	131	53	225
EXEF20- 8-30□□	195	75	300	348.6	131	53	280
EXEF20-10-14□□	195	95	140	188.6	131	73	120
EXEF20-10-19□□	195	95	192	240.6	131	73	172
EXEF20-10-25□□	195	95	245	293.6	131	73	225
EXEF20-10-30□□	195	95	300	348.6	131	73	280
EXEF20-12-14□□	195	120	140	188.6	131	98	120
EXEF20-12-19□□	195	120	192	240.6	131	98	172
EXEF20-12-25□□	195	120	245	293.6	131	98	225
EXEF20-12-30□□	195	120	300	348.6	131	98	280
EXEF24- 7-17□□	240	65	170	218.6	176	43	147
EXEF24- 7-23□□	240	65	230	278.6	176	43	207
EXEF24- 7-29□□	240	65	290	338.6	176	43	267
EXEF24- 7-35□□	240	65	350	398.6	176	43	327
EXEF24- 9-17□□	240	90	170	218.6	176	68	147
EXEF24- 9-23□□	240	90	230	278.6	176	68	207
EXEF24- 9-29□□	240	90	290	338.6	176	68	267
EXEF24- 9-35□□	240	90	350	398.6	176	68	327
EXEF24-12-17□□	240	115	170	218.6	176	93	147
EXEF24-12-23□□	240	115	230	278.6	176	93	207
EXEF24-12-29□□	240	115	290	338.6	176	93	267
EXEF24-12-35□□	240	115	350	398.6	176	93	327



Following models are suitable for Mini-ITX board size.

EXEF20-8-19□□
EXEF20-10-19□□
EXEF20-12-19□□

MT-3N**SLIDING NUT for EX□ • EXH□****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 EXPT • EXP • EXPE • EXW • EXPF • EXEF • EXWF • EX models with width 140mm or larger bottom covers, as well as with width 230mm and 285mm top covers, on all EXH • EXHE • EXHF • EXHFE models with width 140mm or larger bottom covers, as well as all heat-sink top covers.

EXEG series**EMC SHIELDING FABRIC-OVER-FOAM GASKET**

- Exclusive EMC shielding fabric-over-foam gasket for EXPE • EXEF • EXHE • EXHFE models.

Suitable Models

Product no.	Suitable models
EXEG-2.5	EXPE7-□, 9-□, 12-□, 15-□, EXEF7-□, 9-□, 11-□, 15-□ EXHE8-□, 11-□, 14-□, EXHFE8-□, 11-□, 14-□
EXEG-3.2	EXPE20-□, 24-□, 30-□, EXEF20-□, 24-□ EXHE19-□, 23-□, 29-□, EXHFE19-□, 23-□, 29-□

Product no. / Dimensions

Product no.	Dimensions	Pack of
EXEG-2.5	Φ2.5×500mm	1
EXEG-3.2	Φ3.2×500mm	1

Length tolerance = +/- 10%



- Material / Color : Conductive fiber • TPE / Metallic gray

**EX series APPLICATION EXAMPLE****Tube Amplifier**

Product by MJ Audio Technology

**Premain Power Amplifier**

Product by AY-densi (Japan)

**IoT Relay Module**

Product by Bunnyhop (Japan)

**USB Edge Node**

Product by SHINWA (Japan)



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

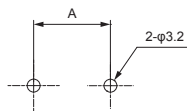
Max load : 7kg

Components

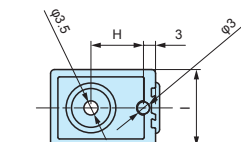
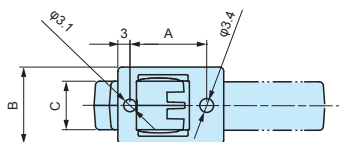
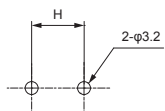
No.	Part name	Pcs	Material	Color / Finish
1	Front foot	2	PC + ABS UL94V-0 • TPE	Black & Black • Navy & Gray • Light gray & Gray
2	Rear foot	2	PC + ABS UL94V-0 • TPE	Black & Black • Navy & Gray • Light gray & Gray
-	Screw	4	Steel M3-8 pan head	Black trivalent chromate
-	Nut	4	Steel M3	Black trivalent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

TLW dimensions

Mounting hole (Front)



Mounting hole (Rear)



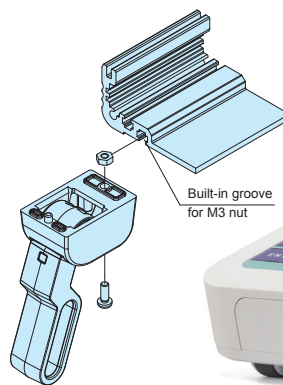
1

2

- 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

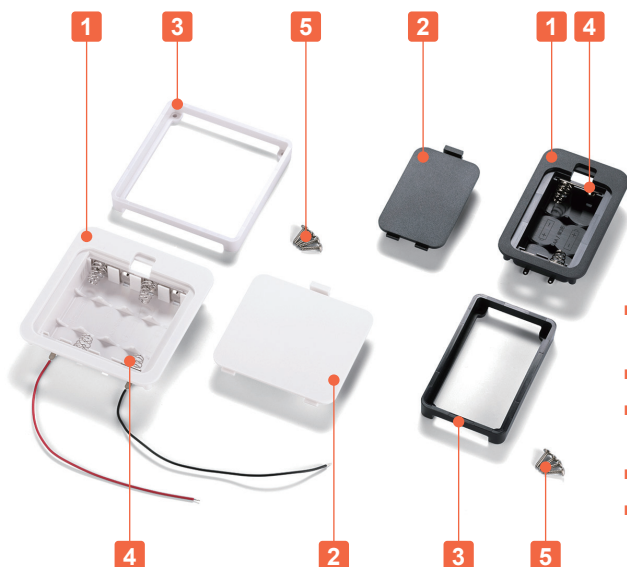
Product no.	A	B	C	D	E	F	G	H	I	J	K	L	Color (plastic)	Color (TPE)	Weight (g)
TLW-46BB	19	19	12	51.2	45.9	2	14	13	19	27	14	2	Black	Black	23
TLW-46NG	19	19	12	51.2	45.9	2	14	13	19	27	14	2	Navy	Gray	23
TLW-46LG	19	19	12	51.2	45.9	2	14	13	19	27	14	2	Light gray	Gray	23
TLW-70EBB	-	25	16	75.4	69	3	21.5	-	25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



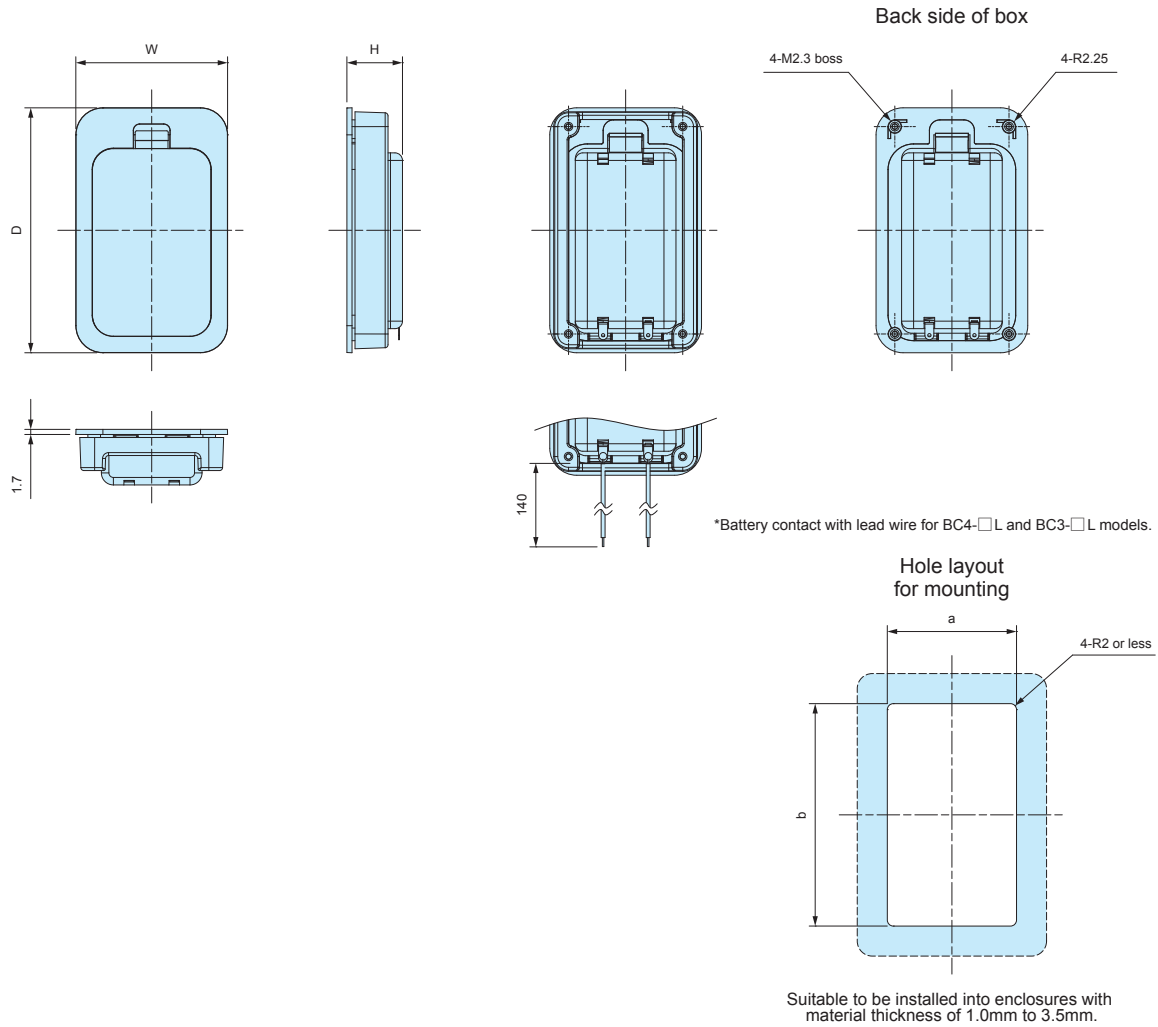
- Suitable to be installed into enclosures with material thickness of 1.0mm to 3.5mm.
- Cover can be opened/closed without any tool for easy battery replacement.
- 5 different battery layouts are available as AA x 2, AA x 3, AA x 4, AAA x 2 and AAA x 4. Each layout comes in 2 models: with lead-wire, 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 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

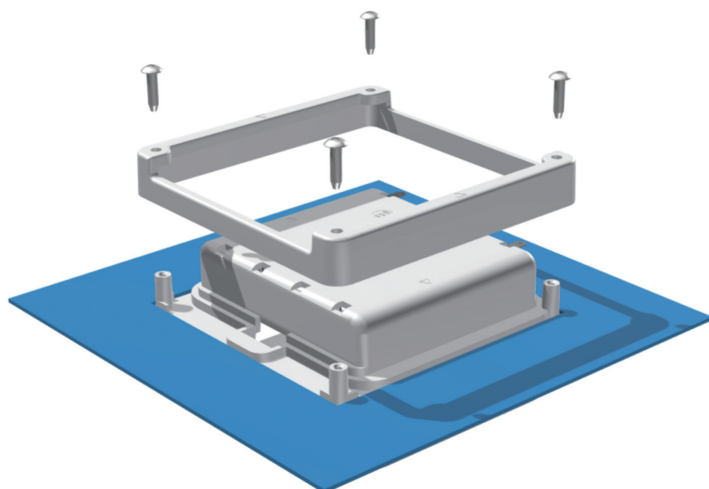
Product no. / Details

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

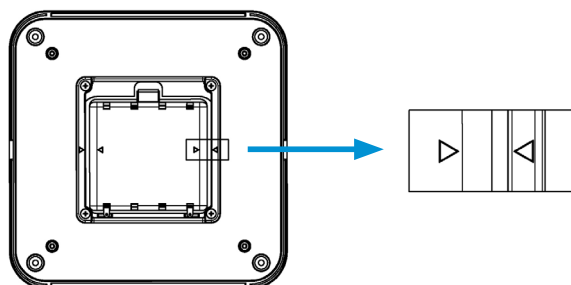
*Alkaline or manganese batteries

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.



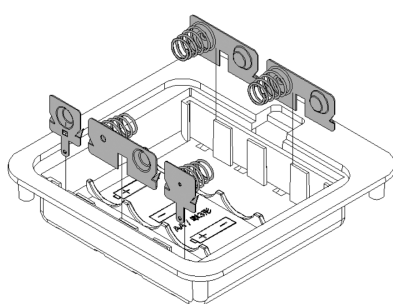
- For BC3-4□ models, ▷ markings are shown on the frame. Install by matching the markings.



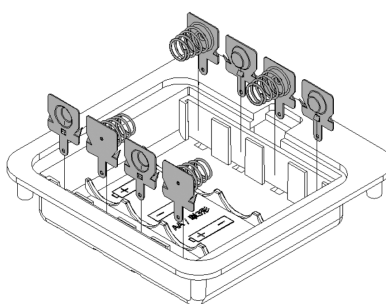
Parallel circuit conversion on BC series battery box

- 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.

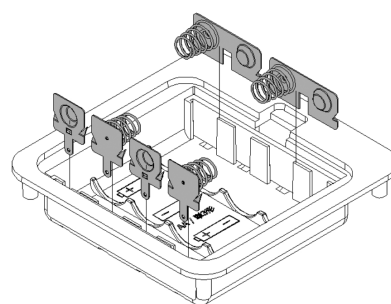
Conversion Example



Series Circuit (Standard)

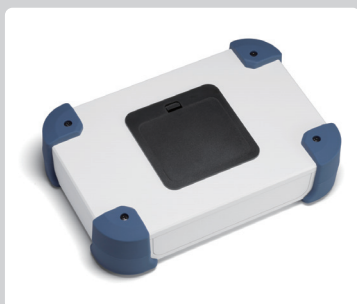


Parallel Circuit (4 batteries)



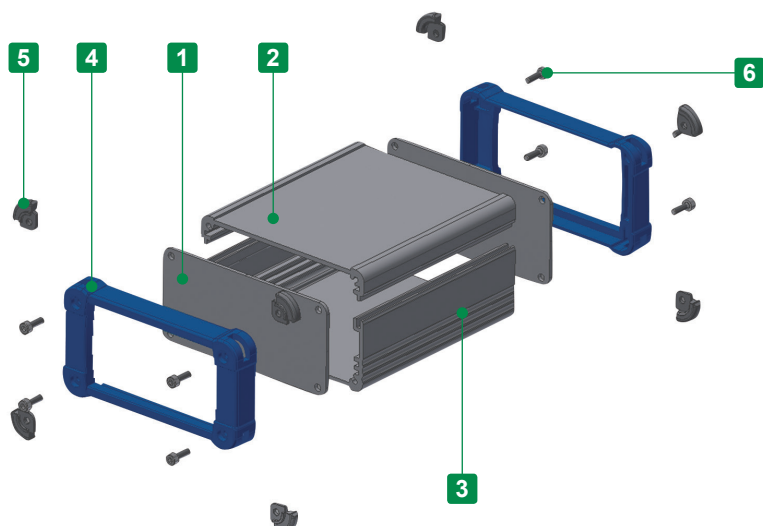
Parallel Circuit (2 batteries x 2)

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



- 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 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)

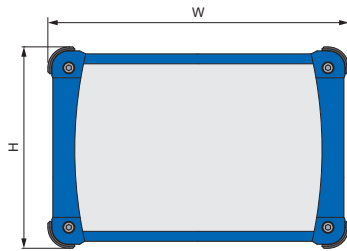
Order Inquiry

For more information, contact us here at sales@takachi-el.co.jp

1 Dimensions

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

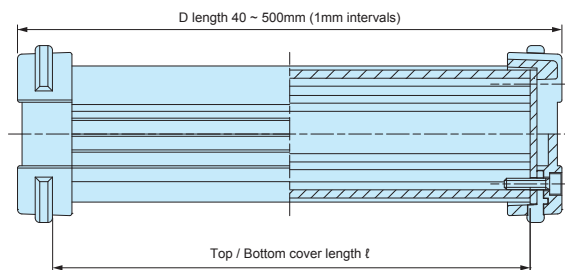
Width-Height dimensions



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
NEW 300- 90	300	90
NEW 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

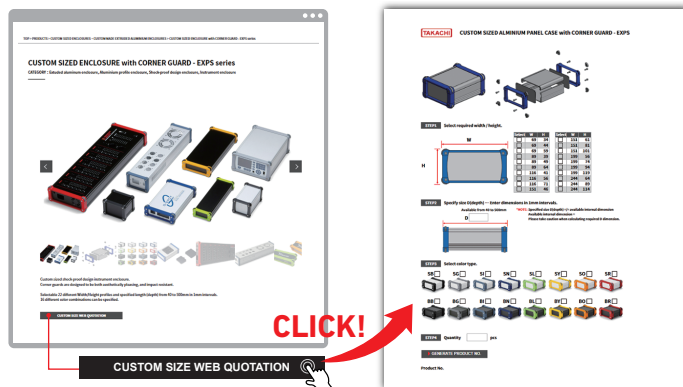
Numbering example: W-H:116-56 x D:234 and BL color code → **EXPS116-56-234BL**

CUSTOM SIZE WEB QUOTATION

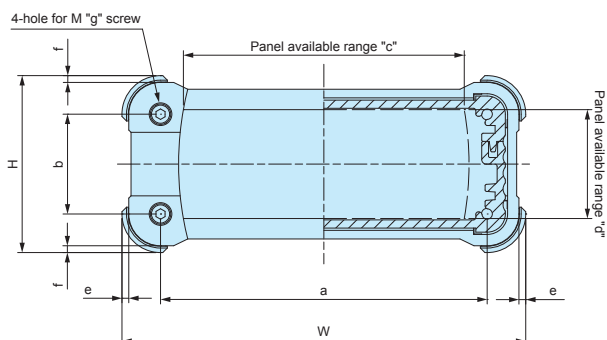
Send your inquiry via our online form now!

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

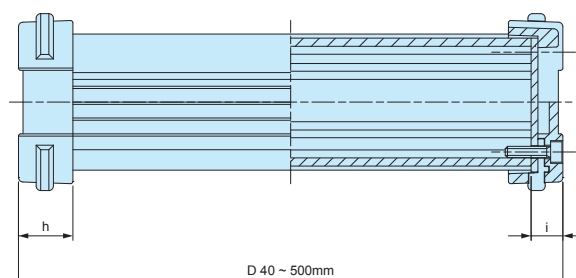
The product number will be generated, and once your information have been filled in, simply click on SUBMIT and await for our sales team's contact!



EXPS dimensions



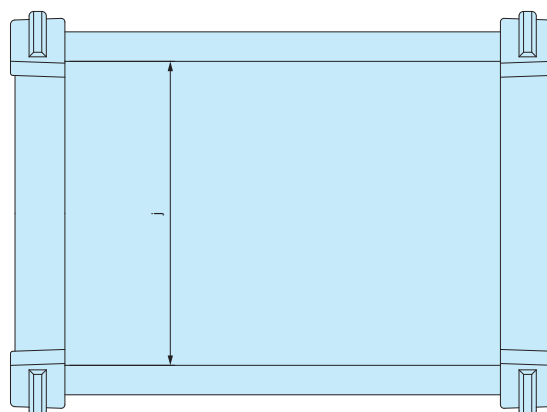
■ DXF/DWG/PDF drawings available on our website.



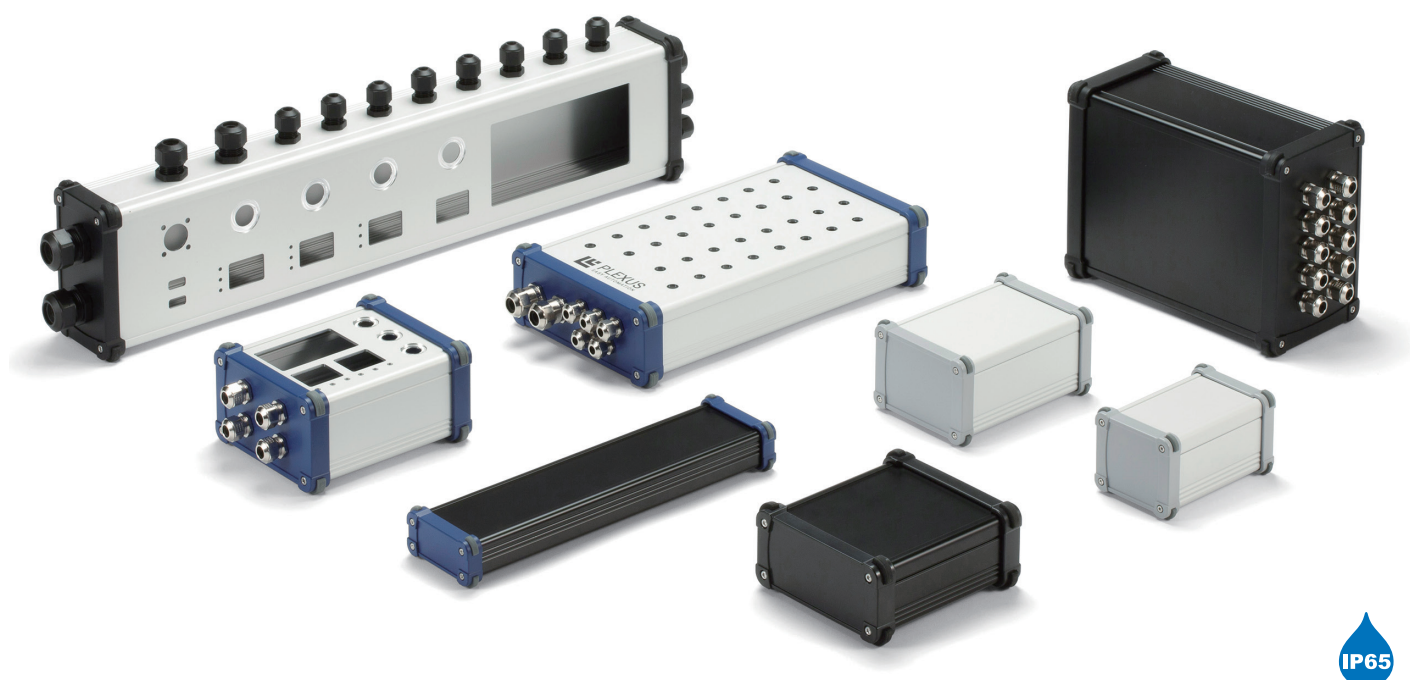
Accessories (Optional parts)



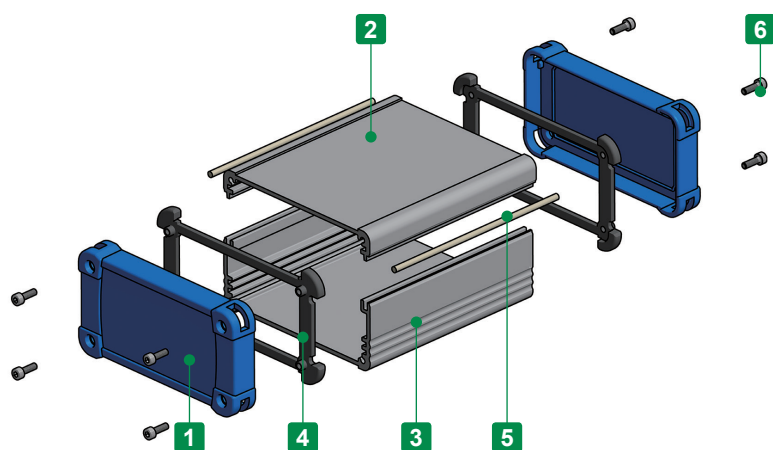
Tilt leg TLW series
See page 222



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



IP65



Technical Data

Protection class : IP65

■ Not suitable for environments with direct rainfall.

*IP65 protection is not applicable if D = 400mm or more.

Operating temperature: -10°C ~ +60°C

- IP65 is made possible by the sealing of between Top/Bottom covers and end panels with gaskets.
- Selectable in 13 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 panel colors.

Included screws

EXWS69-□, 89-□ models : M2.5-8 x 8 pcs

EXWS116-□, 151-□ models : M3-10 x 8 pcs

※Hexagonal wrench included.

Components

No.	Part name	Pcs	Material	Color / Finish
1	Panel	2	PC+ABS Flame-resistant	Black • Gray / Unpainted 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	Charcoal gray*
5	Cover gasket	2	Silicone sponge	White gray
6	Screw (Hexagonal)	8	Stainless steel	Unfinished

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

■ Dark gray and black color panel gasket will be changed to charcoal gray upon depletion of inventory.

Lead Time

Custom Size Only
Custom Size + Hole Milling

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

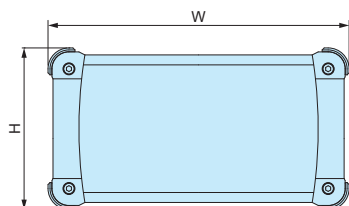
Order Inquiry

For more information, contact us here at sales@takachi-el.co.jp

1 Dimensions

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

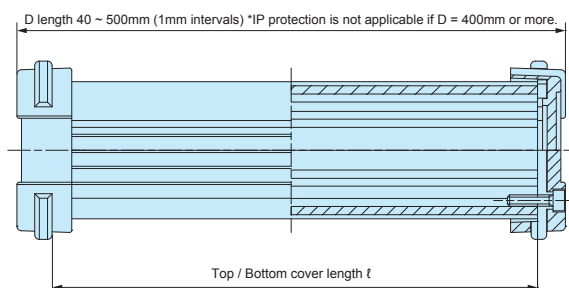
Width-Height dimensions



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

W-H No.	W	H
116- 56	116	56
116- 71	116	71
151- 46	151	46
151- 61	151	61
151- 81	151	81
151-101	151	101

D length



W-H No.	ℓ
69-□	D-11
89-□	D-12
116-□	D-13
151-□	D-13

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

 -

1 W-H

-

1 D length

2 Color code

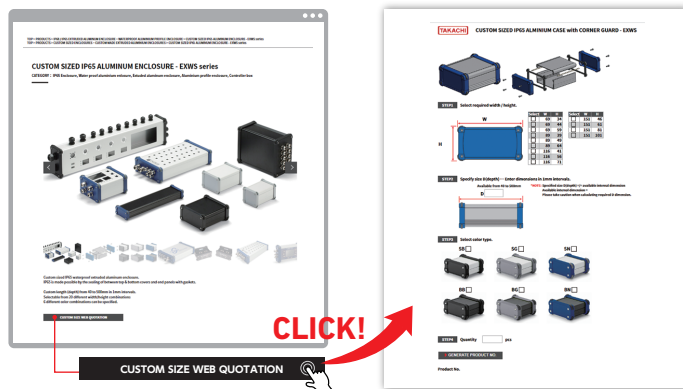
Numbering example: W-H:116-56 x D:345 and SN color code EXWS116-56-345SN

CUSTOM SIZE WEB QUOTATION

Send your inquiry via our online form now!

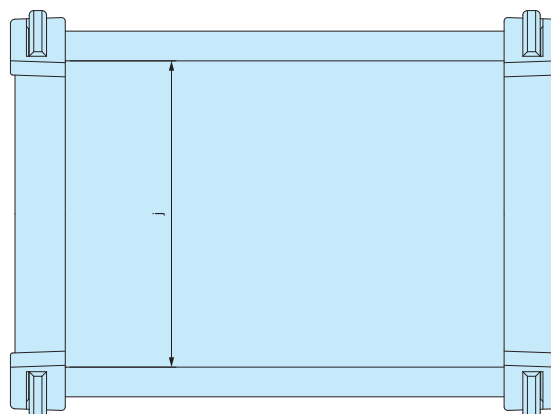
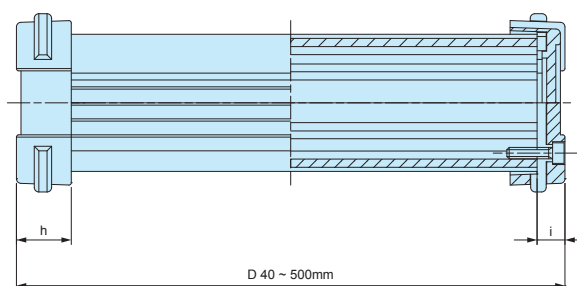
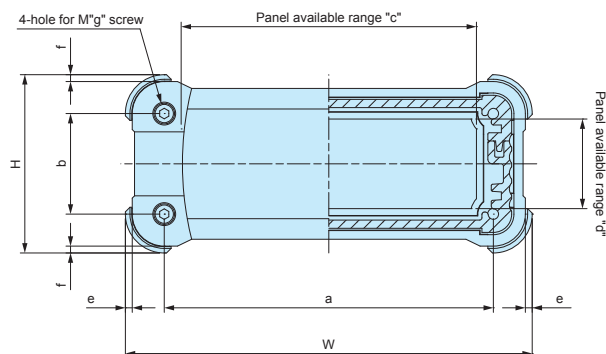
Visit the EXWS product page on our website, click on the "CUSTOM SIZE WEB QUOTATION" button, and fill in the required details.

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!



EXWS dimensions

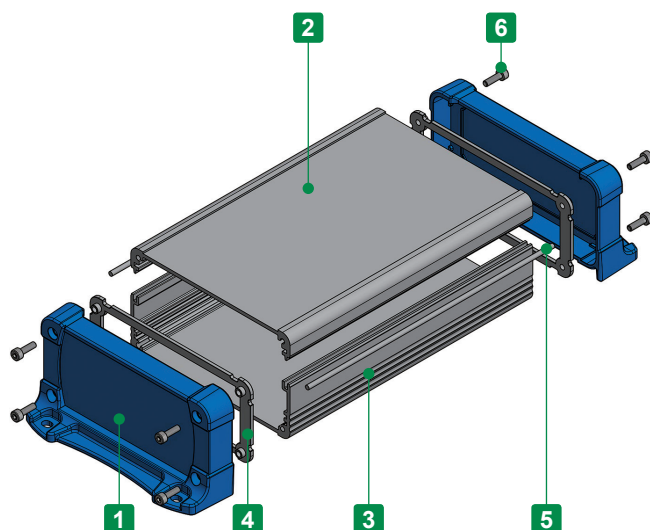
■ DXF/DWG/PDF drawings available on our website.



Product no.	W	H	a	b	c	d	e	f	g	h	i	j
EXWS 69- 34-□	69	34	52	17	46	16	1.5	1.5	2.5	12	6	47
EXWS 69- 44-□	69	44	52	27	46	26	1.5	1.5	2.5	12	6	47
EXWS 69- 59-□	69	59	52	42	46	41	1.5	1.5	2.5	12	6	47
EXWS 89- 39-□	89	39	72	22	65.8	20	1.5	1.5	2.5	12	6.5	67
EXWS 89- 49-□	89	49	72	32	65.8	30	1.5	1.5	2.5	12	6.5	67
EXWS 89- 64-□	89	64	72	47	65.8	45	1.5	1.5	2.5	12	6.5	67
EXWS116- 41-□	116	41	95	20	89.6	18	1.75	1.75	3	16	7	89
EXWS116- 56-□	116	56	95	35	89.6	33	1.75	1.75	3	16	7	89
EXWS116- 71-□	116	71	95	50	89.6	48	1.75	1.75	3	16	7	89
EXWS151- 46-□	151	46	130	25	103.4	18.2	1.75	1.75	3	18	7	124
EXWS151- 61-□	151	61	130	40	103.4	33.2	1.75	1.75	3	18	7	124
EXWS151- 81-□	151	81	130	60	103.4	53.2	1.75	1.75	3	18	7	124
EXWS151-101-□	151	101	130	80	103.4	73.2	1.75	1.75	3	18	7	124



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 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)

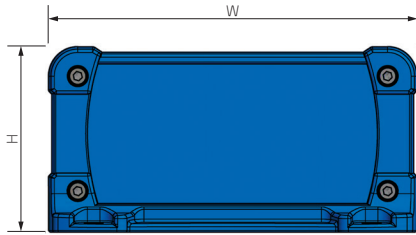
Order Inquiry

For more information, contact us here at sales@takachi-el.co.jp

1 Dimensions

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

Width-Height dimensions

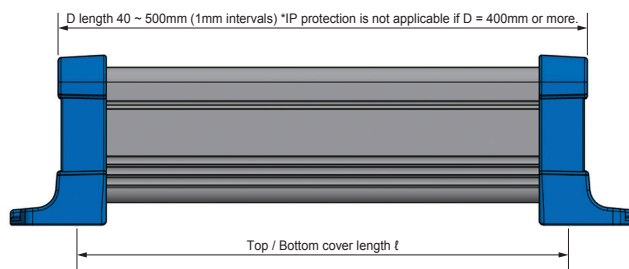


W-H No.	IP Code	W	H
66- 34	IP65	66	34
66- 44	IP65	66	44
66- 59	IP65	66	59
86- 39	IP65	86	39
86- 49	IP65	86	49
86- 64	IP65	86	64
113- 42	IP65	113	41.5
113- 57	IP65	113	56.5
113- 72	IP65	113	71.5
148- 47	IP65	148	47
148- 62	IP65	148	62

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
NEW 298- 93	IP54	298	93
NEW 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 (±0.3mm).
 *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

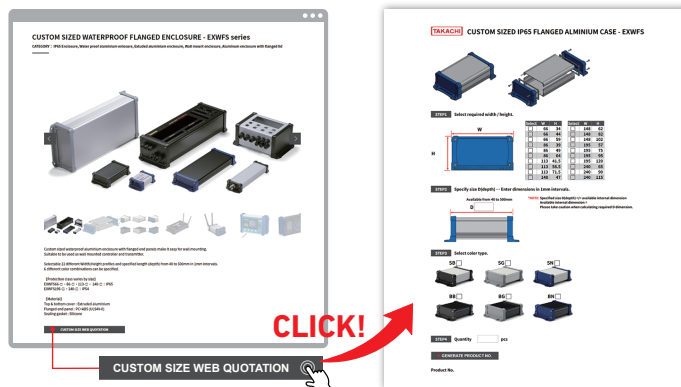
Numbering example: W-H:113-57 x D:345 and SN color code → **EXWFS113-57-345SN**

CUSTOM SIZE WEB QUOTATION

Send your inquiry via our online form now!

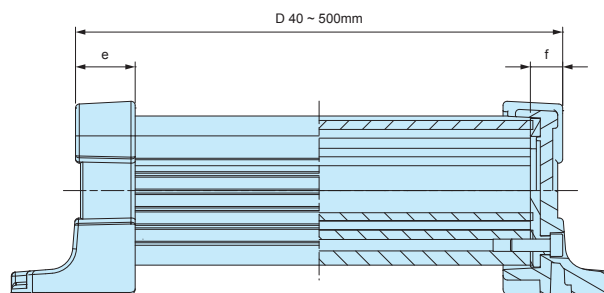
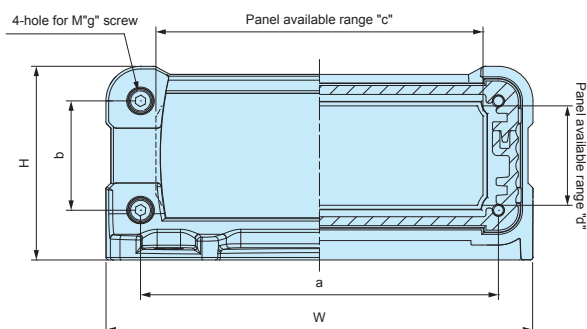
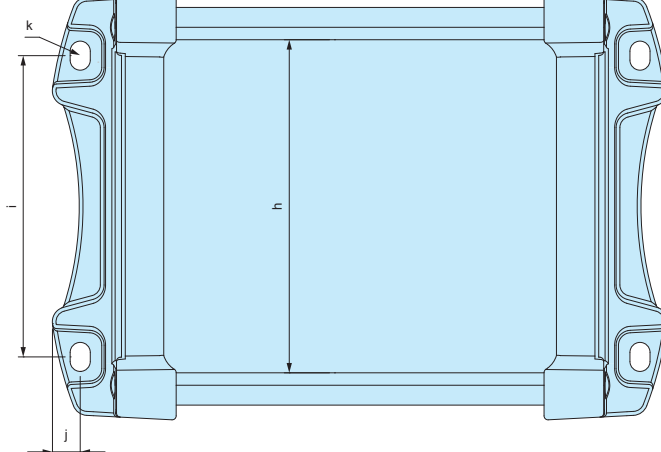
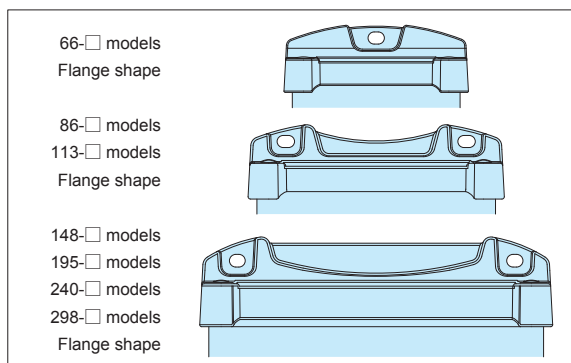
Visit the EXWFS product page on our website, click on the "CUSTOM SIZE WEB QUOTATION" button, and fill in the required details.

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!

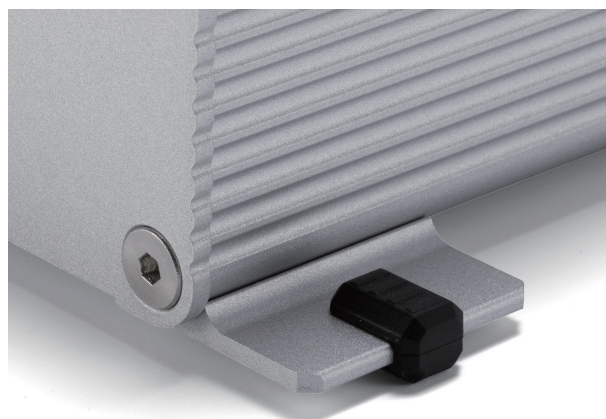
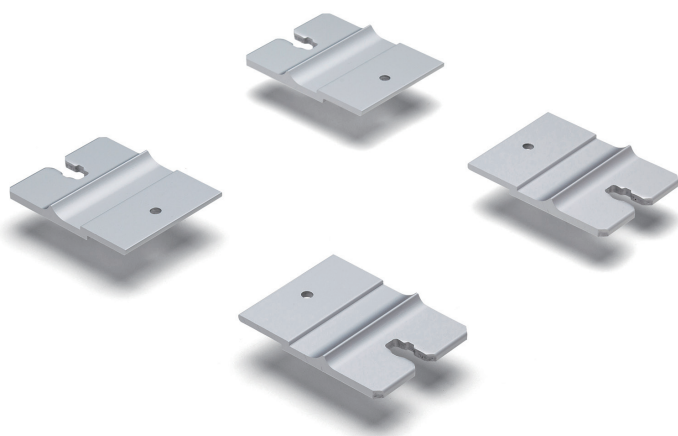


EXWFS dimensions

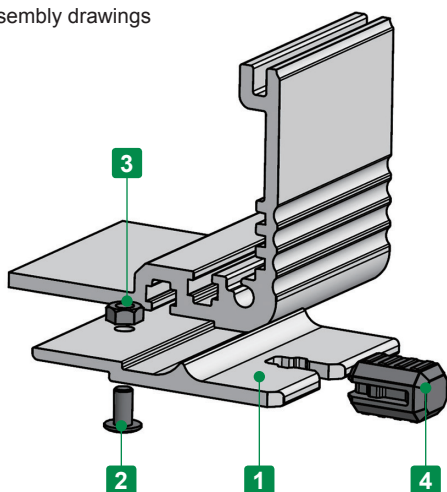
■ DXF/DWG/PDF drawings available on our website.



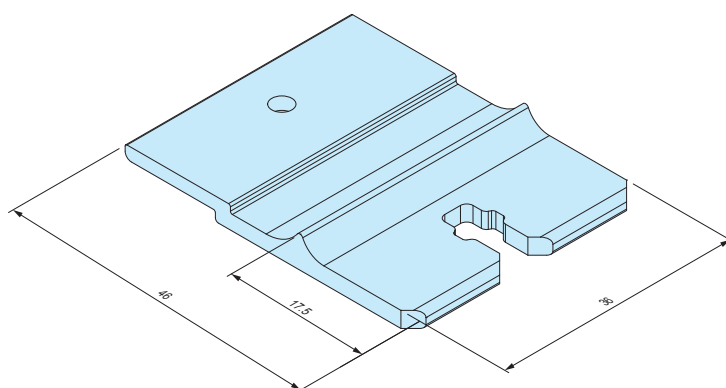
Product no.	W	H	a	b	c	d	e	f	g	h	i	j	k
EXWFS 66- 34-□	66	34	52	17	46	16	12	5.5	2.5	47	—	4.5	4.5×6
EXWFS 66- 44-□	66	44	52	27	46	24	12	5.5	2.5	47	—	4.5	4.5×6
EXWFS 66- 59-□	66	59	52	42	46	41	12	5.5	2.5	47	—	4.5	4.5×6
EXWFS 86- 39-□	86	39	72	22	65.8	20	12	6	2.5	67	60.6	5.6	4.2×6
EXWFS 86- 49-□	86	49	72	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.

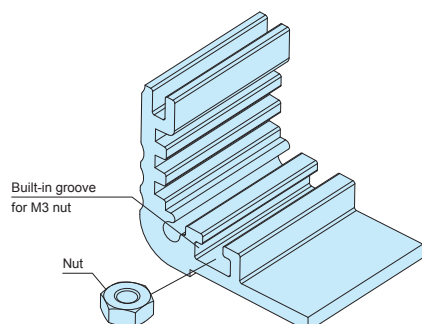
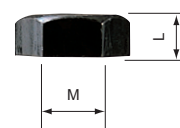
Components

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.