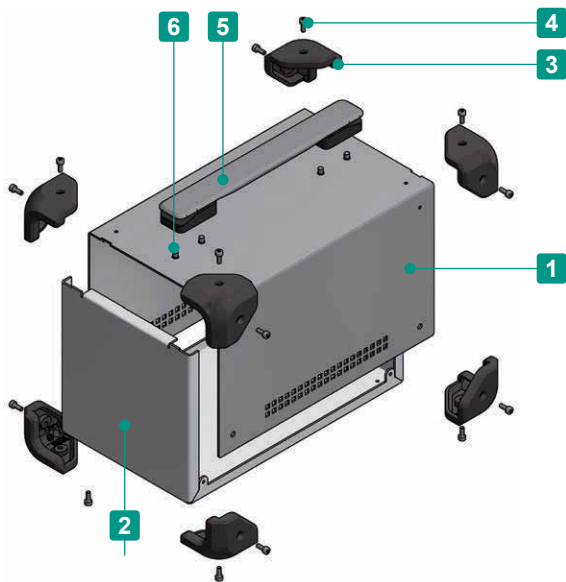
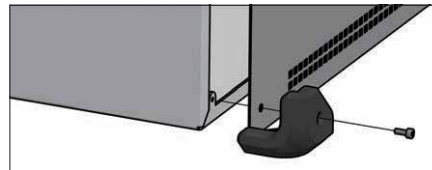




- Aluminium case equipped with shockproof and anti-slip elastomer corner guards.
- Suitable to be used as a fanless PC, power supply, power storage device etc.  
Carrying handle can withstand a maximum load up to 30.0 kg.
- Corner guards are available in 4 different color variations.
- Custom sizes available.



- Aluminium case and corner guard with screw fastening.



Included screws  
 Case / Corner guard - M4-8 Hexagonal : Steel : Black trivalent chromate x 16 or 18 pcs  
 Carrying handle - M5-8 : Steel : Trivalent chromate x 4 pcs  
 ※Hexagonal wrenches included.

**Components**

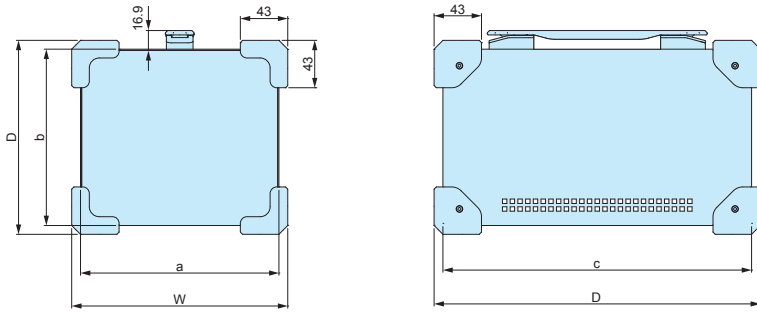
No.	Part name	Pcs	Material	Color / Finish
1	Top cover	1	Steel SECC t=10	Black / Painted
			Aluminium A1100P t=1.5	Metallic silver / Painted : Conductive inside
2	Base	1	Aluminium A1050P t=1.5	Black / Painted
			Aluminium A1100P t=1.5	Metallic silver / Painted : Conductive inside
3	Corner guard	8	TPE	Black • Gray • Navy • Red
4	Case / Corner guard screw	16 / 18	Steel	Black trivalent chromate
5	Carrying handle	1	PU • PA6 • ABS • Steel	Black • Gray
6	Carrying handle screw	4	Steel	Trivalent chromate

Color Type

Code	B B B	B G B	B N B	B R B
Color				
Code	S B B Conductive	S G G Conductive	S N G Conductive	S R G Conductive
Color				

UCG dimensions

■ Drawings below are reference examples only.  
DXF/DWG/PDF drawings available on our website.



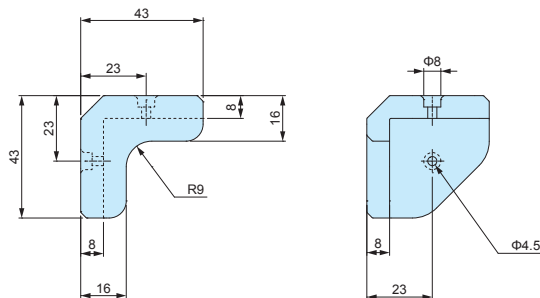
Product no. / Dimensions

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

Product no.	W	H	D	a	b	c	Weight (kg)	
							B □ □ models	S □ □ models
NEW MCG14-14-23 □ □ □	156	156	246	140	140	230	1.2	0.9
NEW MCG18-16-28 □ □ □	196	176	296	180	160	280	1.8	1.3
NEW MCG21-14-24 □ □ □	226	156	256	210	140	240	1.6	1.2
NEW MCG26-18-30 □ □ □	276	196	316	260	180	300	2.3	1.6

Accessories (Optional parts)

MG-1 CORNER GUARD



- Corner guard part for MCG case.
- Corner guard can be installed on other enclosures than UCG series.
- M4 thread holes are required for installation.
- Available in 4 different color variations.

Components

No.	Part name	Material
1	Corner guard	TPE
2	Screw (M4-8 Hexagonal)	Steel

Product no. / Details

Product no.				Weight (g)	Pack of
● Black	● Gray	● Navy	● Red		
NEW MG-1B	NEW MG-1G	NEW MG-1N	NEW MG-1R	124	8

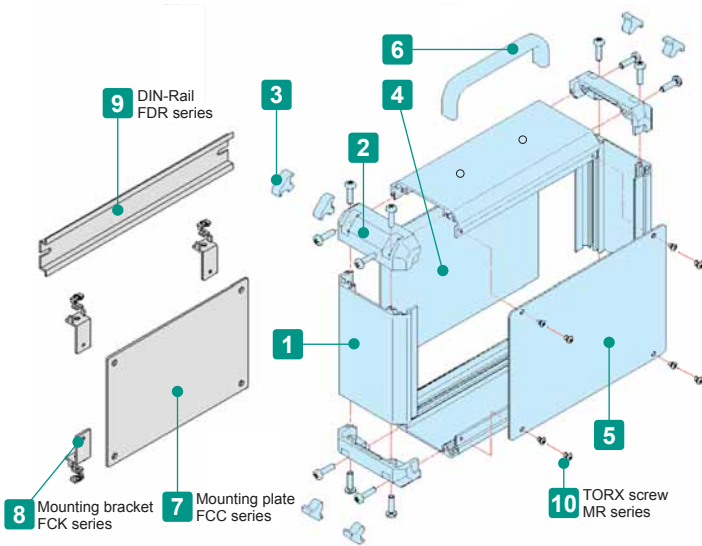
Included screw : M4-8 Hexagonal : Steel : Black trivalent chromate x 18 pcs + Hexagonal wrench

# FCH SERIES

# CONTROL BOX with CARRYING HANDLE



Technical Data
Protection class: IP40



- 23 different sizes in 2 different color variations available.
- Equipped with an aluminium carrying handle for mobile use.
- Comes with a 25kg maximum load carrying handle attachment.
- Simple designed aluminium utility box composed of extruded aluminium frames, aluminium panels and ABS corner joints.

**Included screws**

M4-15 Pan head trivalent chromate x 16 pcs

M3-5 Slotted raised countersunk / Silver = Nickel plated, Black = Trivalent chromate x 8 pcs

M4-10 Pan head trivalent chromate with spring washer x 2 pcs

**Components**

No.	Part name	Pcs	Material	Color / Finish
1	Frame	4	Extruded aluminium A6063S-T5	Silver • Black / Anodized
2	Corner block	4	ABS UL94HB	Light gray • Black
3	Blind plug	8	TPE	Light gray • Black
4	Slide panel	1	Aluminium A1050P t=1.5	Silver / Hairline brushed & Anodized
			Aluminium A1100P t=1.5	Black / Painted
5	Screwed panel	1	Aluminium A1050P t=1.5	Silver / Hairline brushed & Anodized
			Aluminium A1100P t=1.5	Black / Painted
6	Carrying handle	1	Aluminium A6063S-T5	Silver • Black / Anodized

**Accessories (Optional parts)**



7 Mounting plate FCC series  
See page FCC • FCK-1 ~ FCC • FCK-2



8 Mounting bracket FCK series  
See page FCC • FCK-2



9 DIN-Rail FDR series  
See page MR • FDR-1

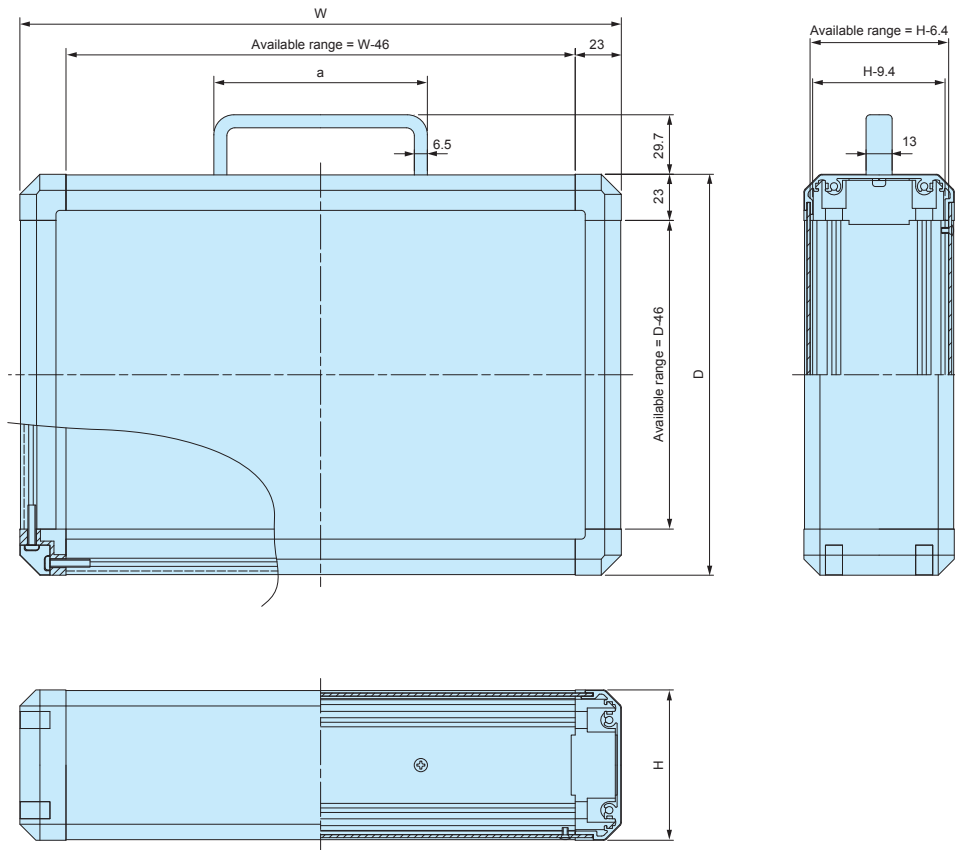


10 TORX screw MR3-5Z  
See page MR • FDR-1



FCH dimensions

■ Drawings below are reference examples only.  
DXF/DWG/PDF drawings available on our website.



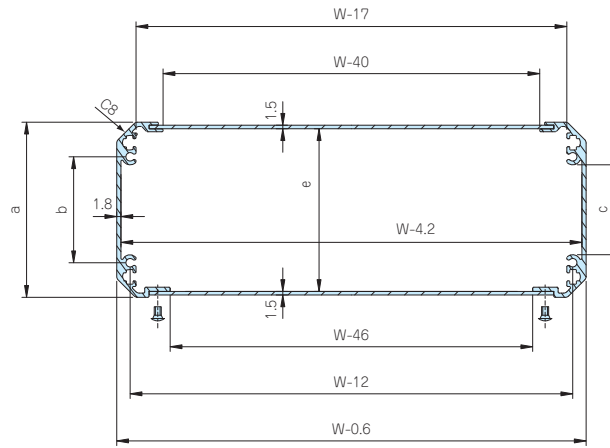
Product no. / Dimensions

Product no.		H	W	D	a	Weight (kg)
● Light gray • Silver	● Black • Black					
FCH 8-20-15GS	FCH 8-20-15BB	75.4	200	150	106.5	0.65
FCH 8-20-20GS	FCH 8-20-20BB	75.4	200	200	106.5	0.79
FCH 8-25-15GS	FCH 8-25-15BB	75.4	250	150	106.5	0.77
FCH 8-25-20GS	FCH 8-25-20BB	75.4	250	200	106.5	0.93
FCH 8-25-25GS	FCH 8-25-25BB	75.4	250	250	106.5	1.10
FCH 8-30-20GS	FCH 8-30-20BB	75.4	300	200	126.5	1.07
FCH 8-30-25GS	FCH 8-30-25BB	75.4	300	250	126.5	1.26
FCH 8-30-30GS	FCH 8-30-30BB	75.4	300	300	126.5	1.45
FCH 8-35-20GS	FCH 8-35-20BB	75.4	350	200	126.5	1.22
FCH 8-35-25GS	FCH 8-35-25BB	75.4	350	250	126.5	1.42
FCH 8-35-30GS	FCH 8-35-30BB	75.4	350	300	126.5	1.54
FCH 8-40-25GS	FCH 8-40-25BB	75.4	400	250	126.5	1.49
FCH 8-40-30GS	FCH 8-40-30BB	75.4	400	300	126.5	1.81
FCH 8-40-40GS	FCH 8-40-40BB	75.4	400	400	126.5	2.27
FCH10-30-20GS	FCH10-30-20BB	100.4	300	200	126.5	1.19
FCH10-30-25GS	FCH10-30-25BB	100.4	300	250	126.5	1.39
FCH10-30-30GS	FCH10-30-30BB	100.4	300	300	126.5	1.60
FCH10-35-20GS	FCH10-35-20BB	100.4	350	200	126.5	1.35
FCH10-35-25GS	FCH10-35-25BB	100.4	350	250	126.5	1.57
FCH10-35-30GS	FCH10-35-30BB	100.4	350	300	126.5	1.80
FCH10-40-25GS	FCH10-40-25BB	100.4	400	250	126.5	1.75
FCH10-40-30GS	FCH10-40-30BB	100.4	400	300	126.5	1.99
FCH10-40-40GS	FCH10-40-40BB	100.4	400	400	126.5	2.48

**FCH cross-section view**

■ Drawings below are reference examples only.  
DXF/DWG/PDF drawings available on our website.

FCH series

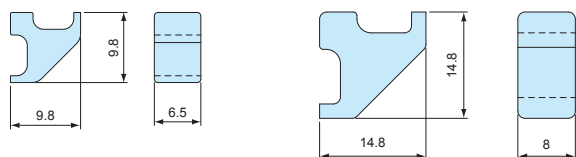


Box height	a	b	c	e
75.4	74.4	45	38.2	69
100.4	99.4	70	63.2	94

**FC-BK SERIES** **BLIND PLUG**

■ Spare / Replacement bling plug for FC • FCW series.

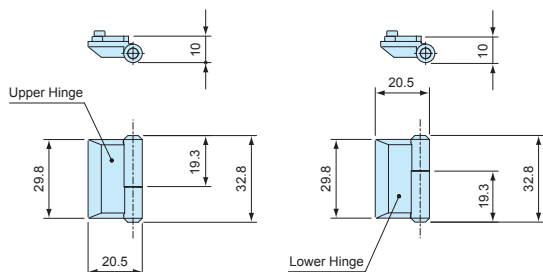
FC-BK-S□ (FC4 models)    FC-BK-□ (Other FC models • FCW series)



Product no.	Material	Color	Pack of
FC-BK-SG	TPE	Light gray	1 set (4 pcs)
FC-BK-SB	TPE	Black	1 set (4 pcs)
FC-BK-G	TPE	Light gray	1 set (4 pcs)
FC-BK-B	TPE	Black	1 set (4 pcs)

**FW SERIES** **HINGE for FCW**

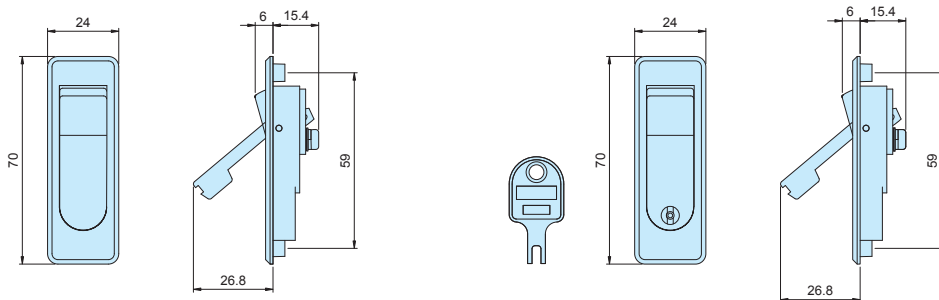
■ Spare / Replacement hinge for FCW series.



Product no.	Material	Color / Finish	Pack of
FW-2S	Diecast zinc	Silver / Painted	1 set (Upper/Lower)
FW-2B	Diecast zinc	Black / Painted	1 set (Upper/Lower)

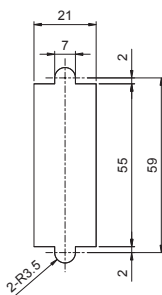
**PH-88 SERIES** **FLAT HANDLE for FCW**

■ Spare / Replacement flat handle for FCW series.



Normal type (without Key)

Key-lock type (with Key)

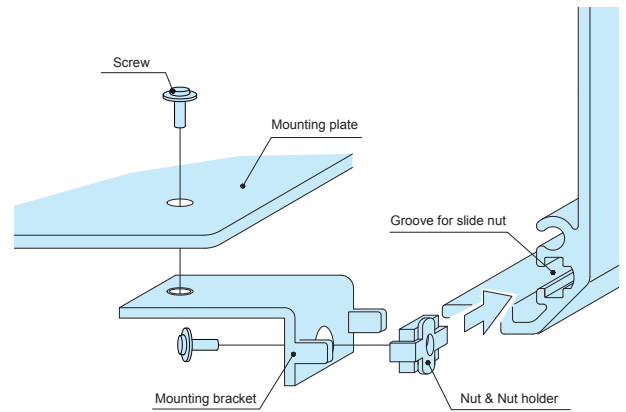


Mounting hole dimensions

Product no.	Key	Material	Color / Finish
PH-88A-2S	without	Diecast zinc	Silver / Painted
PH-88A-2B	without	Diecast zinc	Black / Painted
PH-88 -2S	with	Diecast zinc	Silver / Painted
PH-88 -2B	with	Diecast zinc	Black / Painted

FCC SERIES

MOUNTING PLATE for FC • FCW



How to assemble

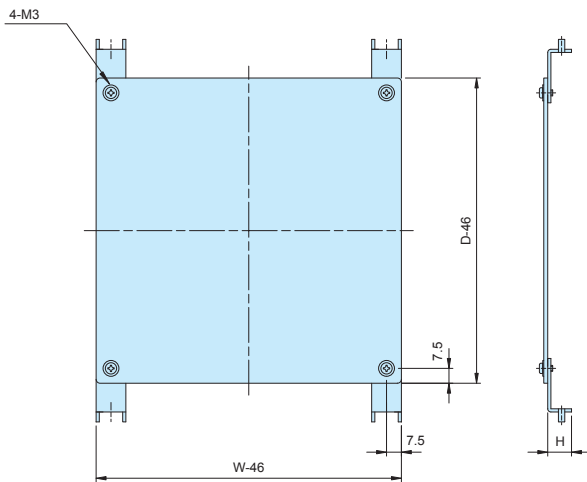
- ① Slide a M3 nut and nut holder into the groove on the frame.
- ② Screw the mounting bracket into the nut holder.
- ③ Screw the mounting plate onto the mounting bracket.

- The mounting bracket comes in 2 different height versions, 12mm and 22mm.
- Use 22mm height version when set on the open/close panel side of FCW series.
- Not suitable for FC4 (H = 37.9mm)
- Mounting brackets (FCK) are included with FCC series.
- DXF/DWG/PDF drawings available on our website.

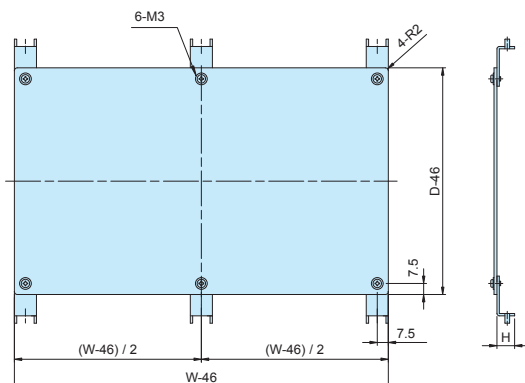
Components

No.	Part name	Material	Color / Finish
1	Mounting plate	Aluminium A1050P t=2.0	Unfinished
2	Mounting bracket	Steel SECC t=1.6	Zinc coated
3	M3 nut	Steel SPCC t=1.6	Trivalent chromate
4	Nut holder	POM	Black
5	Screw	Steel M3-6	Trivalent chromate

For box size (W x D or D x W) 100 x 100mm to 350 x 300mm



For box size (W x D or D x W) 400/500/600 x 200/250/300 mm



Product no. / Dimensions

Product no.	H	Box W x D or D x W	Product no.	H	Box W x D or D x W
FCC10-10-1	12	100×100	FCC10-10-2	22	100×100
FCC15-10-1	12	150×100	FCC15-10-2	22	150×100
FCC15-15-1	12	150×150	FCC15-15-2	22	150×150
FCC20-10-1	12	200×100	FCC20-10-2	22	200×100
FCC20-15-1	12	200×150	FCC20-15-2	22	200×150
FCC20-20-1	12	200×200	FCC20-20-2	22	200×200
FCC25-15-1	12	250×150	FCC25-15-2	22	250×150
FCC25-20-1	12	250×200	FCC25-20-2	22	250×200
FCC25-25-1	12	250×250	FCC25-25-2	22	250×250
FCC30-15-1	12	300×150	FCC30-15-2	22	300×150
FCC30-20-1	12	300×200	FCC30-20-2	22	300×200
FCC30-25-1	12	300×250	FCC30-25-2	22	300×250
FCC30-30-1	12	300×300	FCC30-30-2	22	300×300
FCC35-20-1	12	350×200	FCC35-20-2	22	350×200
FCC35-25-1	12	350×250	FCC35-25-2	22	350×250
FCC35-30-1	12	350×300	FCC35-30-2	22	350×300

Included screws: M3-6 pan head trivalent chromate with flat washer x 8 pcs

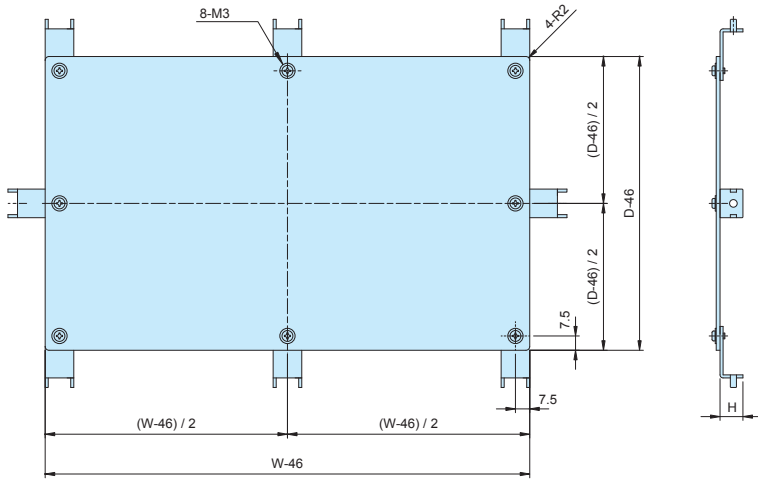
Product no. / Dimensions

Product no.	H	Box W x D or D x W	Product no.	H	Box W x D or D x W
FCC40-20-1	12	400×200	FCC40-20-2	22	400×200
FCC40-25-1	12	400×250	FCC40-25-2	22	400×250
FCC40-30-1	12	400×300	FCC40-30-2	22	400×300
FCC50-25-1	12	500×250	FCC50-25-2	22	500×250
FCC50-30-1	12	500×300	FCC50-30-2	22	500×300
FCC60-30-1	12	600×300	FCC60-30-2	22	600×300

Included screws: M3-6 pan head trivalent chromate with flat washer x 12 pcs

For box size (W x D or D x W) 400/500/600 x 400mm

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



Product no. / Dimensions

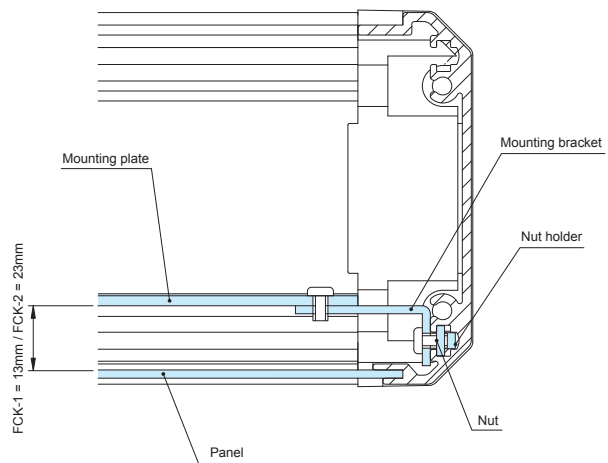
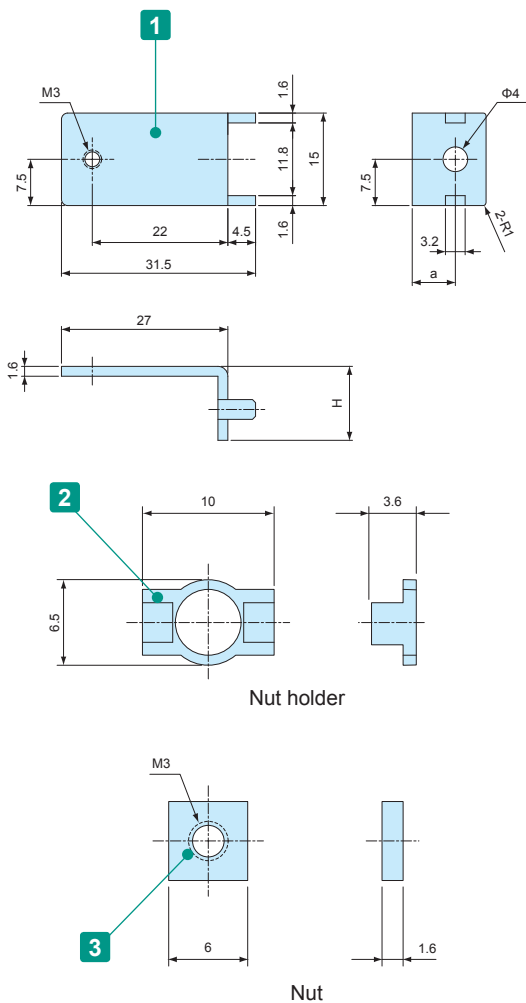
Product no.	H	Box W x D or D x W	Product no.	H	Box W x D or D x W
FCC40-40-1	12	400x400	FCC40-40-2	22	400x400
FCC50-40-1	12	500x400	FCC50-40-2	22	500x400
FCC60-40-1	12	600x400	FCC60-40-2	22	600x400

Included screws: M3-6 pan head trivalent chromate with flat washer x 16 pcs

Accessories (Optional parts)

**FCK SERIES MOUNTING BRACKET**

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



- 2 mounting brackets for PCB or DIN-Rail.
- FCK mounting bracket comes with FCC mounting plate. Additional FCK is not necessary when purchasing FCC series.
- Not suitable for FC4 (H = 37.9mm).

Components

No.	Part name	Material	Color / Finish
1	Mounting bracket	Steel SECC t=1.6	Zinc coated
2	Nut holder	POM	Black
3	M3 nut	Steel SPCC t=1.6	Trivalent chromate

Product no. / Dimensions

Product no.	H	a	Pack of
FCK-1	12	7	10
FCK-2	22	17	10

Included screws: M3-6 pan head trivalent chromate with flat washer x 20 pcs



**MR SERIES**

**SLOTTED RAISED COUNTERSUNK TORX SCREW**



- For use with top / bottom cover.
- Recommended for aesthetic purposes, or for tampering resistance.
- Requires the use of a specialized screwdriver.

**Product no. / Dimensions**

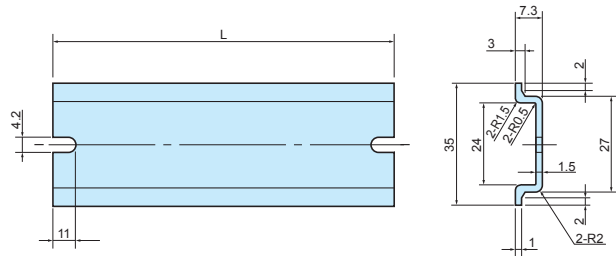
Product no.	M	L	TORX head no.	Material	Color / Finish	Pack of
MR3-5ZS	3	5	T10	Steel	Nickel plated	20
MR3-5ZB	3	5	T10	Steel	Black trivalent chromate	20

**FDR SERIES**

**DIN-RAIL**



- FCK mounting bracket is required for installation.
- Not suitable for FC4 (H = 37.9mm).



**Components**

Material	Color / Finish
Aluminium A6063S-T5	Silver / Anodized

**Product no. / Dimensions**

Product no.	L	Box length
FDR- 50	50	100
FDR-100	100	150
FDR-150	150	200
FDR-205	205	250
FDR-249	249	300
FDR-300	300	350
FDR-350	350	400
FDR-450	450	500
FDR-550	550	600

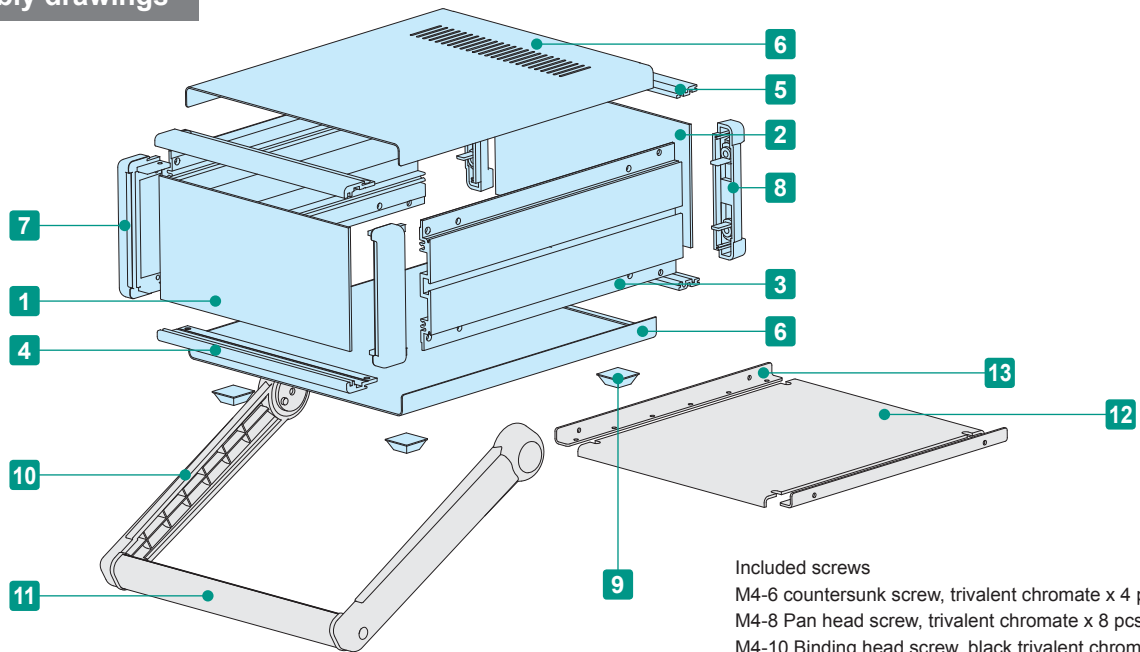
# MSN SERIES

# DESKTOP ENCLOSURE with STAND HANDLE



- Available in 3 different colors and 176 different sizes.
- Stand handle can be shifted and locked at 30° intervals.
- Maximum load support of 25kg.

## Assembly drawings



Included screws  
 M4-6 countersunk screw, trivalent chromate x 4 pcs  
 M4-8 Pan head screw, trivalent chromate x 8 pcs  
 M4-10 Binding head screw, black trivalent chromate x 4 pcs

### Components

No.	Part name	Pcs	Material	Color / Finish	
1	Front panel	1	Aluminium A1050P t=2.0	Silver • Black / Hairline brushed & Anodized	
2	Rear panel	1	Aluminium A1050P t=2.0	Silver • Black / Anodized	
3	Side frame	2	Extruded aluminium A6063S-T5	Gray • Black / Painted	
4	Front frame	2	Extruded aluminium A6063S-T5	Gray • Black / Painted	
5	Rear frame	2	Extruded aluminium A6063S-T5	Silver / Anodized	
6	Top • Bottom cover	1 each	Steel SPCC t=1.0	Light gray • Black / Painted	
7	Corner block	2	Diecast aluminium ADC12	Gray • Black / Painted	
8	Rear feet	2	ABS UL94V-0	Gray • Black	
9	Rubber feet	4	Polyurethane	Black	
10	Stand handle	Bracket	2	ABS UL94HB	Light gray • Black
11		Grip	1	Extruded aluminium A6063S-T5	Silver • Black

■ Note: Front / rear panels are covered with a protective film on one side. Remove before assembly.

## Accessories (Optional parts)



12 Mounting plate MSC series  
See page MSC • MSCL-1



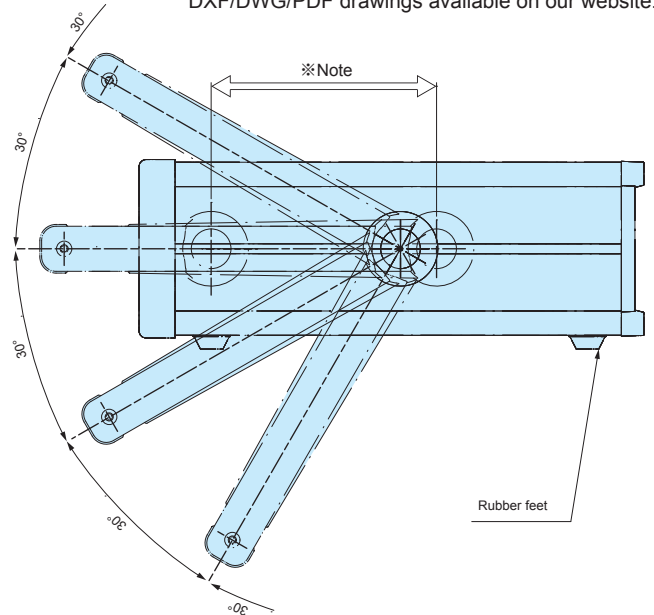
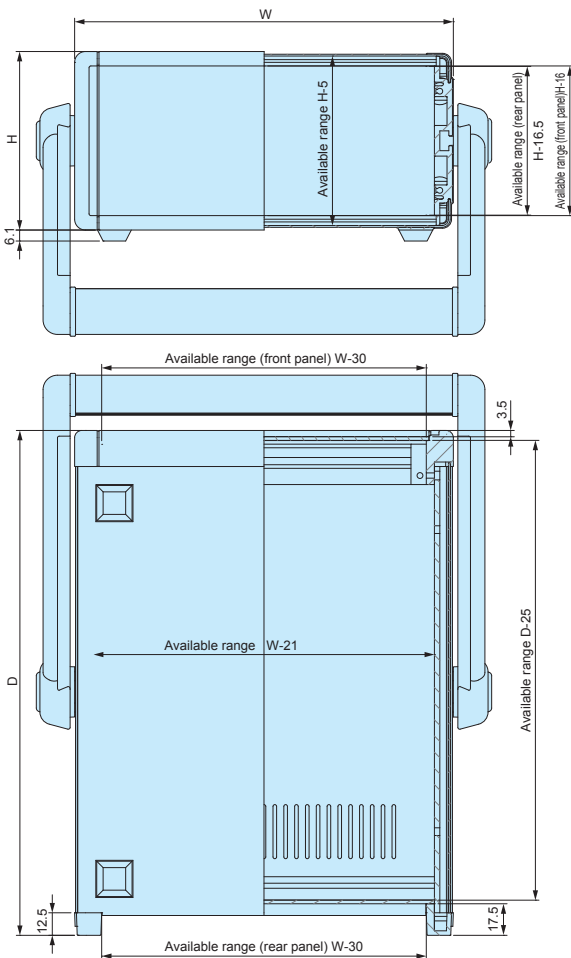
2 L-bracket MSCL series  
See page MSC • MSCL-1



Cable hook CBF series  
See page TL • CBF-1

## MSN dimensions

■ Drawings below are reference examples only.  
DXF/DWG/PDF drawings available on our website.



※ Note  
Stand handle location can be freely affixed within denoted range.

■ Top • Bottom cover of sizes 160x160, 160x230, 160x280, 210x160 do not have ventilation holes.

## Color Type

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

● G		● B		● BS	
Panel	Silver	Panel	Black	Panel	Silver
Top • Bottom cover	Light gray	Top • Bottom cover	Black	Top • Bottom cover	Black
Side frame	Gray	Side frame	Black	Side frame	Black

**Product no. / Dimensions**

Product no.	H	W	D	Weight (kg)
MSN 66-16-16 □	66	160	160	1.2
MSN 66-16-23 □	66	160	230	1.5
MSN 66-16-28 □	66	160	280	1.8
MSN 66-21-16 □	66	210	160	1.4
MSN 66-21-23 □	66	210	230	1.8
MSN 66-21-28 □	66	210	280	2.1
MSN 66-21-35 □	66	210	350	2.5
MSN 66-26-23 □	66	260	230	2.1
MSN 66-26-28 □	66	260	280	2.4
MSN 66-26-35 □	66	260	350	2.9
MSN 66-32-23 □	66	320	230	2.4
MSN 66-32-28 □	66	320	280	2.8
MSN 66-32-35 □	66	320	350	3.4
MSN 66-32-45 □	66	320	450	4.1
MSN 66-37-23 □	66	370	230	2.6
MSN 66-37-28 □	66	370	280	3.1
MSN 66-37-35 □	66	370	350	3.7
MSN 66-37-45 □	66	370	450	4.4
MSN 66-43-23 □	66	430	230	3.0
MSN 66-43-28 □	66	430	280	3.5
MSN 66-43-35 □	66	430	350	4.2
MSN 66-43-45 □	66	430	450	5.2
MSN 88-16-16 □	88	160	160	1.3
MSN 88-16-23 □	88	160	230	1.6
MSN 88-16-28 □	88	160	280	1.9
MSN 88-21-16 □	88	210	160	1.5
MSN 88-21-23 □	88	210	230	1.9
MSN 88-21-28 □	88	210	280	2.3
MSN 88-21-35 □	88	210	350	2.7
MSN 88-26-23 □	88	260	230	2.3
MSN 88-26-28 □	88	260	280	2.6
MSN 88-26-35 □	88	260	350	3.1
MSN 88-32-23 □	88	320	230	2.6
MSN 88-32-28 □	88	320	280	3.0
MSN 88-32-35 □	88	320	350	3.6
MSN 88-32-45 □	88	320	450	4.4
MSN 88-37-23 □	88	370	230	2.9
MSN 88-37-28 □	88	370	280	3.3
MSN 88-37-35 □	88	370	350	4.0
MSN 88-37-45 □	88	370	450	4.7
MSN 88-43-23 □	88	430	230	3.2
MSN 88-43-28 □	88	430	280	3.7
MSN 88-43-35 □	88	430	350	4.4
MSN 88-43-45 □	88	430	450	5.5

Product no.	H	W	D	Weight (kg)
MSN 99-16-16 □	99	160	160	1.3
MSN 99-16-23 □	99	160	230	1.7
MSN 99-16-28 □	99	160	280	2.0
MSN 99-21-16 □	99	210	160	1.6
MSN 99-21-23 □	99	210	230	2.0
MSN 99-21-28 □	99	210	280	2.3
MSN 99-21-35 □	99	210	350	2.8
MSN 99-26-23 □	99	260	230	2.3
MSN 99-26-28 □	99	260	280	2.7
MSN 99-26-35 □	99	260	350	3.2
MSN 99-32-23 □	99	320	230	2.6
MSN 99-32-28 □	99	320	280	3.1
MSN 99-32-35 □	99	320	350	3.7
MSN 99-32-45 □	99	320	450	4.5
MSN 99-37-23 □	99	370	230	2.9
MSN 99-37-28 □	99	370	280	3.4
MSN 99-37-35 □	99	370	350	4.1
MSN 99-37-45 □	99	370	450	4.8
MSN 99-43-23 □	99	430	230	3.3
MSN 99-43-28 □	99	430	280	3.8
MSN 99-43-35 □	99	430	350	4.5
MSN 99-43-45 □	99	430	450	5.6
MSN133-16-16 □	133	160	160	1.5
MSN133-16-23 □	133	160	230	1.9
MSN133-16-28 □	133	160	280	2.2
MSN133-21-16 □	133	210	160	1.8
MSN133-21-23 □	133	210	230	2.3
MSN133-21-28 □	133	210	280	2.6
MSN133-21-35 □	133	210	350	3.1
MSN133-26-23 □	133	260	230	2.6
MSN133-26-28 □	133	260	280	3.0
MSN133-26-35 □	133	260	350	3.5
MSN133-32-23 □	133	320	230	2.9
MSN133-32-28 □	133	320	280	3.4
MSN133-32-35 □	133	320	350	4.0
MSN133-32-45 □	133	320	450	4.9
MSN133-37-23 □	133	370	230	3.3
MSN133-37-28 □	133	370	280	3.8
MSN133-37-35 □	133	370	350	4.4
MSN133-37-45 □	133	370	450	5.2
MSN133-43-23 □	133	430	230	3.7
MSN133-43-28 □	133	430	280	4.2
MSN133-43-35 □	133	430	350	4.9
MSN133-43-45 □	133	430	450	6.0

**Product no. / Dimensions**

Product no.	H	W	D	Weight (kg)
MSN149-16-16 □	149	160	160	1.6
MSN149-16-23 □	149	160	230	2.0
MSN149-16-28 □	149	160	280	2.4
MSN149-21-16 □	149	210	160	1.8
MSN149-21-23 □	149	210	230	2.4
MSN149-21-28 □	149	210	280	2.7
MSN149-21-35 □	149	210	350	3.2
MSN149-26-23 □	149	260	230	2.7
MSN149-26-28 □	149	260	280	3.1
MSN149-26-35 □	149	260	350	3.6
MSN149-32-23 □	149	320	230	3.1
MSN149-32-28 □	149	320	280	3.5
MSN149-32-35 □	149	320	350	4.2
MSN149-32-45 □	149	320	450	5.1
MSN149-37-23 □	149	370	230	3.4
MSN149-37-28 □	149	370	280	3.9
MSN149-37-35 □	149	370	350	4.6
MSN149-37-45 □	149	370	450	5.4
MSN149-43-23 □	149	430	230	3.8
MSN149-43-28 □	149	430	280	4.4
MSN149-43-35 □	149	430	350	5.1
MSN149-43-45 □	149	430	450	6.3
MSN177-16-16 □	177	160	160	1.9
MSN177-16-23 □	177	160	230	2.4
MSN177-16-28 □	177	160	280	2.8
MSN177-21-16 □	177	210	160	2.2
MSN177-21-23 □	177	210	230	2.8
MSN177-21-28 □	177	210	280	3.2
MSN177-21-35 □	177	210	350	3.8
MSN177-26-23 □	177	260	230	3.2
MSN177-26-28 □	177	260	280	3.6
MSN177-26-35 □	177	260	350	4.2
MSN177-32-23 □	177	320	230	3.5
MSN177-32-28 □	177	320	280	4.0
MSN177-32-35 □	177	320	350	4.8
MSN177-32-45 □	177	320	450	5.8
MSN177-37-23 □	177	370	230	3.9
MSN177-37-28 □	177	370	280	4.4
MSN177-37-35 □	177	370	350	5.2
MSN177-37-45 □	177	370	450	6.1
MSN177-43-23 □	177	430	230	4.3
MSN177-43-28 □	177	430	280	4.9
MSN177-43-35 □	177	430	350	5.7
MSN177-43-45 □	177	430	450	7.0

Product no.	H	W	D	Weight (kg)
MSN199-16-16 □	199	160	160	2.0
MSN199-16-23 □	199	160	230	2.6
MSN199-16-28 □	199	160	280	2.9
MSN199-21-16 □	199	210	160	2.3
MSN199-21-23 □	199	210	230	2.9
MSN199-21-28 □	199	210	280	3.3
MSN199-21-35 □	199	210	350	3.9
MSN199-26-23 □	199	260	230	3.3
MSN199-26-28 □	199	260	280	3.7
MSN199-26-35 □	199	260	350	4.4
MSN199-32-23 □	199	320	230	3.7
MSN199-32-28 □	199	320	280	4.2
MSN199-32-35 □	199	320	350	4.9
MSN199-32-45 □	199	320	450	5.9
MSN199-37-23 □	199	370	230	4.0
MSN199-37-28 □	199	370	280	4.6
MSN199-37-35 □	199	370	350	5.4
MSN199-37-45 □	199	370	450	6.3
MSN199-43-23 □	199	430	230	4.5
MSN199-43-28 □	199	430	280	5.1
MSN199-43-35 □	199	430	350	5.9
MSN199-43-45 □	199	430	450	7.2
MSN222-16-16 □	222	160	160	2.2
MSN222-16-23 □	222	160	230	2.7
MSN222-16-28 □	222	160	280	3.0
MSN222-21-16 □	222	210	160	2.5
MSN222-21-23 □	222	210	230	3.0
MSN222-21-28 □	222	210	280	3.4
MSN222-21-35 □	222	210	350	4.1
MSN222-26-23 □	222	260	230	3.4
MSN222-26-28 □	222	260	280	3.8
MSN222-26-35 □	222	260	350	4.5
MSN222-32-23 □	222	320	230	3.8
MSN222-32-28 □	222	320	280	4.3
MSN222-32-35 □	222	320	350	5.1
MSN222-32-45 □	222	320	450	6.2
MSN222-37-23 □	222	370	230	4.2
MSN222-37-28 □	222	370	280	4.8
MSN222-37-35 □	222	370	350	5.6
MSN222-37-45 □	222	370	450	6.6
MSN222-43-23 □	222	430	230	4.7
MSN222-43-28 □	222	430	280	5.2
MSN222-43-35 □	222	430	350	6.1
MSN222-43-45 □	222	430	450	7.5

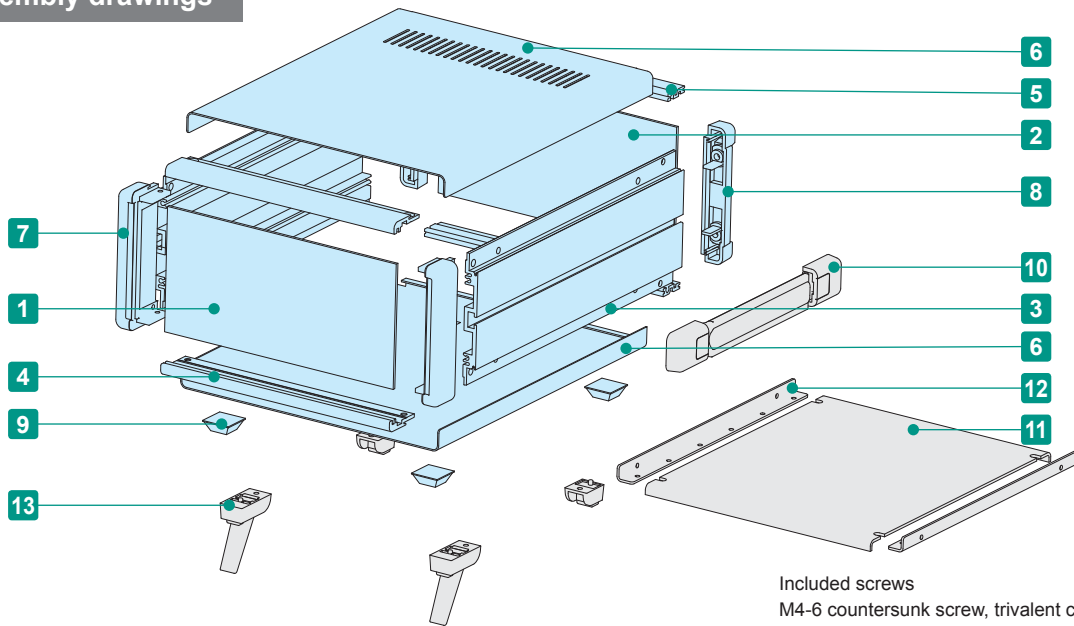
# MSY SERIES

# DESKTOP ENCLOSURE with CARRYING HANDLE



- Available in 3 different colors and 160 different sizes.
- Maximum load support of 20kg.

## Assembly drawings



Included screws  
 M4-6 countersunk screw, trivalent chromate x 4 pcs  
 M4-8 Pan head screw, trivalent chromate x 8 pcs  
 M4-10 Binding head screw, black trivalent chromate x 4 pcs

### Components

No.	Part name	Pcs	Material	Color / Finish
1	Front panel	1	Aluminium A1050P t=2.0	Silver • Black / Hairline brushed & Anodized
2	Rear panel	1	Aluminium A1050P t=2.0	Silver • Black / Anodized
3	Side frame	2	Extruded aluminium A6063S-T5	Gray • Black / Painted
4	Front frame	2	Extruded aluminium A6063S-T5	Gray • Black / Painted
5	Rear frame	2	Extruded aluminium A6063S-T5	Silver / Anodized
6	Top • Bottom cover	1 each	Steel SPCC t=1.0	Light gray • Black / Painted
7	Corner block	2	Diecast aluminium ADC12	Gray • Black / Painted
8	Rear feet	2	ABS UL94V-0	Gray • Black
9	Rubber feet	4	Polyurethane	Black
10	Carrying handle	1	PP + Elastomer	Gray • Black

■ Note: Front / rear panels are covered with a protective film on one side. Remove before assembly.

Accessories (Optional parts)



11 Mounting plate MSC series  
See page MSC • MSCL-1



12 L-bracket MSCL series  
See page MSC • MSCL-1



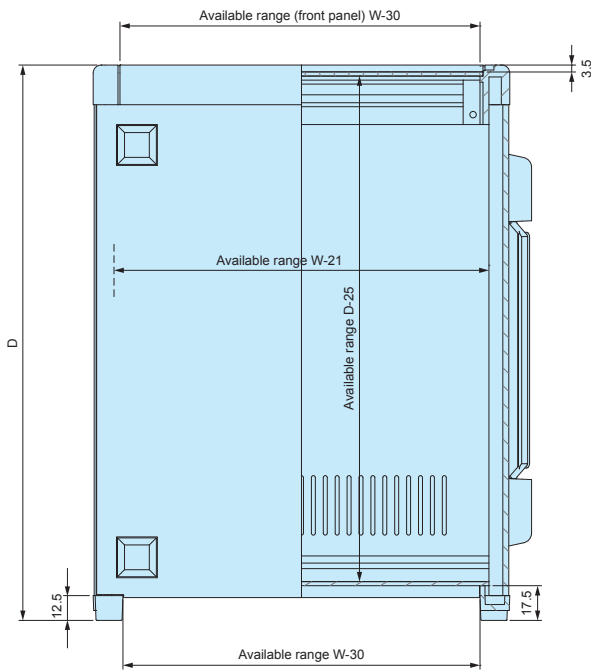
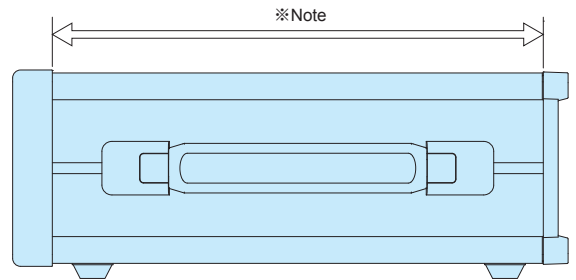
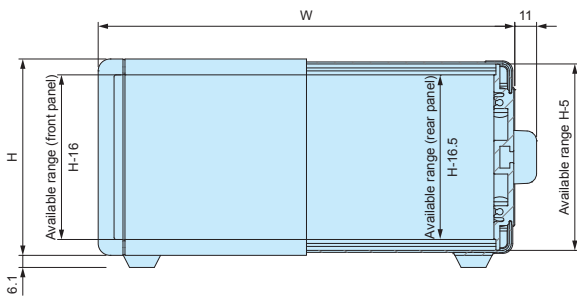
13 Tilt leg TL series  
See page TL • CBF-1



Cable hook CBF series  
See page TL • CBF-1

MSY dimensions

■ Drawings below are reference examples only.  
DXF/DWG/PDF drawings available on our website.



※ Note  
Carrying handle location can be freely affixed within denoted range.

■ Top • Bottom cover of sizes 160×230, 160×280 do not have ventilation holes.

Color Type

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

● G		● B		● BS	
	Panel Silver		Panel Black		Panel Silver
	Top • Bottom cover Light gray		Top • Bottom cover Black		Top • Bottom cover Black
	Side frame Gray		Side frame Black		Side frame Black

**Product no. / Dimensions**

Product no.	H	W	D	Weight (kg)
MSY 66-16-23 □	66	160	230	1.4
MSY 66-16-28 □	66	160	280	1.6
MSY 66-21-23 □	66	210	230	1.6
MSY 66-21-28 □	66	210	280	1.9
MSY 66-21-35 □	66	210	350	2.3
MSY 66-26-23 □	66	260	230	1.9
MSY 66-26-28 □	66	260	280	2.2
MSY 66-26-35 □	66	260	350	2.7
MSY 66-32-23 □	66	320	230	2.2
MSY 66-32-28 □	66	320	280	2.6
MSY 66-32-35 □	66	320	350	3.1
MSY 66-32-45 □	66	320	450	3.9
MSY 66-37-23 □	66	370	230	2.5
MSY 66-37-28 □	66	370	280	2.9
MSY 66-37-35 □	66	370	350	3.5
MSY 66-37-45 □	66	370	450	4.2
MSY 66-43-23 □	66	430	230	2.8
MSY 66-43-28 □	66	430	280	3.3
MSY 66-43-35 □	66	430	350	3.9
MSY 66-43-45 □	66	430	450	4.9
MSY 88-16-23 □	88	160	230	1.5
MSY 88-16-28 □	88	160	280	1.8
MSY 88-21-23 □	88	210	230	1.8
MSY 88-21-28 □	88	210	280	2.1
MSY 88-21-35 □	88	210	350	2.5
MSY 88-26-23 □	88	260	230	2.1
MSY 88-26-28 □	88	260	280	2.4
MSY 88-26-35 □	88	260	350	2.9
MSY 88-32-23 □	88	320	230	2.4
MSY 88-32-28 □	88	320	280	2.8
MSY 88-32-35 □	88	320	350	3.4
MSY 88-32-45 □	88	320	450	4.2
MSY 88-37-23 □	88	370	230	2.7
MSY 88-37-28 □	88	370	280	3.1
MSY 88-37-35 □	88	370	350	3.7
MSY 88-37-45 □	88	370	450	4.5
MSY 88-43-23 □	88	430	230	3.0
MSY 88-43-28 □	88	430	280	3.5
MSY 88-43-35 □	88	430	350	4.2
MSY 88-43-45 □	88	430	450	5.2

Product no.	H	W	D	Weight (kg)
MSY 99-16-23 □	99	160	230	1.6
MSY 99-16-28 □	99	160	280	1.8
MSY 99-21-23 □	99	210	230	1.8
MSY 99-21-28 □	99	210	280	2.1
MSY 99-21-35 □	99	210	350	2.6
MSY 99-26-23 □	99	260	230	2.2
MSY 99-26-28 □	99	260	280	2.5
MSY 99-26-35 □	99	260	350	3.0
MSY 99-32-23 □	99	320	230	2.5
MSY 99-32-28 □	99	320	280	2.9
MSY 99-32-35 □	99	320	350	3.5
MSY 99-32-45 □	99	320	450	4.3
MSY 99-37-23 □	99	370	230	2.7
MSY 99-37-28 □	99	370	280	3.2
MSY 99-37-35 □	99	370	350	3.8
MSY 99-37-45 □	99	370	450	4.6
MSY 99-43-23 □	99	430	230	3.1
MSY 99-43-28 □	99	430	280	3.6
MSY 99-43-35 □	99	430	350	4.3
MSY 99-43-45 □	99	430	450	5.3
MSY133-16-23 □	133	160	230	1.8
MSY133-16-28 □	133	160	280	2.1
MSY133-21-23 □	133	210	230	2.1
MSY133-21-28 □	133	210	280	2.4
MSY133-21-35 □	133	210	350	2.9
MSY133-26-23 □	133	260	230	2.4
MSY133-26-28 □	133	260	280	2.8
MSY133-26-35 □	133	260	350	3.3
MSY133-32-23 □	133	320	230	2.7
MSY133-32-28 □	133	320	280	3.2
MSY133-32-35 □	133	320	350	3.8
MSY133-32-45 □	133	320	450	4.6
MSY133-37-23 □	133	370	230	3.0
MSY133-37-28 □	133	370	280	3.5
MSY133-37-35 □	133	370	350	4.2
MSY133-37-45 □	133	370	450	5.0
MSY133-43-23 □	133	430	230	3.4
MSY133-43-28 □	133	430	280	3.9
MSY133-43-35 □	133	430	350	4.7
MSY133-43-45 □	133	430	450	5.8



**Product no. / Dimensions**

Product no.	H	W	D	Weight (kg)
MSY149-16-23 □	149	160	230	1.9
MSY149-16-28 □	149	160	280	2.2
MSY149-21-23 □	149	210	230	2.2
MSY149-21-28 □	149	210	280	2.5
MSY149-21-35 □	149	210	350	3.0
MSY149-26-23 □	149	260	230	2.5
MSY149-26-28 □	149	260	280	2.9
MSY149-26-35 □	149	260	350	3.4
MSY149-32-23 □	149	320	230	2.9
MSY149-32-28 □	149	320	280	3.3
MSY149-32-35 □	149	320	350	4.0
MSY149-32-45 □	149	320	450	4.9
MSY149-37-23 □	149	370	230	3.2
MSY149-37-28 □	149	370	280	3.7
MSY149-37-35 □	149	370	350	4.3
MSY149-37-45 □	149	370	450	5.2
MSY149-43-23 □	149	430	230	3.6
MSY149-43-28 □	149	430	280	4.1
MSY149-43-35 □	149	430	350	4.8
MSY149-43-45 □	149	430	450	6.0
MSY177-16-23 □	177	160	230	2.3
MSY177-16-28 □	177	160	280	2.6
MSY177-21-23 □	177	210	230	2.6
MSY177-21-28 □	177	210	280	3.0
MSY177-21-35 □	177	210	350	3.6
MSY177-26-23 □	177	260	230	3.0
MSY177-26-28 □	177	260	280	3.4
MSY177-26-35 □	177	260	350	4.0
MSY177-32-23 □	177	320	230	3.3
MSY177-32-28 □	177	320	280	3.8
MSY177-32-35 □	177	320	350	4.6
MSY177-32-45 □	177	320	450	5.6
MSY177-37-23 □	177	370	230	3.6
MSY177-37-28 □	177	370	280	4.2
MSY177-37-35 □	177	370	350	5.0
MSY177-37-45 □	177	370	450	5.9
MSY177-43-23 □	177	430	230	4.0
MSY177-43-28 □	177	430	280	4.6
MSY177-43-35 □	177	430	350	5.5
MSY177-43-45 □	177	430	450	6.7

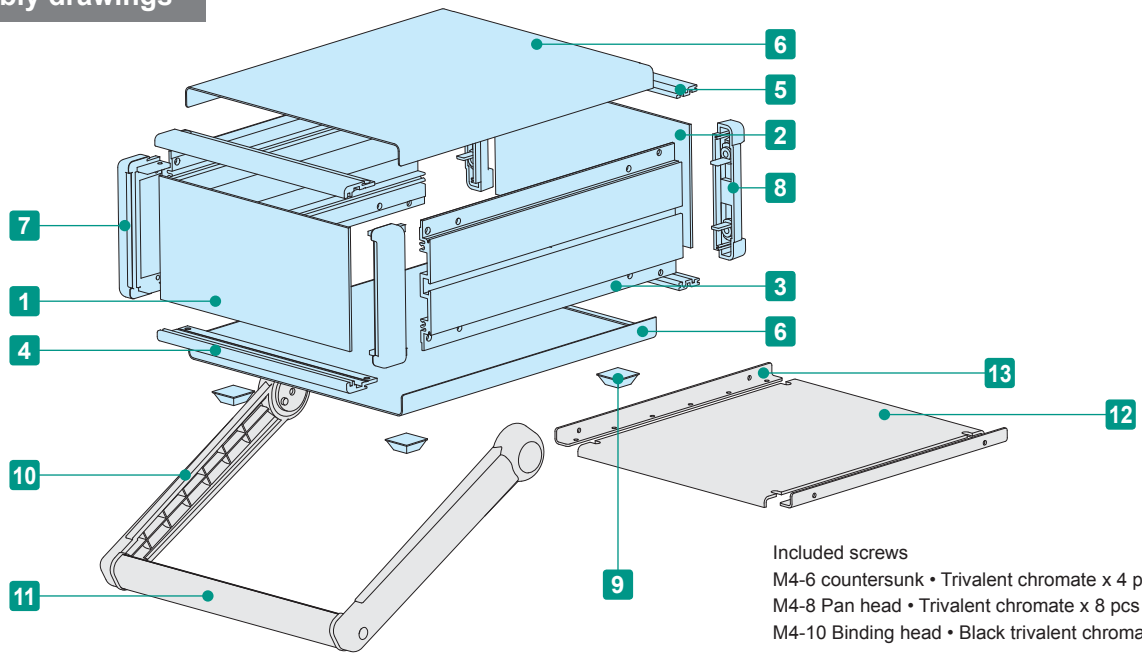
Product no.	H	W	D	Weight (kg)
MSY199-16-23 □	199	160	230	2.4
MSY199-16-28 □	199	160	280	2.8
MSY199-21-23 □	199	210	230	2.7
MSY199-21-28 □	199	210	280	3.1
MSY199-21-35 □	199	210	350	3.7
MSY199-26-23 □	199	260	230	3.1
MSY199-26-28 □	199	260	280	3.5
MSY199-26-35 □	199	260	350	4.2
MSY199-32-23 □	199	320	230	3.5
MSY199-32-28 □	199	320	280	4.0
MSY199-32-35 □	199	320	350	4.7
MSY199-32-45 □	199	320	450	5.7
MSY199-37-23 □	199	370	230	3.8
MSY199-37-28 □	199	370	280	4.4
MSY199-37-35 □	199	370	350	5.1
MSY199-37-45 □	199	370	450	6.1
MSY199-43-23 □	199	430	230	4.2
MSY199-43-28 □	199	430	280	4.8
MSY199-43-35 □	199	430	350	5.6
MSY199-43-45 □	199	430	450	6.9
MSY222-16-23 □	222	160	230	2.5
MSY222-16-28 □	222	160	280	2.9
MSY222-21-23 □	222	210	230	2.9
MSY222-21-28 □	222	210	280	3.3
MSY222-21-35 □	222	210	350	3.9
MSY222-26-23 □	222	260	230	3.3
MSY222-26-28 □	222	260	280	3.7
MSY222-26-35 □	222	260	350	4.4
MSY222-32-23 □	222	320	230	3.6
MSY222-32-28 □	222	320	280	4.1
MSY222-32-35 □	222	320	350	4.9
MSY222-32-45 □	222	320	450	6.0
MSY222-37-23 □	222	370	230	4.0
MSY222-37-28 □	222	370	280	4.5
MSY222-37-35 □	222	370	350	5.3
MSY222-37-45 □	222	370	450	6.4
MSY222-43-23 □	222	430	230	4.4
MSY222-43-28 □	222	430	280	5.0
MSY222-43-35 □	222	430	350	5.9
MSY222-43-45 □	222	430	450	7.2

# MON SERIES SYSTEM CASE with STAND HANDLE



- Available in 3 different colors and 176 different sizes.
- Stand handle can be shifted and locked at 30° intervals. Maximum load support of 25kg.
- Lightweight system case with stand handle. Suitable for use as measuring instruments, etc.

## Assembly drawings



Included screws  
 M4-6 countersunk • Trivalent chromate x 4 pcs  
 M4-8 Pan head • Trivalent chromate x 8 pcs  
 M4-10 Binding head • Black trivalent chromate x 4 pcs

## Components

No.	Part name	Pcs	Material	Color / Finish	
1	Front panel	1	Aluminium A1050P t=2.0	Silver • Black / Hairline brushed & Anodized	
2	Rear panel	1	Aluminium A1050P t=2.0	Silver • Black / Anodized	
3	Side frame	2	Extruded aluminium A6063S-T5	Gray • Black / Painted	
4	Front frame	2	Extruded aluminium A6063S-T5	Gray • Black / Painted	
5	Rear frame	2	Extruded aluminium A6063S-T5	Silver / Anodized	
6	Top • Bottom cover	1 each	Aluminium A1100P t=1.0	Light gray • Black / Painted	
7	Corner block	2	Diecast aluminium ADC12	Gray • Black / Painted	
8	Rear feet	2	ABS UL94V-0	Gray • Black	
9	Rubber feet	4	Polyurethane	Black	
10	Stand handle	Bracket	2	ABS UL94HB	Light gray • Black
11		Grip	1	Extruded aluminium A6063S-T5	Silver • Black

■ Note: Front / rear panels and top / bottom covers are covered with a protective film on one side. Remove before assembly.

Accessories (Optional parts)



12 Mounting plate MSC series  
See page MSC • MSCL-1



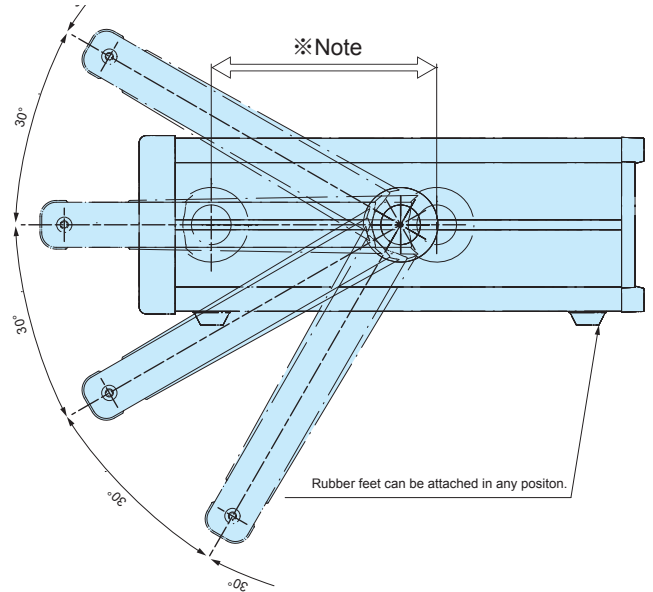
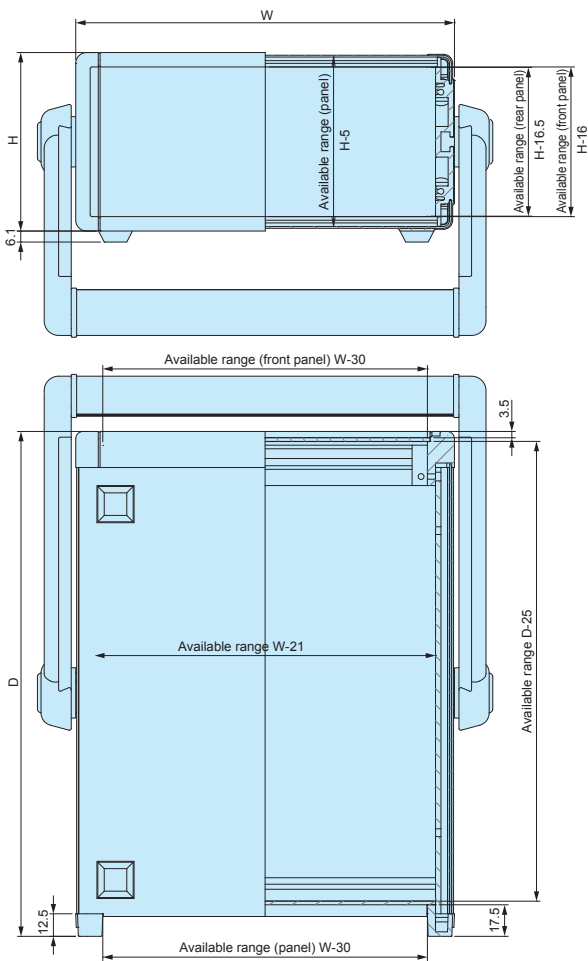
13 L-bracket MSCL series  
See page MSC • MSCL-1



Cable hook CBF series  
See page TL • CBF-1

MON dimensions

■ Drawings below are reference examples only.  
DXF/DWG/PDF drawings available on our website.



※Note  
Stand handle location can be freely affixed within denoted range.

Color Type

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

● G

● B

● BS



Panel	Silver
Top • Bottom cover	Light Gray
Side frame	Gray

Panel	Black
Top • Bottom cover	Black
Side frame	Black

Panel	Silver
Top • Bottom cover	Black
Side frame	Black

**Product no. / Dimensions**

Product no.	H	W	D	Weight (kg)
MON 66-16-16 □	66	160	160	0.9
MON 66-16-23 □	66	160	230	1.1
MON 66-16-28 □	66	160	280	1.3
MON 66-21-16 □	66	210	160	1.1
MON 66-21-23 □	66	210	230	1.3
MON 66-21-28 □	66	210	280	1.5
MON 66-21-35 □	66	210	350	1.7
MON 66-26-23 □	66	260	230	1.5
MON 66-26-28 □	66	260	280	1.7
MON 66-26-35 □	66	260	350	2.0
MON 66-32-23 □	66	320	230	1.7
MON 66-32-28 □	66	320	280	1.9
MON 66-32-35 □	66	320	350	2.2
MON 66-32-45 □	66	320	450	2.6
MON 66-37-23 □	66	370	230	1.9
MON 66-37-28 □	66	370	280	2.1
MON 66-37-35 □	66	370	350	2.4
MON 66-37-45 □	66	370	450	2.8
MON 66-43-23 □	66	430	230	2.1
MON 66-43-28 □	66	430	280	2.4
MON 66-43-35 □	66	430	350	2.7
MON 66-43-45 □	66	430	450	3.2
MON 88-16-16 □	88	160	160	1.0
MON 88-16-23 □	88	160	230	1.3
MON 88-16-28 □	88	160	280	1.5
MON 88-21-16 □	88	210	160	1.2
MON 88-21-23 □	88	210	230	1.5
MON 88-21-28 □	88	210	280	1.7
MON 88-21-35 □	88	210	350	1.9
MON 88-26-23 □	88	260	230	1.7
MON 88-26-28 □	88	260	280	1.9
MON 88-26-35 □	88	260	350	2.2
MON 88-32-23 □	88	320	230	1.9
MON 88-32-28 □	88	320	280	2.1
MON 88-32-35 □	88	320	350	2.5
MON 88-32-45 □	88	320	450	2.9
MON 88-37-23 □	88	370	230	2.1
MON 88-37-28 □	88	370	280	2.3
MON 88-37-35 □	88	370	350	2.7
MON 88-37-45 □	88	370	450	3.1
MON 88-43-23 □	88	430	230	2.3
MON 88-43-28 □	88	430	280	2.6
MON 88-43-35 □	88	430	350	3.0
MON 88-43-45 □	88	430	450	3.5

Product no.	H	W	D	Weight (kg)
MON 99-16-16 □	99	160	160	1.1
MON 99-16-23 □	99	160	230	1.3
MON 99-16-28 □	99	160	280	1.5
MON 99-21-16 □	99	210	160	1.3
MON 99-21-23 □	99	210	230	1.5
MON 99-21-28 □	99	210	280	1.7
MON 99-21-35 □	99	210	350	2.0
MON 99-26-23 □	99	260	230	1.7
MON 99-26-28 □	99	260	280	2.0
MON 99-26-35 □	99	260	350	2.3
MON 99-32-23 □	99	320	230	2.0
MON 99-32-28 □	99	320	280	2.2
MON 99-32-35 □	99	320	350	2.6
MON 99-32-45 □	99	320	450	3.0
MON 99-37-23 □	99	370	230	2.1
MON 99-37-28 □	99	370	280	2.4
MON 99-37-35 □	99	370	350	2.8
MON 99-37-45 □	99	370	450	3.2
MON 99-43-23 □	99	430	230	2.4
MON 99-43-28 □	99	430	280	2.7
MON 99-43-35 □	99	430	350	3.1
MON 99-43-45 □	99	430	450	3.7
MON133-16-16 □	132.5	160	160	1.3
MON133-16-23 □	132.5	160	230	1.6
MON133-16-28 □	132.5	160	280	1.8
MON133-21-16 □	132.5	210	160	1.5
MON133-21-23 □	132.5	210	230	1.8
MON133-21-28 □	132.5	210	280	2.0
MON133-21-35 □	132.5	210	350	2.3
MON133-26-23 □	132.5	260	230	2.0
MON133-26-28 □	132.5	260	280	2.3
MON133-26-35 □	132.5	260	350	2.6
MON133-32-23 □	132.5	320	230	2.3
MON133-32-28 □	132.5	320	280	2.5
MON133-32-35 □	132.5	320	350	2.9
MON133-32-45 □	132.5	320	450	3.4
MON133-37-23 □	132.5	370	230	2.5
MON133-37-28 □	132.5	370	280	2.8
MON133-37-35 □	132.5	370	350	3.2
MON133-37-45 □	132.5	370	450	3.6
MON133-43-23 □	132.5	430	230	2.7
MON133-43-28 □	132.5	430	280	3.0
MON133-43-35 □	132.5	430	350	3.5
MON133-43-45 □	132.5	430	450	4.1

**Product no. / Dimensions**

Product no.	H	W	D	Weight (kg)
MON149-16-16 □	149	160	160	1.3
MON149-16-23 □	149	160	230	1.7
MON149-16-28 □	149	160	280	1.9
MON149-21-16 □	149	210	160	1.5
MON149-21-23 □	149	210	230	1.9
MON149-21-28 □	149	210	280	2.1
MON149-21-35 □	149	210	350	2.4
MON149-26-23 □	149	260	230	2.1
MON149-26-28 □	149	260	280	2.4
MON149-26-35 □	149	260	350	2.7
MON149-32-23 □	149	320	230	2.4
MON149-32-28 □	149	320	280	2.7
MON149-32-35 □	149	320	350	3.1
MON149-32-45 □	149	320	450	3.6
MON149-37-23 □	149	370	230	2.6
MON149-37-28 □	149	370	280	2.9
MON149-37-35 □	149	370	350	3.3
MON149-37-45 □	149	370	450	3.9
MON149-43-23 □	149	430	230	2.9
MON149-43-28 □	149	430	280	3.2
MON149-43-35 □	149	430	350	3.6
MON149-43-45 □	149	430	450	4.3
MON177-16-16 □	177	160	160	1.6
MON177-16-23 □	177	160	230	2.1
MON177-16-28 □	177	160	280	2.3
MON177-21-16 □	177	210	160	1.8
MON177-21-23 □	177	210	230	2.3
MON177-21-28 □	177	210	280	2.6
MON177-21-35 □	177	210	350	3.0
MON177-26-23 □	177	260	230	2.6
MON177-26-28 □	177	260	280	2.9
MON177-26-35 □	177	260	350	3.3
MON177-32-23 □	177	320	230	2.8
MON177-32-28 □	177	320	280	3.2
MON177-32-35 □	177	320	350	3.7
MON177-32-45 □	177	320	450	4.3
MON177-37-23 □	177	370	230	3.1
MON177-37-28 □	177	370	280	3.4
MON177-37-35 □	177	370	350	3.9
MON177-37-45 □	177	370	450	4.6
MON177-43-23 □	177	430	230	3.4
MON177-43-28 □	177	430	280	3.7
MON177-43-35 □	177	430	350	4.3
MON177-43-45 □	177	430	450	5.0

Product no.	H	W	D	Weight (kg)
MON199-16-16 □	199	160	160	1.8
MON199-16-23 □	199	160	230	2.2
MON199-16-28 □	199	160	280	2.5
MON199-21-16 □	199	210	160	2.0
MON199-21-23 □	199	210	230	2.4
MON199-21-28 □	199	210	280	2.7
MON199-21-35 □	199	210	350	3.1
MON199-26-23 □	199	260	230	2.7
MON199-26-28 □	199	260	280	3.0
MON199-26-35 □	199	260	350	3.4
MON199-32-23 □	199	320	230	3.0
MON199-32-28 □	199	320	280	3.3
MON199-32-35 □	199	320	350	3.8
MON199-32-45 □	199	320	450	4.5
MON199-37-23 □	199	370	230	3.2
MON199-37-28 □	199	370	280	3.6
MON199-37-35 □	199	370	350	4.1
MON199-37-45 □	199	370	450	4.7
MON199-43-23 □	199	430	230	3.5
MON199-43-28 □	199	430	280	3.9
MON199-43-35 □	199	430	350	4.4
MON199-43-45 □	199	430	450	5.2
MON222-16-16 □	221.5	160	160	1.9
MON222-16-23 □	221.5	160	230	2.3
MON222-16-28 □	221.5	160	280	2.6
MON222-21-16 □	221.5	210	160	2.1
MON222-21-23 □	221.5	210	230	2.6
MON222-21-28 □	221.5	210	280	2.9
MON222-21-35 □	221.5	210	350	3.3
MON222-26-23 □	221.5	260	230	2.9
MON222-26-28 □	221.5	260	280	3.1
MON222-26-35 □	221.5	260	350	3.6
MON222-32-23 □	221.5	320	230	3.1
MON222-32-28 □	221.5	320	280	3.5
MON222-32-35 □	221.5	320	350	4.0
MON222-32-45 □	221.5	320	450	4.8
MON222-37-23 □	221.5	370	230	3.4
MON222-37-28 □	221.5	370	280	3.8
MON222-37-35 □	221.5	370	350	4.3
MON222-37-45 □	221.5	370	450	5.0
MON222-43-23 □	221.5	430	230	3.7
MON222-43-28 □	221.5	430	280	4.1
MON222-43-35 □	221.5	430	350	4.7
MON222-43-45 □	221.5	430	450	5.5

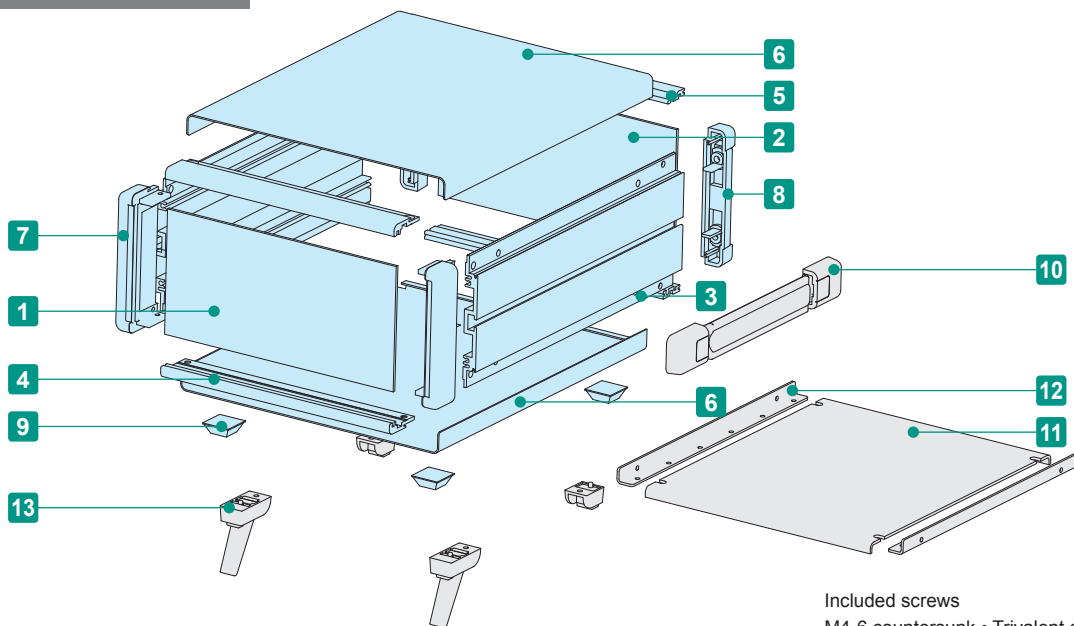
# MOY SERIES

# SYSTEM CASE with CARRYING HANDLE



- Available in 3 different colors and 160 different sizes.
- Lightweight system case with carrying handle. Suitable for use as measuring instruments, etc.
- Maximum load support of 20kg.

## Assembly drawings



Included screws  
 M4-6 countersunk • Trivalent chromate x 4 pcs  
 M4-8 Pan head • Trivalent chromate x 8 pcs  
 M4-10 Binding head • Black trivalent chromate x 4 pcs

### Components

No.	Part name	Pcs	Material	Color / Finish
1	Front panel	1	Aluminium A1050P t=2.0	Silver • Black / Hairline brushed & Anodized
2	Rear panel	1	Aluminium A1050P t=2.0	Silver • Black / Anodized
3	Side frame	2	Extruded aluminium A6063S-T5	Gray • Black / Painted
4	Front frame	2	Extruded aluminium A6063S-T5	Gray • Black / Painted
5	Rear frame	2	Extruded aluminium A6063S-T5	Silver / Anodized
6	Top • Bottom cover	1 each	Aluminium A1100P t=1.0	Light gray • Black / Painted
7	Corner block	2	Diecast aluminium ADC12	Gray • Black / Painted
8	Rear feet	2	ABS UL94V-0	Gray • Black
9	Rubber feet	4	Polyurethane	Black
10	Carrying handle	1	PP + Elastomer	Gray • Black

■ Note: Front / rear panels and top / bottom covers are covered with a protective film on one side. Remove before assembly.

Accessories (Optional parts)



11 Mounting plate MSC series  
See page MSC • MSCL-1



12 L-bracket MSCL series  
See page MSC • MSCL-1



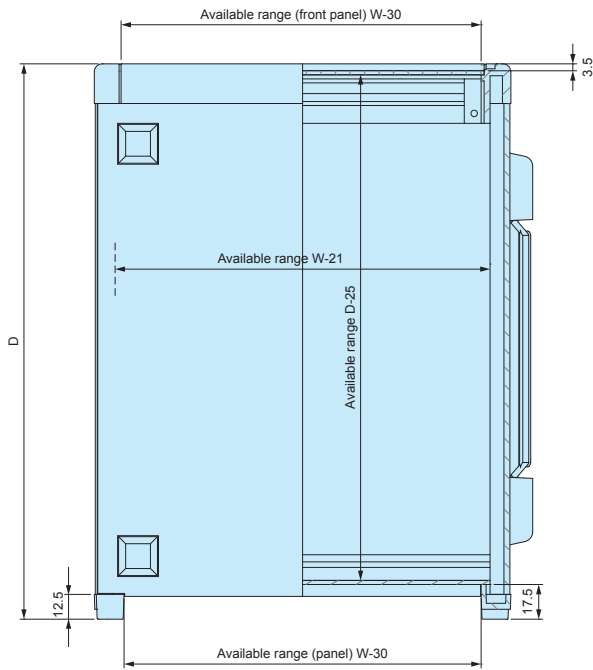
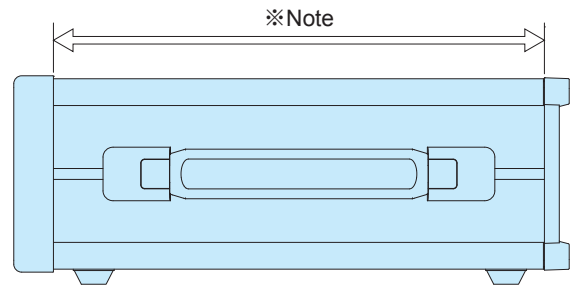
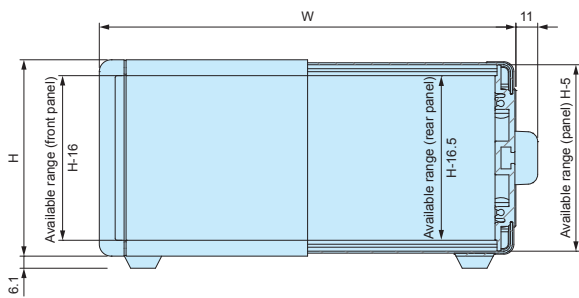
13 Tilt leg TL series  
See page TL • CBF-1



Cable hook CBF series  
See page TL • CBF-1

MOY dimensions

■ Drawings below are reference examples only.  
DXF/DWG/PDF drawings available on our website.



※Note  
Carrying handle location can be freely affixed within denoted range.

Color Type

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

● G

● B

● BS



Panel	Silver
Top • Bottom cover	Light Gray
Side frame	Gray



Panel	Black
Top • Bottom cover	Black
Side frame	Black



Panel	Silver
Top • Bottom cover	Black
Side frame	Black

**Product no. / Dimensions**

Product no.	H	W	D	Weight (kg)
MOY 66-16-23 □	66	160	230	1.0
MOY 66-16-28 □	66	160	280	1.1
MOY 66-21-23 □	66	210	230	1.2
MOY 66-21-28 □	66	210	280	1.3
MOY 66-21-35 □	66	210	350	1.6
MOY 66-26-23 □	66	260	230	1.3
MOY 66-26-28 □	66	260	280	1.5
MOY 66-26-35 □	66	260	350	1.8
MOY 66-32-23 □	66	320	230	1.5
MOY 66-32-28 □	66	320	280	1.7
MOY 66-32-35 □	66	320	350	2.0
MOY 66-32-45 □	66	320	450	2.4
MOY 66-37-23 □	66	370	230	1.7
MOY 66-37-28 □	66	370	280	1.9
MOY 66-37-35 □	66	370	350	2.2
MOY 66-37-45 □	66	370	450	2.6
MOY 66-43-23 □	66	430	230	1.9
MOY 66-43-28 □	66	430	280	2.1
MOY 66-43-35 □	66	430	350	2.5
MOY 66-43-45 □	66	430	450	3.0
MOY 88-16-23 □	88	160	230	1.1
MOY 88-16-28 □	88	160	280	1.3
MOY 88-21-23 □	88	210	230	1.3
MOY 88-21-28 □	88	210	280	1.5
MOY 88-21-35 □	88	210	350	1.8
MOY 88-26-23 □	88	260	230	1.5
MOY 88-26-28 □	88	260	280	1.7
MOY 88-26-35 □	88	260	350	2.0
MOY 88-32-23 □	88	320	230	1.7
MOY 88-32-28 □	88	320	280	1.9
MOY 88-32-35 □	88	320	350	2.3
MOY 88-32-45 □	88	320	450	2.7
MOY 88-37-23 □	88	370	230	1.9
MOY 88-37-28 □	88	370	280	2.1
MOY 88-37-35 □	88	370	350	2.5
MOY 88-37-45 □	88	370	450	2.9
MOY 88-43-23 □	88	430	230	2.1
MOY 88-43-28 □	88	430	280	2.3
MOY 88-43-35 □	88	430	350	2.7
MOY 88-43-45 □	88	430	450	3.3

Product no.	H	W	D	Weight (kg)
MOY 99-16-23 □	99	160	230	1.2
MOY 99-16-28 □	99	160	280	1.4
MOY 99-21-23 □	99	210	230	1.4
MOY 99-21-28 □	99	210	280	1.6
MOY 99-21-35 □	99	210	350	1.8
MOY 99-26-23 □	99	260	230	1.6
MOY 99-26-28 □	99	260	280	1.8
MOY 99-26-35 □	99	260	350	2.1
MOY 99-32-23 □	99	320	230	1.8
MOY 99-32-28 □	99	320	280	2.0
MOY 99-32-35 □	99	320	350	2.4
MOY 99-32-45 □	99	320	450	2.8
MOY 99-37-23 □	99	370	230	2.0
MOY 99-37-28 □	99	370	280	2.2
MOY 99-37-35 □	99	370	350	2.6
MOY 99-37-45 □	99	370	450	3.0
MOY 99-43-23 □	99	430	230	2.2
MOY 99-43-28 □	99	430	280	2.4
MOY 99-43-35 □	99	430	350	2.8
MOY 99-43-45 □	99	430	450	3.4
MOY133-16-23 □	132.5	160	230	1.4
MOY133-16-28 □	132.5	160	280	1.6
MOY133-21-23 □	132.5	210	230	1.6
MOY133-21-28 □	132.5	210	280	1.8
MOY133-21-35 □	132.5	210	350	2.1
MOY133-26-23 □	132.5	260	230	1.8
MOY133-26-28 □	132.5	260	280	2.1
MOY133-26-35 □	132.5	260	350	2.4
MOY133-32-23 □	132.5	320	230	2.0
MOY133-32-28 □	132.5	320	280	2.3
MOY133-32-35 □	132.5	320	350	2.7
MOY133-32-45 □	132.5	320	450	3.2
MOY133-37-23 □	132.5	370	230	2.2
MOY133-37-28 □	132.5	370	280	2.5
MOY133-37-35 □	132.5	370	350	2.9
MOY133-37-45 □	132.5	370	450	3.4
MOY133-43-23 □	132.5	430	230	2.5
MOY133-43-28 □	132.5	430	280	2.8
MOY133-43-35 □	132.5	430	350	3.2
MOY133-43-45 □	132.5	430	450	3.8



**Product no. / Dimensions**

Product no.	H	W	D	Weight (kg)
MOY149-16-23 □	149	160	230	1.5
MOY149-16-28 □	149	160	280	1.7
MOY149-21-23 □	149	210	230	1.7
MOY149-21-28 □	149	210	280	2.0
MOY149-21-35 □	149	210	350	2.3
MOY149-26-23 □	149	260	230	2.0
MOY149-26-28 □	149	260	280	2.2
MOY149-26-35 □	149	260	350	2.5
MOY149-32-23 □	149	320	230	2.2
MOY149-32-28 □	149	320	280	2.4
MOY149-32-35 □	149	320	350	2.8
MOY149-32-45 □	149	320	450	3.4
MOY149-37-23 □	149	370	230	2.4
MOY149-37-28 □	149	370	280	2.7
MOY149-37-35 □	149	370	350	3.1
MOY149-37-45 □	149	370	450	3.6
MOY149-43-23 □	149	430	230	2.6
MOY149-43-28 □	149	430	280	3.0
MOY149-43-35 □	149	430	350	3.4
MOY149-43-45 □	149	430	450	4.1
MOY177-16-23 □	177	160	230	1.9
MOY177-16-28 □	177	160	280	2.2
MOY177-21-23 □	177	210	230	2.1
MOY177-21-28 □	177	210	280	2.4
MOY177-21-35 □	177	210	350	2.8
MOY177-26-23 □	177	260	230	2.4
MOY177-26-28 □	177	260	280	2.7
MOY177-26-35 □	177	260	350	3.1
MOY177-32-23 □	177	320	230	2.6
MOY177-32-28 □	177	320	280	2.9
MOY177-32-35 □	177	320	350	3.4
MOY177-32-45 □	177	320	450	4.1
MOY177-37-23 □	177	370	230	2.8
MOY177-37-28 □	177	370	280	3.2
MOY177-37-35 □	177	370	350	3.7
MOY177-37-45 □	177	370	450	4.3
MOY177-43-23 □	177	430	230	3.1
MOY177-43-28 □	177	430	280	3.5
MOY177-43-35 □	177	430	350	4.0
MOY177-43-45 □	177	430	450	4.8

Product no.	H	W	D	Weight (kg)
MOY199-16-23 □	199	160	230	2.0
MOY199-16-28 □	199	160	280	2.3
MOY199-21-23 □	199	210	230	2.2
MOY199-21-28 □	199	210	280	2.5
MOY199-21-35 □	199	210	350	2.9
MOY199-26-23 □	199	260	230	2.5
MOY199-26-28 □	199	260	280	2.8
MOY199-26-35 □	199	260	350	3.2
MOY199-32-23 □	199	320	230	2.7
MOY199-32-28 □	199	320	280	3.1
MOY199-32-35 □	199	320	350	3.6
MOY199-32-45 □	199	320	450	4.2
MOY199-37-23 □	199	370	230	3.0
MOY199-37-28 □	199	370	280	3.3
MOY199-37-35 □	199	370	350	3.8
MOY199-37-45 □	199	370	450	4.5
MOY199-43-23 □	199	430	230	3.6
MOY199-43-28 □	199	430	280	3.9
MOY199-43-35 □	199	430	350	4.5
MOY199-43-45 □	199	430	450	5.2
MOY222-16-23 □	221.5	160	230	2.2
MOY222-16-28 □	221.5	160	280	2.4
MOY222-21-23 □	221.5	210	230	2.4
MOY222-21-28 □	221.5	210	280	2.7
MOY222-21-35 □	221.5	210	350	3.1
MOY222-26-23 □	221.5	260	230	2.7
MOY222-26-28 □	221.5	260	280	2.9
MOY222-26-35 □	221.5	260	350	3.4
MOY222-32-23 □	221.5	320	230	2.9
MOY222-32-28 □	221.5	320	280	3.3
MOY222-32-35 □	221.5	320	350	3.8
MOY222-32-45 □	221.5	320	450	4.6
MOY222-37-23 □	221.5	370	230	3.2
MOY222-37-28 □	221.5	370	280	3.5
MOY222-37-35 □	221.5	370	350	4.1
MOY222-37-45 □	221.5	370	450	4.8
MOY222-43-23 □	221.5	430	230	3.5
MOY222-43-28 □	221.5	430	280	3.8
MOY222-43-35 □	221.5	430	350	4.4
MOY222-43-45 □	221.5	430	450	5.3

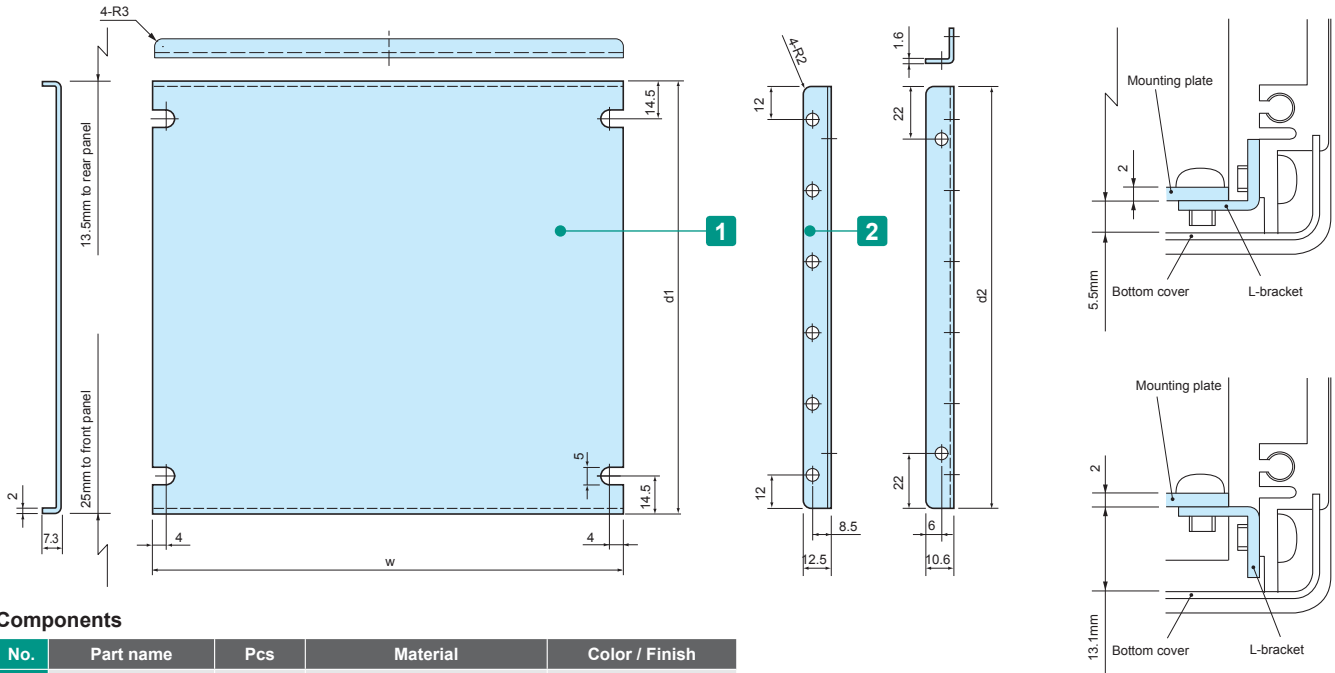
MSC SERIES

MOUNTING PLATE for MS • MSN • MSY • MSR • MO • MON • MOY • MOR

DXF/DWG/PDF drawings available on our website.

1 set = Mounting plate + L-bracket

Mounting example



Components

No.	Part name	Pcs	Material	Color / Finish
1	Mounting plate	1	Aluminium A1050P t=2.0	Unfinished
2	L-bracket	2	Steel SPCC	Trivalent chromate

Included screws: M4-6 pan head, trivalent chromate x8

Product no. / Dimensions

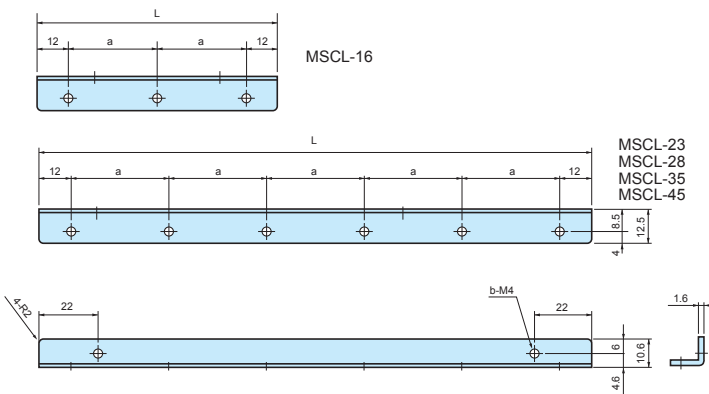
Product no.	w	d1	d2	Enclosure W×D	Weight (g)
MSC16-16	130	96.5	91.5	160 × 160	120
MSC16-23	130	166.5	161.5	160 × 230	210
MSC16-28	130	216.5	211.5	160 × 280	270
MSC21-16	180	96.5	91.5	210 × 160	150
MSC21-23	180	166.5	161.5	210 × 230	250
MSC21-28	180	216.5	211.5	210 × 280	330
MSC21-35	180	286.5	281.5	210 × 350	430
MSC26-23	230	166.5	161.5	260 × 230	300
MSC26-28	230	216.5	211.5	260 × 280	390
MSC26-35	230	286.5	281.5	260 × 350	510
MSC32-23	290	166.5	161.5	320 × 230	360

Product no.	w	d1	d2	Enclosure W×D	Weight (g)
MSC32-28	290	216.5	211.5	320 × 280	460
MSC32-35	290	286.5	281.5	320 × 350	600
MSC32-45	290	386.5	381.5	320 × 450	810
MSC37-23	340	166.5	161.5	370 × 230	410
MSC37-28	340	216.5	211.5	370 × 280	520
MSC37-35	340	286.5	281.5	370 × 350	680
MSC37-45	340	386.5	381.5	370 × 450	910
MSC43-23	400	166.5	161.5	430 × 230	460
MSC43-28	400	216.5	211.5	430 × 280	590
MSC43-35	400	286.5	281.5	430 × 350	770
MSC43-45	400	386.5	381.5	430 × 450	1,040

MSCL SERIES

L-BRACKET for MS • MSN • MSY • MSR • MO • MON • MOY • MOR

- Use with your original mounting plate or PCB.
- 1 pair of L-bracket are included with each MSC mounting plate.



Components

Part name	Material	Color / Finish
L-bracket	Steel SPCC	Trivalent chromate

Product no. / Dimensions

Product no.	L	a	b	Sales unit
MSCL-16	91.5	33.75	5	1 set (2 pcs)
MSCL-23	161.5	27.5	8	1 set (2 pcs)
MSCL-28	211.5	37.5	8	1 set (2 pcs)
MSCL-35	281.5	51.5	8	1 set (2 pcs)
MSCL-45	381.5	71.5	8	1 set (2 pcs)

**MSM SERIES**

**RACK MOUNT BRACKET**

**Components**

Material	Color / Finish
Extruded aluminium A6063S-T5	Gray • Black / Painted

Included screws : M5-10 Flat head x 4 pcs / Black trivalent chromate + Nut x 4 pcs

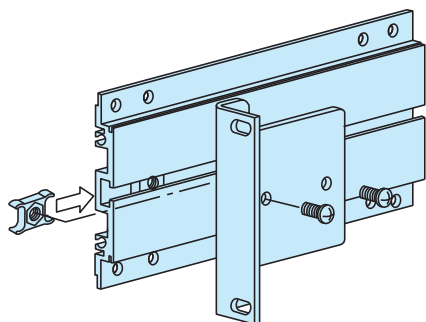
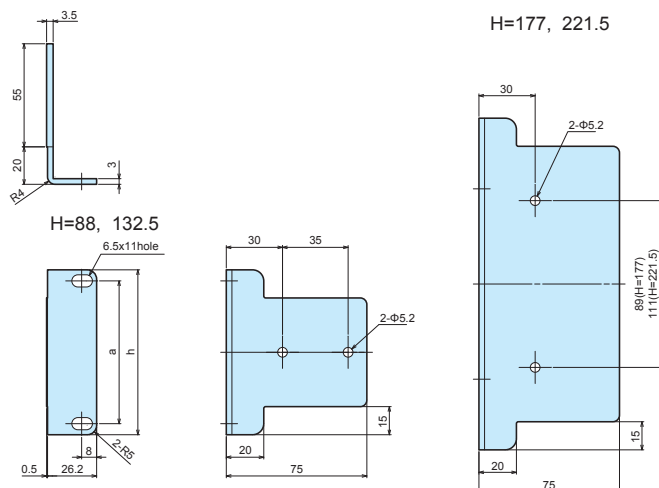
**Color Type**

Color code	Material	Color / Finish
G	Extruded aluminium A6063S-T5	Gray / Painted
B	Extruded aluminium A6063S-T5	Black / Painted

**Product no. / Dimensions**

Product no.	h (Enclosure H)	a	Pack of
MSM- 88□	88	76.2	2
MSM-133□	132.5	57.1	2
MSM-177□	177	101.6	2
MSM-222□	221.5	146	2

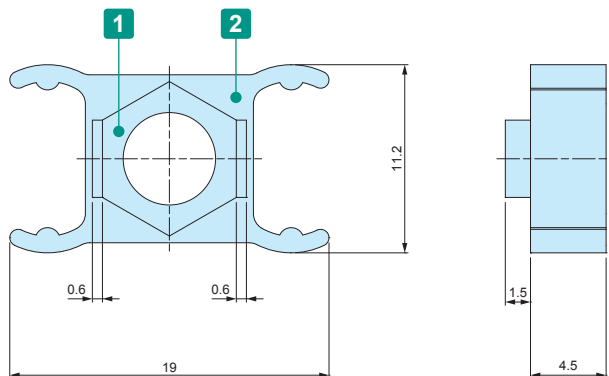
■ Please suffix color code at the end of the product number.



**MZ SERIES**

**SIDE FRAME NUT**

■ Side frame nut for MS • MSN • MSY • MSR • MO • MON • MOY • MOR series.



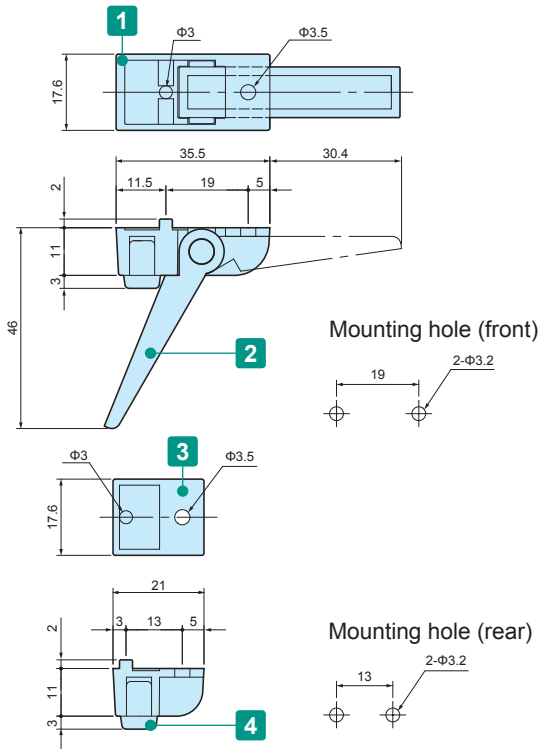
**Components**

No.	Part name	Material	Color / Finish
1	Nut	Brass • Steel	Nickel plated
2	Holder	Polyethylene	Black

**Product no. / Feature**

Product no.	Screw size	Nut material	Pack of
MZ-4	M4	Brass	10
MZ-5	M5	Steel	10

**TL SERIES TILT LEG**



**Components**

\* Maximum load = 7 kg

No.	Part name	Pcs	Material	Color / Finish
1	Front feet	2	ABS UL94HB	Black • Gray • Light gray
2	Leg	2	ABS UL94HB	Black • Gray • Light gray
3	Rear feet	2	ABS UL94HB	Black • Gray • Light gray
4	Rubber feet	4	EPDM	Gray • Black
-	Screw	4	Steel	Black trivalent chromate

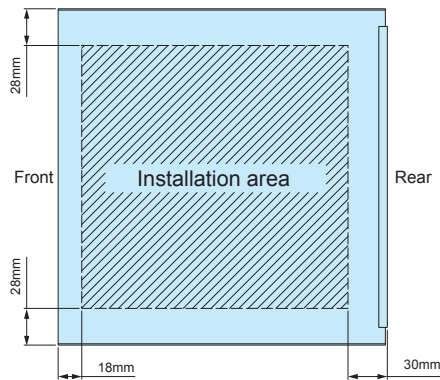
■ Included screws: M3-8 and M3 nut (with washer) set.

**Product no. / Dimensions**

Product no.	Color (body)	Color (rubber feet)	Sales unit
● TL-45BB	Black	Black	1 set
● TL-45GG	Gray	Gray	1 set
● TL-45SG	Light gray	Gray	1 set

■ EPDM (black) may have its color migrate onto the placement surface.

**MS SERIES INSTALLATION AREA**



**CBF SERIES CABLE HOOK**



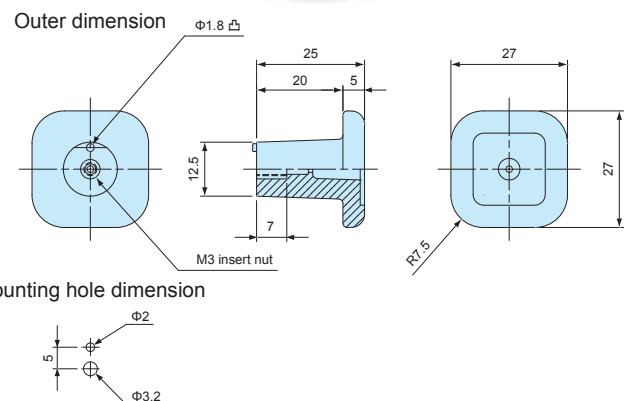
APPLICATION EXAMPLE

- Used for wrapping and securing cords and wires.
- Can be used with a variety of different enclosure series and models.
- Requires a panel thickness of between 1.0 ~ 3.0mm.

**Product no. / Dimensions**

Product no.		Material	Pack of
● Gray	● Black		
CBF-1G	CBF-1B	POM	4

■ Included screws: M3-8 trivalent chromate (with washer) x 4 pcs

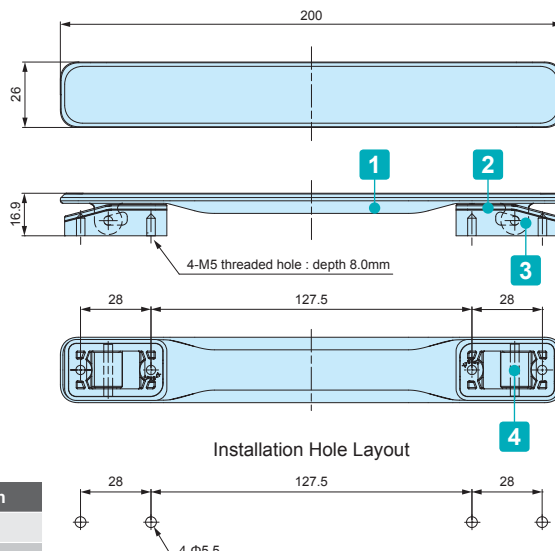


FM200 SERIES

ELASTOMER CARRYING HANDLE



DXF/DWG/PDF drawings available on our website.



Comfortable and easy to grip elastomer handle.

Technical Data	
Max load : 20kg	

Components

No.	Part name	Pcs	Material	Color / Finish
1	Grip	1	PU	Black • Gray
2	Base	2	PA6	Black • Gray
3	Base cover	2	ABS	Black • Gray
4	Shaft	2	SWCH	Nickel plated
—	Screw (Pan head tapping M5-8)	4	Steel	Trivalent chromate

Product no.

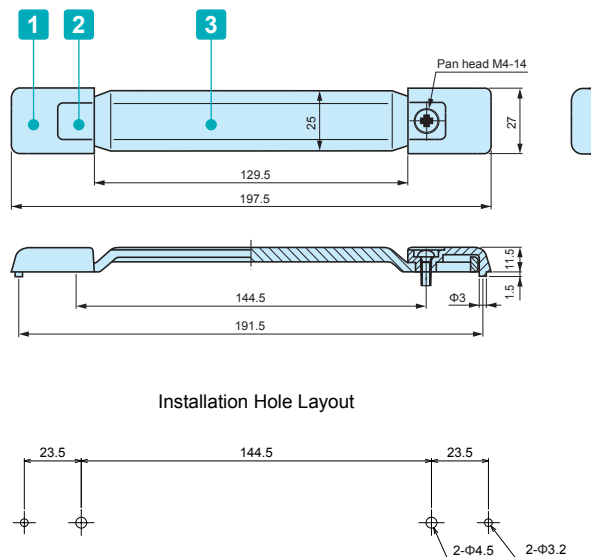
Product no.	
● Black	● Gray
NEW FM200B	NEW FM200G

MH SERIES

CARRYING HANDLE



DXF/DWG/PDF drawings available on our website.



Components

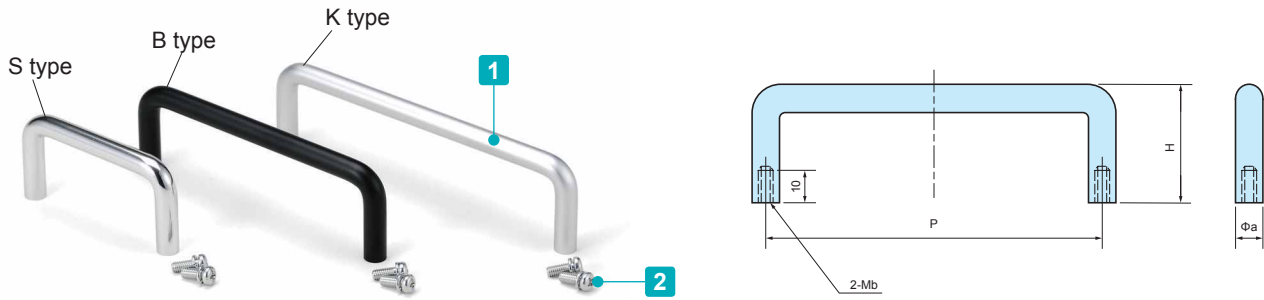
No.	Part name	Pcs	Material	Color / Finish
1	Holder	2	PC + ABS	Black • Gray
2	Blind cap	2	PP + Elastomer	Black • Gray
3	Grip	1	PP + Elastomer	Black • Gray
—	Screw (Pan head M4-14)	2	Steel	Trivalent chromate
—	Nut	2	Steel	Trivalent chromate
—	Spring washer	2	Steel	Trivalent chromate

Product no.

Product no.	
● Black	● Gray
MH-197B	MH-197G

Technical Data	
Max load : 20kg	

## BH SERIES ROUNDED ALUMINIUM HANDLE



### Components

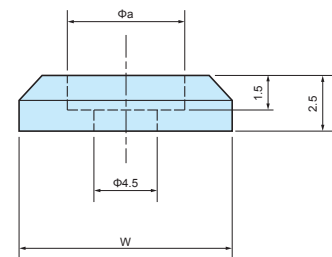
No.	Part name	Pcs	Material	Color / Finish
1	Handle	1	Extruded aluminium A5056S	Polished • Matte anodized
2	Screw	2	Steel	Trivalent chromate

### Product no. / Dimensions

■ K type only available on BH-100, 120, 150, and 180 models.

Product no.			P	H	a	b	Pack of
● Silver polished	● Black matte anodized	● Silver matte anodized					
BH- 26S	BH- 26B	-	26	25	6	3	2
BH- 30S	BH- 30B	-	30	35	8	4	2
BH- 50S	BH- 50B	-	50	35	8	4	2
BH- 60S	BH- 60B	-	60	35	8	4	2
BH- 70S	BH- 70B	-	70	35	8	4	2
BH- 80S	BH- 80B	-	80	35	8	4	2
BH-100S	BH-100B	BH-100K	100	35	8	4	2
BH-110S	BH-110B	-	110	35	8	4	2
BH-120S	BH-120B	BH-120K	120	35	8	4	2
BH-150S	BH-150B	BH-150K	150	35	8	4	2
BH-180S	BH-180B	BH-180K	180	35	8	4	2

## Z-P SERIES WASHER for HANDLE



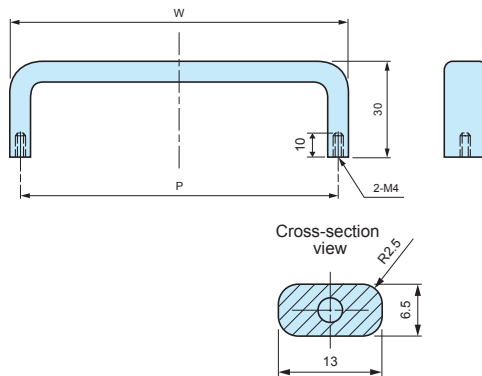
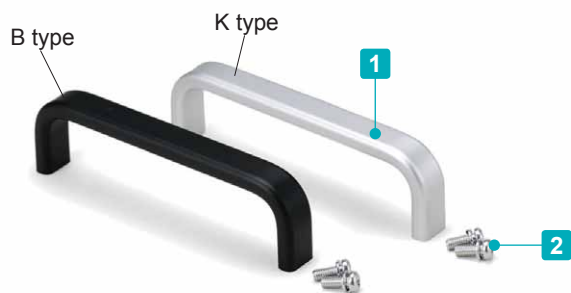
■ Brass washer for BH • KH series.

### Product no. / Dimensions

■ Material / Brass

Product no.		W	a	Pack of
Chrome plated	Black painted			
Z-P6S	Z-P6B	10	6.2	10
Z-P8S	Z-P8B	12	8.2	10

**OH SERIES ALUMINIUM HANDLE**



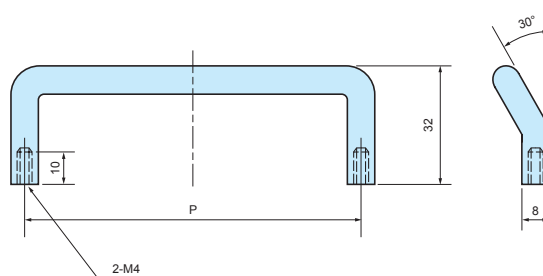
**Components**

No.	Part name	Pcs	Material	Color / Finish
1	Handle	1	Extruded aluminium A6063S-T5	Matte anodized
2	Screw (M4-10 Pan head with spring washer)	2	Steel	Trivalent chromate

**Product no. / Dimensions**

Product no.		P	W	Pack of
● Black matte anodized	● Silver matte anodized			
OH- 55B	OH- 55K	55	61.5	2
OH- 70B	OH- 70K	70	76.5	2
OH- 85B	OH- 85K	85	91.5	2
OH-100B	OH-100K	100	106.5	2
OH-120B	OH-120K	120	126.5	2
OH-140B	OH-140K	140	146.5	2
OH-170B	OH-170K	170	176.5	2

**KH SERIES ANGLED ALUMINIUM HANDLE**



**Components**

No.	Part name	Pcs	Material	Color / Finish
1	Handle	1	Extruded aluminium A5056S	Polished • Matte anodized
2	Screw (M4-10 Pan head with spring washer)	2	Steel	Trivalent chromate

**Product no. / Dimensions**

Product no.		P	Pack of
● Silver polished	● Black matte anodized		
KH- 70S	KH- 70B	70	2
KH-100S	KH-100B	100	2

# LASER CUTTING

Laser cutting utilizes a laser to perform cutting on an object, allowing various types and shapes of holes to be cut.

New fiber laser machine allows the processing of aluminium sheets with both high precision and speed. Processing of Pure Aluminium 1050 is also possible with minimal burr as compared to conventional CO<sup>2</sup> laser machines, which causes excessive burring.



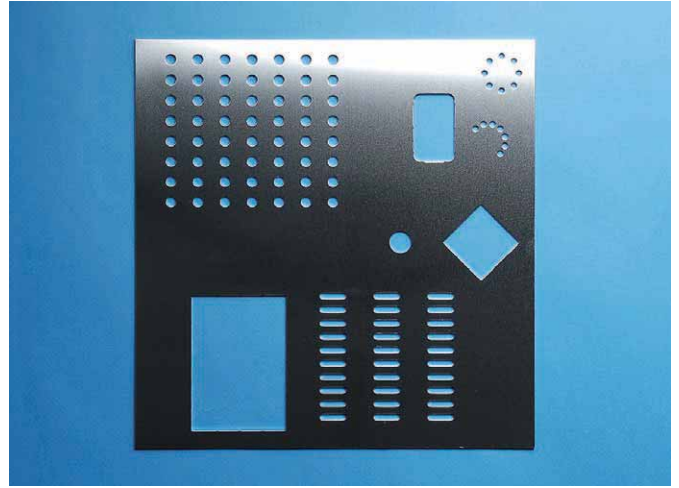
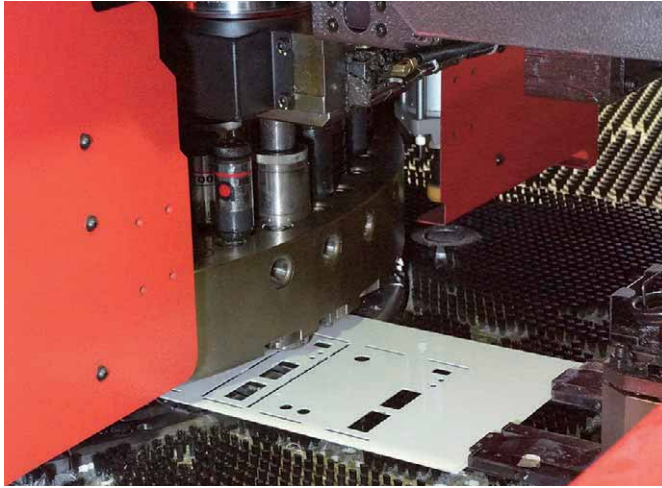


# PUNCHING PRESS

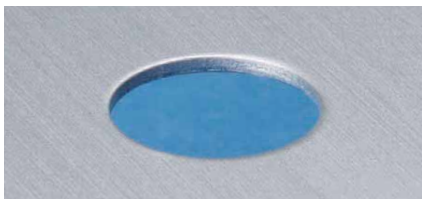
What is punching press? It is a type of machine press used to cut holes in material via the use of various sized die sets.

Punching press allows the realization of high cost performance due to its high speed automated turret punching process, which significantly reduces machining lead-time.

Due to its ability to create designated sized holes by means of rapid multiple hole punches, this enables it to punch holes of various sizes and types quickly and efficiently.

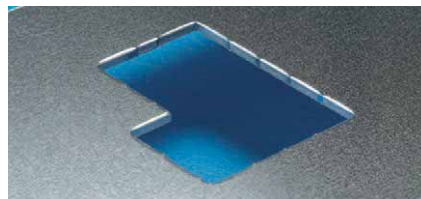


## Circular hole



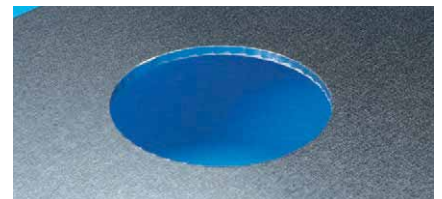
Circular holes as small as 1.0mm in diameter can be punched.

## Nibbling press (rectangle)



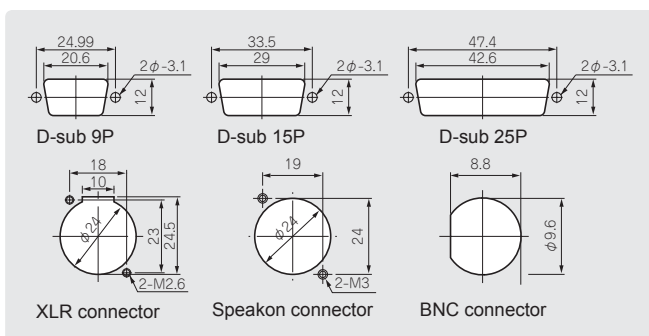
Complex or large rectangular shapes can be punched out with multiple presses.

## Nibbling press (round)

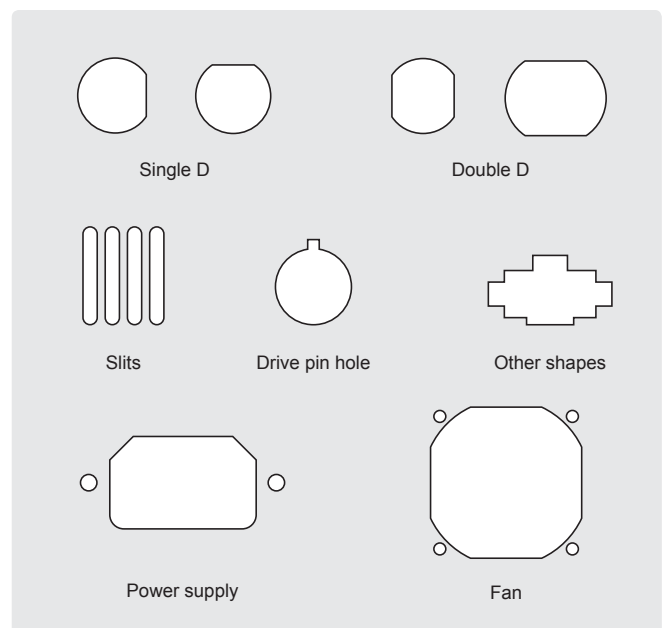


Punching of large circular holes with multiple smaller die strokes.

## Common connector shapes



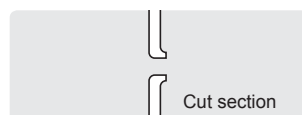
## Unique shapes



## Burring punch



Increasing surface area on a thin metallic sheet for screw threads to bore into.



# CNC MACHINING

CNC milling is a form of computer controlled machining. Similar in operation to drilling and cutting, it is able to create various hole styles and shapes by using a rotating cutting tool to bore into the object.

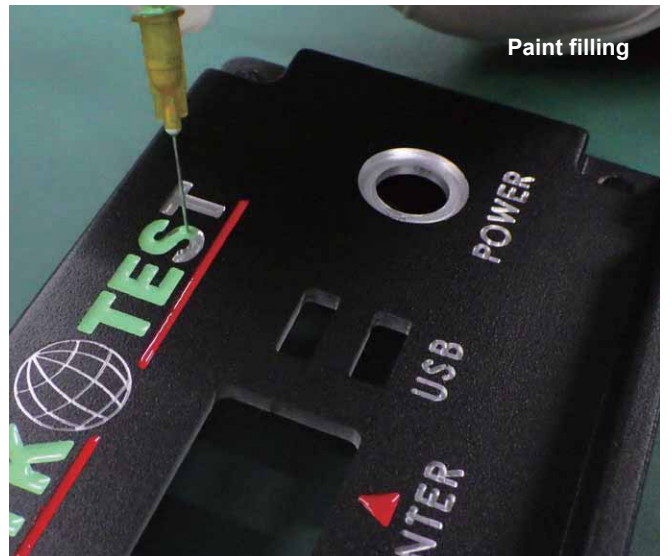
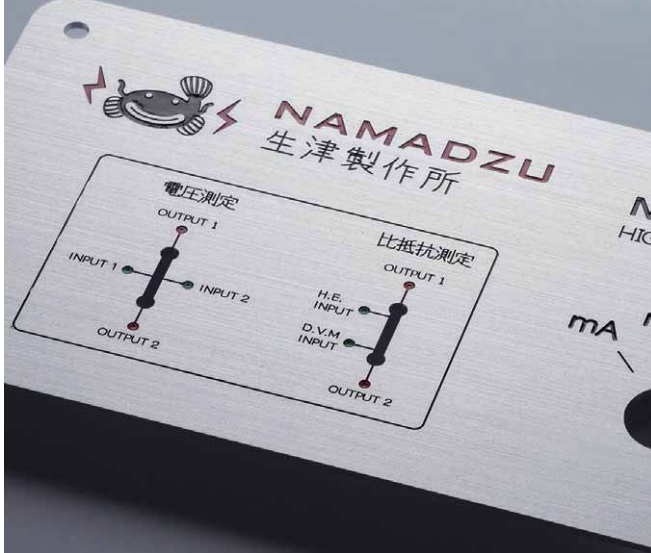


- Mainly used for plastic, aluminium die-cast, and aluminium extrusion material types.
- Able to perform milling for various shapes and sizes.
- Recommended for small quantity customization.



# ENGRAVING

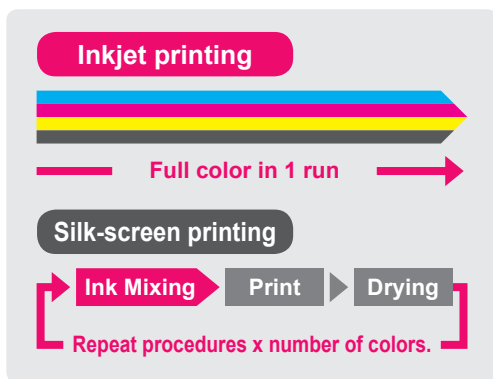
By having the drill-head slightly milling the surface, the engraving of fine text or complex designs is able to be performed on a variety of surfaces, be it flat, curved, and so on. Suitable for small batch print, and/or simple lettering. Font shall be similar to VAG Rounded font type.



# INKJET PRINTING



Full color digitally designed image can be printed in 1 run.  
No cost difference regardless of the number of colors used.



**Low printing cost**  
Full color print possible in small quantities

**Inkjet printing** 1 run only for full color print

Printing cost Full color

**Silk-screen printing** Printing cost x number of colors

Printing cost Color 1	Printing cost Color 2	Printing cost Color 3	Printing cost Color 4
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# High quality printing of photo image and color gradation.

Print photo images in maximum 1,800 x 1,800 dpi quality.

Pictures, logos and unique designs with color gradation can be recreated in a high quality print.



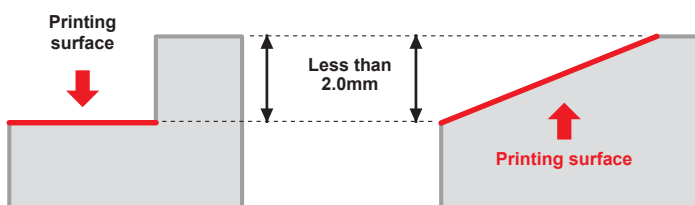
## Maximum printable enclosure size



## Printable on surfaces with height differential

Printing is possible on recessed, sloped and rounded sections.

Gap difference is less than 2.0mm.



\*Not suitable if height difference is more than 2.0mm.



Printed example

