



**KAMEDA DENKI Co.,Ltd** Catalog NO.11<sup>(excerpt)</sup>  
Multi-angles・Switchboard materials・Wiring materials

**株式会社 カメダデンキ** 総合カタログ NO.11  
マルチアングル・盤用資材・配線資材・エコ照明

The "RoHS-compliant product" in this Catalog No.11 is a product that complies with the 6 substances of the old RoHS directive.



**KAMEDA**

### Lighting equipment



P.6?7

Rail Socket



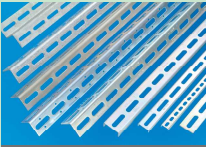
P.8?15

Lighting equipment

### Lighting equipment

### Index

### Multi-Angle



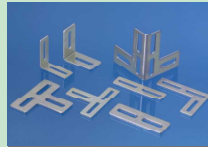
P.24-31

Multi-Angle  
Multi-channel  
U-canag, Flat bar



P.31

Multi-Angle  
End cover



P.32-33

Multi-Angle  
Uni-kanagu



P.34

Multi-Angle  
Uni-kanagu, Plated silver



P.36-38

Bracket  
L type bracket,  
Triangle bracket  
Channel bracket, U bolt



P.39-41

Multi-Angle  
Collar, Nut, Washer  
SEMS bolt

### Multi-Angle

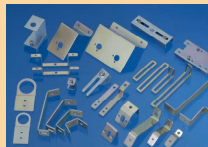
### Bracket

### Switchboard material



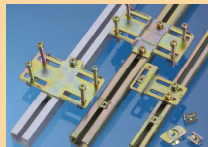
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DIN Free rail system  
DIN rail, Free nut  
Free washer  
DIN rail cutter



P.49-55

MINI-kanagu  
Terminal block mounting bracket  
Switch mounting base,  
Duct mounting bracket



P.56-57

Nejikkku  
Nejikkku rail, Nejikkku nut,  
Nejikkku adapter



P.58-62

Insulation support  
Bar holder, KP cleat  
Spacer insulator,  
CBS insulator



P.63-64

High pressure insulator  
BMC resin insulator  
High voltage relay terminal block  
Eco insulator, Clamp



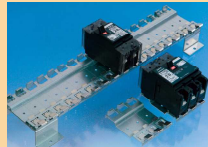
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Distribution board parts  
Main bar, Copper bar  
Earth bar, Ground terminal  
Green bolt, Shunt lead



P.70

Distribution board parts  
Quick support



P.71

Distribution board parts  
Agreement type  
breaker bracket



P.72

Box parts  
LED panel lighting  
LED lighting unit



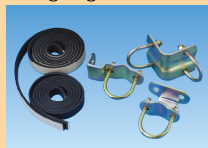
P.73-75

Box parts  
Ventilation louver



P.76

Box parts  
High pack  
Plastic drawing holder



P.77

Box parts  
Rubber sponge  
Pipe clamp

### DIN rail

### MINI-kanagu

### Nejikkku

### Insulation support

### High pressure insulator

### Distribution board parts

### Box parts

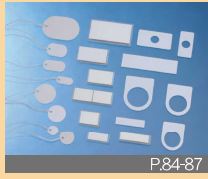
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## Switchboard material



P.78-83

**Supporter**  
Supporters (iron, brass, stainless, POM, Bake)



P.84-87

**Display parts**  
Card holder, Name tag  
Nameplate



P.88-91

**Display parts**  
Vinyl tube, Marker label  
Marker plate



P.92

**Display parts**  
Thermo color sensor

### Supporter

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### Display parts

## Wiring material



P.94-100

**Banding band**  
Inslock, Convex  
SK binder, Band fixture



P.101

**Banding band**  
Vinyver, Vinyver Ring



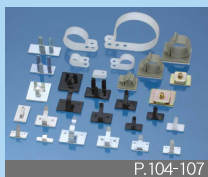
P.102

**Banding band**  
Stainless band



P.103

**Banding band**  
Viny-tai, Cable tie,  
Vinyl string



P.104-107

**Wiring fixture**  
High sticker  
Wire sticker  
Nylon clip



P.108-109

**Piping fixture**  
Clic



P.110-113

**Unity protection**  
Spiral tube  
Corrugated tube  
SF tube, Button tube



P.114-118

**Unity shield protection**  
Shield sleeve  
Zipper tube



P.119-127

**Insulation protection**  
V cap, VCC cap, VCP cap  
Heat shrinkable tube,  
Glass tube, UL tube



P.128-129

**Bushing**  
Free bushing, Grommets  
Edging



P.129-131

**Bushing**  
Capcom, Code lock  
Super Grand



P.132-134

**Bushing**  
Guard bush  
Blind bush, grommets



P.135

**Rubber foot**  
Bampon, Rubber foot



P.136-138

**Wiring duct**  
KD Duct, Duct Nipper  
Duct cutter

### Banding band

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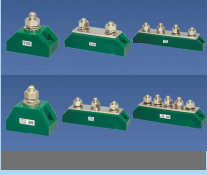
### Rubber foot

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### Wiring duct

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### Wiring material



Terminal block  
TB type terminal block



Terminal block  
Terminal block, box terminal



Terminal block  
Multiple terminal insulating cap

### Terminal block

	JP	EN
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### COS sleeve (ferrule)



COS sleeve

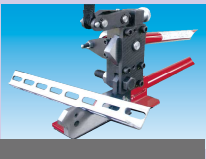
### COS sleeve

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### Tool



DIN rail cutter  
DIN rail cutter  
DIN rail ripper



Angle cutter  
Angle cutter  
Race way cutter



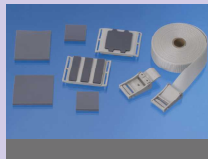
Tool  
Wire case



Tool  
Koterizer  
Gas for exclusive use of Koterizer



Tool  
Plajet  
Duct nippers etc

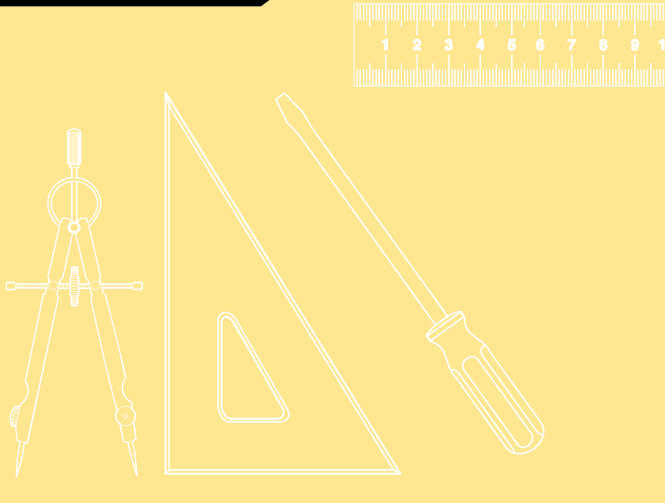


Earthquake countermeasure products  
Seismic gel base

### Tool

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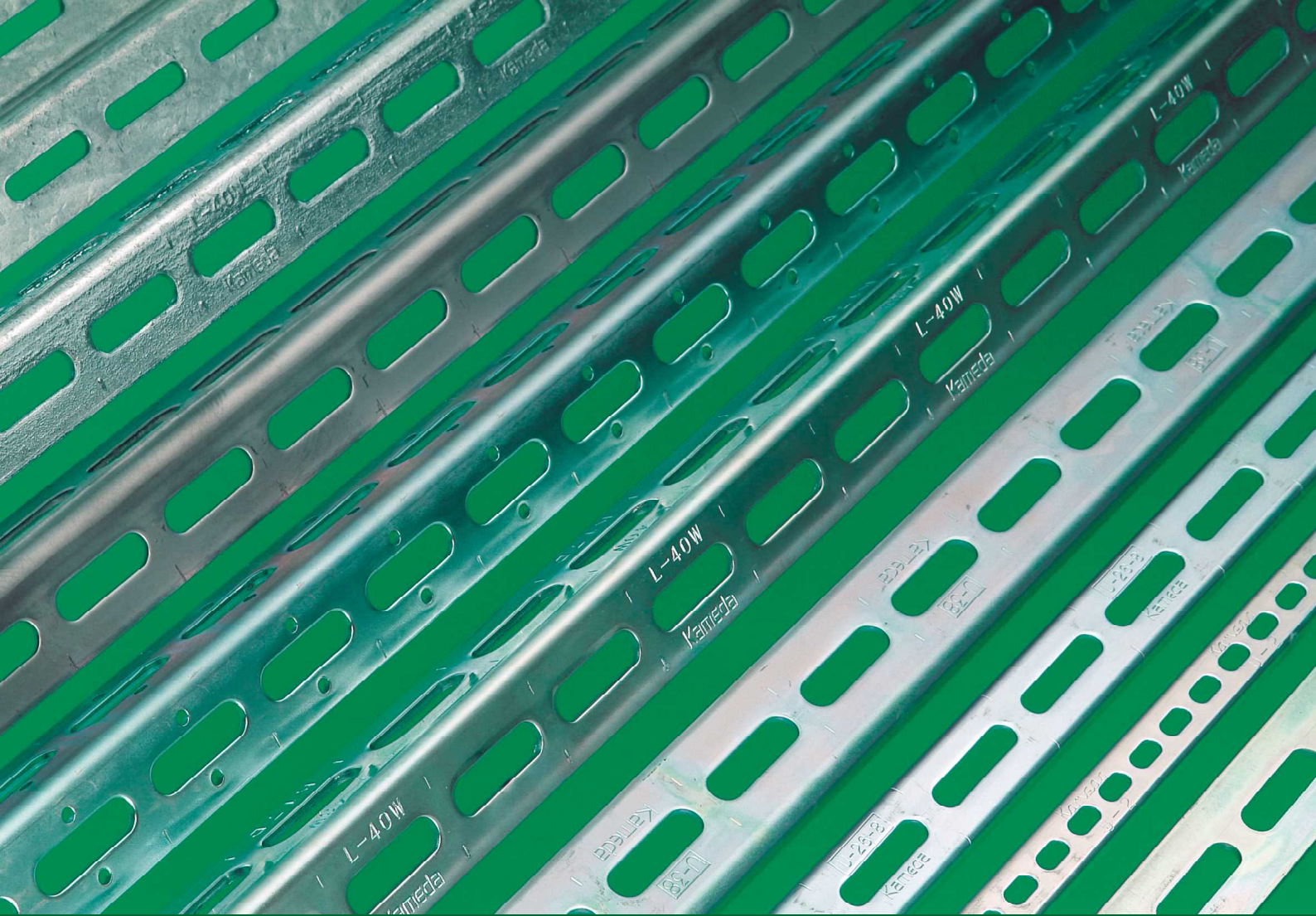
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### Information



### Notes on catalog usage

- Please note that product specifications are subject to change without notice.
- All the products listed in this catalog are for indoor use unless otherwise stated.
- Products listed in this catalog can not be used in salt-affected areas unless specifically stated for salt damage.
- The expiration date of this catalog is until our company publishes the latest version of this catalog or a catalog instead.
- We do not guarantee the contents even if there is any typographical error or omission in the contents of this catalog.
- This catalog is an automatic translation. Please forgive me if there is a translation mistake.



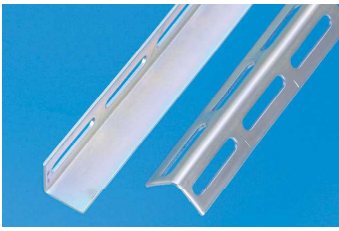
# Multi Angle

マルチアングル

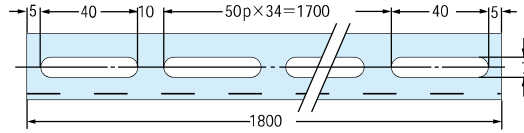
## Multi-angle L type

type      size      Single, Double, with nail holes      plating, material      length m

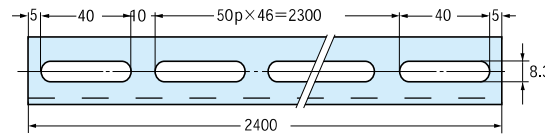
Model number L-(25~50)(S, W, P) - (3C, UN, ZN, SUS etc)-(1.8, 2.4 etc)



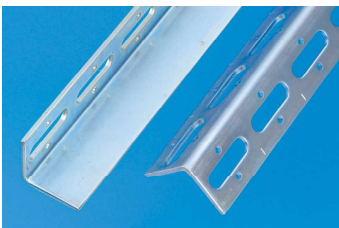
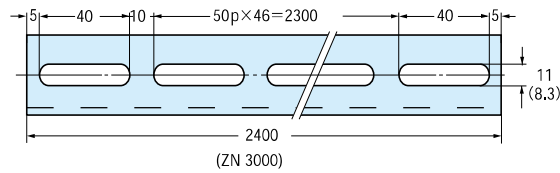
■ L-25S  
■ L-25W



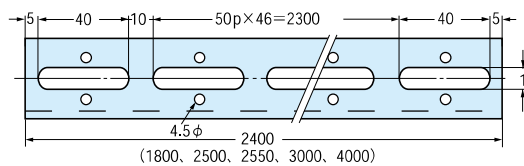
■ L-30S  
■ L-30W



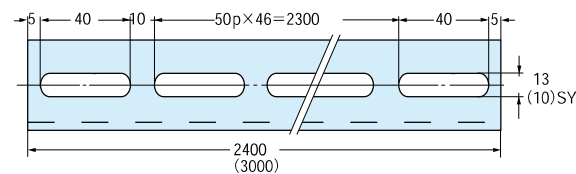
■ L-40S  
■ L-40W  
■ L-40S8  
■ L-40W8 (hole 8.3)



■ L-40SP  
■ L-40WP



■ L-50S  
■ L-50W  
■ L-50SY (hole 10)



## L type Standard List

RoHS: ●N, ●3C, ●ZAM, ●SUS

Size	Hole	Model number	Material / finishing					Length mm	Width mm	Thick- ness mm	Hole Width mm	Bolt Size	Weight k g	Packing Quantity Pieces	Stock	
			Iron fabric	Iron trivalent	Iron bright chromate	Iron molten zinc	ZAM									Stainless steel
			N	3C	UN	ZN	ZAM									SUS
L 25	S	L-25S-N	●					1800	25	2.3	7	M6	1.3	20	○	
		L-25S-3C		●											◎	
	W	L-25W-N	●										1.1		○	
		L-25W-3C		●											◎	
L 30	S	L-30S-N	●				2400	30	3.2	8.3	M6 M8 W1/4	2.9	10	○		
		L-30S-3C		●										3	◎	
		L-30S-SUS													●	○
	W	L-30W-N	●						3.2			2.4		○		
		L-30W-3C		●										3	◎	
		L-30W-ZN				●									○	
		L-30W-SUS												●	◎	
L 40	S	L-40S-N	●				2400	3.2	11	M8 M10 W3/8	3.9	5	○			
		L-40S-3C		●									3.4	◎		
		L-40S-ZN				●								○		
	W	L-40W-N	●				3000	4.3	○							
		L-40W-3C		●					2400	3.1	◎					
		L-40W-ZN				●					○					
		L-40W-ZN-3.0				●			◎							
	L-40W-SUS					●	◎									
	S8	L-40S8-3C		●			2400	3.2	8.3	M6 M8	4.1	5	○			
	L-40S8-ZN				●	◎										
	W8	L-40W8-3C		●			3.6	○								
		L-40W8-ZN				●		◎								
	SP	L-40SP-UN-2.4				●	2400	3.2	11	M8 M10 W3/8	4.0	3	○			
		L-40SP-UN-2.55				●	2550						3	◎		
		L-40SP-SUS					●							2400	○	
	WP	L-40WP-UN-1.8				●	1800	3.2	11	M8 M10 W3/8	2.4	5	○			
		L-40WP-UN-2.4				●	2400						3.0	◎		
		L-40WP-UN-2.5				●	2500							3.2	○	
		L-40WP-UN-3.0				●	3000				3.8		◎			
		L-40WP-UN-4.0				●	4000						5.1	○		
L-40WP-ZAM®-2.4						●	2400				3.0			○		
L-40WP-ZAM®-3.0						●							3000	3.8	○	
L-40WP-SUS-1.8						●	1800				2.4				5	○
L-40WP-SUS-2.4						●							2400	3.1		○
L-40WP-SUS-3.0					●	3000		◎								
L 50	S	L-50S-N	●				2400	4.5	13	M10 M12	6.2	3	◎			
		L-50S-3C-2.4		●									3000	7.8	○	
		L-50S-3C-3.0		●											2400	6.6
		L-50S-ZN				●							2400	6.6		
	L-50S-SUS-2.4					●	2400	5.8	◎							
	W	L-50W-N	●				2400	4.5	13	M10 M12	5.9	3	◎			
		L-50W-3C-2.4		●									3000	7.4	○	
		L-50W-3C-3.0		●											2400	6.3
		L-50W-ZN-2.4				●							3000	7.9		
		L-50W-ZN-3.0				●									2400	5.3
L-50W-SUS						●							2400	5.3		
SY	L-50SY-3C		●			2400	4.5	10	M10	6.5	○					

↳ S: Single-sided hole W: Double-sided hole P: With nail hole Others: Difference in hole width

※ Please refer to P45 for the difference of material and plating.

※ The fabric is oiled on the surface,  
but it is easy to rust so please be careful about storage.

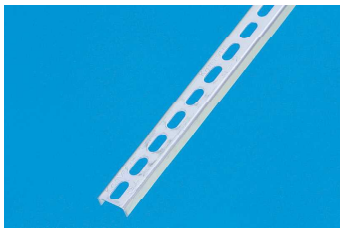
※ Wear work gloves etc. for handling to avoid unexpected injuries.

**Sales unit: 1 piece (N fabric is 1 package)**

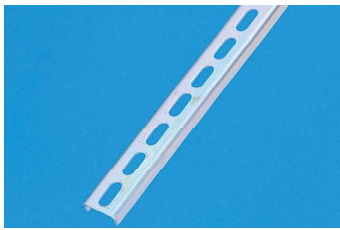
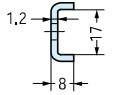
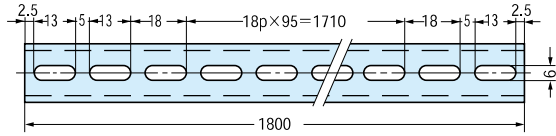
Multi Angle L type

U-kanagu U type

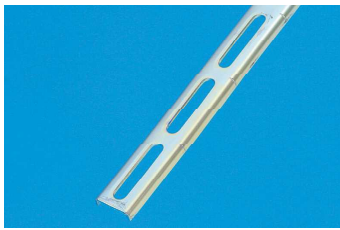
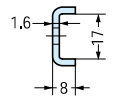
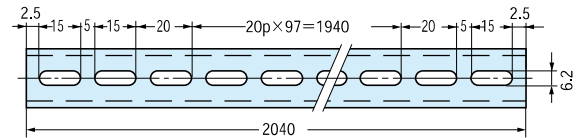
Model number    type    size    plating, material    length m  
 U-(1~26)-    (3C, SUS etc)-    (1.8, 2.4 etc)



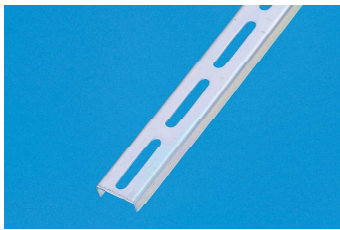
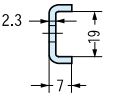
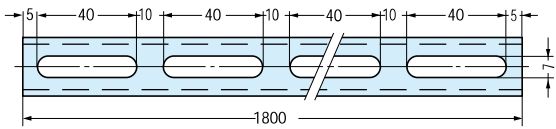
■ U - 2



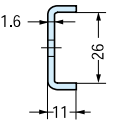
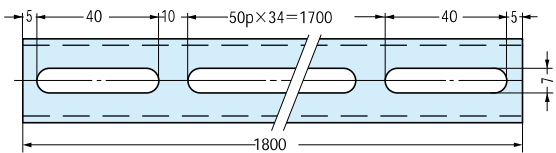
■ UH - 23



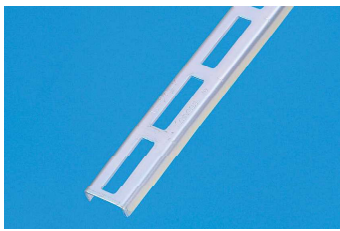
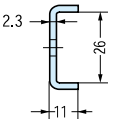
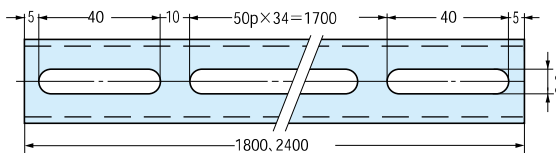
■ U - 23



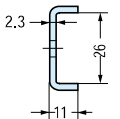
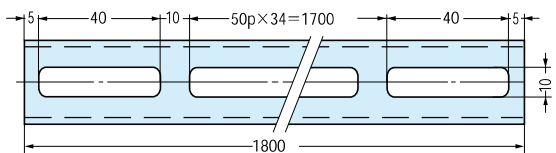
■ U - 1



■ U - 26 - 8



■ U - 26K



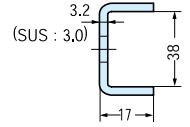
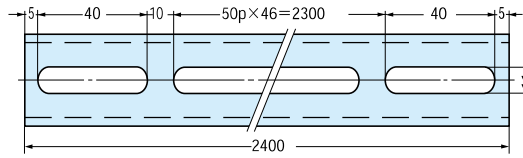


U-kanagu U type

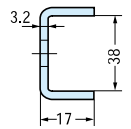
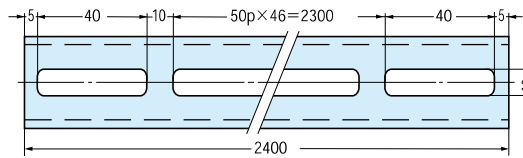
Model number      type      size      plating, material      length m  
 U-(38)-(3C, ZN, SUS etc)-(2.4)



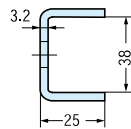
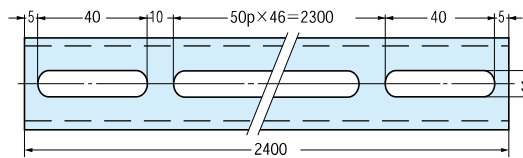
■ U - 38



■ U - 38K



■ U - 38H



U type Standard List

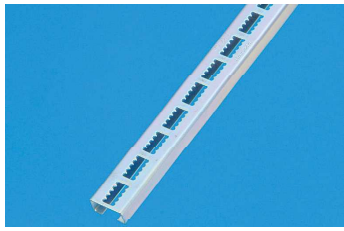
RoHS: ●N, ●3C, ●SUS

type	width (inside) mm	Model number	Material / finishing				Length mm	Width mm	Height mm	Thickness mm	Hole Width mm	Bolt Size	Weight kg	Packing Quantity Pieces	Stock
			Iron fabric	Iron trivalent	Iron molten zinc	Stainless steel									
			N	3C	ZN	SUS									
U	17	U-2-3C		●			1800	19.4	8	1.2	6	M5	0.5	20	◎
		UH-23-3C		●			2040	20.2	8	1.6	6.2	M6	0.7		◎
	19	U-23-3C		●			1800	23.6	7	2.3	7	M6	0.7		◎
	26	U-1-3C		●			1800	29.2	11	1.6	7	M6	0.9		◎
		U-26-8-N	●				1800	30.6	11	2.3	8.3	M6 M8	1.2		○
		U-26-8-3C		●											◎
		U-26-8-N-2.4	●				2400						1.6	10	◎
		U-26-8-3C-2.4		●									◎		
	U-26K-3C		●			1800									10
	38	U-38-N	●				2400	44.4	17	3.2	11	W3/8 M8 M10	3.3	6	○
			U-38-3C		●										
		U-38-ZN			●										◎
U-38-SUS					●	◎									
U-38K-3C			●			◎									
U-38H-3C			●			◎									
						44			3.0					◎	
						44.4			3.2	10				○	
								25		11		4.4	4	○	

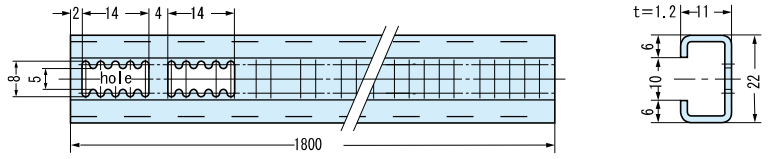
- ※ Please refer to P45 for the difference of material and plating.
- ※ The fabric is oiled on the surface, but it is easy to rust so please be careful about storage.
- ※ Wear work gloves etc. for handling to avoid unexpected injuries.

Sales unit: 1 piece (N fabric is 1 package)

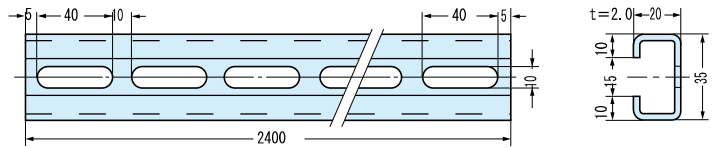
## Multi Channel KC type



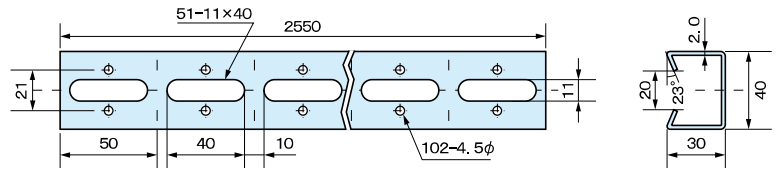
**KC - 22S**



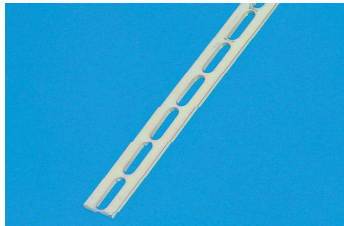
**KC - 35**



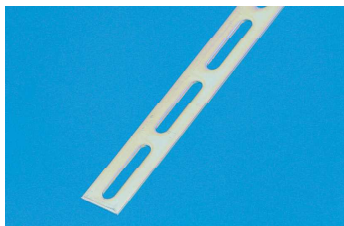
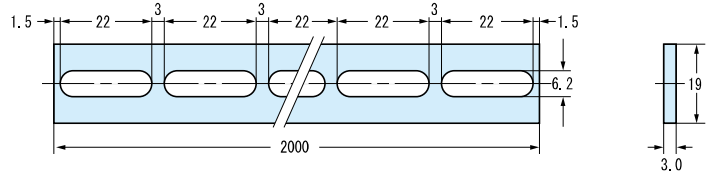
**KC - 40PB**



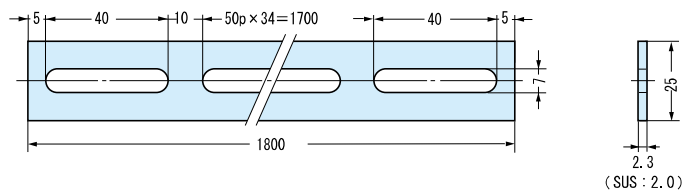
## Flat bar F type



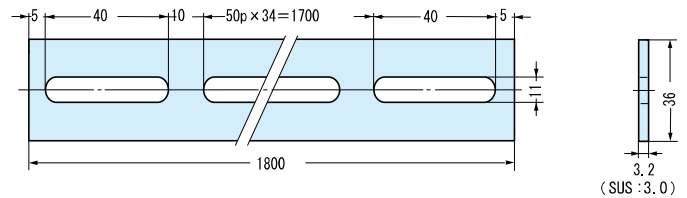
**F - 19L**



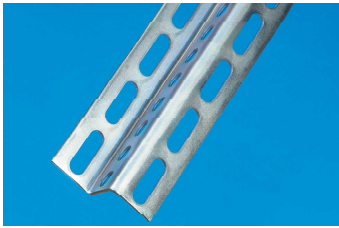
**F - 26L**



**F - 38L**



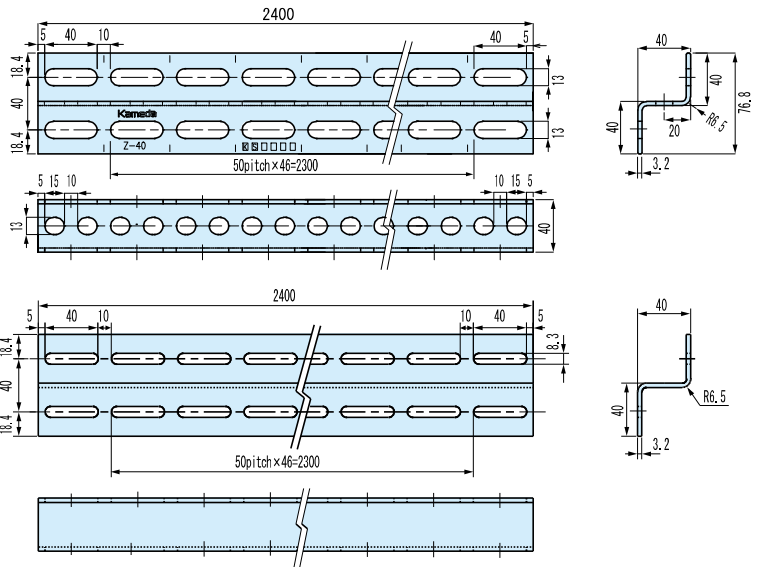
## Multi Angle Z type



Z - 40



Z - 40 - 8  
(hole 8.3 mm)



### KC / F / Z type Standard List

RoHS: ●N, ●3C, ●SUS

type	width mm	Model number	Material / finishing					Length mm	Width mm	Height mm	Thickness mm	Hole Width mm	Bolt Size	Weight kg	Packing Quantity Pieces	Stock
			Iron fabric N	Iron trivalent 3C	Galvanized steel ZK	Iron molten zinc ZN	Stainless steel SUS									
KC	22	KC-22S-N	●				1800	22	11	1.2	5	M5	0.7	20	○	
		KC-22S-3C		●											○	
	35	KC-35-3C		●			2400	35	20	2.0	10	M10	2.7	6	○	
	40	KC-40PB-ZK			●		2550	40	30	2.0	11	M10 W3/8	4.0	4	○	
F	19	F-19L-3C		●			2000	19		3.0	6.2	M6	0.6	20	◎	
		F-26L-3C		●						2.3	7	M6	0.6	20	◎	
	25	F-26L-SUS					1800	25		2.0			0.6	20	◎	
		F-38L-3C		●						3.2						○
	36	F-38L-ZN				●	1800	36		3.0	11	M10	1.2	20	○	
		F-38L-SUS														○
Z	40	Z-40-3C		●			2400	40	76.8	3.2	13	M10 M12	4.8	3	○	
		Z-40-ZN				●					8.3	M8	5.8	○		
		Z-40-8-ZN				●								○		

※ Please refer to P45 for the difference of material and plating.

Sales unit: 1 piece (N fabric is 1 package)

※ The fabric is oiled on the surface,

but it is easy to rust so please be careful about storage.

※ Wear work gloves etc. for handling to avoid unexpected injuries.

## End cover



Multi-Angle / channel end face protection cap.

### Features

- It is made of soft PVC and can be safely protected simply by fitting it into the cut of the angle channel. Easy to install, remove and reuse.
- Apply and fix the adhesive where it is easy to touch.

### Basic Specs

- Material: soft PVC
- Color: Black
- Sales unit: 10 pieces
- Inventory: ○



- VL-40-GY (gray)
- VL-40-WH (White)
- Sales unit: 10 pieces
- Inventory: ○

Model number	Apply	Depth (inside)	Quantity
VL-30	L-30	20 ±0.2	100
VL-40	L-40		
VL-50	L-50		
VU-38	U-38	15 ±0.2	100
VKC-35	KC-35		
VKC-40	KC-40		



## Uni-kanagu UN

### Example of use

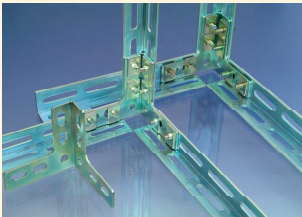
UN-26A



UN-26T



UN-30TL



L-25W·L-30W  
For corner connection  
※ Please use it inside.  
※ Applicable bolt  
L-25W···M4·M6  
L-30W···M8  
Recommended bolt length is 15mm or less  
※ The bolt position is shifted up and down and left and right Please use it.

UN-40AA



For corner connection  
In the middle connection

UN-40AB



In connection with wood

UN-40AC

**NEW**



Adjusters and castors can be freely adjusted in height and moved  
※ Pay attention to the load capacity

UN-40J



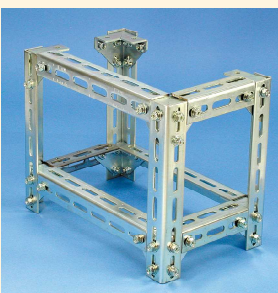
For L-40W straight connection

UN-40TL

For corner connection of L-40W



UN-40CB



Corner bracket for L-40W

UN-50J



For L-50W straight connection

※ When connecting L-50S, be sure to use W1/2 or M12 bolts.

Connection fitting for Multi-angle, U-canag..

**特長** RoHS (3C, SUS)

● UN-26 series as fittings for U-1 and U-26, UN-38 series as fittings for U-38 and L-40, UN-40 series as fittings for L-40, when assembled in three dimensions.

We also offer sems bolts (P41) with washers for Uni-Kanag connections.

**仕様**

- Material: Steel plate 2.3t, 3.2t  
Stainless steel SUS304 3.0t
- Surface finish: 3C trivalent  
ZN molten zinc

Order number:  -

### List of standards

Model number	Apply	Material / finishing			Sales unit (Pieces)
		3C iron, trivalent	ZN iron, molten zinc	SUS stainless steel	
UN-26L		○			10
UN-26T	U-1	◎			10
UN-26A	U-26	◎			10
UN-26S	L-30	◎			10
UN-38L		○	○		10
UN-38T	U-38	○	○		10
UN-38A	L-40	◎	○	○	10
UN-38S		◎	○		10
UN-30TL	L-25 L-30	○			10
UN-40AA		○			10
UN-40AB		○			10
UN-40J	L-40	○	○	○	1
UN-40TL		◎	○		1
UN-40CB		○			1
UN-50J	L-50	○	○		1

### UN-40AC List of standards

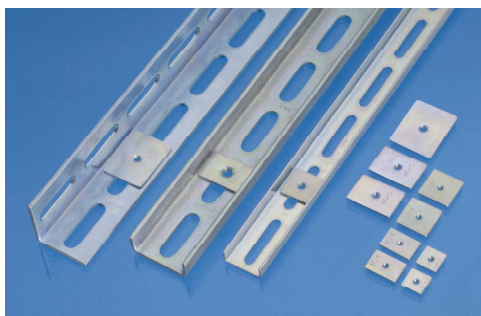
Model number	Apply	Material finishing	Hole	Sales unit
UN-40AC-10	L-40	3C iron trivalent	10.5 φ	10 pic
UN-40AC- M12			M12※	10 set
UN-40AC-13			13 φ	10 pic

※ UN-40AC-M12 has body + M10 × 16 sems bolt and nut It is a set.

※ The screw of UN-40AC-M12 is M12 × 1.75 coarse.



## Square nut N



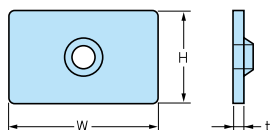
It is a square plate nut for Multi-angle, U-canag.

**Features** RoHS

- It does not rotate because it is matched to the inner diameter of Multi-angle U-canag. Work is easy because there is no need for a spanner from the back.
- NS, N0, N3 types can be shared in different sizes in vertical and horizontal.

**Basic Specs**

- Material: Steel plate
- Surface finish: 3C trivalent
- Stock: ○

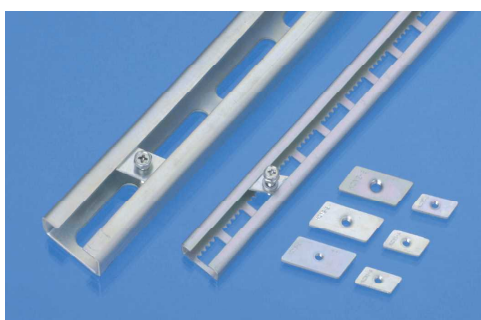


Apply	UH U-2 L-25	U-1 U-26 L-30	L-50
UH U-2 L-25	 N1		
U-1 U-26 L-30	 NS	 N2	
U-38 L-40		 N0	 N3

Model number	Screw size	H	W	t	Apply	Sales unit (pcs)
N1-4-3C	M4	15	15	1.6	U-2	100
N1-5-3C	M5				UH+23	
N1-6-3C	M6				U-23	
NS-4-3C	M4	15.5	23	1.6	U-2	100
NS-5-3C	M5				UH+23	
NS-6-3C	M6				U-23	
N2-4-3C	M4	23	23	1.6	U-1	100
N2-5-3C	M5				U-26	
N2-6-3C	M6				L-30	
N0-4-3C	M4	23	34	2.3	U-1 U-26 U-38 L-30 L-40	100
N0-5-3C	M5					
N0-6-3C	M6					
N0-8-3C	M8			3.2		100
N0-10-3C	M10					
<b>NEW</b> N0-8B	M8			4.5		50
<b>NEW</b> N0-10B	M10					
N3-6-3C	M6	32	40	1.6	U-38 L-40 L-50	50
N3-8-3C	M8			2		
N3-10-3C	M10			4.5		
<b>NEW</b> NS-5T	M5	15	18	1.6	LK, HK	100

※ For details on NS-5T, see P26.

## Quick nut KCN



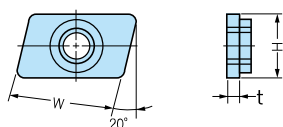
Nuts for multi-channel KC-22S, KC-35.

**Features** RoHS

- It can be installed from above at any position on the rail.
- It can be used for U-canag and KC channel as well as square nut.

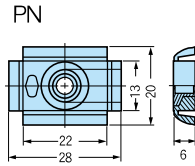
**Basic Specs**

- Material: Steel plate
- Surface finish: 3C trivalent
- Stock: ○



Model number	Screw size	H	W	t	Apply	Sales unit (pcs)
KCN1-4-3C	M4	9.5	17	2.0	KC-22S	100
KCN1-5-3C	M5					
KCN2-4-3C	M4	14	27	2.3	KC-35	100
KCN2-5-3C	M5					
KCN2-6-3C	M6					

## Punch nut PN



Drop-off preventing nut for U-kanag.

**Features** RoHS

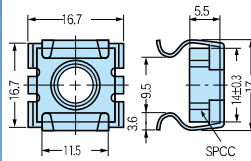
- Push it into U-kanag to use. It won't fall off when you release your hand, so it's suitable for work where it's hard to reach.

**Basic Specs**

- Material: PP  
Screw ... iron
- Sales unit: 100 pcs
- Stock: ○

Model number	color	screw size	Apply
PN-4-3C	black	M4	U-1
PN-5-3C	gray	M5	U-26

## Snap nut SPN



Drop-off preventing nut for Multi-angle.

**Features** RoHS

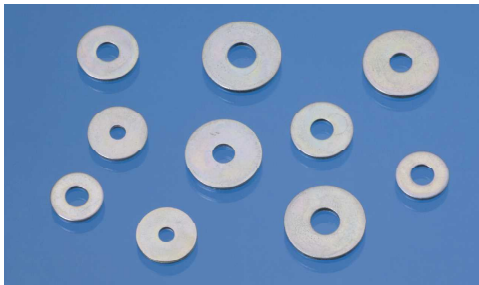
- It is a nut attached to the inside of Multi-angle long hole. It can be used for any Multi-angle long hole with a width of 10 to 11 mm.

**Basic Specs**

- Material: Spring steel plate  
Iron square nut
- Surface finish: 3C  
Trivalent
- Sales unit: 100 pcs
- Stock: ○

Model number	screw size	Apply
SPN-5-3C	M5	U-38 U-38H
SPN-6-3C	M6	L-40S
SPN-8-3C	M8	L-40W

## Flat washer W



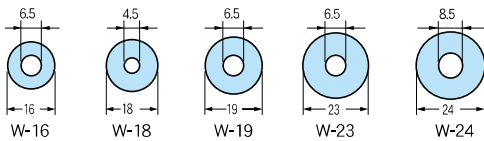
Washer for Multi-angle, U-kanag.

**Features** RoHS

- Use when the bolt diameter is smaller than the hole diameter of Multi-angle, U-Kanag. A large and durable washer with an outer diameter.

**Basic Specs**

- Material: Steel plate
- Surface finish: trivalent
- Sales unit: 100 pcs
- Stock: ○



Model number	Outer diameter	Inner diameter	Thickness	Apply
W-16-3C	16	6.5	1.6	Use M6 bolt for U-26, L-30
W-18-3C	18	4.5	1.6	Use M4 bolt for U-26
W-19-3C	19	6.5	1.6	Use M6 bolt for U-26, L-30
W-23-3C	23	6.5	2.0	Use M6 bolt for U-38, L-40, L-50
W-24-3C	24	8.5	2.0	Use M8 bolt for L-50

## Washer built-in screw B



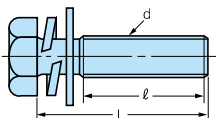
A washer built-in screw for Multi-angle, U-kanag.

**Features** RoHS

- Work is easy and parts management is easy.

**Basic Specs**

- Material: iron
- Surface finish: trivalent
- Sales unit: 50 pcs  
(25 pcs B10-35)
- Stock: ○



Model number	screw d	length L	effective length ℓ
B8-15-3C	M8	15	8
B8-20-3C		20	14
B8-25-3C		25	18
B8-30-3C		30	23
B8-35-3C		35	28
B10-20-3C	M10	20	10
B10-25-3C		25	15
B10-30-3C		30	20
B10-35-3C		35	25

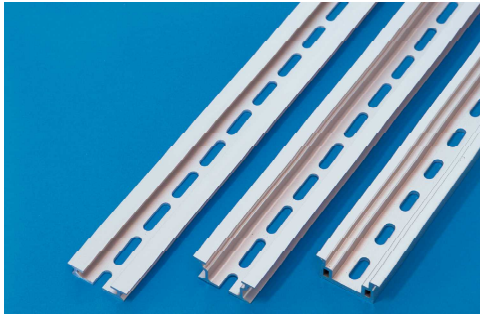




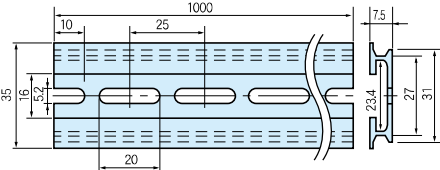
# Panel Assembly System

盤用資材

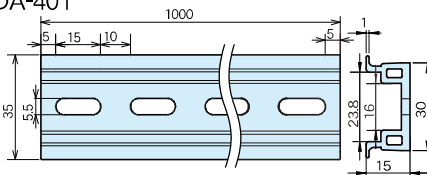
## DIN RAIL (Aluminum Model) STRONG



DA-201



DA-401



Multifunctional reinforced DIN rail with rotating nut inside.

**Features** RoHS

- Parts can be attached to the rail center by inserting a free nut inside.  
(DA-201) ※ Square nuts NS, N2 and N0 (page 40) can also be used.
- Parts not compatible with DIN rail can also be mounted on the same rail.  
(DA-201)
- The DIN rail type terminal block and the small terminal block (TOGI RT series) It can be mounted on the same rail. (DA-201)
- By using an AC base or NF base, all parts can be mounted.
- The DA-401 is a super-strong type, and large parts can be mounted stably. It has high torsional strength and can be mounted directly on the rack without an intermediate plate.

**Basic Specs**

- Material: Aluminum alloy alumite finish
- Sales unit : 10

Stock : ○

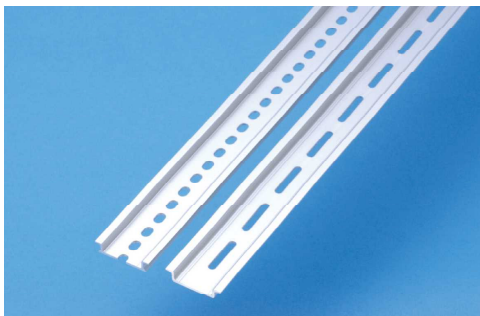
Model number	length(mm)	weight (g)	Number of boxes (Pieces)
DA-201	1,000	249	50
DA-401	1,000	444	40



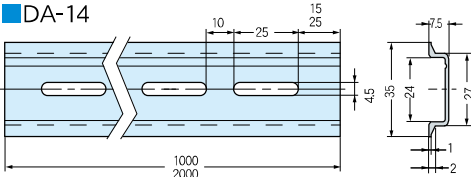
Example of use



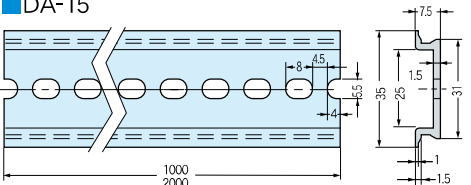
## DIN RAIL (Aluminum Model) STANDARD



DA-14



DA-15



It is a general purpose DIN rail. Most manufacturers' controls can be installed.

**Features** RoHS

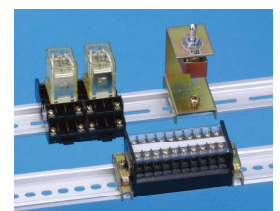
- As it is made of aluminum, it is lightweight and easy to handle, and the finish is also good.
- It is easy to cut and there is no need to cut off the cross section.
- It is possible to mount any part that complies with DIN standard rails regardless of the manufacturer.
- Parts and terminal blocks can be freely installed and removed at any position on the rail, allowing for flexibility in design changes and circuit additions.
- Parts not compatible with DIN rail can also be attached using attachment canags such as NF base.

**Basic Specs**

- Material: Aluminum alloy, anodized finish
- Sales unit : 10
- Stock : ○

Model number	length(mm)	weight (g)	Number of boxes (Pieces)
DA-141	1,000	156	100
DA-142	2,000	332	60
DA-151	1,000	170	100
DA-152	2,000	334	60

Example of use

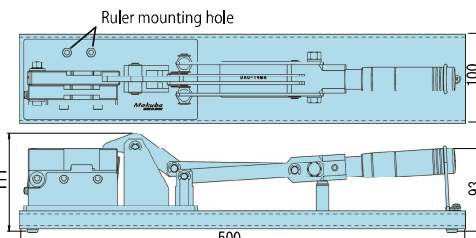


## DIN rail cutter DAC series

Wet-cut, lightweight cutter for aluminum DIN rails.



Ruler sold separately  
■ DACS-50



■ DAC-14MA

Applicable rail	Cut surface
DA-14series	

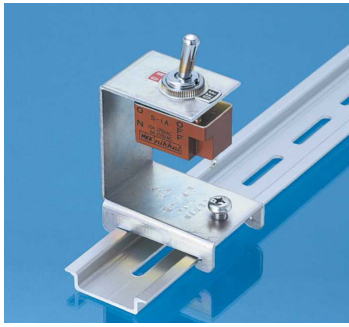
■ DAC-15MA

Applicable rail	Cut surface
DA-15series	



## Switch mounting table S-14F

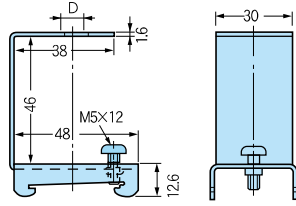
Design registered



Mounting example

- S-14F-9-3C
- S-14F-13-3C

DIN rail mounted toggle switch base



It is a convenient mounting can for mounting volume and various switches independently in switchboards, control boards, and control boards.

### Features RoHS

- The S-14F can be mounted anywhere on the DIN rail.

### Basic Specs

- Material: steel plate 1.6t
- Surface finish: 3C trivalent chromate

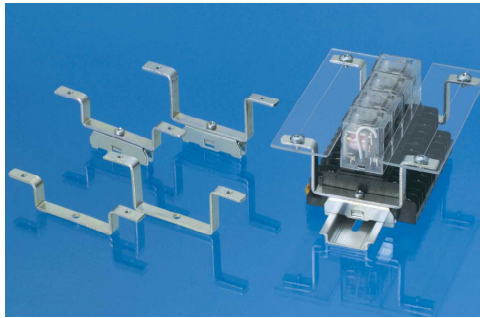
Sales unit : 1 piece

Stock : ○

Model number	Mounting hole diameter Dφ	Application
S-14F-9-3C	9	toggle switch volume
S-14F-13-3C	13	

(unit: mm)

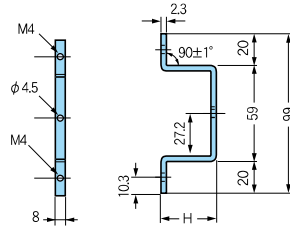
## Protective cover stay S-19



Mounting example

For terminal protection cover, see P120.

A mounting bracket for mounting a terminal protective cover such as a relay on a DIN rail.



### Features RoHS

- The protective cover can be easily attached by tightening the terminal block clamps together.
- For stoppers, please use the commercial products of each terminal block manufacturer.
- There are two heights, 20mm and 35mm.

### Basic Specs

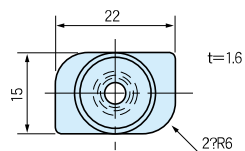
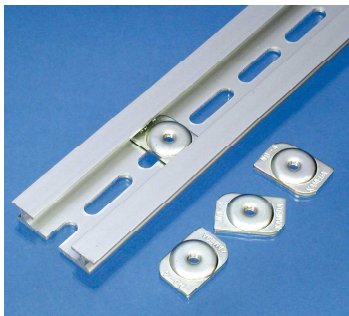
- Material: Steel plate 2.3t
- Surface finish: 3C trivalent chromate

- S-19-20-3C (H=20)
- S-19-35-3C (H=35)
- S-19-20K-3C (H=20 With stopper)
- S-19-35K-3C (H=35 With stopper)

Sales unit : 10 pieces

Stock : ○

## Free nut ND



This is a dedicated nut for DA-201, and it is easy to respond to the addition or change of parts after mounting other equipment.

### Features RoHS

- It can be inserted from anywhere on the rail, and parts can be fixed anywhere.
- It has a special shape and strength not found in conventional plate nuts.

### Basic Specs

- Material: Steel plate
- Surface finish: trivalent chromate

- ND-3-3C (M3)
- ND-4-3C (M4)
- ND-5-3C (M5)

Sales unit: 100 pieces Stock: ○

With spring

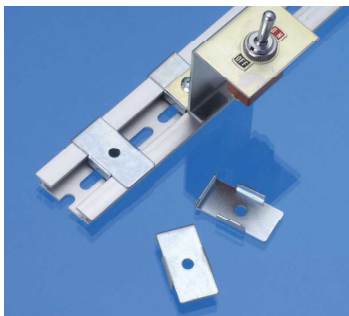
- NDS-3-3C (M3)
- NDS-4-3C (M4)
- NDS-5-3C (M5)

Sales unit: 50 pieces Stock: ○

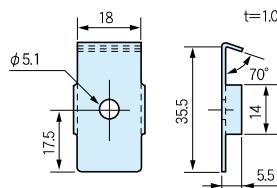
Convenient for vertical use  
Spring Nut



## Free washer W



Mounting example



This is a washer to prevent the feet of parts from falling into the groove of the rail when attaching parts to the DA-201.

### Features RoHS

- Just put it on the rail and it won't fall.
- Use with free nut ND or square nut NS.
- The movement to the left and right can be done easily by holding the nut and moving at the same time.

### Basic Specs

- Material: Steel plate
- Surface finish: trivalent chromate

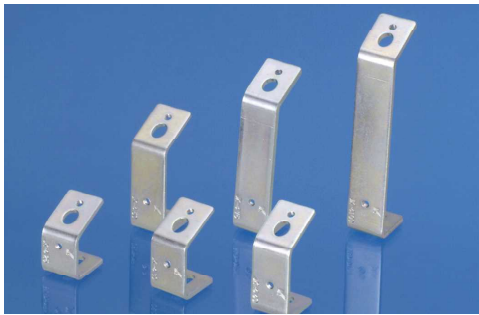
■ W-201-3C

Sales unit: 100

Stock : ○



## Terminal block mounting bracket JK



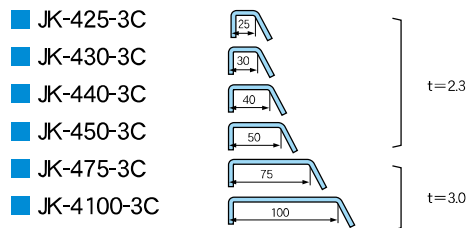
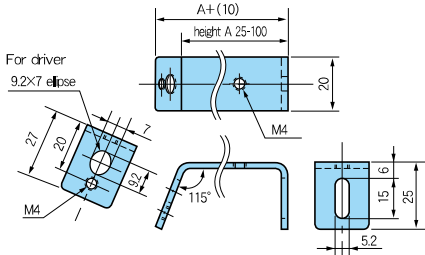
Space-saving terminal block support bracket.

**Features** RoHS

- It is space-saving design that allows the terminal block to be easily mounted even in narrow places.
- The inclination is 25°, which is easy to use.
- The center of the terminal block rail and the center of the mini-kanag mounting screw are on the same line, simplifying the design.
- The height is abundant with 6 types from 25mm to 100mm.

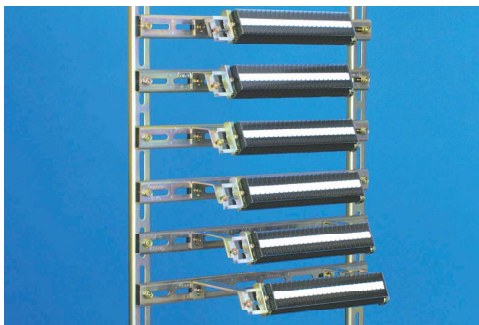
**Basic Specs**

- Material: Steel plate t = 2.3, t = 3.0
- Surface finish: 3C trivalent chromate



Sales unit: 10 pieces

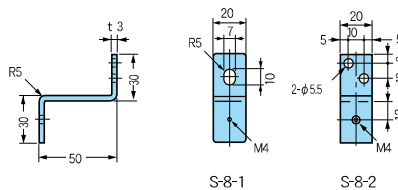
Stock : ○



## Mounting bracket S



- S-8-1-3C
- S-8-2-3C



Install parallel to the mounting surface  
It is an auxiliary Kanag for.

**Features** RoHS

- A new mounting hole has been added to make it easier to use.

**Basic Specs**

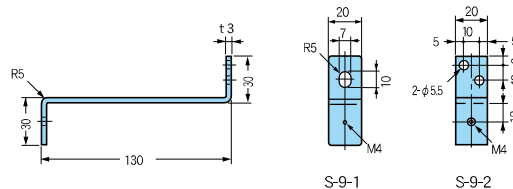
- Material: Steel plate t = 3.0
- Surface finish: 3C trivalent chromate

Sales unit: 10 pieces

Stock : ○



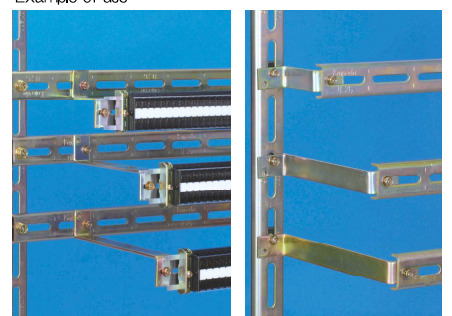
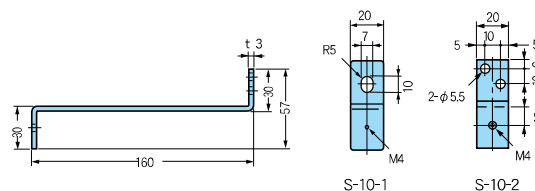
- S-9-1-3C
- S-9-2-3C



Example of use



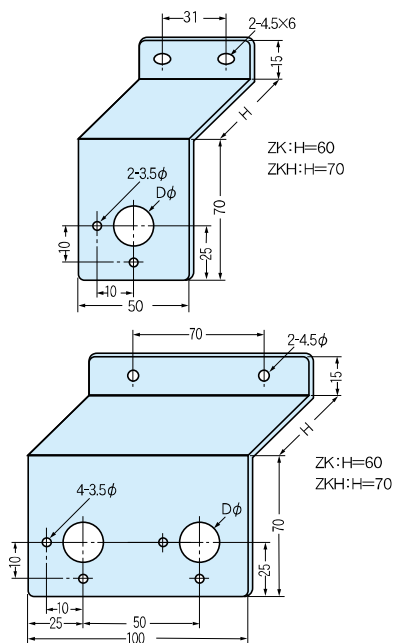
- S-10-1-3C
- S-10-2-3C



## Switch mounting base ZK ZKH



Mounting example



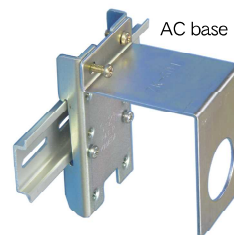
It is a convenient mounting style for mounting various switches and volumes independently.

### Features RoHS

- There are 5 types of switch mounting holes: 9φ, 13φ, 22φ, 25φ and 30φ, which can be used to mount all switches and volumes.
- Each size is available for one or two, and can be combined to accommodate three or more multiple installations.
- The switch mounting surface is wide enough to facilitate mounting of the display nameplate.
- Since 9φ and 13φ are provided with small holes at the 0° and 90° positions for anti-rotation, they can be used in both vertical and horizontal positions.

### Basic Specs

- Material: Steel sheet 1.6t
- Surface finish: 3C trivalent chromate
- Sales unit: 10 pieces
- Stock : ○



AC base (P46) installation example

- One unit can be mounted on a DIN rail using S-21.

(mm)

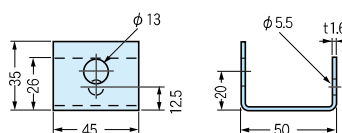
	Model number (H=60)	Model number (H=70)	D φ	Lock hole	Use
For one hole	ZK-091-3C	—	9	3.5	Volume
	ZK-131-3C	—	13	3.5	Volume, toggle switch
	ZK-221-3C	ZKH-221-3C	22.5	—	22 φ Switch, lamp
	ZK-251-3C	—	25.5	—	25 φ Switch, lamp
For 2 holes	ZK-301-3C	ZKH-301-3C	30.5	—	30 φ Switch, lamp
	ZK-092-3C	—	9	3.5	Volume
	ZK-132-3C	—	13	3.5	Volume, toggle switch
	ZK-222-3C	—	22.5	—	22 φ Switch, lamp
	ZK-252-3C	—	25.5	—	25 φ Switch, lamp
	ZK-302-3C	—	30.5	—	30 φ Switch, lamp

## Switch mounting table S-14

Design registered



■ S-14-3C



It is a convenient bracket for mounting the volume and various switches independently in the switchboard and control panel.

### Features RoHS

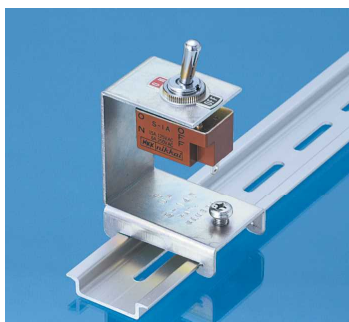
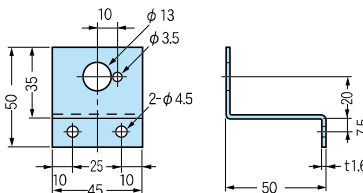
- S-14 is space saving type.
- S-14Z is a Z type that is easy to retrofit.
- S-14F can be mounted anywhere on the DIN rail.

### Basic Specs

- Material: Steel sheet 1.6t
- Surface finish: 3C trivalent chromate
- Sales unit: 10 pieces (S-14F is 1 piece)
- Stock : ○



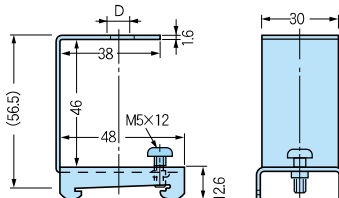
■ S-14Z-3C



■ S-14F-9-3C

■ S-14F-13-3C

DIN rail mounted toggle switch stand

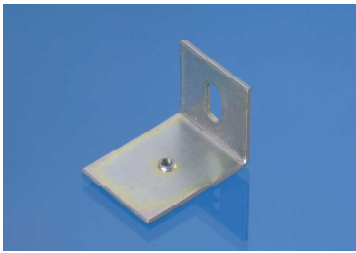


(mm)

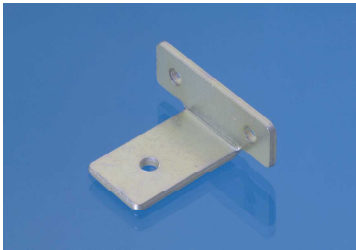
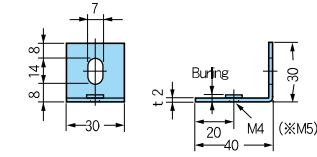
Model number	D φ	Use
S-14-3C	13	volume
S-14Z-3C	13	
S-14F-9-3C	9	Toggle switch
S-14F-13-3C	13	

※取付例

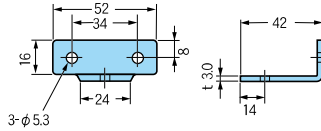
## Duct mounting bracket Connection fitting S



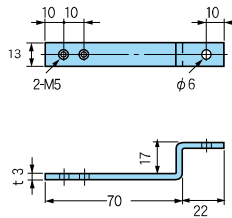
■ S-4-3C  
■ S-4-5-3C※



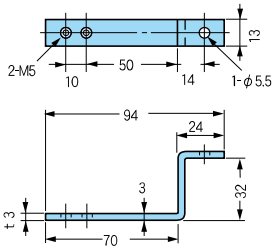
■ S-5-3C



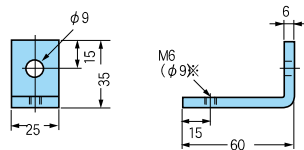
■ S-6-3C



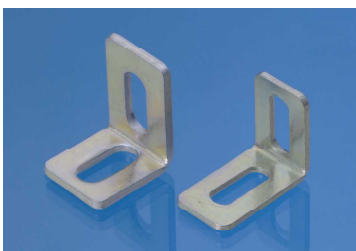
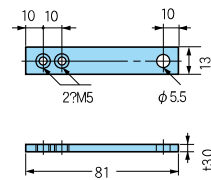
■ S-6B-3C



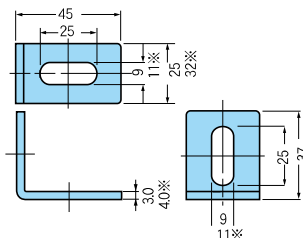
■ S-11-3C  
■ S-11B-3C※



■ S-13-3C



■ S-20-25-3C  
■ S-20-32-3C※



A series of brackets that are useful for supporting ducts, wiring, small parts, etc.

**Features** RoHS

- Since all metal fittings have tapped holes for component mounting (except S-5), no nut is required.
- S-11 and S-11B are used to connect U-1 and U-26 at right angles.
- S-20-25, S-20-32 are durable right-angle fittings. Please use it for fixing heavy items.

**Basic Specs**

- Material: Steel plate
- Surface finish: 3C trivalent chromate
- Sales unit: 10 pieces
- Stock : ○



Example of use S-4



Example of use S-6B

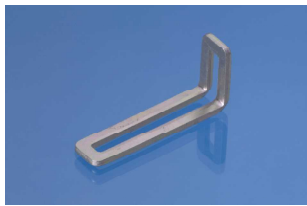


Example of use S-11

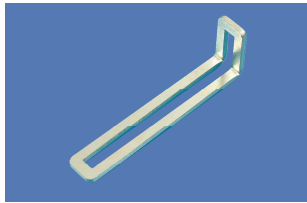
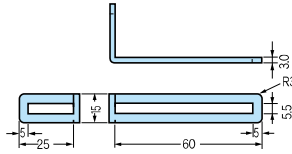




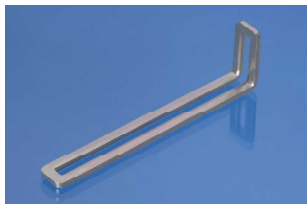
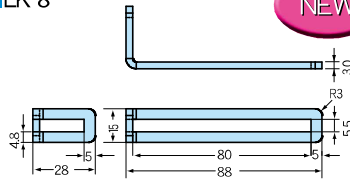
## Auxiliary bracket LK, HK



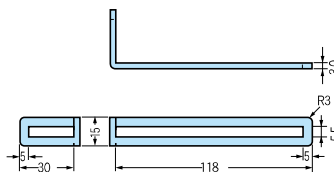
■ LK-6-3C



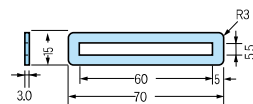
■ LK-8



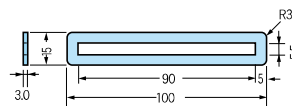
■ LK-12-3C



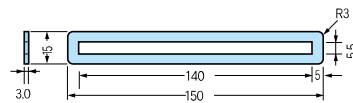
■ HK-7-3C



■ HK-10-3C



■ HK-15-3C



Please use it freely to support wiring ducts and small parts.

**Features** RoHS

- Since the hole is grooved, positioning can be done freely.
- If bending process is added, it can cope with difficult installation.

**Basic Specs**

- Material: Steel plate t = 3
- Surface finish: 3C trivalent chromate

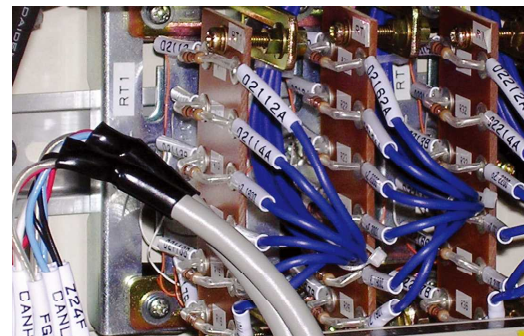
Sales unit: 10 pieces

Stock : ○



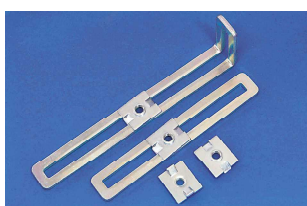
Example of use

LK-6

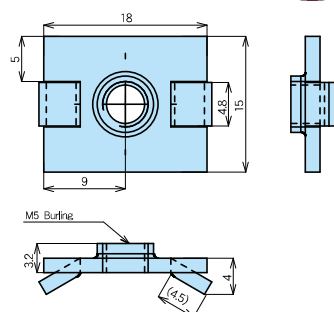


Board mounting example

LK-6



■ NS-5T



It is a locking nut with a protruding feature.

**Features** RoHS

- By inserting the protruding part when installing LK・HK, it prevents idling.

**Basic Specs**

- Material: Steel plate t = 1.6

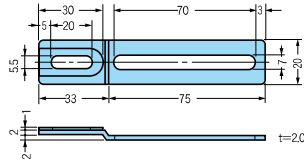
Sales unit: 100 pieces

Stock : ○

## MINI QUICK KS



■KS-11-3C



Auxiliary fitting used in combination with channel KC-22S.

**Features** RoHS

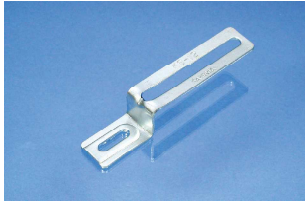
- It is convenient for adjusting the dimensions and height.
- The KS-14 can be easily fixed using a push mount tie.

**Basic Specs**

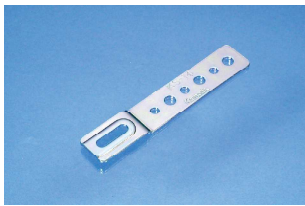
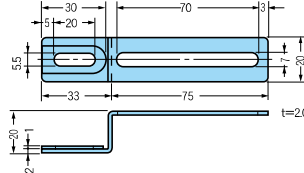
- Material: Steel plate t = 2
- Surface finish: 3C trivalent chromate

Sales unit: 50 pieces

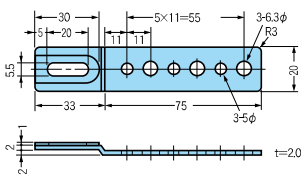
Stock : ○



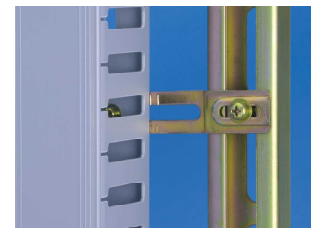
■KS-12-3C



■KS-14-3C



Example of use KS-14

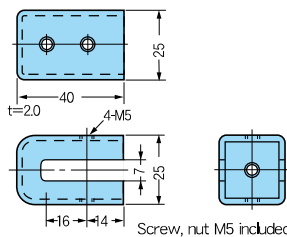


Example of use KS-11

## QUICK HOLDER KH



■KH-1-3C



Screw, nut M5 included

It is a metal fitting which inserts a duct and parts by inserting in a board part.

**Features** RoHS

- It can be fixed with one screw and does not require drilling.
- The KH-65 and KH-100 can also be directly fixed to the wire with a binding band.

**Basic Specs**

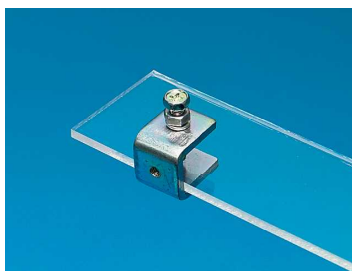
- Material: Steel plate
- Surface finish: 3C trivalent chromate

Sales unit: 10 pieces

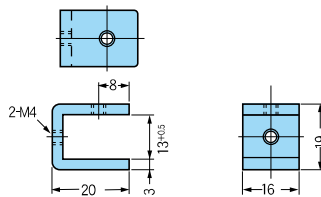
Stock : ○



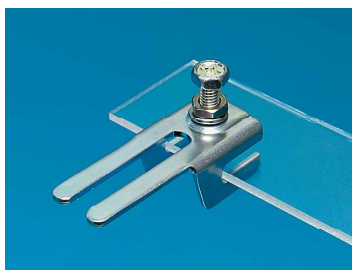
With insulation coating (Made to order)



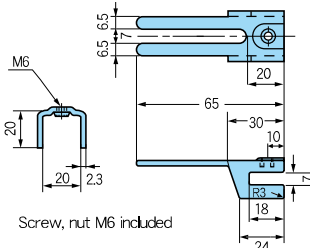
■KH-4-3C



Screw, nut M4 included



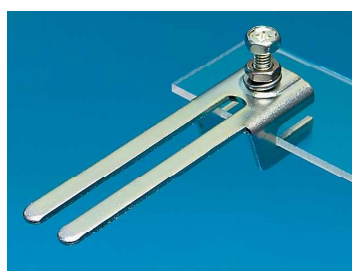
■KH-65-3C



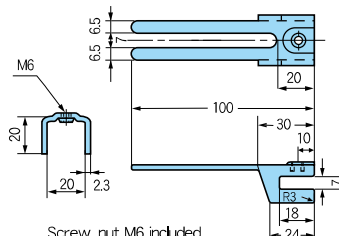
Screw, nut M6 included



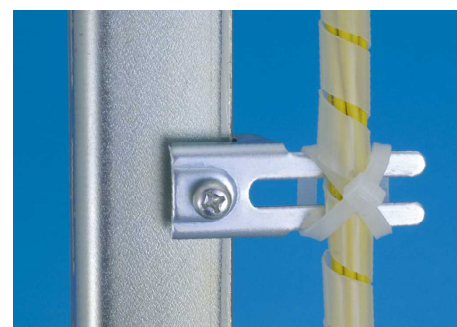
Example of use



■KH-100-3C



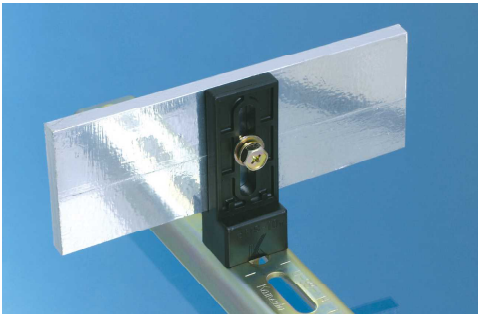
Screw, nut M6 included



Example of use

## Bar holder BHS-10

Design registered



Low cost, light weight, good working low pressure bus bar support.

**Features**    **RoHS**

- The spacing can be adjusted freely to support the bus bars one by one.
- The bus bar can be fixed with one bolt and can be used in various sizes.

**Basic Specs**

- Material: Body ... glass fiber filled P.P.  
Bolt, nut, washer ... iron, trivalent chromate

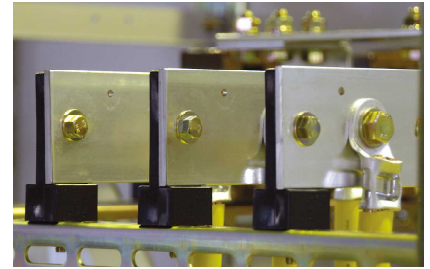
● Test results

Bending strength D	average 108kgf
Bending strength W	average 288kgf
Tensile strength	average 418kgf
Withstand voltage	22kV 1 minute
Impact withstand voltage	50kV No abnormality

■ BHS-10

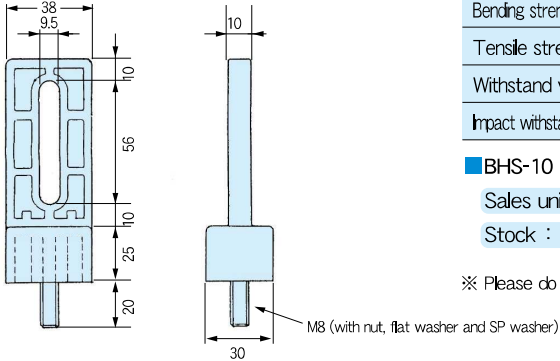
Sales unit: 1 piece    100 pieces / box

Stock : ☉



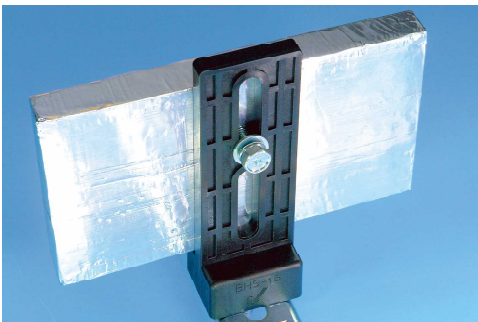
Example of use

※ Please do not attach the bar holder with excessive force.



## Bar holder BHS-15

**NEW**



It is a bar holder one size larger than BHS-10.

**Features**    **RoHS**

- The spacing can be adjusted freely to support the bus bars one by one.
- The bus bar can be fixed with one bolt and can be used in various sizes.
- It can handle bus bars larger than BHS-10.

**Basic Specs**

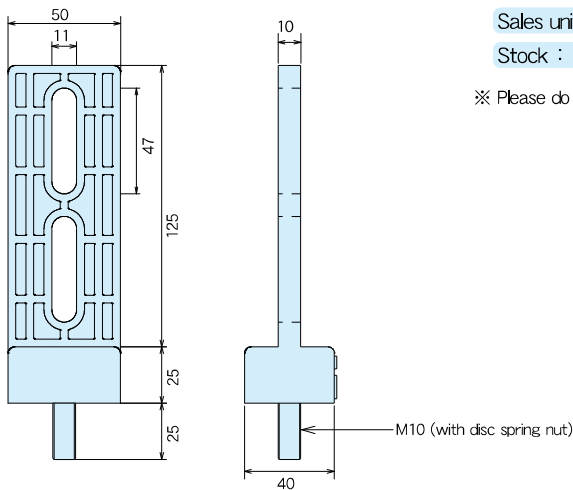
- Material: Body ... glass fiber filled P.P.  
Disc spring nut ... for M10 Iron, trivalent  
Mounting bolt ... M10 × 25 L Iron, trivalent

■ BHS-15

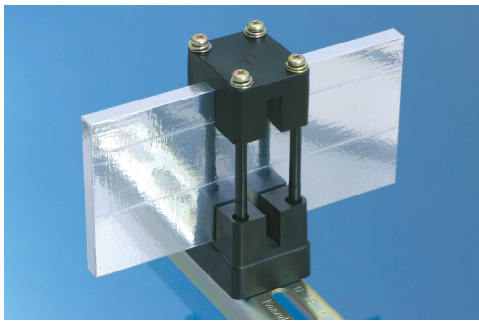
Sales unit: 1 piece    50 pieces / box

Stock : ○

※ Please do not attach the bar holder with excessive force.



## Bar holder BHX



Support the low pressure bus bar without inserting a hole.

**Features** RoHS

- Supports busbars up to 8 to 20 mm thick.
- Please use side A or side B according to the thickness of the bus bar.
- Please select the model number according to the width of the bus bar.

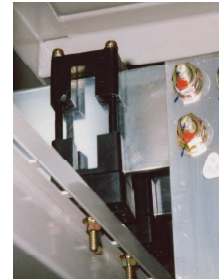
**Basic Specs**

- Material: Body polypropylene  
Insert bolt Iron, trivalent M8  
M8 nut, washer included  
Tightening bolt M6 iron, long screw, trivalent  
Insulated PVC shrink tube

● Test results	Withstand voltage	22kV 1 minute
	Impact withstand voltage	50kV No abnormality

Sales unit: 1 piece  
(M8 nut, washer, long bolt included)

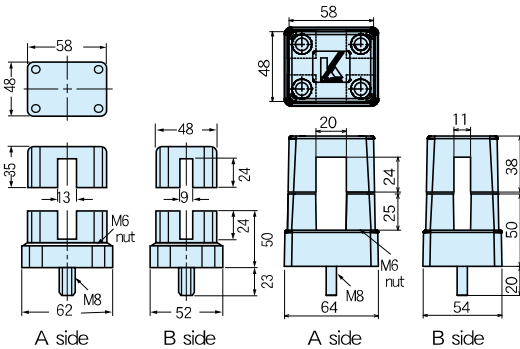
Stock : ○



Example of use

■ BHX-1 type

■ BHX-2N type

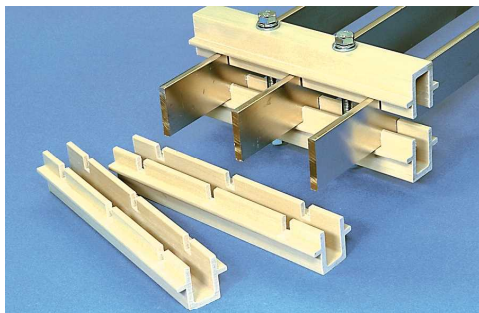


Model number	Bus bar width mm	Busbar thickness mm	Supplied tightening bolt
BHX-105	50	8 - 12	M6× 75 4 pcs
BHX-107	75		Insulation M6×100 4 pcs
BHX-110	100		Insulation M6×130 4 pcs
BHX-115	150		Insulation M6×180 4 pcs
BHX-205N	50	10 - 20	M6× 75 4 pcs
BHX-207N	75		Insulation M6×100 4 pcs
BHX-210N	100		Insulation M6×130 4 pcs
BHX-215N	150		Insulation M6×180 4 pcs

※ Please do not attach the bar holder with excessive force.

## KP cleat (FRP made)

Design registered



A cleat for holding low pressure bus bars in three phases.

**Features** RoHS

- It is light and durable made of FRP with glass fiber that has excellent electrical properties and mechanical strength.
- We will make an order based on the desired bus bar pitch and thickness.

**Basic Specs**

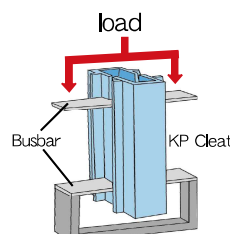
- Material: FRP glass fiber reinforced
- Heat distortion temperature: 120 ° C
- Operating temperature : -40 to 102 ° C

■ Made to order (reference standard)

Model number	length A (mm)	interval B (mm)	interval C (mm)	width D (mm)
KP-80-6	220	80	80	7.5
KP-80-8				9.5
KP-80-10				11.5
KP-100-6	260	100	100	7.5
KP-100-8				9.5
KP-100-10				11.5
KP-150-8	360	150	150	9.5
KP-150-10				11.5
Fixed size (no processing)	1150	-	-	-

※ Please use separately M8 × length (bus bar width + 60mm ~ 70mm) for mounting bolt.  
Use a bolt with a tightening torque of 9.8 N · m (100 kgf · cm) or less.

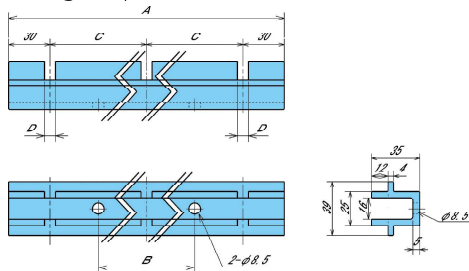
Load test result



KP cleat's notch was crushed.

Maximum load  
39.5kN

Mounting example



■ How to order

Specify the model number and A to D dimensions with reference standard on the right.  
Model number: KP-(interval C)-(bus bar thickness)  
A to D dimensions are manufactured upon request.  
We accept in one set of two.

Sales unit: 10 pieces (5 sets)

Stock: △ Made to order

## Low voltage insulating support "ES spacer"

Insulating support for low pressure (AC 600 V or less).

### Features RoHS

- Various sizes are available and insulation such as busbars  
It is very useful for supporting the things you need.
- Excellent impact resistance and insulation.

### Basic Specs

- Material: • Body: Polypropylene  
• Insert bolt/nut: Iron, trivalent

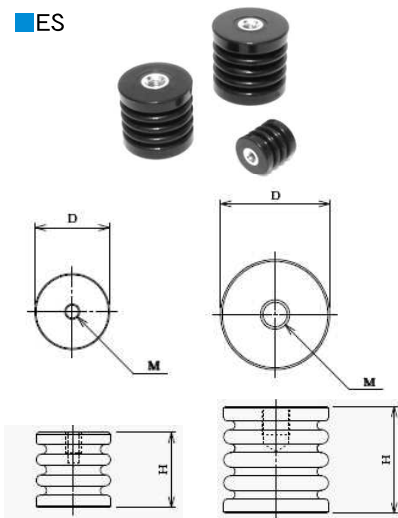
Color: Black

Stock: ○ We also manufacture the flame retardant UL94V-0.



Example of use

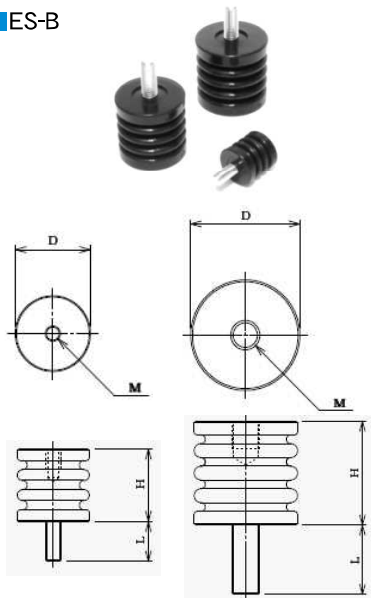
### ES



### Both sides nut type


Part Number	outer diameter D (mm)	height H (mm)	screw		Unit	Number of boxes
			diameter	depth (mm)		
ES-20-4	20	20	M4	6	50 Pieces	1000 Pieces
ES-20-5	20	20	M5	6		
ES-20-6	20	20	M6	5.5		
ES-25	25	25	M6	8	25 Pieces	500
ES-30	30	30	M8	9		300
ES-35	35	35	M8	11		250
ES-40	40	40	M8	11		200
ES-45	40	45	M8	11		
ES-50	40	50	M8	11		


### ES-B



### Bolt / Nut Type


Part Number	outer diameter D (mm)	height H (mm)	screw			Unit	Number of boxes
			diameter	depth (mm)	Bolt len. L (mm)		
ES-B-20-4	20	20	M4	6	11	50 Pieces	1000 Pieces
ES-B-20-406	20	20	M4	6	6		
ES-B-20-5	20	20	M5	6	11		
ES-B-20-506	20	20	M5	6	6		
ES-B-20-6	20	20	M6	5.5	13		
ES-B-25-5	25	25	M5	6	11	25 Pieces	500
ES-B-25	25	25	M6	8	12		300
ES-B-30	30	30	M8	9	20		250
ES-B-35	35	35	M8	11	20		200
ES-B-40	40	40	M8	11	20		
ES-B-45	40	45	M8	11	20		
ES-B-50	40	50	M8	11	20		

 Note Installation of a bus bar wider than the outer diameter (Dφ) of the ES spacer causes an overload.

 Note Please be careful not to over tighten the screw tightening torque referring to the table below.

### Recommended tightening torque (according to JIS C8306)

Screw size	M4	M5	M6	M8	
Tightening torque	N·m	1.2	2	2.5	5.5
	kgf·cm	12	20	25	55

 Note It uses an elastic resin and may break if it is subjected to excessive load for a long time.

Use a bending load perpendicular to the screw within the safe bending load shown below.

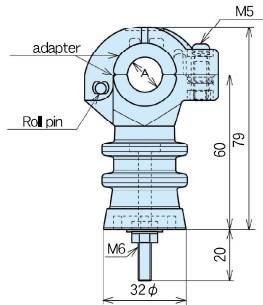
### Safe bending load (according to JIS C8306)

Screw size	M4	M5	M6	M8	
Bending load	N	49	58.5	78.4	88.2
	kgf	5	6	8	9

## CBS-EC Insulator Design registered



Mounting example



For high voltage wire insulation support in the cubicle (for 6.6kV).

**Features** RoHS

- CBS-EC is small and light, and has been designed to obtain sufficient insulation characteristics, contributing to the miniaturization of equipment.
- Easy wiring and wiring operation, with a screw-free holding mechanism, good workability can be obtained.
- It is made of polypropylene that is resistant to impact and has good electrical insulation, and has sufficient strength even in a small size.
- The wire clamp adapter uses a flexible elastomer, so it holds the wire securely without damaging it.

**Basic Specs**

- Material: Body ... polypropylene (Black)  
Adapter ... Elastomer
- Stock: ○



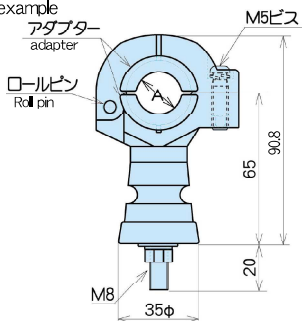
Mounting example

Model number	A φ	Applicable wire	Sales unit (pieces)	Number of boxes (pcs)
CBS-EC-14-3C	13	KIP14 <sup>□</sup> , MLFC8	1	100
CBS-EC-22-3C	14	KIP22 <sup>□</sup> , MLFC14	1	100
CBS-EC-38-3C	16	KIP38 <sup>□</sup> , MLFC22	1	100
CBS-EC-60-3C	18	KIP60 <sup>□</sup>	1	100

## CBS-ED Insulator Design registered



Mounting example



For large diameter high voltage wire insulation support (for 6.6kV) in cubicle.

**Features** RoHS

- It can be used from 38 sq to 200 sq.
- Easy wiring for wiring work and secure with one screw.
- The wire clamp adapter uses a flexible elastomer, so it holds the wire securely without damaging it.

**Basic Specs**

- Material: Body ... polypropylene (black)  
Adapter ... Elastomer
- Stock: ○

Model number	A φ	Applicable wire	Sales unit (pcs)	Number of boxes (pcs)
CBS-ED-38-3C	16	KIP38 <sup>□</sup> , MLFC22	1	20pcs×3bags=60
CBS-ED-60-3C	18	KIP60 <sup>□</sup> , MLFC38	1	20pcs×3bags=60
CBS-ED-100-3C	21	KIP100 <sup>□</sup>	1	20pcs×3bags=60
CBS-ED-150-3C	25	KIP150 <sup>□</sup>	1	20pcs×3bags=60
CBS-ED-200-3C	28	KIP200 <sup>□</sup>	1	20pcs×3bags=60

● CBS Test result list

試験方法: JS-C3801, JS-C3851

Test items	Strength test		Electrical test	
	Bending load test		anti-voltage test	Lightning withstand voltage test
	Maximum load (N) [(kgf)]		60Hz 22kV 1 minute	60kV voltage waveform(1.2×50 μs)
Model number				
CBS-EC	987 [101]		No abnormality	No abnormality
CBS-ED	1940 [198]		No abnormality	No abnormality

※ The above description is not a guaranteed value. It is a measured value.

Ventilation louver VT-2525 IP45 type • IP55 salt damage measures type

Utility model registered

P45 type



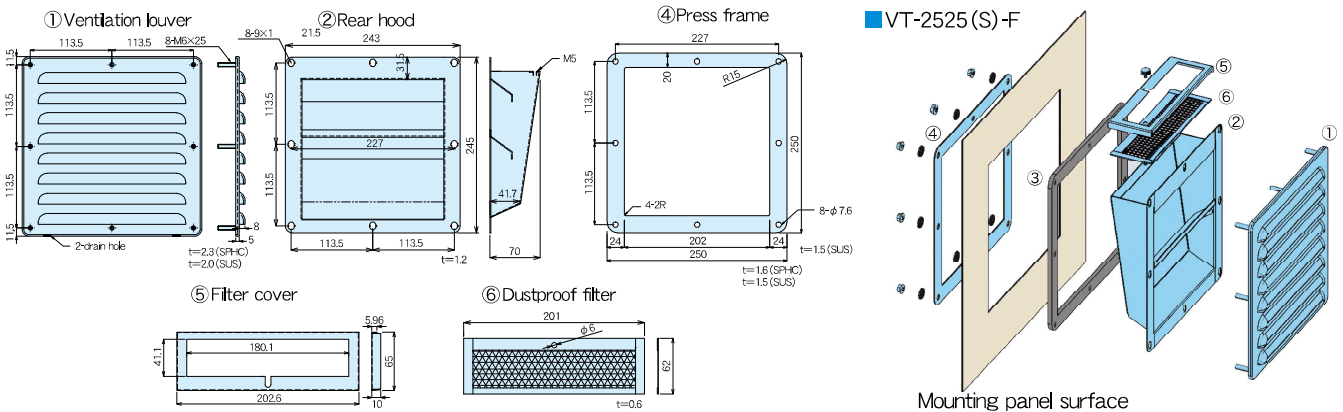
It is a ventilation louver of blowout prevention P45.

**Features** RoHS

- The back hood with a blowproof structure makes it an P45 specification that can be used outdoors.
- The dust filter can be easily attached and removed with a single thumb screw, making maintenance easy.

**Basic Specs**

- Material and finish: Ventilation louver, Rear hood, Press frame ... steel plate • special anti-corrosion treatment, stainless steel  
Packing ... epto sealer, Dust filter ... stainless steel frame, saran honeycomb  
Mounting nut ... Iron trivalent plating, flange nut  
Filter retaining nut ... white screw, Bonder washer... stainless steel



P55 salt damage measures type



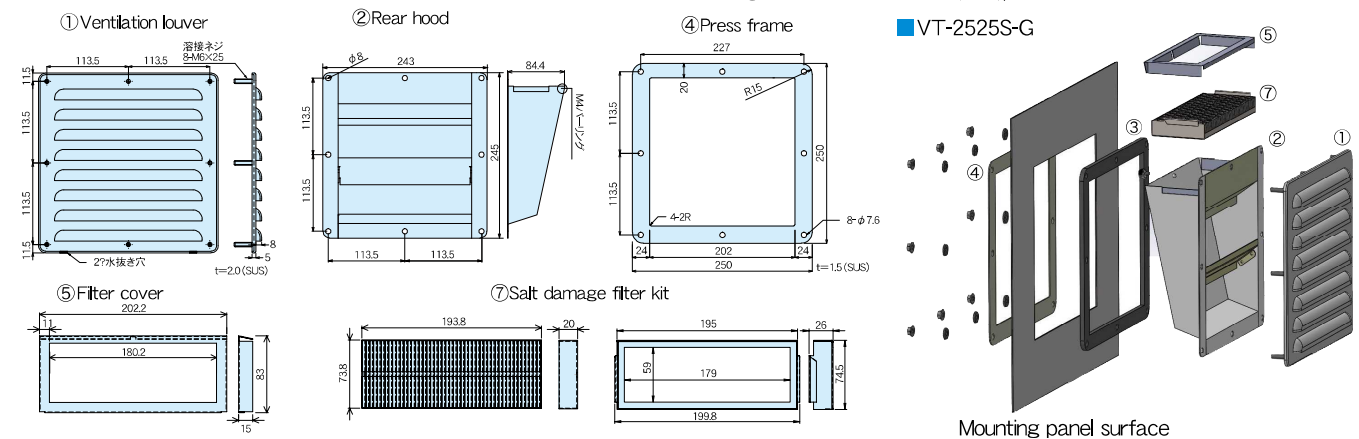
It is a salt damage measures ventilation louver of IP55.

**Features** RoHS

- Use a special 3-layer mesh structure for salt damage measures.
- The low re-scattering rate of 0.1% to 0.7% prevents salt from entering the interior.  
※ The filter kit for salt damage is available separately.  
※ As a rule of thumb, filter replacement time is half a year to 1 year.

**Basic Specs**

- Material and finish: Ventilation louver, Rear hood, Presser frame ... stainless steel  
Packing ... ept sealer, Salt damage filter ... stainless steel frame, Non-woven filter cassette ... stainless steel, Filter cover ... stainless steel  
Mounting nut ... stainless flange nut  
Filter retaining nut ... black flat screw (SUS), Bonder washer... stainless steel



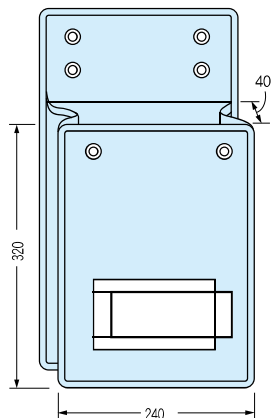
■ Ventilation louver standard

Material	IP grade	Model number	Product configuration							Size V×H (mm)	Thick-ness (mm)	Clipping size V×H (mm)	Opening area (cm <sup>2</sup> )
			①Ventilation louver	②Rear hood	③Packing	④Press frame	⑤Filter cover	⑥Dustproof filter	⑦Salt damage filter kit				
steel plate	IP45	VT-2525-F	VT-2525	VT-2525PC	VT-2525PP	VT-2525PW	VT-2525PG	VT-2525PF	250 × 250	2.3	235 × 235	113.7	
			●	●	●	●	●	●					●
stainless	IP45	VT-2525S-F	VT-2525S	VT-2525SPC	VT-2525PP	VT-2525SPW	VT-2525PG	VT-2525PF	250 × 250	2.0	235 × 235	119.9	
			●	●	●	●	●	●					●
			VT-2525S	VT-2525SPC2	VT-2525PP	VT-2525SPW	VT-2525PGG	VT-2525PFGC					●

※ For outdoor use, please be sure to attach Rear hood to prevent blow-in. Please apply urethane coating for steel plate.



## Hi-pack <Adhesive drawing storage bag> DH



It is a drawing storage bag of vinyl leather cross.

**Features** RoHS

- Store the switchboard drawings, specifications, etc. in the panel.
- Made of vinyl leather cloth, it has excellent durability and weather resistance.
- A card is included that allows you to enter an item on the surface.
- High-performance adhesive tape processing is applied to the back side.

**Basic Specs**

- Material: Vinyl Leather Cloth, Double-sided Tape 3M # 4032
- Sales unit: 1 sheet
- Stock: ○

**DH-A4-B ... B color (beige)**

B color: Munsell symbol 2.5 Y 8/2 (approximate color)

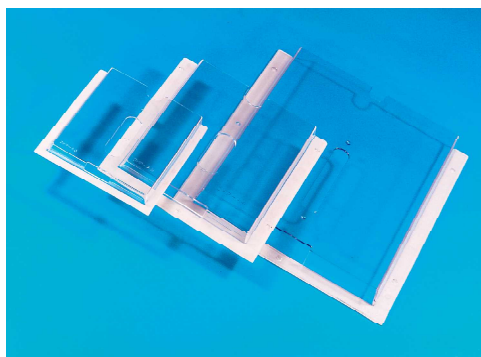
**how to use**

- ① Save the dust and oil on the side where the high pack will be attached.
- ② Peel off the protective tape of adhesive tape on the back of the high pack, gently crimp it in the correct position and press it well from the surface.
- ③ The weight limit of the expropriation is as follows.

DH-A4 about 2kg

**⚠** Due to the nature of the adhesive tape, the presence of oil on the adhesive surface will significantly reduce the adhesion. After wiping the adhesive surface with alcohol etc., please press firmly to bond.

## Plastic drawing holder DHP



It is an in-panel drawing storage pocket of transparent plastic.

**Features** RoHS

- Store the switchboard drawings, specifications, etc. in the panel.
- It uses high-performance adhesive tape.

**Basic Specs**

- Material: Standard type ... A4: AS resin / A5, A6: PS resin
- Double-sided tape: Sekisui # 535
- Flame Retardant Type ... AS Resin Flame Retardant Grade UL94-V2
- Double-sided tape Sekisui # 535

Sales unit: 1 sheet

Stock: ○

**※Note**

- If there is oil on the mounting surface, the adhesion will be reduced.
- Wipe the mounting surface with alcohol etc. and press firmly to bond.
- If the temperature of the mounting surface is low, such as in winter, adhesion will be weak. Please warm up the mounting surface before sticking.
- Avoid repasting, please leave it for several hours.

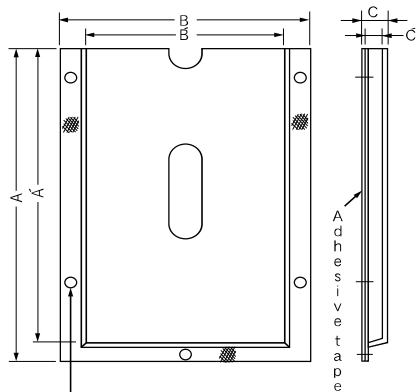
**Standard type**


Model number	A	B	C	A'	B'	C'	Size Thickness	Packing unit (sheet)
DHP-A4	330	270	23	305	221	20	A4 19	10
DHP-A5	231	197	15	209	152	12.2	A5 11	10
DHP-A6	164	140	13	150	114	10.5	A6 10	10

**Flame retardant type**

Model number	A	B	C	A'	B'	C'	Size Thickness	Packing unit (sheet)
DHP-A4-V2	330	270	23	305	221	20	A4 19	10
DHP-A7-V2	130	110	7.7	116	82	4.9	A7 4.5	10

※ The tape is not flame retardant.



Screw hole mark  
 The surface is a satin finish.

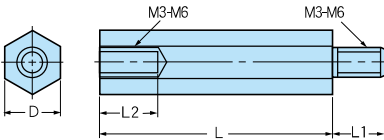
## Hexagon supporter



Example of use

MK Hexagon supporter

MKZ Insulated Hexagon Supporter



A metal supporter useful for supporting printed circuit boards, acrylic covers and other parts. There is also an "insulation supporter" with a vinyl coating.

**Features** RoHS

- Size is abundant from M3 to M6. Concatenation is also possible.
- The insulation supporter is the insulation coating on the side of the supporter. There is no insulation between the screw top and bottom.

**Basic Specs**

- Material: iron
- Surface finish: 3C trivalent

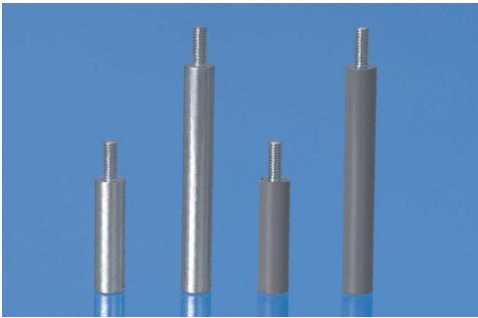
Insulation Coating: Hishi tube Gray (UL-224 VW-1) Withstand Voltage: 5,000 V

Sales unit: 50 pieces (M5, M6 even 10 pieces are sold)

Stock: MK ○ MKZ··M4 ○, M5, M6 △

Screw size	Length L mm	Model number	
		Standard	Insulation
M3 D=6 L <sub>1</sub> =8 (6) L <sub>2</sub> =8 (6) ( )MK-310	10	MK-310-3C	———
	15	MK-315-3C	———
	20	MK-320-3C	———
	25	MK-325-3C	———
	30	MK-330-3C	———
	40	MK-340-3C	———
M4 D=7 L <sub>1</sub> =10 (6) L <sub>2</sub> =10 (6) ( )MK-410	10	MK-410-3C	———
	15	MK-415-3C	MKZ-415-3C
	20	MK-420-3C	MKZ-420-3C
	25	MK-425-3C	MKZ-425-3C
	30	MK-430-3C	MKZ-430-3C
	40	MK-440-3C	MKZ-440-3C
	50	MK-450-3C	MKZ-450-3C
	60	MK-460-3C	MKZ-460-3C
	70	MK-470-3C	———
	80	MK-480-3C	———
	90	MK-490-3C	———
M5 D=8 L <sub>1</sub> =13 L <sub>2</sub> =13	100	MK-4100-3C	MKZ-4100-3C
	105	MK-4105-3C	———
	20	MK-520-3C	MKZ-520-3C
	25	MK-525-3C	MKZ-525-3C
	30	MK-530-3C	MKZ-530-3C
	40	MK-540-3C	MKZ-540-3C
	50	MK-550-3C	MKZ-550-3C
M6 D=10 L <sub>1</sub> =15 L <sub>2</sub> =15	60	MK-560-3C	MKZ-560-3C
	100	MK-5100-3C	MKZ-5100-3C
	20	MK-620-3C	MKZ-620-3C
	25	MK-625-3C	MKZ-625-3C
	30	MK-630-3C	MKZ-630-3C
	40	MK-640-3C	MKZ-640-3C
	50	MK-650-3C	MKZ-650-3C
	60	MK-660-3C	MKZ-660-3C
	75	MK-675-3C	———
	80	MK-680-3C	———
100	MK-6100-3C	MKZ-6100-3C	

## Round supporter



A metal supporter useful for supporting printed circuit boards, acrylic covers and other parts. There is also an "insulation supporter" with a vinyl coating.

**Features** RoHS

- The slotted groove on the head allows tightening with a flathead screwdriver.
  - The plus (cross) screw supporter can be tightened with a cross screw driver.
  - The insulation supporter is the insulation coating on the side of the supporter.
- There is no insulation between the screw top and bottom.

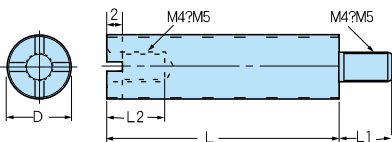
**Basic Specs**

- Material: Iron SS400
  - Surface finish: 3C trivalent
  - Insulation Coating: Hishi tube Gray (UL-224 VW-1) Withstand Voltage: 5,000 V
- Sales unit: 50 pieces (M5, M6 even 10 pieces are sold)
- Stock: ○



Insulated plus(cross) screw supporter

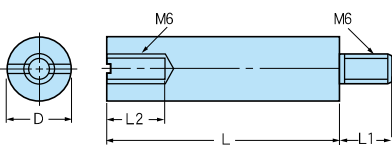
MR-P **Round Plus Supporter**  
MRZ-P **Insulated Round Plus Supporter**



Screw size	Length L mm	Model number	
		Plus(cross) screw	Insulated plus screw
M4 D =8 L <sub>1</sub> =10 L <sub>2</sub> =10	10	—	—
	15	—	—
	20	MR-420P-3C	MRZ-420P-3C
	25	MR-425P-3C	MRZ-425P-3C
	30	MR-430P-3C	MRZ-430P-3C
	40	MR-440P-3C	MRZ-440P-3C
	50	MR-450P-3C	MRZ-450P-3C
	60	MR-460P-3C	MRZ-460P-3C
	70	—	—
	80	—	—
	90	—	—
	100	MR-4100P-3C	MRZ-4100P-3C
105	—	—	

M5 D =10 L <sub>1</sub> =13 L <sub>2</sub> =13	20	MR-520P-3C	MRZ-520P-3C
	25	MR-525P-3C	MRZ-525P-3C
	30	MR-530P-3C	MRZ-530P-3C
	40	MR-540P-3C	MRZ-540P-3C
	50	MR-550P-3C	MRZ-550P-3C
	60	MR-560P-3C	MRZ-560P-3C
	100	MR-5100P-3C	MRZ-5100P-3C

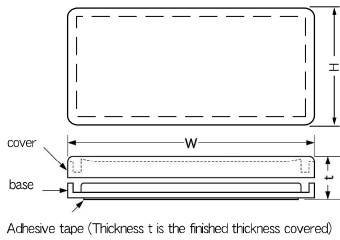
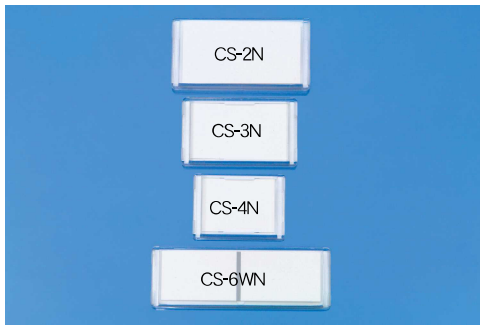
MR **Round supporter**  
MRZ **Insulated Round Supporter**



Screw size	Length L mm	Standard	Insulation
M6 D =11 L <sub>1</sub> =15 L <sub>2</sub> =15	20	MR-620-3C	MRZ-620-3C
	25	MR-625-3C	MRZ-625-3C
	30	MR-630-3C	MRZ-630-3C
	40	MR-640-3C	MRZ-640-3C
	50	MR-650-3C	MRZ-650-3C
	60	MR-660-3C	MRZ-660-3C
	75	—	—
	80	—	—
	100	MR-6100-3C	MRZ-6100-3C

## Card holder <with adhesive tape> CS

Design registered



It is a display board (name plate) for adhesive type distribution board circuit etc.

### Features RoHS

- The use of strong adhesive tape eliminates the need for drilling and the card is sealed so it does not get dirty or fall off.
- The cover is made of AS resin and the transparency is improved.
- The namepaper is held by the base and does not fall off even if the cover is opened.
- Namepaper is included. The optional special registration sheet can also be printed on a PC.
- Non-woven double-sided tape does not leave glue on the adhesive side when removed.
  - ※ You can not paste again.
- Polyethylene foam tape is thick and has excellent initial adhesion.

### Basic Specs

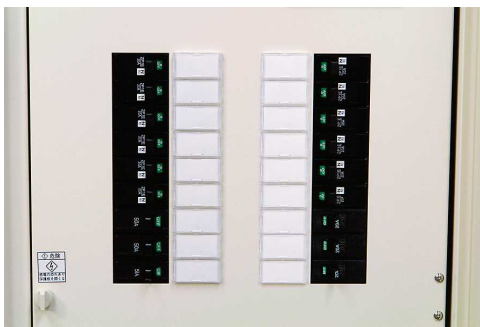
- Material: Cover ... AS resin, Base ... PP  
Tape ... Non-woven tape, Polyethylene foam tape

Stock: ○

### How to use

- Fill in the namepaper and set it on the base. Hold with the base nails.
- Put on the cover.
- Remove dust, oil and moisture from the place of paste.
- Peel off the release paper on the back and press it firmly to the installation location.

### Example of use

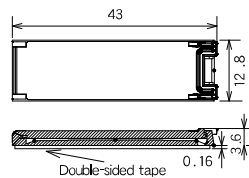
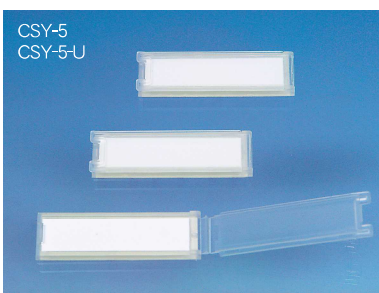


Model number Non-woven tape	Model number polyethylene foam tape	size (mm)			Number of boxes (pcs × bag)	Sales unit (pieces)
		W	H	t		
CS-2N	CS-2N-U	46	24	4.2	50×6	50
CS-3N	CS-3N-U	38	22	4.2	50×8	50
CS-4N	CS-4N-U	30	21	4.2	50×10	50
CS-6WN※	CS-6WN-U※	58	20	4.2	50×6	50

※ A vertical line is printed at the center of the name sheet.

## Card holder <horizontal opening hinge type> CSY

Design registered



It is a side-opening hinge type in which the cover and the base are integrated.

### Features RoHS

- Non-woven double-sided tape does not leave glue on the adhesive side when removed. ※ You can not paste again.
- The CSY-5-CT is attached to 10 sheets in a row, making the work very easy and fast.
- Polyethylene foam tape is thick and has excellent initial adhesion.
- There is also a print sheet ISY-5 (sold separately) for PC printing.

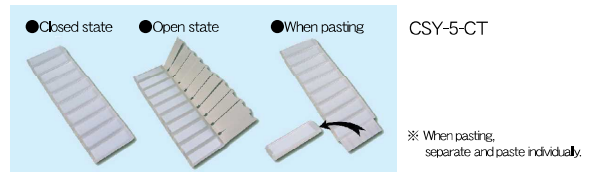
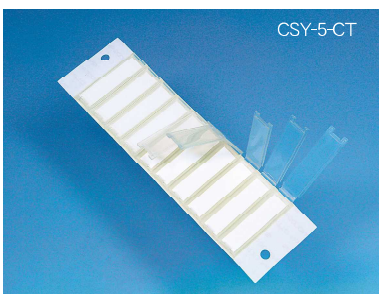
### Basic Specs

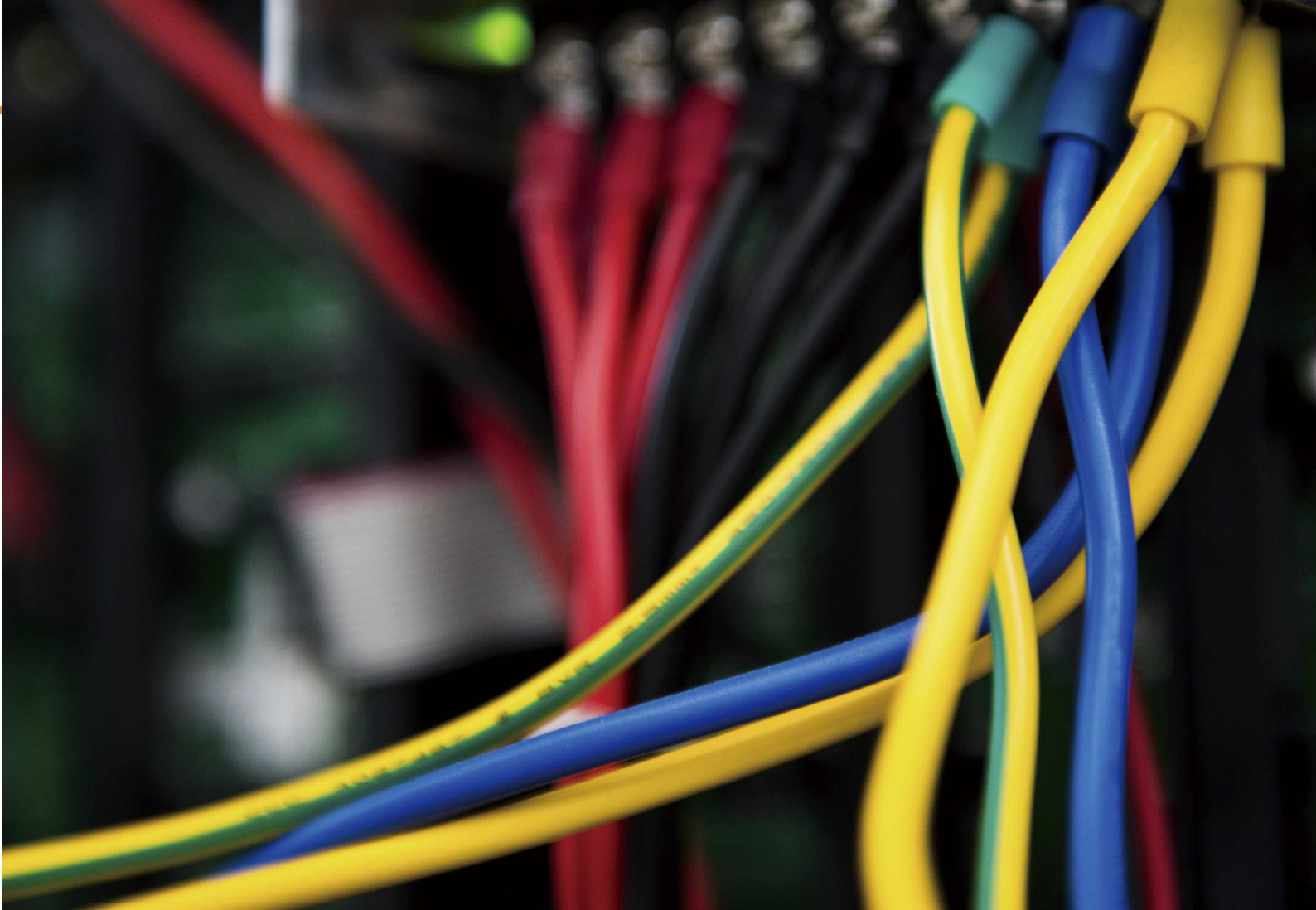
- Material: polypropylene  
Tape ... non-woven tape, polyethylene foam tape

■ CSY-5 non-woven tape Sales unit: 50 pieces Stock: ○

■ CSY-5-U polyethylene foam tape

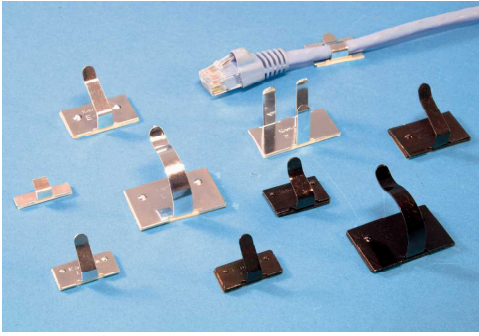
■ CSY-5-CT non-woven tape Sales unit: 5 sheets Stock: ○





# Wiring 配線資材 Accessories

High sticker



Adhesive-type wire fasteners that are active in all fields.

**Features** RoHS

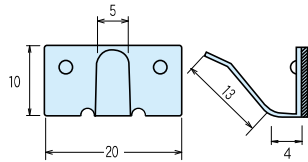
- Using the highest quality double-sided tape, it can be used safely with a wide range of materials such as steel, aluminum, plastic, glass and wood.

**Basic Specs**

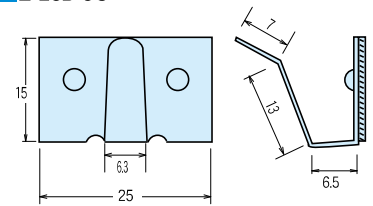
- Material: SPCC t = 0.5  
Double-sided tape ... 3M # 4032 (E-30 ... Sekisui # 535)  
Black ... Sekisui # 518TF
- Surface finish: trivalent, black ... trivalent black
- Sales unit: 100 pieces    Stock: ○



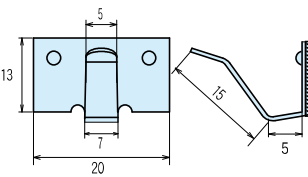
E-20-3C  
E-20B-3C



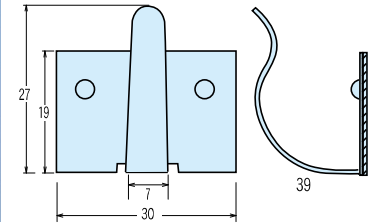
E-25-3C  
E-25B-3C



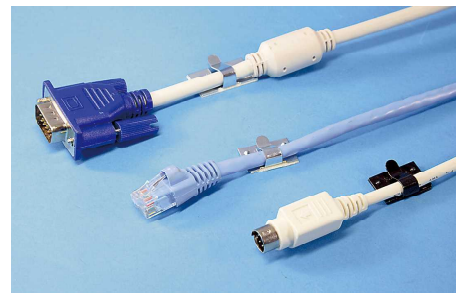
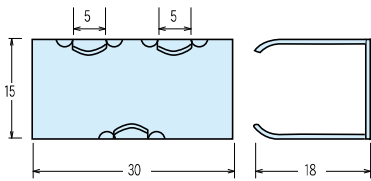
E-23-3C  
E-23B-3C



E-30-3C  
E-30B-3C



W-30-3C



Example of use

⚠ After wiping the adhesive side with alcohol etc., please press firmly. Due to the nature of adhesive tape, the presence of oil on the surface results in a marked reduction in adhesion.

## Stainless steel High sticker



Adhesive type wiring fixture made of stainless steel that is beautiful and does not rust.

**Features** RoHS

- It is resistant to rust and can be used outdoors or in humid places.
- Suitable for internal wiring of refrigerated showcases and vending machines.

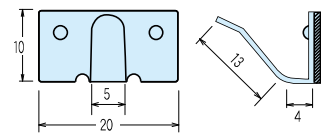
**Basic Specs**

- Material: Body ... stainless steel SUS 304 t = 0.5  
Double-sided tape ... 3M # 4032

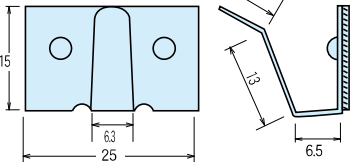
Sales unit: 100 pieces    Stock: ○



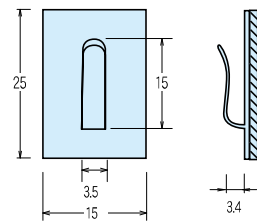
■ ES-20



■ ES-25

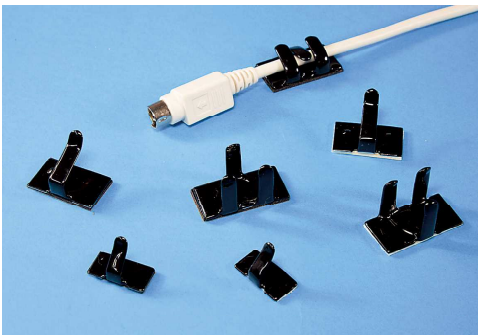


■ NES-25



⚠ After wiping the adhesive side with alcohol etc., please press firmly.  
Due to the nature of adhesive tape, the presence of oil on the surface results in a marked reduction in adhesion.

## Coating High sticker



It is a PVC-coated High sticker not to damage the electric wire.

**Features** RoHS

- Insulating coated high sticker.
- It is safe because the metal part is not exposed.
- It is suitable for LAN cables and optical fibers because it holds the wires soft and does not slip.
- Double-sided tape is two types: strong white (M), black (GN) excellent weather resistance.

**Basic Specs**

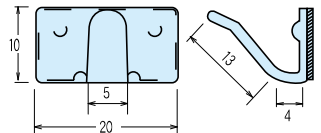
- Material: Body ... SPCC t = 0.5    trivalent  
Double-sided tape... GN: Sekisui #518TF    M: 3M #4032

● Coating : PVC dip coat

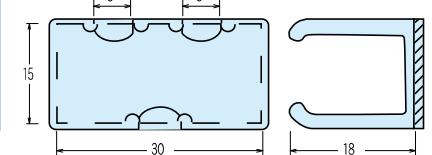
Sales unit: 100 pieces    Stock: ○



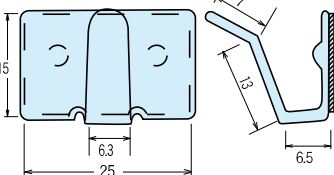
■ ED-20GN (3C)  
■ ED-20M-3C



■ WD-30GN-3C  
■ WD-30M-3C



■ ED-25GN (3C)  
■ ED-25M-3C

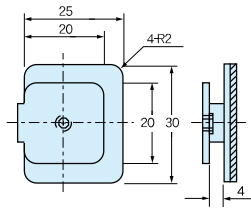


⚠ After wiping the adhesive side with alcohol etc., please press firmly.  
Due to the nature of adhesive tape, the presence of oil on the surface results in a marked reduction in adhesion.

## High sticker K



**K-34-3C (M4)**



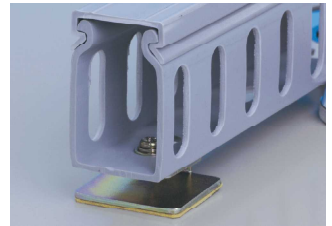
It is a convenient High sticker for screwing small parts in places where holes can not be drilled, such as the back of the panel door.

**Features** RoHS

- It is made of durable steel plate and stable installation is possible. The screw size is M4.

**Basic Specs**

- Material: steel sheet 1.6t trivalent
- Double sided tape 3M # 4032
- Screw included: M4 × 8, with washer trivalent
- Sales unit: 50 pieces    Stock: ○



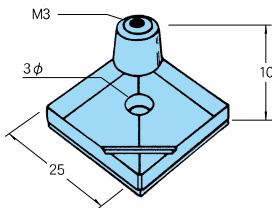
Example of use

⚠ After wiping the adhesive side with alcohol etc., please press firmly. Due to the nature of adhesive tape, the presence of oil on the surface results in a marked reduction in adhesion.

## Petet T



**T-600**



Adhesive supporters for quick attachment of printed circuit boards, lugs, etc.

**Features** RoHS

- The need for drilling holes in the chassis is eliminated, and significant labor savings can be achieved.

**Basic Specs**

- Material: ABS resin
- Sales unit : 100 pieces
- Stock : ○

## Wire sticker S



An inexpensive version of metal adhesive clamps.

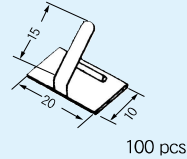
- Material: SPCC unichrome

It is a Wire sticker with a sponge.

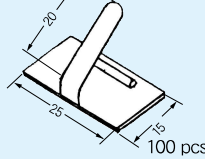
RoHS

- Material: painted steel sheet with sponge

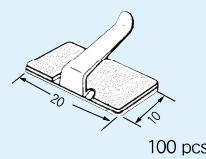
**S-10**



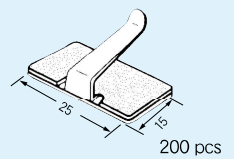
**S-15**



**SD-10**



**SD-15**



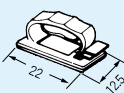
Adhesive type made of nylon.

It is flexible and can be opened and closed with one touch.

RoHS

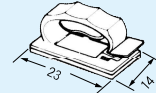
- Material: 66 nylon gray

**S-703**



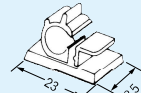
2.5 - 4 φ    200 pcs

**S-705**



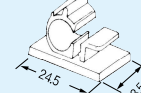
4.5 - 6 φ    200 pcs

**S-606**



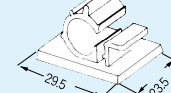
4 - 6 φ    100 pcs

**S-608**



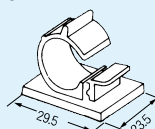
6 - 8 φ    100 pcs

**S-510**



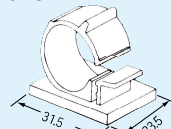
8 - 10 φ    50 pcs

**S-514**



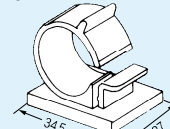
12 - 14 φ    50 pcs

**S-518**



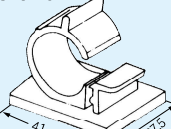
16 - 18 φ    50 pcs

**S-522**



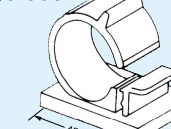
20 - 22 φ    25 pcs

**S-526**



24 - 26 φ    25 pcs

**S-530**



28 - 30 φ    20 pcs

Stock: ○



## Spiral tube KSS



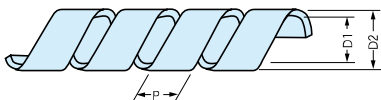
Wrap around the wire to protect the unity.

**Features** RoHS

- It is beautiful for the protection of the bends of the bundle, the door crossover, the board crossover, etc., and it can be applied quickly with low man-hours.
- You can take out the wire from any position.
- Black is weather resistant, so it can be used outdoors.

**Basic Specs**

- Material: polyethylene
- Color: Natural (milky white), black (weatherproof)
- Stock: ○



Model number	Model number (black)	Color	Diameter D1×D2mm	Thickness mm	Interval Pmm	Bundle range φ	Sales unit m
KSS-2	KSS-2B	○	2.6×4.2	0.6-0.8	6	3-7	100
KSS-4	KSS-4B	○	4×6	0.7-1.0	8	4-12	100
KSS-6	KSS-6B	○	6×8	0.7-1.0	10	6-18	100
KSS-8	KSS-8B		8×10	0.8-1.0	12	8-25	50
KSS-9	KSS-9B	○ 9×12	9×11	0.8-1.0	12	9-28	50
KSS-10	KSS-10B		10×12	0.8-1.0	12	10-30	50
KSS-12	KSS-12B	○ 12×15	12×14	0.8-1.0	14	12-35	50
KSS-15	KSS-15B	○	15×18	1.3-1.4	16	15-45	50
KSS-20	KSS-20B	○	20×24	1.6-1.8	20	20-60	25
KSS-25	KSS-25B	○	25×29	1.6-1.8	22	25-75	20

- If there is ○ in the color column, yellow (Y) and gray (GY) are also available.
- Both outer diameter and inner diameter are the size of the tube before being processed into a spiral.

## Spiral tube KS (Flexible type)

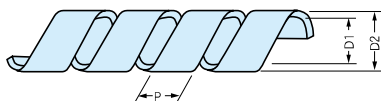


**Features** RoHS

- Flexible (thin) type spiral tube.
- There are up to large diameter 50φ.

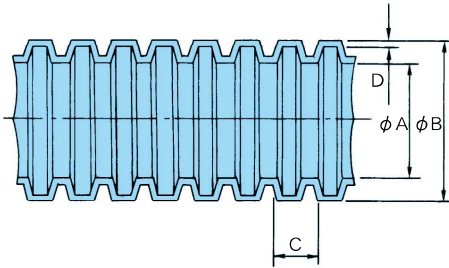
**Basic Specs**

- Material: polyethylene
- Color: Natural (milky white) / Black (black) not weatherproof
- Stock: ○



Model number	Model number (black)	Diameter D1×D2mm	Thickness mm	Interval Pmm	Sales unit m
KS-2.6	KS-2.6B	2.6×4	0.7	8	100
KS-4	KS-4B	4×5.4	0.7	8	100
KS-6	KS-6B	6×7.4	0.7	10	100
KS-8	KS-8B	8×9.4	0.7	12	50
KS-9	KS-9B	9×10.6	0.8	12	50
KS-10	KS-10B	10×11.6	0.8	12	50
KS-12	KS-12B	12×14	1.0	15	50
KS-15	KS-15B	15×17.4	1.2	16	50
KS-20	KS-20B	20×22.8	1.4	20	25
KS-25	KS-25B	25×27.8	1.4	25	20
KS-30	KS-30B	30×34	2.0	35	10
KS-40	KS-40B	40×44.6	2.3	45	10
KS-50	KS-50B	50×55	2.5	55	10

## Corrugate tube (slitted)



A new tie tube with excellent flexibility for various wire harnesses, wire protection and ties.

### Features RoHS

- It is light and flexible, yet strong and hard to crush, and securely protects the wires.
- Slit (cut) processing is applied in the extension direction, so the wires can be stored easily.
- There is a wide range of sizes.

### Basic Specs

- Material: KCT ... flame retardant polypropylene black UL94HB  
KCT-N ... nylon dark gray UL94V-2
- Operating temperature range: KCT ... -40 to 95 °C  
KCT-N ... -40 to 125 °C
- Appearance: There is a slit in the extension direction.
- Stock :  KCT ... ○,  KCT-N ... △ Order



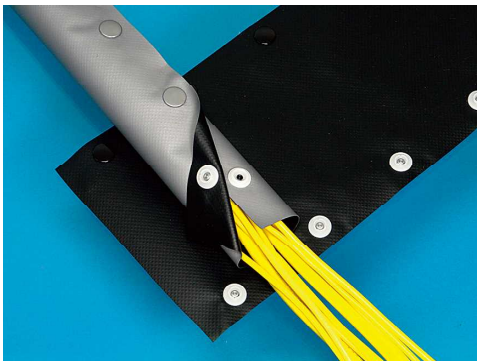
KCT-N (nylon)

### ■ Small boxed type

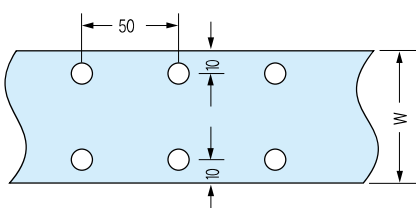
(Unit: mm)

Model number		I diameter	O. diameter	interval	thickness	Sales unit
standard	nylon	A φ	B φ	C	D	(m)
KCT-05	KCT-N05	5.3	7.5	2.3	0.2	50
KCT-07	KCT-N07	7.4	10.2	2.7	0.25	50
KCT-10	KCT-N10	10.7	14.1	2.7	0.25	50
KCT-13	KCT-N13	13.2	17.5	3.5	0.25	25
KCT-15	KCT-N15	15.3	19.5	3.6	0.25	25
KCT-19	KCT-N19	19.5	23.7	3.6	0.25	25
KCT-22	KCT-N22	22.3	27.1	4.3	0.30	20
KCT-25	KCT-N25	25.2	30.0	4.3	0.35	20
KCT-28	KCT-N28	28.4	33.8	4.4	0.35	20
KCT-32	KCT-N32	32.7	38.0	4.4	0.35	10

## Button tube KOP



You can pull it out of the box or take out the reel for use.



A binding protection tube that opens and closes with a snap button.

### Features RoHS

- No tools are required, one-touch binding allows easy specification change and inspection.
- It is a reversible type that can be used either black or gray.
- It's in a compact box with reels, so it's easy to handle and won't wrinkle.
- It is economical and economical because it can be cut to the required length.

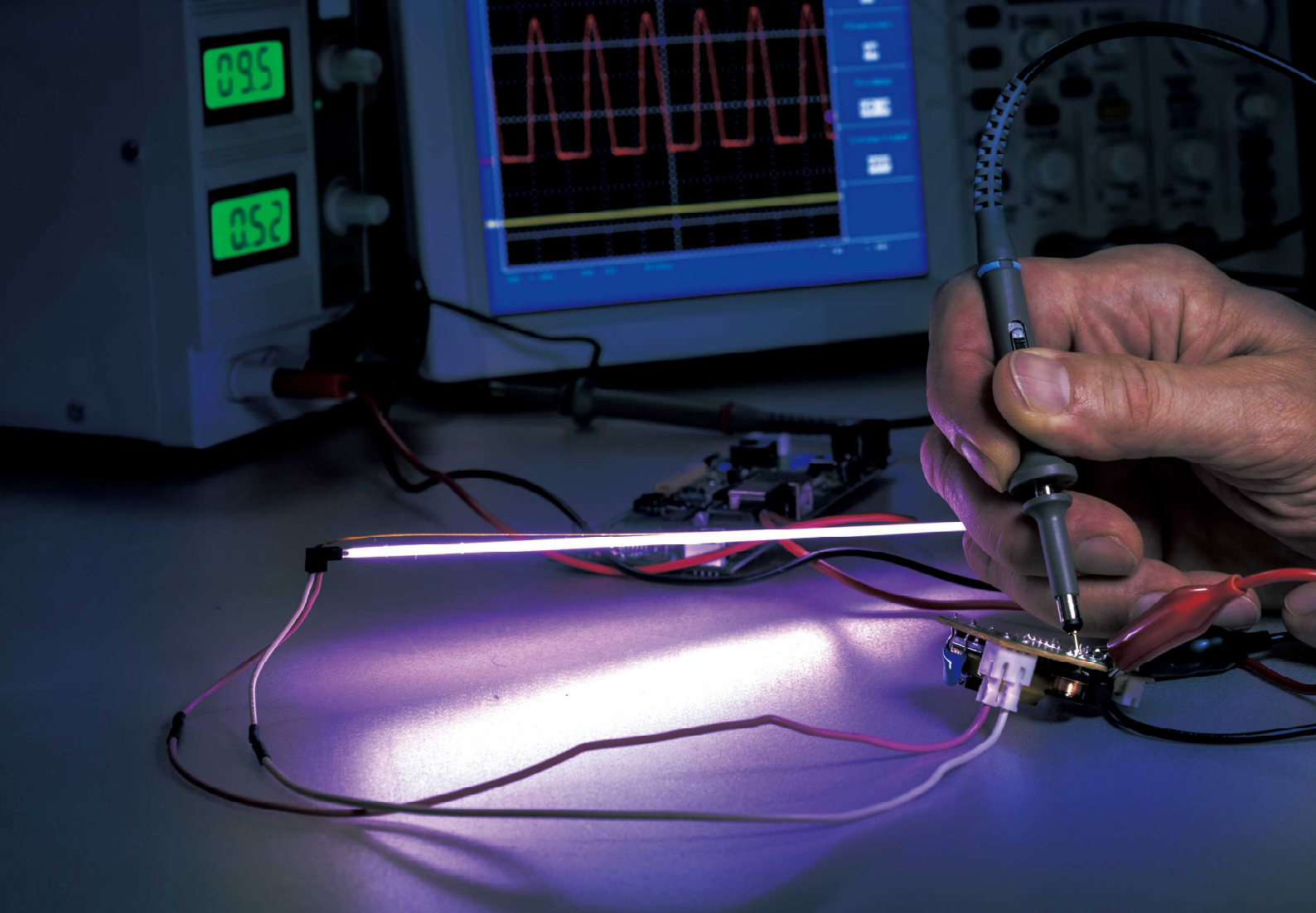
### Basic Specs

- Material: Sheet ... PVC with polyester cloth (0.35mm)  
Snap button ... Polyacetal resin
- Snap button data:

Tensile strength: 4.3 kg (± 0.3)  
Detachment power: 0.9 to 1.0 kg

Stock:  ○

Model number	diameter φ mm	width W mm	color	Sales unit
KOP-10R	10	55	Black / gray (reversible)	25m*
KOP-15R	15	75		
KOP-20R	20	90		
KOP-25R	25	100		
KOP-30R	30	115		
KOP-40R	40	145		
KOP-50R	50	175		
KOP-70R	70	245		
KOP-80R	80	280		
KOP-100R	100	340		

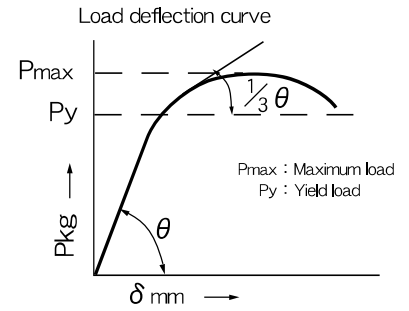
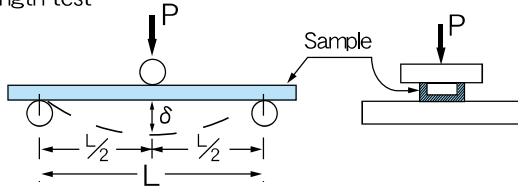


# Technological material


























技術資料

## Multi-angle / Multi-channel quality test results

### Bending strength test



### Test results

Sample (Model number)	cross section Load direction	Support distance L mm	Maximum load Pmax Kgf	Yield moment My kg·cm	Maximum bending moment Mmax kg·cm	Displacement at yield delta mm
U-1		400	62	520	620	6.8
		400	64	520	640	7.5
		400	180	1770	1800	5.9
U-26		400	96	800	960	9.5
		400	101	850	1010	10.6
U-38		600	188	2580	2820	14.8
		600	193	2475	2895	13.9
U-38H		600	390	4650	5850	6.4
		600	360	4650	5400	6.5
		600	600	8625	9000	7.8
L-25S		400	96	900	960	3.2
		400	144	1240	1440	4.3
L-30W		400	256	2450	2560	4.5
		400	314	2760	3140	5.5
L-40S		600	365	5445	5475	6.2
		600	474	7065	7110	6.9
L-40W		600	343	4875	5145	5.3
		600	343	4905	5145	7.3
L-50W		600	708	9870	10620	6.6
		600	750	9855	11250	5.2
KC-22S		400	59	495	590	6.6
		400	97	921	970	5.2
KC-35		600	240	3300	3600	5.5
		600	308	4389	4620	4.4
KC-40PB		1000	370	9150	9250	35.0
		2000	340	16800	17000	80.0

### Description

- **Maximum load**  
Load  $P_{max}$  when the specimen breaks with concentrated load at P point
- **Yield moment**  
The point at which the deflection curve under load became  $1/3$  of the initial inclination  $\theta$  was calculated as  $P_y$  yield load. (Yield load X distance between supporting points / 4)
- **Maximum bending moment**  
Calculated from the maximum load of  $P_{max}$ . (Maximum load X distance between supporting points / 4)
- **Bending moment**  
It is a force generated by a moment (a force acting to rotate) by an external force at a certain point on a member.

### Calculation of the maximum load ( $P_x$ ), safety load ( $A_x$ ) at any span ( $L_x$ )

Example: L-40W  $L_x = 1200$  mm

● **Maximum load**

$$P_x = \frac{\text{test span}(L)}{\text{test results}(L_x)} \times P_{max}$$

$$P_x = \frac{1200}{600} \times 343 = 686$$

● **Safety load**

$$A_x = \frac{1}{3} \times P_x$$

$$A_x = \frac{1}{3} \times 686 = 228.7$$

※When the safety load is  $\frac{1}{3}$  of the maximum load

### Salt spray test

- **Sample**  
Multi-angle L-40W  
galvanized / colored chromate
- **Test method**  
JIS Z2371  
(Salt spray test method)

### Plating thickness test

- **Sample**  
Multi-angle L-40W  
galvanized / colored chromate
- **Test method**  
According to JIS H8610  
(Electrolytic thickness gauge)

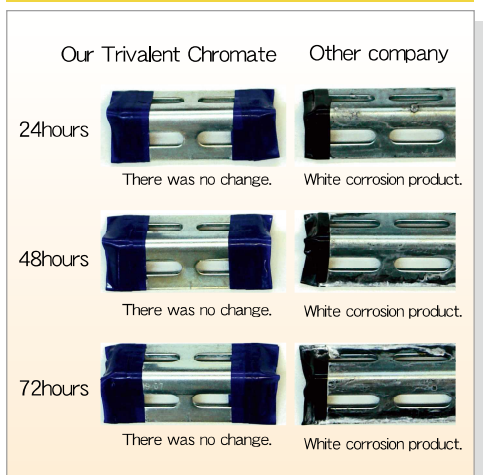
### Test results

Sample	L-40W
Spray time	16 hours
Pause	32 hours
total	48 hours
Surface condition	No white corrosion product

### Test results

Sample	Galvanized ( $\mu$ )
L-40W	7.5

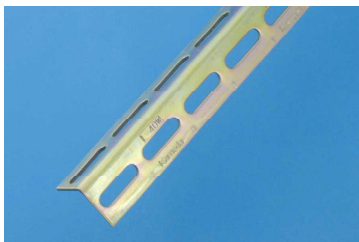
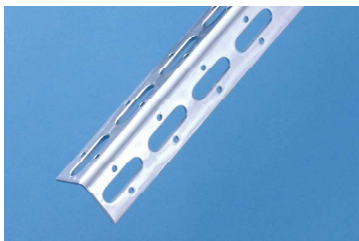
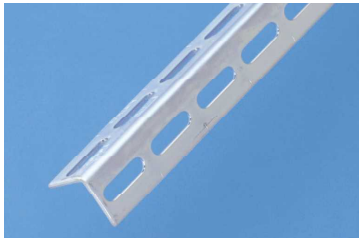
### Trivalent plating salt spray plating test result



## About Multi-angle/Multi-channel plating, material

The material of the Multi-angle/Multi-channel is iron (SPHC / SPCC steel plate). Galvanize with good iron bonding to prevent rusting of iron surface. Zinc also loses its white greasy luster when the surface is oxidized. It is treated with chromate to prevent it, keep beautiful gloss forever, and enhance corrosion resistance. There are several types of finishes depending on the chemical being processed.

### Galvanized



### Molten zinc



### Galvanized steel plate



### Stainless steel



### <Plated notation of Kameda model number>

■ **3C**: trivalent chromate (Trivalent Unichrome plating) It has excellent corrosion resistance because it contains no harmful hexavalent chromium.

Surface color:  
White silver similar to Unichrome plating, slightly reddish.

Application: For indoor use

**RoHS compliant**

※ As it is weak to sweat, please wear work gloves etc. for handling.

■ **UN**: Unichrome plating (hexavalent) It is often used for architectural hardware that emphasizes aesthetics.

Surface color: white silver

Application: For indoor use

Corrosion resistance is slightly inferior to colored chromate.

■ **YC**: Colored chromate plating The most widely used surface treatment method to date. The plating layer contains hexavalent chromium which is said to be a trace amount of harmful.

Surface color:  
There is uneven color in golden (yellowish brown)

Application: For indoor use

※ Because of non-RoHS compliance, it will be made to order.

■ **ZN**: Molten zinc (Hot-dip galvanized) Soak in hot zinc and plate. The plating is thick and the surface is uneven. Suitable for use outdoors or in high humidity.

Surface color:  
Dull silver  
It will lose its luster over time

Application: Outdoor

■ **ZAM®**: ZAM® steel plate  
■ **ZK**: galvanized steel plate It is plated with zinc or a zinc alloy at the steel plate manufacturing stage, has excellent corrosion resistance and is inexpensive.

Surface color:  
Shiny silver  
Slightly dull silver (ZK)

Application: both indoor and outdoor

In particular, ZAM® has been recognized to outperform

**RoHS compliant** (ZAM®)

1) "ZAM®" is a registered trademark of Nisshin Steel Co., Ltd.  
2) "ZAM®" is a trade name of hot-dip zinc-aluminum Magnesium Mg alloy plated steel sheet developed by Nisshin Steel Co., Ltd.

■ **SUS**: stainless steel (SUS304) It is aesthetically pleasing, corrosion resistant, and suitable for outdoor and water use.

Surface color: Shiny silver

Application: both indoor and outdoor

It is more expensive than iron products.

**RoHS compliant**

Our safety and quality is for smile  
Make people smile with electricity



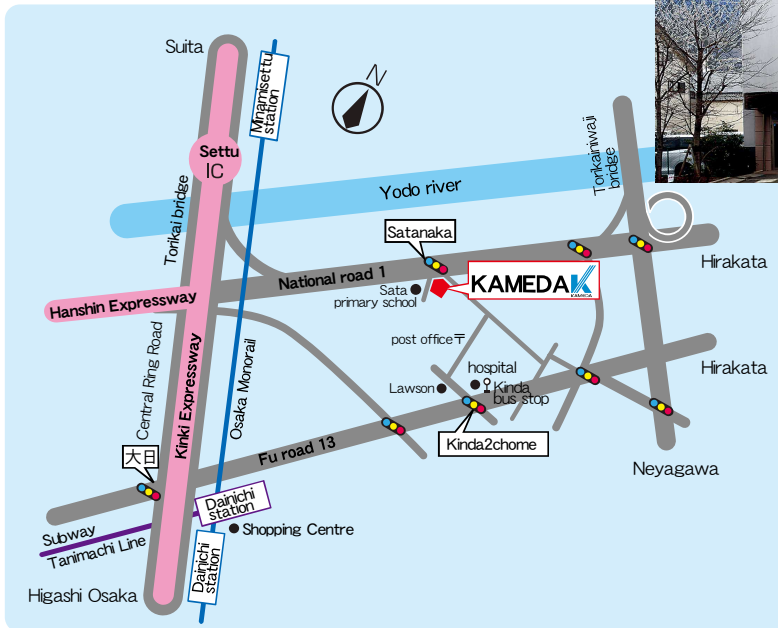
Company Philosophy of KAMEDA DENKI

- We will not forget the founding spirit of prayer.
- We will always keep our promises.
- We aim for human growth through work.
- We find new value in each other.

## Access

### Osaka Headquarters

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E-mail [eigyo@kameden.com](mailto:eigyo@kameden.com)  
Sales office: Tokyo, Osaka, Nagoya, Fukuoka



#### Traffic access

##### <Transportation>

- Keihan bus from Dainichi Station  
7 minutes walk from Kinda bus stop

##### <For car>

- Hanshin Expressway No. 12 Moriguchi Line  
Route 1 from Moriguchi exit  
Satanakamachi signal turn right
- Fu 13 Route Hirakata  
Kinda2chome signal left turn,  
Lawson turn right, butt turn left

## Company Profile

location	6-47-7 Satanaka-machi, Moriguchi city, Osaka fu, 570-0002, JAPAN	Company certification	Governor of Osaka Prefecture (General-28) No. 146573 Manufacturing spirit company (Moriguchi Kadoma Chamber of Commerce authorized)
Representative	President Toshiaki Shimauchi	Membership of professional institutions	Japan Power Distribution Control System Association Kansai Section Kansai switchboard industrial cooperative Japan Wiring Materials Industry Association Moriguchi Kadoma chamber of commerce Japan Lighting Coordination Association
Establishment	July 1960		
Capital	20 million yen		
Bank	Kyoto Bank Kadoma Branch Mitsubishi UFJ Bank Keihan Kyobashi Branch		
Business content	Multi-angle, Panel Assembly System, Wiring Accessories, Piping support material		

## business information

### Multi Purpose Angle

Multi-angle channel, U Kanag, various brackets  
Panel Assembly System  
Din rail  
Mini canag  
Supporter  
Insulating support  
Distribution board parts  
Busbar and copper products  
Ventilation louver

### Eco Lighting

Rail socket  
LED lighting various

### Wiring Accessories

Cable band  
Wiring fixture  
Terminal cap  
High sticker, clamps  
Spiral tube  
Vinyl tube, Shrinkable tube  
Wiring duct  
Terminal block  
Display parts  
Crimping tools and other tools



Kameda Denki Image Character 亀殿©

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Contact information

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