

SF 2010 - 2011
Standard Frame Series



Frame



SF-20-20 p24



SF-20-40 p24



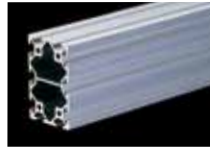
SF-20-60 p25



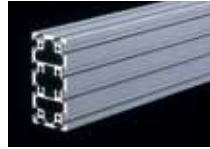
SF-20-80 p25



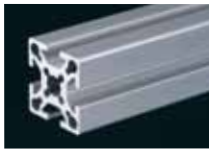
SF-40-40-2S p25



SF-40-60-SS p25



SF-40-80-SS p25



SF-25-25 p26



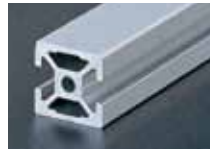
SF-20-20-1F p26



SF-20-20-2F p26



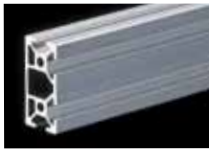
SF-20-20-3F p27



SF-20-20-2H p27



SF-20-20-R p27



SF-20-40-1F p27



SF-40-40-2S-1F p28



SF-40-40-2S-2F p28



SF-20-40-40 p28



SF-20-DE45 p29



SF-20-DE30 p29



SF-20-DE60 p29

Nut(for 20 Series)



T Nut SS p30
Anti-Skid Cap SS



Easy Nut SS p30



After Nut SS p31
After Nut Support SS



Lock Nut SS p31



S Free Nut SS p31



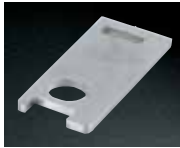









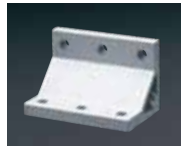




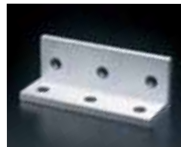

















Joint Bar SS120 p31



T Nut SS Material p31
After Nut SS Material

Bracket (for 20 Series)

					
D Bracket SS Electroless nickel		p32	D Bracket Spacer SS	p32	D Bracket 2040 Electroless nickel
					
Hard Bracket SS	p33	Hard Bracket SSG	p33	Hard Bracket SS2040	p34
					
Hard Bracket SS2060	p35	Hard Bracket SSG2060	p35	Angle Bracket SS	p36
					
Angle Bracket SS2040	p36	Angle Bracket SSG2060	p36	QC Joint SS	p37
					
Corner Block SS Kit	p38	R Bracket SS Kit	p38	Tapping Bolt SS	p39
					
Hard Bracket SS-DE135	p41	Hard Bracket SS-DE45	p41	Hard Bracket SS2040-DE135	p41
				Hard Bracket SS2040-DE45	p41
				Truss Joint SS	p41
				Truss Cap SS	
					Turn Bracket 20

Parts (for 20 Series)

					
Adjuster Kit	p43	Foot Base	p44	Caster Plate SS	p44
					
Slot Seal SS	p46	Cover Holder SS	p47	Cable Clamp SS	p48
		Cover Support SS		Slot Hook SS	
				Slot Roller SS	p48

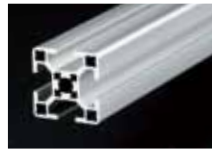
Frame



SF2-30-30 p50



SF2-30-60 p50



SF-K-30-30 p51



SF-K-30-60 p51



SF-30-90 p51



SF-30-120 p51



SF-60-60-2S p52



SF-60-90 p52



SF-60-120 p52



SF2-30-30-1F p53



SF2-30-30-2F p53



SF2-30-30-3F p53



SF2-30-30-2H p53



SF2-30-60-1F p54



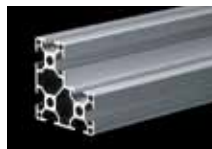
SF2-30-60-2H p54



SF-60-60-2S-1F p54



SF-60-60-2S-2F p54



SF-30-60-60 p55



SF-30-30-R p55



SF-30-DE45 p56



SF-30-DE30 p56



SF-30-DE60 p56



SF-50-50-2S p57



SF-50-100-2S p57



SF-50-50-2S-1F p57



SF-50-50-2S-2F p57



SF-35-35 p58



SF-35-35-1F p58



SF-35-35-2F p58



SF-35-35-2H p58



SF-35-70 p59

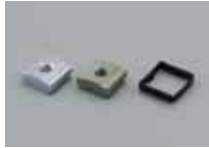


SF-35-70-1F p59



SF-35-70-2F p59

Nut (for 30 Series)



T Nut S
Anti Sliding Cap S **p60**



Easy Nut SS **p60**



After Nut S
After Nut Support S **p61**



Lock Nut S **p61**



S Free Nut S
Plastic Nut S **p61**



Joint Bar S140 **p62**



T Nut S Material
After Nut S Material **p62**



Free Nut with Headless Bolt S
Free Stud S
Free Nut Stopper S **p62**



Double Round Nut
S30 **p62**



S Double Joint 30 **p62**

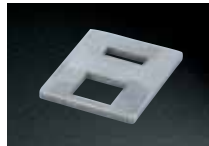
Bracket (for 30 Series)



D Bracket S



Electroless Nickel **p63**



D Bracket Spacer S **p63**



D Bracket 3060 **p63**



D Bracket S3060 **p63**



Hard Bracket S **p64**



Hard Bracket SG **p64**



Hard Bracket
SW3030 **p64**



Hard Bracket S3060 **p65**



Hard Bracket SG3060 **p65**



Hard Bracket
SW3060 **p65**



Hard Bracket
S3090 **p66**



Hard Bracket
SG3090 **p66**



Hard Bracket
SW3090 **p66**



Hard Bracket
S50 **p66**



Hard Bracket
SG50 **p66**



Angle Bracket S **p67**



Angle Bracket
Hard S **p67**



Angle Bracket S3060 **p67**



Angle Bracket
S50 **p68**



Angle Bracket
S3090 **p68**



QC Joint S **p69**

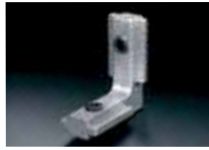


TG Joint Kit 30
Wrench Hole Cap **p70**



S Double Joint Kit 30 **p70**

SF Aluminum Component / For medium cover or conveyer frame
30 Series Groove Width 8mm Nut Below M6



S Blind Bracket S **p71**



Block Bracket S Kit **p71**



Corner Block S Kit **p71**



R Bracket S Kit **p71**



Tapping Bolt S **p72**



Torque Bit T40 **p72**



Torque Driver T40 **p72**



Plate Bracket S **p73**



L Bracket S(Stainless) **p74**



Hard Bracket S-DE135 Hard Bracket S-DE45 **p74**



Hard Bracket S3060-DE135 Hard Bracket S3060-DE45 **p74**



Truss Joint S Truss Cap S **p75**



Turn Bracket 30A Turn Bracket 30B **p75**

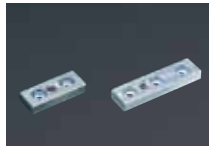


Bend Bracket S **p76**

Parts(for 30 Series)



Adjuster Kit **p77**



Foot Base **p78**



Anchor Bracket **p79**



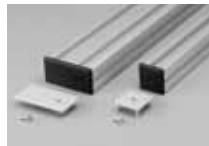
Anchor Plate 60602S Anchor Plate Bracket **p79**



Caster Plate S **p79**



Frame Cap **p80**



Frame Cap Lock Type **p81**



D Bracket Cap S Hard Bracket Cap **p81**



Slot Cap S **p81**



Slot Seal S **p81**



Cover Holder S Cover Support S **p82**



Cable Clamp S **p82**



Slot Hook S **p82**










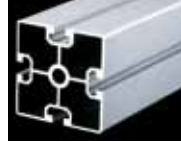















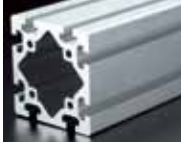










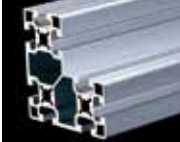





Slider S **p83**



Slot Roller S **p83**

Frame

 SF2-40-40 p86	 SF2-40-80 p86	 SF-K-40-40 p87	 SF-K-40-80 p87	 SF-80-80 p87	 SF-80-80-H p87
 SF-40-160 p88	 SF-80-160 p88	 SF-60-60-1S p88	 SF-80-80-1S p88	 SF2-40-40-1F p89	 SF2-40-40-2F p89
 SF2-40-40-3F p89	 SF2-40-40-2H p89	 SF2-40-80-1F p89	 SF-40-80-80 p90	 SF-40-40-R p90	 SF-40-DE45 p91
 SF-40-DE30 p91	 SF-40-DE60 p91	 SF2-45-45 p92	 SF2-45-90 p92	 SF-K-45-45 p93	 SF-K-45-90 p93
 SF-90-90 p93	 SF-90-90-H p93	 SF2-45-45-1F p94	 SF2-45-45-2F p94	 SF2-45-45-3F p94	 SF2-45-45-2H p94
 SF-K-45-45-1F p95	 SF-K-45-45-2F p95	 SF2-45-90-1F p95	 SF-45-45-R p95	 SF-45-180 p96	 SF-90-180 p96
 SF-45-90-90 p96	 SF-45-DE45 p97	 SF-45-DE30 p97	 SF-45-DE60 p97		

Nut(for 40·45 Series)



Bracket(for 40·45 Series)





R Bracket L40 Kit **p115**
R Bracket L45 Kit



Tapping Bolt L40 **p116**



Torque Bit T40 **p116**



Torque Driver T40 **p116**



Plate **p117~118**
Bracket L

Parts(for 40•45 Series)



Adjuster Kit **p119**



Caster Plate L **p112**



Foot Base **p120**



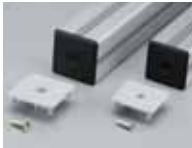
Anchor Bracket **p121**



Anchor Plate **p121**
Anchor Plate Bracket



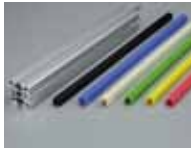
Frame Cap **p122**



Frame Cap **p123**
Lock Type 4040/4545



D Bracket Cap L **p123**
Hard Bracket Cap



Slot Cap L **p124**



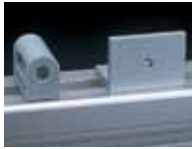
Slot Seal L **p124**



Cable Clamp L **p125**



Slot Hook L **p125**



Cover Holder L **p125**
Cover Support L6



Slider L **p126**



Slot Roller **p126**
L40/L45

SF Aluminum Component **Complex Parts**



Flat Bar **p128**



Angle **p129**



Channel **p130**



Panel Guard **p130**



Square **p131**



Panel Guard T3 **p131**



UF **p132**



SF Light 15•15 **p133**



SF Light 30•30 **p133**



SF Light 45•45 **p133**



Adjuster•Foot•Caster **p134~136**
Caster Plate as Single Item



Caster Pad **p135**



Duct Cover **p137~138**



Duct Clip kit **p138**

Door Panel



Fixed Hinge **p140**



Slip-Joint Hinge **p141**
Electroless Nickel/Acrylic Paint



Free Hinge **p142~143**
Free Size Free Hinge



Door Lock **p144**



Pull **p145**



Magnet Catch **p146~148**
NJ



Magnet Catch G **p149**



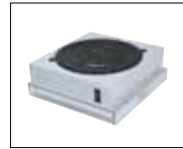
Magnet Catch **p150~152**
with Limit Switch



Magnet Catch G **p153**
with Limit Switch



Safety Instrument **p154~164**



Clean Fan Unit **p166~169**



Ball Catch **p170**



Panel Fix **p172~173**
Panel Fix Rubber



Panel Clamp **p172~173**



Seal Cover **p172~173**



Panel Frame SS **p174**



Sliding Door Rail **p176~177**
(Resin)



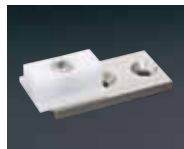
Sliding Door Rail **p176~177**
2 Rows-3 Rows(Aluminum)



Sliding Door Frame **p178**
Panel Joint Kit



Rail Guide Kit **p178**
Sliding Door Wheel



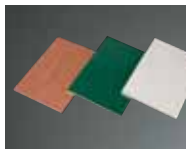
Folding Door Slider **p179**



Magnet Catch for Folding Door **p180**



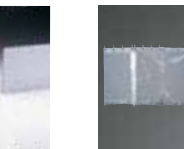
Magnet Catch with Limit Switch **p180**
for Folding Door



Wooden Board **p182**



Resin Panel **p182**

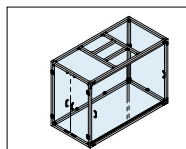


Anti-Static-Partition Sheet **p183**
Plate to fix Sheet



Steel Plate Panel **p183**

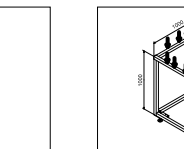
Technical Data



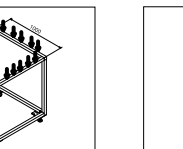
Standard Unit Type **p187~191**
Example of Free unit



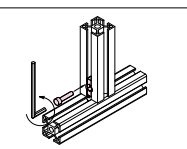
Aluminum Material Data **p192~**



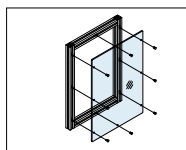
Indication of Allowable Load **p194~195**



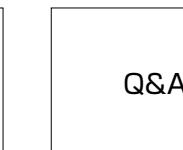
How to use Nut **p197**



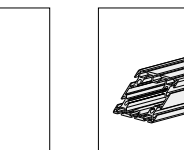
How to use Bracket **p198**



How to install **p204~205**
Resin Panel



Aluminum Frame Q & A **p206**



Frame Processing Chart **p208**



Standard Frame

SF is best suited for machine table or clean booth, and is very effective as components with the flexibility and recyclability. Also, the price setting is reasonable, with overturning the existing idea which says "Aluminum component is expensive". (SF corresponds to design support service and assembly shipment.)

SF

Standard Frame

Total support from CAD design, arrangement to assembly shipment

To construct the aluminum component system, SUS is conducting "Assembly Shipment" and "Free Unit Quotation Service" which we draw up cubic diagram and parts table to estimate the cost based on customer's sketch drawing. Please utilize these services to reduce total cost and to shorten the working hours.

Responds to resin and steel plate panel or assembly shipment

SUS processes various panels for covers or doors in production line, and assembles when delivery.

Realized further price down

SUS realized the lower price than ever for SF series by reducing distribution costs and producing in our own factory. Thus, the price is more reasonable and you can decide to introduce equipment more easily.

New service started to enable local buying in overseas

In view of high reputation in Japan, SUS is spreading to overseas. It's making a good progress to expand into Asian countries which developed countries' are impressively advancing in. We are organizing the system to enable purchasing component directly at your locations, establishing the bases across Asia.

From Aluminum Frame & Resin Panel to Assemble Shipment

Flexible Response and Quick Delivery

Degree of freedom to design is increased because frame is cut by 0.1mm unit from 50mm to 4000mm (some of them can be cut to 6000mm as special order). Also, parts standardization and self-manufacture enabled quick delivery.

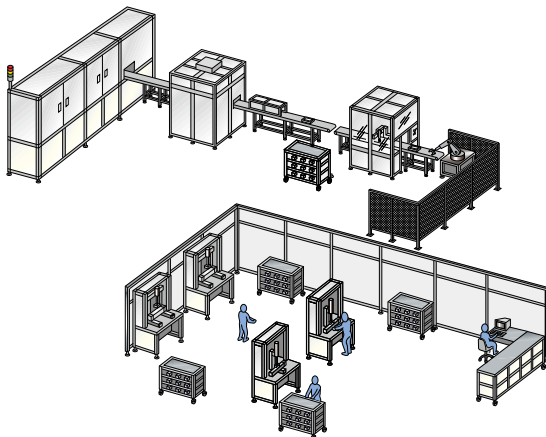
Excellent Recyclability

Aluminum frames in SF series are combined by bolt and nut, so it's easy to disassemble and they can be reused. Also, in case you dispose, they can be recycled as resources.

SUS takes back the aluminum products in SF catalog as part of the recycling activities. We will reduce the amount of money for the next purchase, according to the weight of the received aluminum products.

High-Stiffness and Beautiful Frame

At joint part, binding strength is highly ensured by using exclusive nuts. Aluminum surface is finished by alumite treatment (more than 9 μm thickness) and it will maintain the glaze for a long time.



Applications



Auto Loader



Screw-Tightening Machine



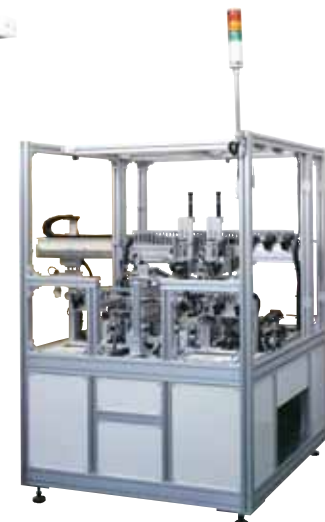
Palletizer



Take-Out Machine



Automatic Inspection Machine



Processing Machine



Coating Machine

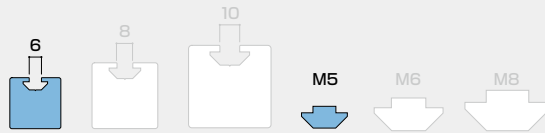


Auto Loader



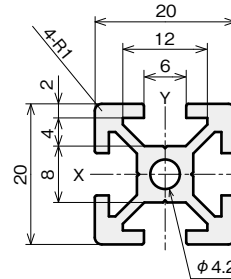
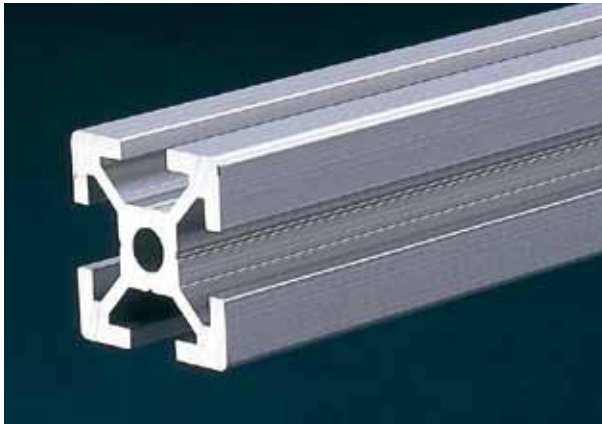
STANDARD FRAME

SF20
SERIES



SF-20·20

Asia



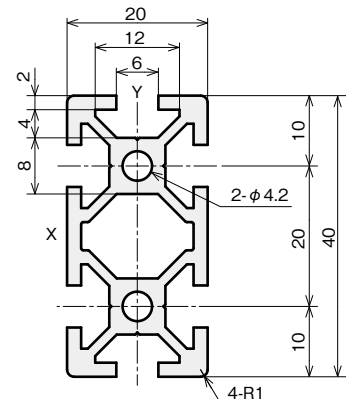
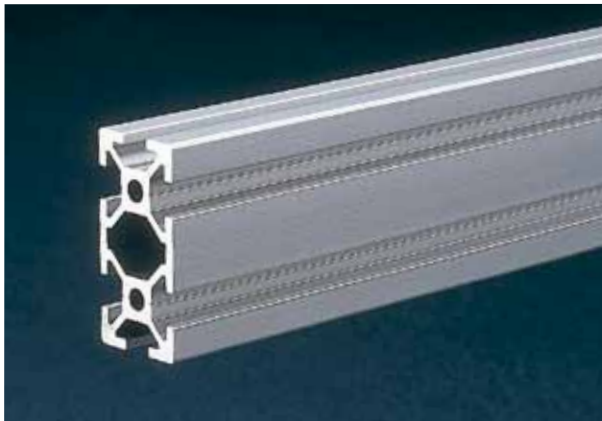
Name	SF-20·20 (ℓ=4000)	SF-20·20 ℓ=50~4000
Item No.	SFF-202-T	SFF-204-T

■Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical moment of inertia	$I_x=0.74 \times 10^4 \text{mm}^4$ $I_y=0.74 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=0.74 \times 10^3 \text{mm}^3$ $Z_y=0.74 \times 10^3 \text{mm}^3$
Unit Mass	0.49kg/m

SF-20·40

Asia



Name	SF-20·40 (ℓ=4000)	SF-20·40 ℓ=50~4000
Item No.	SFF-242-T	SFF-244-T

■Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical moment of inertia	$I_x=5.12 \times 10^4 \text{mm}^4$ $I_y=1.36 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=2.56 \times 10^3 \text{mm}^3$ $Z_y=1.36 \times 10^3 \text{mm}^3$
Unit Mass	0.88kg/m



SF Frame
Standard (ℓ=4000) (Cut by customer)
Item No. ℓ=4030-Effective range of use ℓ=4000
SFF-202-T



In case of specifying the length (Cut by SUS) ※Order by 0.1mm unit
Item No. Length (mm)
SFF-204-T ℓ=800

Frame for 20

Nut for 20

Bracket for 20

Adjuster for 20

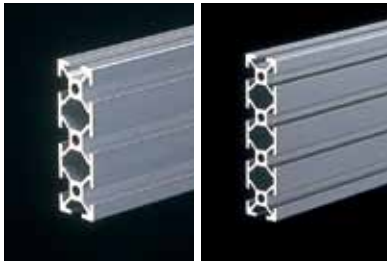
Accessory for 20

Asia

This sign shows the product is designed for Asia region only

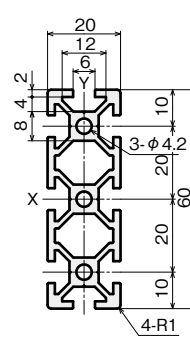
SF-20·60 / SF-20·80

Asia

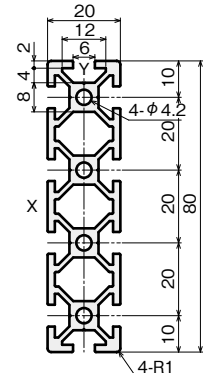


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
	SF-20·60 SF-20·80
Geometrical	$I_x=15.97 \times 10^4 \text{mm}^4$ $I_y=36.13 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=1.97 \times 10^4 \text{mm}^4$ $I_x=2.58 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=5.30 \times 10^3 \text{mm}^3$ $Z_y=9.03 \times 10^3 \text{mm}^3$
	$Z_y=1.97 \times 10^3 \text{mm}^3$ $Z_x=2.58 \times 10^3 \text{mm}^3$
Unit Mass	1.26kg/m 1.64kg/m

Name	SF-20·60 ($\ell=4000$)	SF-20·60 $\ell=50\sim4000$
Item No.	SFF-262-T	SFF-264-T
Name	SF-20·80 ($\ell=4000$)	SF-20·80 $\ell=50\sim4000$
Item No.	SFF-282-T	SFF-284-T



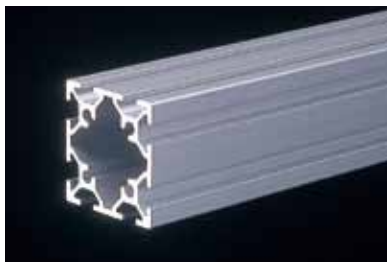
SF-20·60



SF-20·80

SF-40·40·2S

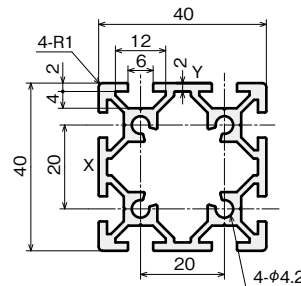
Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=8.89 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=8.89 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=4.45 \times 10^3 \text{mm}^3$
	$Z_y=4.45 \times 10^3 \text{mm}^3$
Unit Mass	1.29kg/m

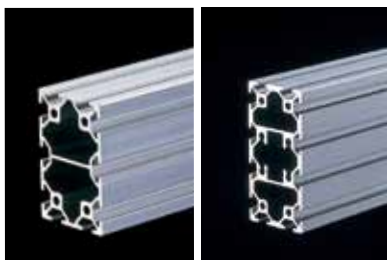
Name	SF-40·40·2S ($\ell=4000$)	SF-40·40·2S $\ell=50\sim4000$
Item No.	SFF-402W-T	SFF-404W-T

● Long Length (up to 6000mm) is available by special order.



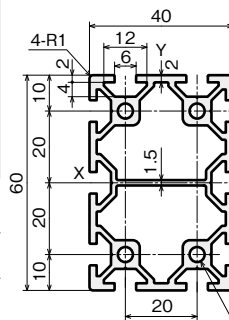
SF-40·60·SS / SF-40·80·SS

Asia

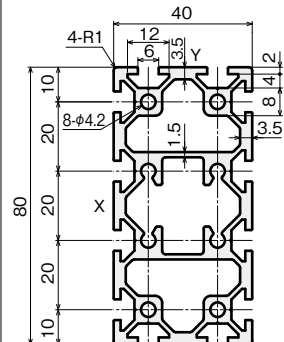


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
	SF-40·60·SS SF-40·80·SS
Geometrical	$I_x=27.03 \times 10^4 \text{mm}^4$ $I_y=63.52 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=12.63 \times 10^4 \text{mm}^4$ $I_x=18.39 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=9.01 \times 10^3 \text{mm}^3$ $Z_y=15.88 \times 10^3 \text{mm}^3$
	$Z_y=6.31 \times 10^3 \text{mm}^3$ $Z_x=9.20 \times 10^3 \text{mm}^3$
Unit Mass	1.80kg/m 2.70kg/m

Name	SF-40·60·SS ($\ell=4000$)	SF-40·60·SS $\ell=50\sim4000$
Item No.	SFF-462-T	SFF-464-T
Name	SF-40·80·SS ($\ell=4000$)	SF-40·80·SS $\ell=50\sim4000$
Item No.	SFF-4082-T	SFF-4084-T



SF-40·60·SS



SF-40·80·SS

●Exclusive Nut

T Nut SS
After Nut SS
Lock Nut SS
Free Nut SS
P30~

●Exclusive Cap

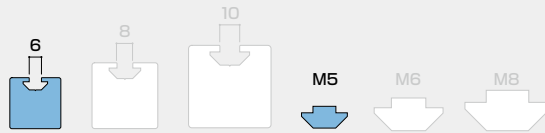
Frame Cap
P45

●Additional processing and surface treatment are also available.



P208~

SF20 SERIES



SF-25·25

Asia



■Material/Technical Data

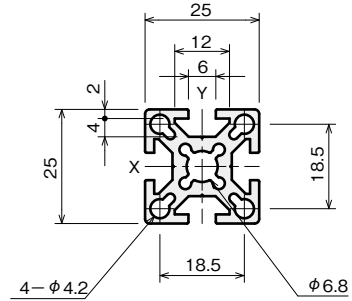
Material — Aluminium Alloy
Alumite Treatment

Environment — **RoHS** Compliant
Green Procurement

Geometrical — $I_x=1.64 \times 10^4 \text{mm}^4$
Moment of Inertia — $I_y=1.64 \times 10^4 \text{mm}^4$

Section Modulus — $Z_x=1.31 \times 10^3 \text{mm}^3$
 $Z_y=1.31 \times 10^3 \text{mm}^3$

Unit Mass — 0.78kg/m



Name	SF-25·25 (ℓ=4000)	SF-25·25 ℓ=50~4000
Item No.	SFF-252-T	SFF-254-T

SF-20·20·1F

Asia



■Material/Technical Data

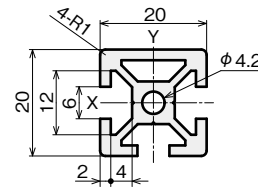
Material — Aluminium Alloy
Alumite Treatment

Environment — **RoHS** Compliant
Green Procurement

Geometrical — $I_x=0.83 \times 10^4 \text{mm}^4$
Moment of Inertia — $I_y=0.75 \times 10^4 \text{mm}^4$

Section Modulus — $Z_x=0.78 \times 10^3 \text{mm}^3$
 $Z_y=0.75 \times 10^3 \text{mm}^3$

Unit Mass — 0.52kg/m



Name	SF-20·20·1F (ℓ=4000)	SF-20·20·1F ℓ=50~4000
Item No.	SFF-E22-T	SFF-E24-T

SF-20·20·2F

Asia



■Material/Technical Data

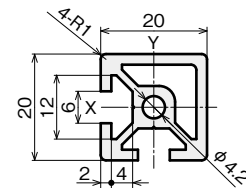
Material — Aluminium Alloy
Alumite Treatment

Environment — **RoHS** Compliant
Green Procurement

Geometrical — $I_x=0.81 \times 10^4 \text{mm}^4$
Moment of Inertia — $I_y=0.81 \times 10^4 \text{mm}^4$

Section Modulus — $Z_x=0.79 \times 10^3 \text{mm}^3$
 $Z_y=0.79 \times 10^3 \text{mm}^3$

Unit Mass — 0.53kg/m



Name	SF-20·20·2F (ℓ=4000)	SF-20·20·2F ℓ=50~4000
Item No.	SFF-F22-T	SFF-F24-T



Frame
for 20

Nut
for 20

Bracket
for 20

Adjuster
for 20

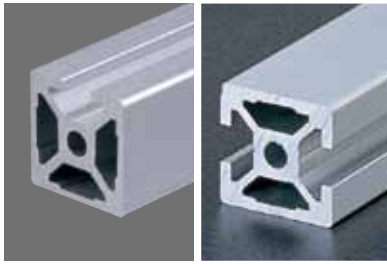
Accessory
for 20

Asia

This sign shows the product is designed for Asia region only

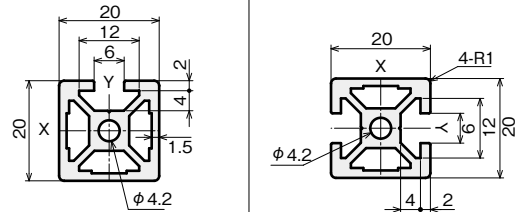
SF-20-20-3F / SF-20-20-2H

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
	SF-20-20-3F SF-20-20-2H
Geometrical	$I_x=0.81 \times 10^4 \text{mm}^4$ $I_x=0.74 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=0.89 \times 10^4 \text{mm}^4$ $I_y=0.89 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=0.78 \times 10^3 \text{mm}^3$ $Z_x=0.74 \times 10^3 \text{mm}^3$ $Z_y=0.89 \times 10^3 \text{mm}^3$ $Z_y=0.89 \times 10^3 \text{mm}^3$
Unit Mass	0.56kg/m 0.54kg/m

Name	SF-20-20-3F (ℓ=4000)	SF-20-20-3F ℓ=50~4000
Item No.	SFF-FF22	SFF-FF24-T
Name	SF-20-20-2H (ℓ=4000)	SF-20-20-2H ℓ=50~4000
Item No.	SFF-FH22-T	SFF-FH24-T



SF-20-20-3F

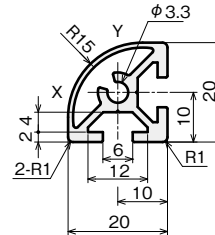
SF-20-20-2H

SF-20-20-R



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=0.55 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=0.55 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=0.48 \times 10^3 \text{mm}^3$ $Z_y=0.48 \times 10^3 \text{mm}^3$
Unit Mass	0.40kg/m

Name	SF-20-20-R (ℓ=4000)	SF-20-20-R ℓ=50~4000
Item No.	SFF-R52	SFF-R54



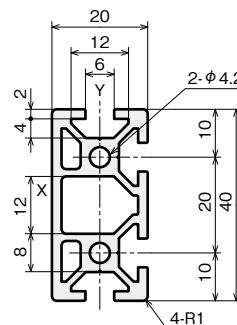
SF-20-40-1F

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=5.40 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=1.53 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=2.70 \times 10^3 \text{mm}^3$ $Z_y=1.44 \times 10^3 \text{mm}^3$
Unit Mass	0.93kg/m

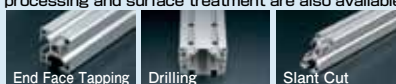
Name	SF-20-40-1F (ℓ=4000)	SF-20-40-1F ℓ=50~4000
Item No.	SFF-E242-T	SFF-E244-T



●Exclusive Nut
T Nut SS
After Nut SS
Lock Nut SS
Free Nut SS
P30~

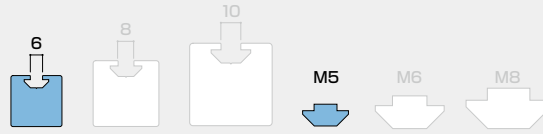
●Exclusive Cap
Frame Cap
P45

●Additional processing and surface treatment are also available.

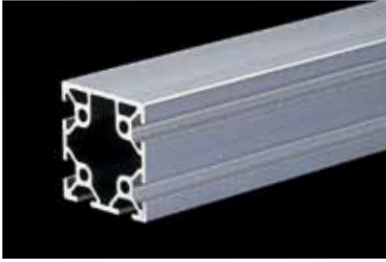


P208~

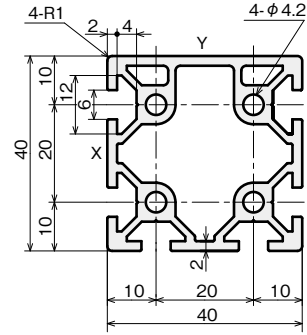
SF20 SERIES



SF-40·40·2S·1F



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=9.78 \times 10^4 \text{mm}^4$ $I_y=9.32 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=5.08 \times 10^3 \text{mm}^3$ $Z_y=4.66 \times 10^3 \text{mm}^3$
Unit Mass	1.41kg/m

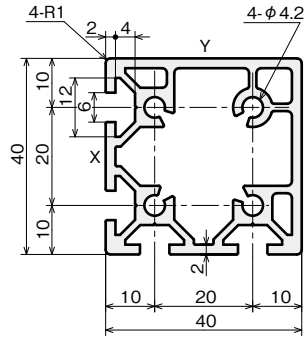


Name	SF-40·40·2S·1F (ℓ=4000)	SF-40·40·2S·1F ℓ=50~4000
Item No.	SFF-E02W	SFF-E04W

SF-40·40·2S·2F



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=9.60 \times 10^4 \text{mm}^4$ $I_y=9.60 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=4.89 \times 10^3 \text{mm}^3$ $Z_y=4.89 \times 10^3 \text{mm}^3$
Unit Mass	1.35kg/m

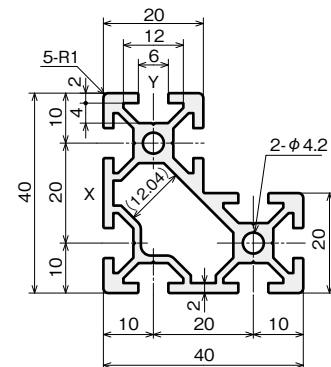


Name	SF-40·40·2S·2F (ℓ=4000)	SF-40·40·2S·2F ℓ=50~4000
Item No.	SFF-F02W	SFF-F04W

SF-20·40·40



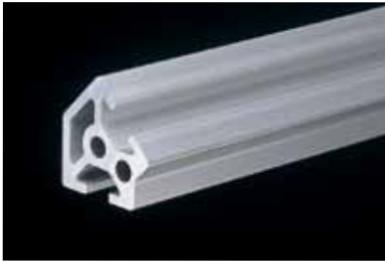
Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=6.61 \times 10^4 \text{mm}^4$ $I_y=6.61 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=3.82 \times 10^3 \text{mm}^3$ $Z_y=3.82 \times 10^3 \text{mm}^3$
Unit Mass	1.16kg/m



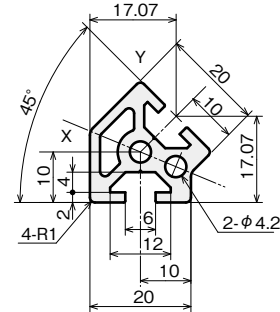
Name	SF-20·40·40 (ℓ=4000)	SF-20·40·40 ℓ=50~4000
Item No.	SFF-G02	SFF-G04



SF-20-DE45

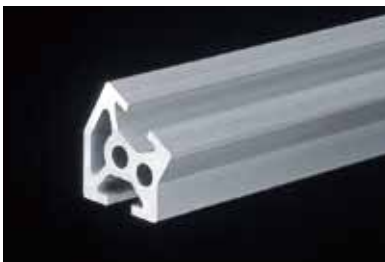


Material/Technical Data
Material — Aluminium Alloy
 Alumite Treatment
Environment — **RoHS** Compliant
Green Procurement
Geometrical Moment of Inertia
 $I_x=0.82 \times 10^4 \text{mm}^4$
 $I_y=0.92 \times 10^4 \text{mm}^4$
Section Modulus
 $Z_x=0.59 \times 10^3 \text{mm}^3$
 $Z_y=0.69 \times 10^3 \text{mm}^3$
Unit Mass — 0.59kg/m

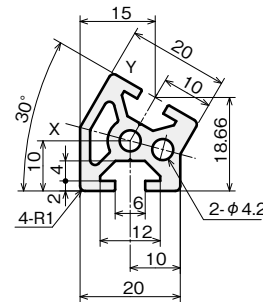


Name	SF-20-DE45 (ℓ=4000)	SF-20-DE45 ℓ=50~4000
Item No.	SFF-J52B	SFF-J54B

SF-20-DE30



Material/Technical Data
Material — Aluminium Alloy
 Alumite Treatment
Environment — **RoHS** Compliant
Green Procurement
Geometrical Moment of Inertia
 $I_x=0.80 \times 10^4 \text{mm}^4$
 $I_y=0.98 \times 10^4 \text{mm}^4$
Section Modulus
 $Z_x=0.60 \times 10^3 \text{mm}^3$
 $Z_y=0.77 \times 10^3 \text{mm}^3$
Unit Mass — 0.61kg/m

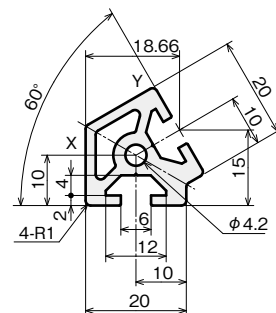


Name	SF-20-DE30 (ℓ=4000)	SF-20-DE30 ℓ=50~4000
Item No.	SFF-J52A	SFF-J54A

SF-20-DE60



Material/Technical Data
Material — Aluminium Alloy
 Alumite Treatment
Environment — **RoHS** Compliant
Green Procurement
Geometrical Moment of Inertia
 $I_x=0.86 \times 10^4 \text{mm}^4$
 $I_y=0.92 \times 10^4 \text{mm}^4$
Section Modulus
 $Z_x=0.63 \times 10^3 \text{mm}^3$
 $Z_y=0.73 \times 10^3 \text{mm}^3$
Unit Mass — 0.61kg/m

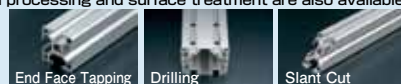


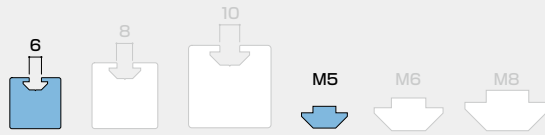
Name	SF-20-DE60 (ℓ=4000)	SF-20-DE60 ℓ=50~4000
Item No.	SFF-J52C	SFF-J54C

●Exclusive Nut T Nut SS
 After Nut SS
 Lock Nut SS
 Free Nut SS
 P30~

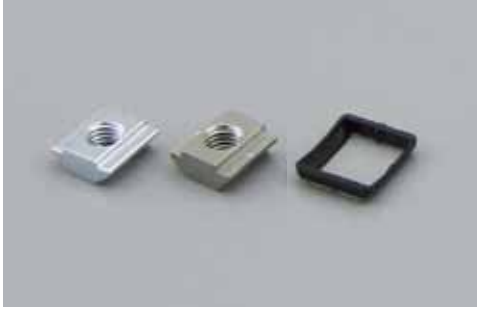
●Exclusive Cap Frame Cap
 P45

●Additional processing and surface treatment are also available.

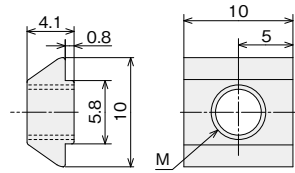




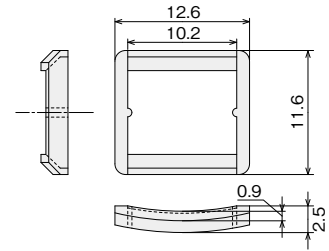
T Nut SS (M※) / Anti-Skid Cap SS



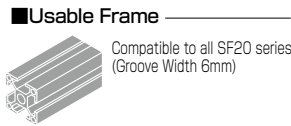
T Nut SS (M※)



Anti-Skid Cap SS (for T Nut SS)



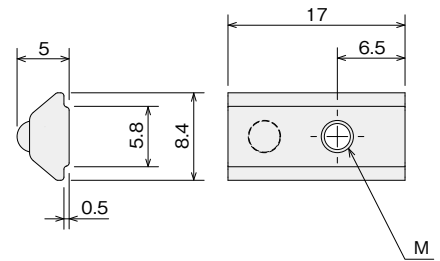
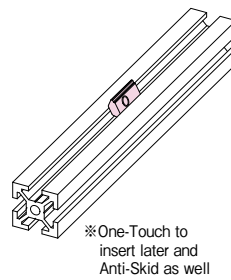
Name	T Nut SS(M5) <ST Nut SS (M5)>	T Nut SS(M4) <ST Nut SS (M4)>	T Nut SS(M3) <ST Nut SS (M3)>
Item No.	SFB-013 (SFN-TX5)	SFB-012 (SFN-TX4)	SFB-011 (SFN-TX3)
Name	Anti-Skid Cap SS (50pcs/pack)		
Item No.	SFA-905		



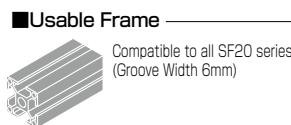
■ Material/Technical Data

T Nut SS	ST Nut SS	Anti-Skid Cap SS
Material: Equivalent to S10C Uni-Chrome	Material: Stainless With conductive function	Material: Black Polyamide
Weight: 2g	Weight: 2g	Weight: 0.09g/piece
Environment: RoHS Compliant	Environment: Green	Environment: Procurement

Easy Nut SS (M※)



Name	Easy Nut SS(M5)	Easy Nut SS(M4)	Easy Nut SS(M3)
Item No.	SFB-PN15	SFB-PN14	SFB-PN13
Name	Easy Nut SS(M5) CN	S Easy Nut SS(M4) Stainless	S Easy Nut SS(M3) Stainless
Item No.	SFB-PN39	SFN-EX4	SFN-EX3

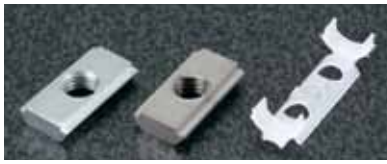


■ Material/Technical Data

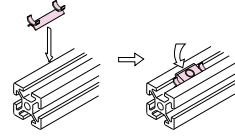
S Easy Nut SS	Easy Nut SS CN	Easy Nut SS
Material: Stainless With conductive	Material: Equivalent to S10C Ni-plating	Material: Equivalent to S10C Uni-Chrome plating
Weight: 4g/piece		
Environment: RoHS Compliant	Environment: Green	Environment: Procurement



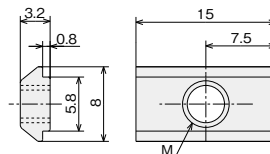
After Nut SS (M※) / After Nut Support SS



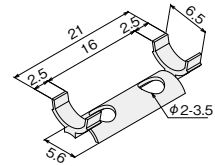
※Using After Nut Support together prevents from slipping.



After Nut SS(M※)



After Nut Support SS (for After Nut)



Name	After Nut SS(M5) ※1(S After Nut SS(M5))	After Nut SS(M4) (S After Nut SS(M4))	After Nut SS(M3) (S After Nut SS(M3))
Item No.	SFB-605 (SFB-SH5)	SFB-604 (SFB-AX4)	SFB-603 (SFB-AX3)
Name	After Nut Support SS(50pcs/pack)		
Item No.	SFA-9A1		

※1 No conductive type with S After Nut SS

■Usable Frame —
Compatible to all SF20 series
(Groove Width 6mm)

Material/Technical Data			
	After Nut SS	S After Nut SS	After Nut Support SS
Material	Equivalent to S10C Uni-Chrome	Stainless With conductive function	PP Resin
Weight	2g	2g	0.10g/piece
Environment	RoHS Compliant	Green Procurement	

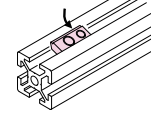
Lock Nut SS (M※) / S Free Nut SS (M※)



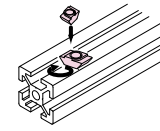
Name	Lock Nut SS(M5) (S Lock Nut SS(M5))	Lock Nut SS(M4) (S Lock Nut SS(M4))	Lock Nut SS(M3) (S Lock Nut SS(M3))
Item No.	★SFB-4D5 (★SFB-SD5)	★SFB-4D4 (★SFB-LX4)	★SFB-4D3 (★SFB-LX3)
Name	S Free Nut SS(M4)		S Free Nut SS(M3)
Item No.	★SFB-FX4		★SFB-FX3

Lock Nut SS (M※)

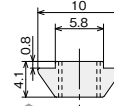
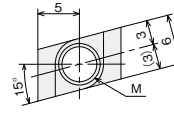
※You can fix Nut and conduct electricity by tightening attached Set Screw.



S Free Nut SS



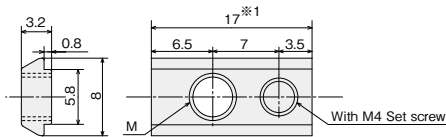
Free Nut SS(M※)



■Usable Frame —
Compatible to all SF20 series
(Groove Width 6mm)

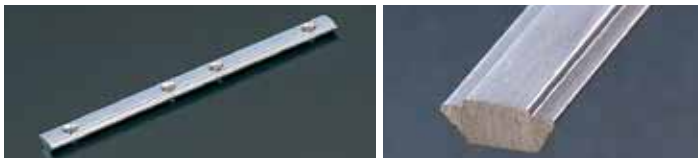
Material/Technical Data			
	Lock Nut SS	Lock Nut SS	S Free Nut SS
Material	Equivalent to S10C Uni-Chrome	Stainless	Stainless With conductive function
Weight	2g	2g	1g
Environment	★RoHS Compliant	★Green Procurement	

Lock Nut SS (M※)



※1 M3 and M4: Length 15

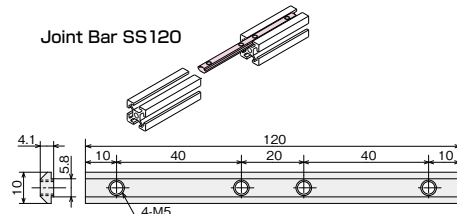
Joint Bar SS 120 / T Nut SS Material After Nut SS Material



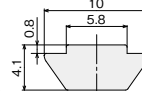
Name (Single Item)	Joint Bar SS120	Name (With Set Screw)	Joint Bar SS120 Kit
Item No.	★SFJ-605	Item No.	★SFK-605
Name	T Nut SS Material ℓ=(2800) (ST Nut SS Material ℓ=(2800))	T Nut SS Material ℓ=450 (ST Nut SS Material ℓ=450)	
Item No.	★SFX-105 (★SFX-001)	★SFX-125 (★SFX-S05)	
Name	After Nut SS Material ℓ=(2800) (S After Nut SS Material ℓ=(2800))	After Nut SS Material ℓ=450 (S After Nut SS Material ℓ=450)	
Item No.	★SFX-106 (★SFX-006)	★SFX-126 (★SFX-S06)	

• Note : T nut material will be delivered without plating.

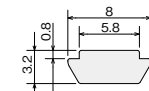
Joint Bar SS120



T Nut SS Material
(ST Nut SS Material)



After Nut SS Material



■Usable Frame —
Compatible to all SF20 series
(Groove Width 6mm)

■Joint Bar SS120 Kit contents—
●Joint Bar SS120×1
●Set screw (M5×5)×4

Material/Technical Data			
	Joint Bar SS120	T Nut SS Material After Nut SS Material	ST Nut SS Material S After Nut SS Material
Material	Equivalent to S10C Uni-Chrome plating	Equivalent to S10C Not plating	SUS303
Weight	about 25g	250g/m(T Nut SS) 170g/m (After Nut SS)	256g/m(ST Nut SS) 174g/m (S After Nut SS)
Environment	★RoHS Compliant	★Green Procurement	



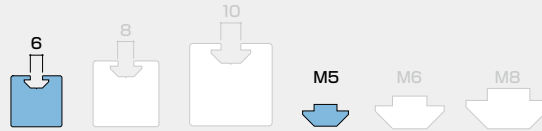
We sell Nut Material and Bracket Material as well.

T Nut SS Material
P31

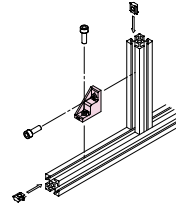
●Hard Bracket SS Material
●Angle Bracket SS Material



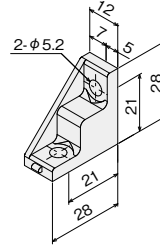
SF20 SERIES



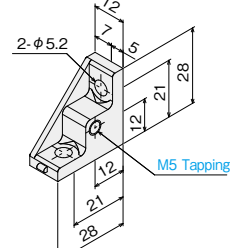
D Bracket SS



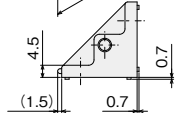
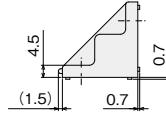
D Bracket SS



D Bracket SS with Tap



Name(Single Item)	D Bracket SS (D Bracket SS with Tap)		D Bracket SS-CN (D Bracket SS-CN with Tap)
Item No.	★SFJ-016 ★SFJ-017		★SFJ-016N ★SFJ-017N
Name(Bolt and Nut Kit)	D Bracket SS Kit (D Bracket SS Kit with Tap)	D Bracket SS (Stainless) Kit (D Bracket SS with Tap (Stainless) Kit)	D Bracket SS-CN Kit (D Bracket SS-CN Kit with Tap)
Item No.	★SFK-016 ★SFK-017	★SFK-016S ★SFK-017S	★SFK-016N ★SFK-017N



Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

■Usable Frame



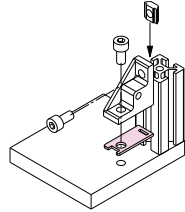
■Kit Contents

- D Bracket SS(or with Tap)×1
- Hexagon Socket Bolt (M5×10)×2
- T Nut SS(M5)×2
- ※Bolt and Nut in CN (Stainless) Kit are Stainless.

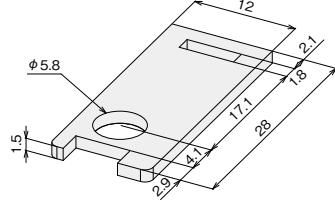
■Material/Technical Data

Material Aluminum Die-Cast
(CN:Electroless nickel plating)
With Anti-Skid Function
Weight 1.1g
Environment ★RoHS Compliant
★Green Procurement

D Bracket Spacer SS



●Setting to bottom of D Bracket enables to fix on a flat base.



Name	D Bracket Spacer SS
Item No.	SFJ-400S

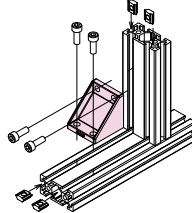
■Usable Frame



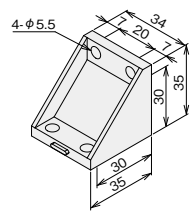
■Material/Technical Data

Material SUS304
Weight 4g
Environment ★RoHS Compliant
Green Procurement

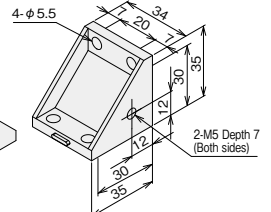
D Bracket 2040



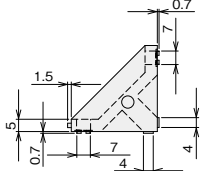
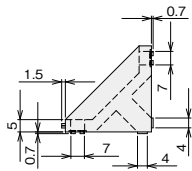
D Bracket 2040



D Bracket 2040 with Tap



Name(Single Item)	D Bracket 2040 (D Bracket 2040 with Tap)	
Item No.	SFJ-020 (SFJ-020T)	
Name(Bolt and Nut Kit)	D Bracket 2040 Kit (D Bracket 2040 Kit with Tap)	D Bracket 2040 (Stainless) Kit (D Bracket 2040 with Tap (Stainless) Kit)
Item No.	SFK-020 (SFK-020T)	SFK-020S (SFK-020P)
Name(Single Item)	D Bracket 2040-CN (D Bracket 2040-CN with Tap)	
Item No.	SFJ-020N (SFJ-020C)	
Name(Bolt and Nut Kit)	D Bracket 2040-CN Kit (D Bracket 2040-CN Kit with Tap)	
Item No.	SFK-020N (SFK-020C)	



Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

■Usable Frame



■Kit Contents

- D Bracket 2040(or with Tap)×1
- Hexagon Socket Bolt (M5×10)×4
- T Nut SS(M5)×4
- ※Bolt and Nut in CN (Stainless) Kit are stainless.

■Material/Technical Data

Material Aluminum Die-Cast
(CN:Electroless Nickel Plating)
With Anti-Skid Function
Weight 35g
Environment ★RoHS Compliant
Green Procurement

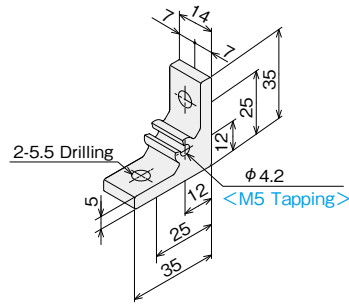
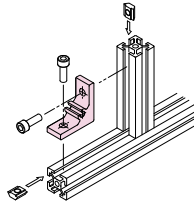
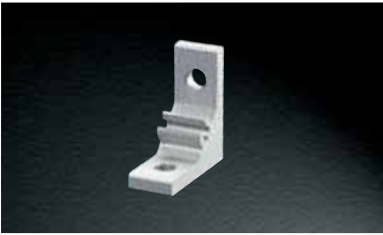


Parts
How to order
Item No. Quantity (pcs)
SFJ-016 □□

●Cap for Bracket
P45



Hard Bracket SS



Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

Name(Single Item)	Hard Bracket SS (Hard Bracket SS with Tap)	
Item No.	★SFJ-N01 ★SFJ-N01T	
Name(Bolt and Nut Kit)	Hard Bracket SS Kit (Hard Bracket SS Kit with Tap)	Hard Bracket SS(Stainless)Kit (Hard Bracket SS with Tap(Stainless)Kit)
Item No.	★SFK-N01 ★SFK-N01T	★SFK-N01S ★SFK-N01P



■Usable Frame —
Compatible to all SF20 series
(Groove Width 6mm)

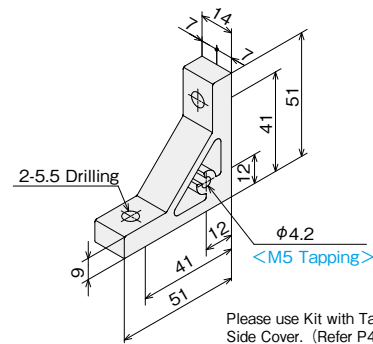
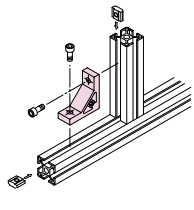
■Kit Contents

- Hard Bracket SS(or with Tap)×1
- Hexagon Socket Bolt (M5×10) × 2
- T Nut SS(M5)×2
- ※Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
Weight 1.5g
Environment ★RoHS Compliant
★Green Procurement

Hard Bracket SSG



Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

Name(Single Item)	Hard Bracket SSG (Hard Bracket SSG with Tap)	
Item No.	★SFJ-N23 ★SFJ-N23T	
Name(Bolt and Nut Kit)	Hard Bracket SSG Kit (Hard Bracket SSG Kit with Tap)	Hard Bracket SSG(Stainless)Kit (Hard Bracket SSG with Tap(Stainless)Kit)
Item No.	★SFK-N23 ★SFK-N23T	★SFK-N23S ★SFK-N23P



■Usable Frame —
Compatible to all SF20 series
(Groove Width 6mm)

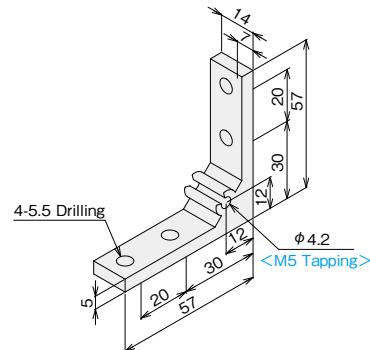
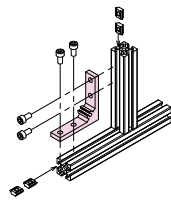
■Kit Contents

- Hard Bracket SSG(or with Tap)×1
- Hexagon Socket Bolt (M5×14) × 2
- T Nut SS(M5)×2
- ※Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
Weight 3.1g
Environment ★RoHS Compliant
★Green Procurement

Hard Bracket SSW2020



Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

Name(Single Item)	Hard Bracket SSW2020 (Hard Bracket SSW2020 with Tap)	
Item No.	SFJ-N14(SFJ-N14T)	
Name(Bolt and Nut Kit)	Hard Bracket SSW2020 Kit (Hard Bracket SSW2020 Kit with Tap)	Hard Bracket SSW2020(Stainless)Kit (Hard Bracket SSW2020 with Tap(Stainless)Kit)
Item No.	SFK-N14(SFK-N14T)	SFK-N14S(SFK-N14P)



■Usable Frame —
Compatible to all SF20 series
(Groove Width 6mm)

■Kit Contents

- Hard Bracket SSW2020(or with Tap)×1
- Hexagon Socket Bolt (M5×10) × 4
- T Nut SS(M5)×4
- ※Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
(Special order:Black Alumite is also available.)
Perpendicular surface is machining finished.
Weight 2.2g
Environment RoHS Compliant
Green Procurement



We sell Nut Material and Bracket Material as well.

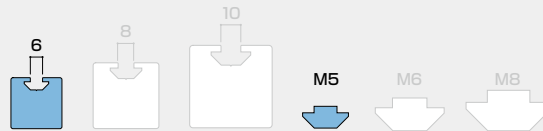
T Nut SS Material
P31

●Hard Bracket SS Material
●Angle Bracket SS Material

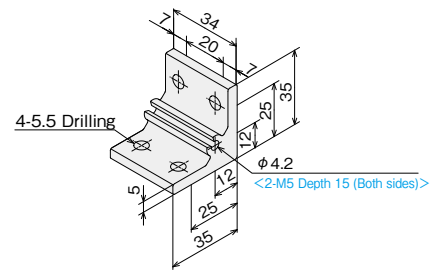
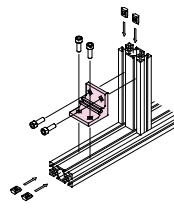


Material Frame

SF20 SERIES




Hard Bracket SS2040



Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

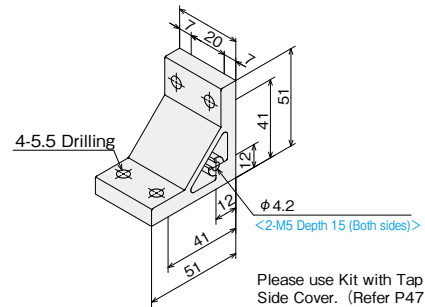
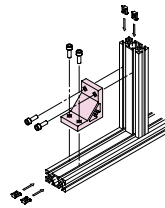
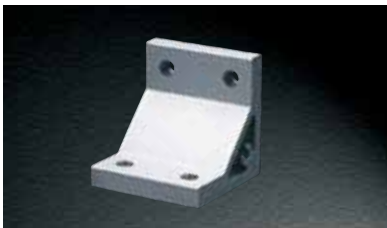
Name(Single Item)	Hard Bracket SS2040 (Hard Bracket SS2040 with Tap)	
Item No.	★SFJ-N02 ★SFJ-N02T	
Name(Bolt and Nut Kit)	Hard Bracket SS2040 Kit (Hard Bracket SS2040 Kit with Tap)	Hard Bracket SS2040(Stainless)Kit (Hard Bracket SS2040 with Tap (Stainless) Kit)
Item No.	★SFK-N02 ★SFK-N02T	★SFK-N02S ★SFK-N02P

■Usable Frame
 SF-20-40/SF-40-40-2S/SF-40-60-SS/SF-20-40-40(1F)

- Kit Contents
- Hard Bracket SS2040(or with Tap)×1
 - Hexagon Socket Bolt (M5×10)×4
 - T Nut SS(M5)×4
 - ※Bolt and Nut in (Stainless)
- Kit are stainless.


■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Perpendicular surface is machining finished.
 Weight 36g
 Environment ★RoHS Compliant
 ★Green Procurement

Hard Bracket SSG2040



Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

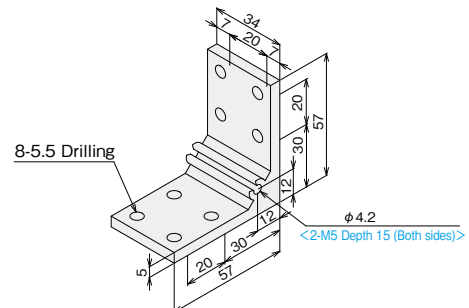
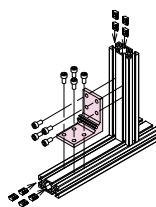
Name(Single Item)	Hard Bracket SSG2040 (Hard Bracket SSG2040 with Tap)	
Item No.	★SFJ-N24 ★SFJ-N24T	
Name(Bolt and Nut Kit)	Hard Bracket SSG2040 Kit (Hard Bracket SSG2040 Kit with Tap)	Hard Bracket SSG2040(Stainless)Kit (Hard Bracket SSG2040 with Tap (Stainless) Kit)
Item No.	★SFK-N24 ★SFK-N24T	★SFK-N24S ★SFK-N24P

■Usable Frame
 SF-20-40/SF-40-40-2S/SF-40-60-SS/SF-20-40-40(1F)

- Kit Contents
- Hard Bracket SSG2040(or with Tap)×1
 - Hexagon Socket Bolt (M5×14)×4
 - T Nut SS(M5)×4
 - ※Bolt and Nut in (Stainless)
- Kit are stainless.


■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Perpendicular surface is machining finished.
 Weight 75g
 Environment ★RoHS Compliant
 ★Green Procurement

Hard Bracket SSW2040



Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

Name(Single Item)	Hard Bracket SSW2040 (Hard Bracket SSW2040 with Tap)	
Item No.	SFJ-N15(SFJ-N15T)	
Name(Bolt and Nut Kit)	Hard Bracket SSW2040 Kit (Hard Bracket SSW2040 Kit with Tap)	Hard Bracket SSW2040(Stainless)Kit (Hard Bracket SSW2040 with Tap (Stainless) Kit)
Item No.	SFK-N15(SFK-N15T)	SFK-N15S(SFK-N15P)

■Usable Frame
 SF-20-40/SF-40-40-2S/SF-40-60-SS/SF-20-40-40(1F)

- Kit Contents
- Hard Bracket SSW2040(or with Tap)×1
 - Hexagon Socket Bolt (M5×10)×8
 - T Nut SS(M5)×8
 - ※Bolt and Nut in (Stainless)
- Kit are stainless.

■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 (Special order Black Alumite is also available.)
 Perpendicular surface is machining finished.
 Weight 56g
 Environment RoHS Compliant
 Green Procurement



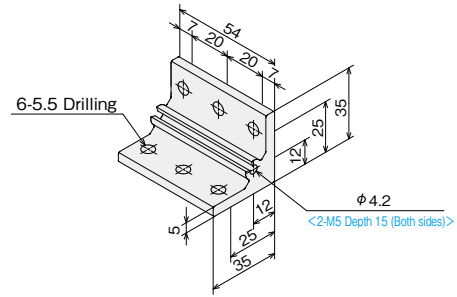
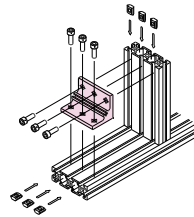
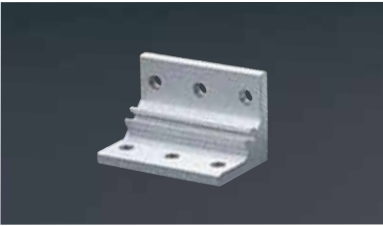
Parts
 How to order
 Item No. Quantity (pcs)
 SFJ-N02 □□

●Cap for Bracket
 P45



Frame for 20 Nut for 20 Bracket for 20 Adjuster for 20 Accessory for 20

Hard Bracket SS2060



Name(Single Item)	Hard Bracket SS2060 (Hard Bracket SS2060 with Tap)	
Item No.	SFJ-N09(SFJ-N09T)	
Name(Bolt and Nut Kit)	Hard Bracket SS2060 Kit (Hard Bracket SS2060 Kit with Tap)	Hard Bracket SS2060(Stainless)Kit (Hard Bracket SS2060 with Tap (Stainless) Kit)
Item No.	SFK-N09(SFK-N09T)	SFK-N09S(SFK-N09P)

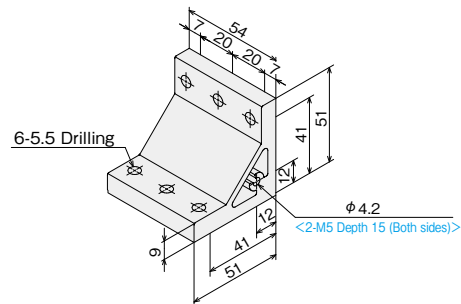
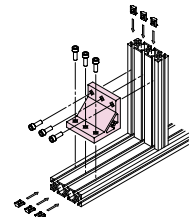
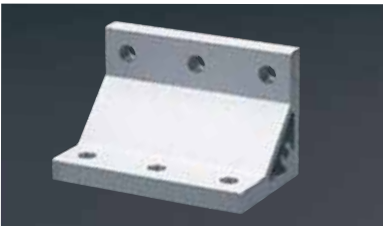
Usable Frame —
 SF-20-60
SF-40-60

Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 (Special Order:Black Alumite is also available.)
 Perpendicular surface is machining finished.
 Weight 60g
 Environment **RoHS** Compliant
Green Procurement

Kit Contents
 ● Hard Bracket SS2060 (or with Tap) × 1
 ● Hexagon Socket Bolt (M5×10) × 6
 ● T Nut SS(M5)×6
 ※ Bolt and Nut in (Stainless)
 Kit are stainless.

Hard Bracket SSG2060



Name(Single Item)	Hard Bracket SSG2060 (Hard Bracket SSG2060 with Tap)	
Item No.	SFJ-N25(SFJ-N25T)	
Name(Bolt and Nut Kit)	Hard Bracket SSG2060 Kit (Hard Bracket SSG2060 Kit with Tap)	Hard Bracket SSG2060(Stainless)Kit (Hard Bracket SSG2060 with Tap (Stainless) Kit)
Item No.	SFK-N25(SFK-N25T)	SFK-N25S(SFK-N25P)

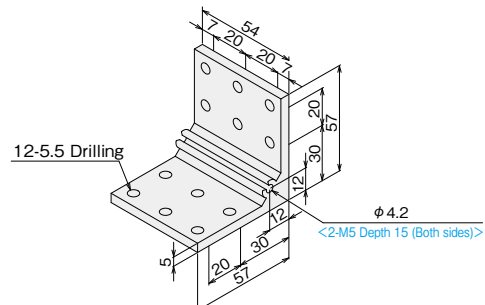
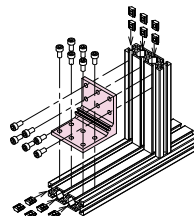
Usable Frame —
 SF-20-60
SF-40-60

Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 (Special Order:Black Alumite is also available.)
 Perpendicular surface is machining finished.
 Weight 119g
 Environment **RoHS** Compliant
Green Procurement

Kit Contents
 ● Hard Bracket SSG2060 (or with Tap) × 1
 ● Hexagon Socket Bolt (M5×14) × 6
 ● T Nut SS(M5)×6
 ※ Bolt and Nut in (Stainless)
 Kit are stainless.

Hard Bracket SSW2060



Name(Single Item)	Hard Bracket SSW2060 (Hard Bracket SSW2060 with Tap)	
Item No.	SFJ-N16(SFJ-N16T)	
Name(Bolt and Nut Kit)	Hard Bracket SSW2060 Kit (Hard Bracket SSW2060 Kit with Tap)	Hard Bracket SSW2060(Stainless)Kit (Hard Bracket SSW2060 with Tap (Stainless) Kit)
Item No.	SFK-N16(SFK-N16T)	SFK-N16S(SFK-N16P)

Usable Frame —
 SF-20-60
SF-40-60

Please use Kit with Tap to install Side Cover. (Refer P47 for details.)

Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 (Special Order:Black Alumite Treatment)
 Perpendicular surface is machining finished.
 Weight 89g
 Environment **RoHS** Compliant
Green Procurement

Kit Contents
 ● Hard Bracket SSW2060 (or with Tap) × 1
 ● Hexagon Socket Bolt (M5×10) × 12
 ● T Nut SS(M5)×12
 ※ Bolt and Nut in (Stainless)
 Kit are stainless.

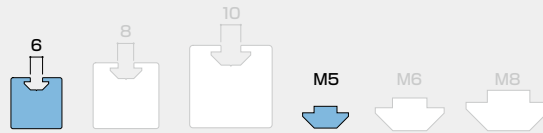


We sell Nut Material and Bracket Material as well.

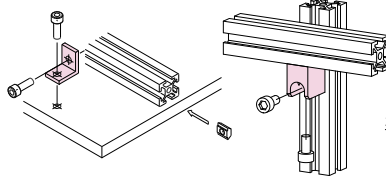
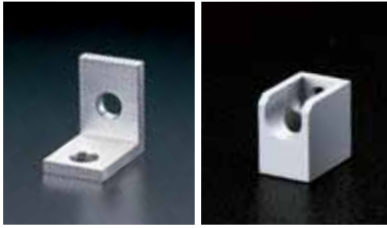
T Nut SS Material
P31

● Hard Bracket SS Material
● Angle Bracket SS Material



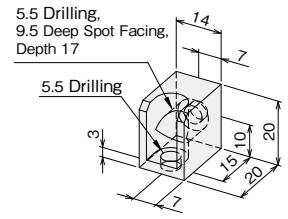
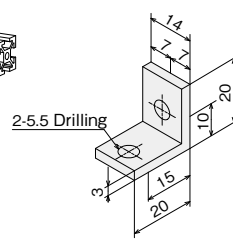


Angle Bracket SS / Angle Bracket Hard SS



Angle Bracket SS

Angle Bracket Hard SS



Name (Single Item)	Angle Bracket SS	Angle Bracket Hard SS
Item No.	★SFJ-A01	★SFJ-A14
Name (Bolt and Nut Kit)	Angle Bracket SS Kit (Angle Bracket SS(Stainless) Kit)	Angle Bracket Hard SS Kit (Angle Bracket Hard SS(Stainless) Kit)
Item No.	★SFK-A01 ★SFK-A01S	★SFK-A14 ★SFK-A14S

■ Usable Frame

Compatible to all SF20 series
(Groove Width 6mm)

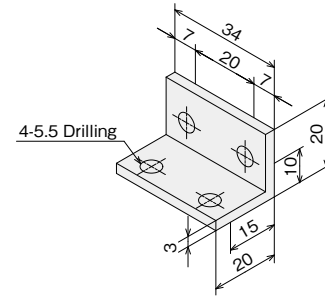
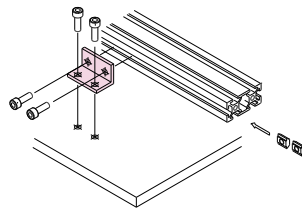
■ Kit Contents

- Angle Bracket SS (or Hard) ×1
- Hexagon Socket Bolt (M5×8) ×2
- T Nut SS (M5) ×2
- ※ Bolt and Nut in (Stainless) Kit are stainless.

■ Material/Technical Data

	Angle Bracket SS	Angle Bracket hard SS
Material	Aluminium Alloy	A6063
	Alumite Treatment	Alumite Treatment
Weight	4g	9g
Environment	★RoHS Compliant	★RoHS Compliant
	★Green Procurement	★Green Procurement

Angle Bracket SS2040



Name (Single Item)	Angle Bracket SS2040
Item No.	★SFJ-A02
Name (Bolt and Nut Kit)	Angle Bracket SS2040 Kit (Angle Bracket SS2040(Stainless) Kit)
Item No.	★SFK-A02 ★SFK-A02S

■ Usable Frame

SF-20-40/1F
SF-20-40-40

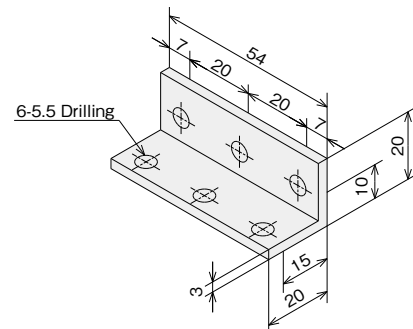
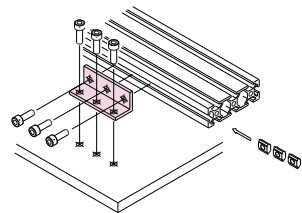
■ Kit Contents

- Angle Bracket SS2040 ×1
- Hexagon Socket Bolt (M5×8) ×4
- T Nut SS (M5) ×4
- ※ Bolt and Nut in (Stainless) Kit are stainless.

■ Material/Technical Data

Material	Aluminium Alloy
	Alumite Treatment
Weight	10g
Environment	★RoHS Compliant
	★Green Procurement

Angle Bracket SS2060



Name (Single Item)	Angle Bracket SS2060
Item No.	SFJ-A09
Name (Bolt and Nut Kit)	Angle Bracket SS2060 Kit (Angle Bracket SS2060(Stainless) Kit)
Item No.	SFK-A09 (SFK-A09S)

■ Usable Frame

SF-20-60

■ Kit Contents

- Angle Bracket SS2060 ×1
- Hexagon Socket Bolt (M5×8) ×6
- T Nut SS (M5) ×6
- ※ Bolt and Nut in (Stainless) Kit are stainless.

■ Material/Technical Data

Material	Aluminium Alloy
	Alumite Treatment
Weight	15g
Environment	★RoHS Compliant
	★Green Procurement



Parts

How to order

Item No. Quantity (pcs)

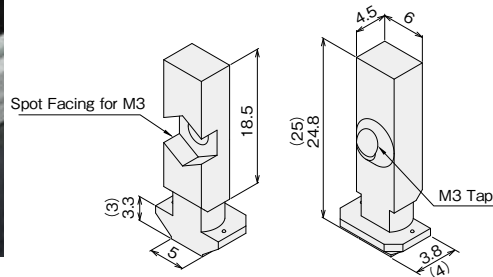
SFJ-A01



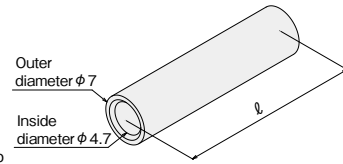
QC Joint SS



QC Joint SS(Common Parts)



SS Round metal tool



	SS Kit	SS40 Kit	SS60 Kit
l	8	28	48

Name	QC Joint SS Kit	QC Joint SS40 Kit	QC Joint SS60 Kit
Item No.	SFK-Q20	SFK-Q21	SFK-Q22

Kit Contents	Kit Name	QC Joint	Round metal tool	Bolt
	QC Joint SS Kit	QC Joint SS x1set	SS Round metal tool 20x1	Hexagon Socket Bolt (M3x15)Stainlessx1
	QC Joint SS40 Kit		SS Round metal tool 40x1	Hexagon Socket Bolt (M3x35)Stainlessx1
	QC Joint SS60 Kit		SS Round metal tool 60x1	Hexagon Socket Bolt (M3x55)Stainlessx1

Material/Technical Data

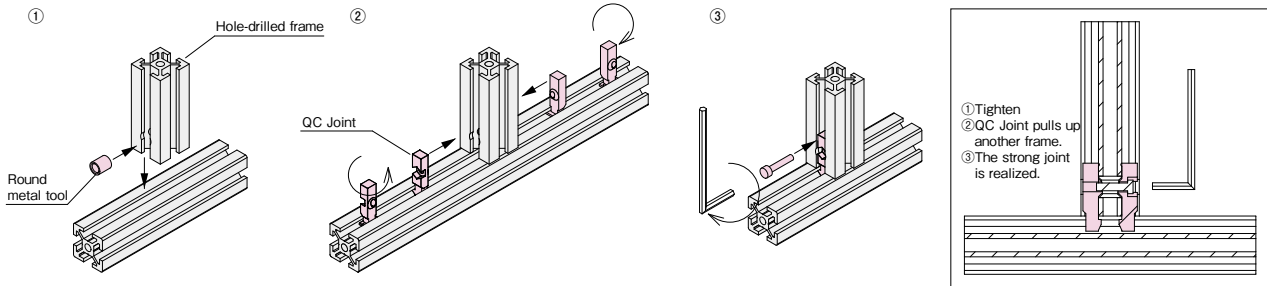
Material	QC Joint SS	Round metal tool
	Stainless	Stainless
	With Conductive Function	
Weight	14g(SS Kit) 18g(SS40 Kit) 23g(SS60 Kit)	
Environment	RoHS Compliant Green Procurement	

QC Joint SS

(Characteristics)

It's easy to set vertically and hardly make gap, because 2 frames are pulled at each other to combine. Also, you don't have to let nuts into frame in advance, and strong fixing is possible by one bolt, so the assembly man-hour is reduced.

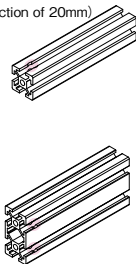
(How to assemble)



(Example of kit selection)

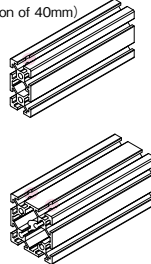
● QC Joint SS Kit

(For drilled hole to the direction of 20mm)



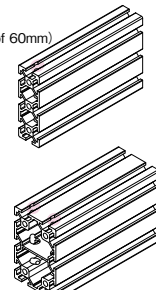
● QC Joint SS40 Kit

(For drilled hole to the direction of 40mm)



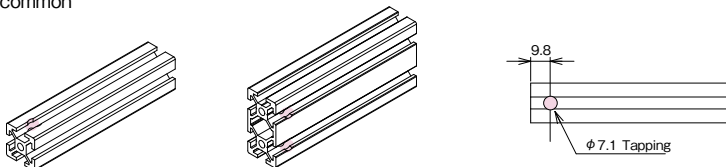
● QC Joint SS60 Kit

(For drilled hole to the direction of 60mm)



(Drilling)

SF-20 in common

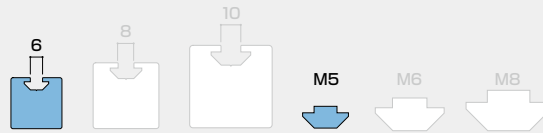


We sell Nut Material and Bracket Material as well.

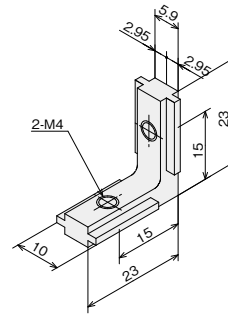
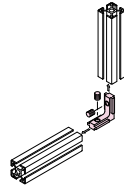
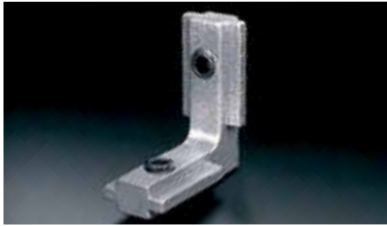
T Nut SS Material P31

● Hard Bracket SS Material
● Angle Bracket SS Material





S Blind Bracket SS



Name	S Blind Bracket SS
Item No.	SFK-600S

Usable Frame

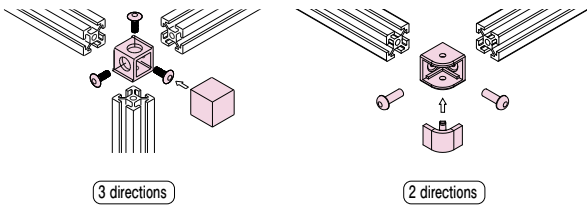


Compatible to all SF20 series (Groove Width 6mm)

Material/Technical Data

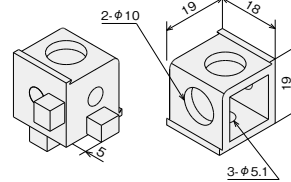
Material: Stainless (SCS13)
 (2 Set Screws M4x6 Stainless Included.)
 Weight: 1.1g
 Environment: RoHS Compliant
 Green Procurement

Block Bracket SS Kit / Corner Block SS Kit

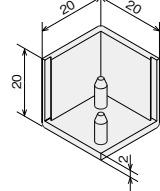


※Hold the Pin edge to insert Cap.

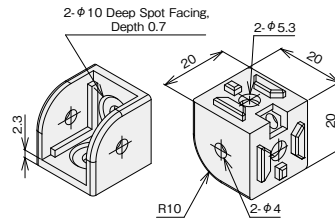
Block Bracket SS



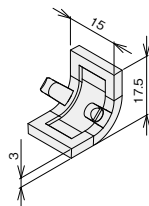
Block Cap SS



Corner Block SS



Corner Cap SS



Name	Block Bracket SS Kit (Black)	Block Bracket SS Kit (Light Gray)
Item No.	SFK-Q11	SFK-Q11G

Name	Corner Block SS Kit (Black)	Corner Block SS Kit (Light Gray)
Item No.	SFK-Q61	SFK-Q61G

Usable Frame



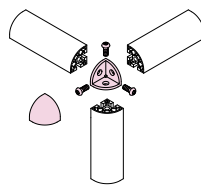
<Block Bracket SS Kit> SF-20-20 (1F/2F)
 <Corner Block SS Kit> SF-20-20 (1F/2F/3F/2H)

Material/Technical Data

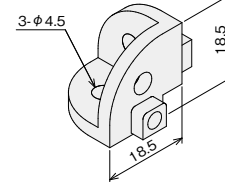
Block Bracket SS	Corner Block SS
Material: Zinc Die-Cast (Block Bracket SS), Polyamide (Block Cap SS)	Material: Stainless (Corner Block SS), Polyamide (Corner Cap SS)
Hexagon Socket Button Bolt (M5x15) 3 pcs (Block Bracket)	Hexagon Socket Button Bolt (M5x15) 2 pcs (Corner Block)
Weight: 27g (Block Bracket SS), 3g (Block Cap SS)	Weight: 23g (Corner Block SS), 2g (Corner Cap SS)
Environment: RoHS Compliant	Environment: RoHS Compliant

※M5 Tap Processing is needed to the section of SF20-20 (or 1F/2F). (Refer P209~ for details.)
 ※Corner block SS Kit is installable by Tapping Bolt as well.

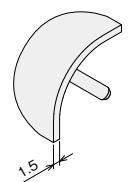
R Bracket SS Kit



R Bracket SS



R Cap SS



Usable Frame SF-20-20-R

Name	R Bracket SS Kit (Black)	R Bracket SS Kit (Light Gray)
Item No.	SFK-R01	SFK-R01G

Material/Technical Data

R Bracket SS	R Cap SS
Material: Stainless (SCS13)	Material: Polyamide
Hexagon Socket Bolt (M4x12) 3 pcs	Color/Black-Light gray
Weight: 18g	Weight: 2g
Environment: RoHS Compliant	Environment: RoHS Compliant

※M4 Tap Processing is needed to the section of SF-20-20-R to mount. (Refer P209~ for details.)

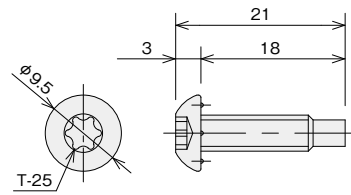
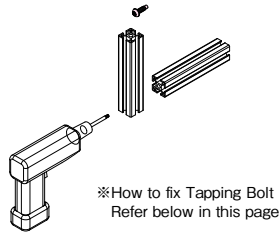


Parts
 How to order
 Item No. Quantity (pcs)
SFK-600S

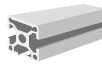
●Cap for Bracket
P45



Tapping Bolt SS

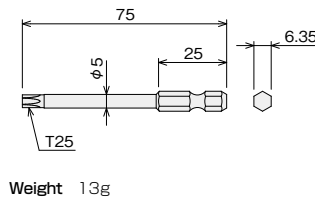


Name	Tapping Bolt SS
Item No.	SFB-T20

■Usable Frame

 SF-20-20 (1F/2F/3F/2H)
 SF-20-40 (1F)
 SF-20-60/20-80
 SF-40-40-2S (1F/2F)

■Material/Technical Data
 Material SWCH18A
 Uni-Chrome Plating
 Weight 2g
 Environment RoHS Compliant
 Green Procurement

Torque Bit T25 / Torque Driver T25



Name	Torque Bit T25
Item No.	SFA-JT25

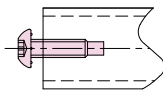


Weight 78g

Name	Torque Driver T25
Item No.	SFA-T25H

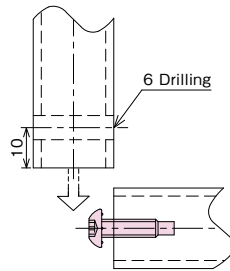
How to fix Tapping Bolt

①



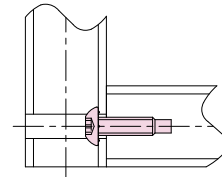
Fix the frame with jig etc, and screw the Tapping Bolt halfway into the end face. (Temporary joint)
 ※ In case it is too tight, please use cutting oil.

②




Put the bolt head through T slot of another frame.

③



Tighten by Manual tool to fix.
 ※Manual tool is recommended, because the reaction of torque up is big by using electric drill.

 Drillid by SUS
 Processing Symbol P216~



We sell Nut Material and Bracket Material as well.

T Nut SS Material
 P31

●Hard Bracket SS Material
 ●Angle Bracket SS Material



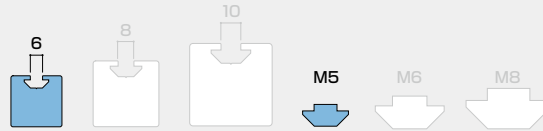
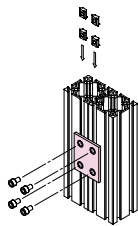
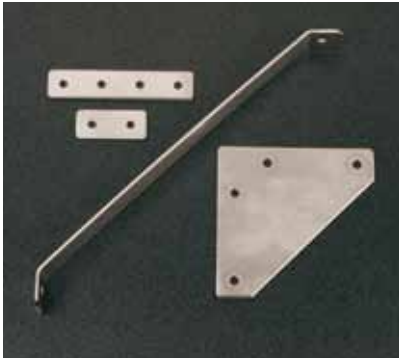
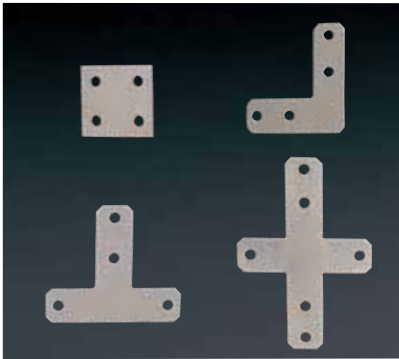


Plate Bracket



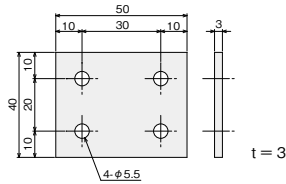
Usable Frame
Compatible to all SF20 series (Groove Width 6mm)

Kit Contents
Refer table for right

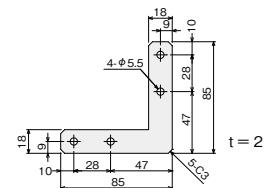
Material/Technical Data

Name	Weight(g)	Material	Environment
Plate Bracket SSG	46	SUS304	RoHS Compliant Green Procurement
S Plate Bracket SS-L	54		
S Plate Bracket SS-T	56		
S Plate Bracket SS+	78		
Plate Bracket SS-H2	8.3		
Plate Bracket SS-H4	18.7		
Corner Support Bracket SS	65		
Corner Support Plate SS	104		

S Plate Bracket SSG



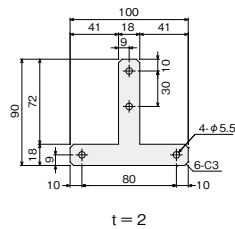
S Plate Bracket SS-L Type



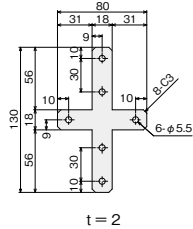
Name	S Plate Bracket SSG	S Plate Bracket SSG Kit	S Plate Bracket SS-L type	S Plate Bracket SS-L type Kit
Item No.	SFJ-121S	SFK-121S	SFJ-109S	SFK-109S

- Kit Contents**
- Plate Bracket SSG×1
 - Hexagon Socket Bolt (M5×8)Stainless×4
 - ST Nut SS (M5)×4
- S Plate Bracket SS-L type×1
 - Hexagon Socket Bolt (M5×6)Stainless×4
 - ST Nut SS (M5)×4

S Plate Bracket SS-T type



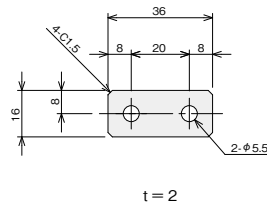
S Plate Bracket SS+ type



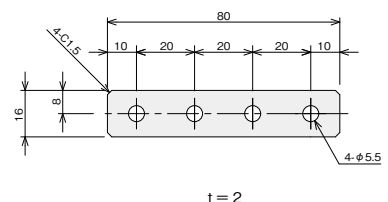
Name	S Plate Bracket SS-T type	S Plate Bracket SS-T type Kit	S Plate Bracket SS+ type	S Plate Bracket SS+ type Kit
Item No.	SFJ-110S	SFK-110S	SFJ-111S	SFK-111S

- Kit Contents**
- S Plate Bracket SS-T Type×1
 - Hexagon Socket Bolt (M5×6)Stainless×4
 - ST Nut SS(M5)×4
- S Plate Bracket SS+ Type×1
 - Hexagon Socket Bolt (M5×6)Stainless×6
 - ST Nut SS(M5)×6

S Plate Bracket SS-H2



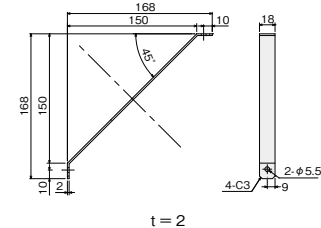
S Plate Bracket SS-H4



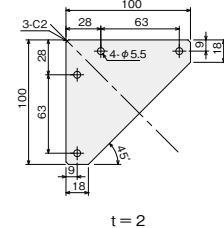
Name	Plate Bracket SS-H2	Plate Bracket SS-H2 Kit	Plate Bracket SS-H4	Plate Bracket SS-H4 Kit
Item No.	SFJ-124S	SFK-124S	SFJ-128S	SFK-128S

- Kit Contents**
- Plate Bracket SS-H2×1
 - Hexagon Socket Bolt (M5×6)Stainless×2
 - ST Nut SS (M5)×2
- Plate Bracket SS-H4×1
 - Hexagon Socket Bolt (M5×6)Stainless×4
 - ST Nut SS (M5)×4

S Corner Support Bracket SS



S Corner Support Plate SS



Name	Corner Support Bracket SS	Corner Support Bracket SS Kit	Corner Support Plate SS	Corner Support Plate SS Kit
Item No.	SFJ-135S	SFK-135S	SFJ-136S	SFK-136S

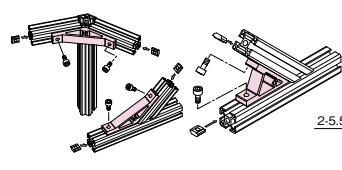
- Kit Contents**
- Corner Support Bracket SS×1
 - Hexagon Socket Bolt (M5×6)Stainless×2
 - ST Nut SS (M5)×2
- Corner Support Plate SS×1
 - Hexagon Socket Bolt (M5×6)Stainless×4
 - ST Nut SS (M5)×4



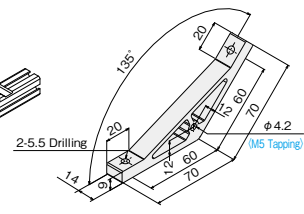
Parts
How to order
Item No. Quantity (pcs)
SFJ-121S

- Frame for 20
- Nut for 20
- Bracket for 20
- Adjuster for 20
- Accessory for 20

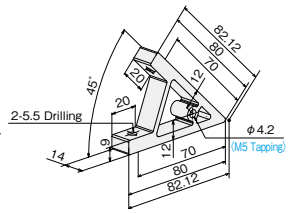
Hard Bracket SS-DE



Hard Bracket SS-DE135



Hard Bracket SS-DE45



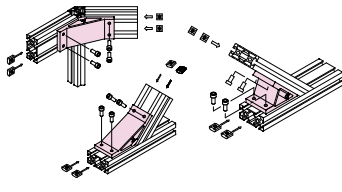
Name (Single Item)	Hard Bracket SS-DE135 (Hard Bracket SS-DE135 with Tap)		Hard Bracket SS-DE45 (Hard Bracket SS-DE45 with Tap)	
Item No.	SFJ-N31 (SFJ-N31T)		SFJ-N32 (SFJ-N32T)	
Name (Bolt and Nut Kit)	SS-DE135Kit (SS-DE135 Kit with Tap)	SS-DE135(Stainless)Kit (SS-DE135 with Tap/Stainless)Kit	SS-DE45Kit (SS-DE45 Kit with Tap)	SS-DE45(Stainless)Kit (SS-DE45 with Tap/Stainless)Kit
Item No.	SFK-N31 (SFK-N31T)	SFK-N31S (SFK-N31P)	SFK-N32 (SFK-N32T)	SFK-N32S (SFK-N32P)

Usable Frame
 Compatible to all SF20 series (Groove Width 6mm)

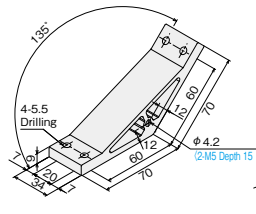
Kit Contents
(Hard Bracket SS-DE135Kit)
 ● Hard Bracket SS-DE135 (or with Tap) ×1
 ● Hexagon Socket Bolt (M5×14) ×2
 ● T Nut SS (M5) ×2
(Hard Bracket SS-DE45Kit)
 ● Hard Bracket SS-DE45 (or with Tap) ×1
 ● Hexagon Socket Bolt (M5×14) ×2
 ● T Nut SS (M5) ×2
 ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Weight 48g (DE135)
 41g (DE45)
 Environment **RoHS** Compliant
Green Procurement

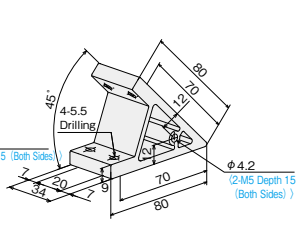
Hard Bracket SS2040-DE



Hard Bracket SS2040-DE135



Hard Bracket SS2040-DE45



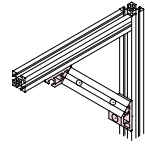
Name (Single Item)	Hard Bracket SS2040-DE135 (Hard Bracket SS2040-DE135 with Tap)		Hard Bracket SS2040-DE45 (Hard Bracket SS2040-DE45 with Tap)	
Item No.	SFJ-N38 (SFJ-N38T)		SFJ-N37 (SFJ-N37T)	
Name (Bolt and Nut Kit)	SS2040-DE135Kit (SS2040-DE135 Kit with Tap)	SS2040-DE135(Stainless)Kit (SS2040-DE135 with Tap/Stainless)Kit	SS2040-DE45Kit (SS2040-DE45 Kit with Tap)	SS2040-DE45(Stainless)Kit (SS2040-DE45 with Tap/Stainless)Kit
Item No.	SFK-N38 (SFK-N38T)	SFK-N38S (SFK-N38P)	SFK-N37 (SFK-N37T)	SFK-N37S (SFK-N37P)

Usable Frame
 SF20 Series 45° slant cut frame (Refer from P208)

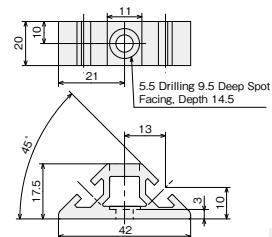
Kit Contents
(Hard Bracket SS2040-DE135Kit)
 ● Hard Bracket SS2040-DE135 (or with Tap) ×1
 ● Hexagon Socket Bolt (M5×14) ×4
 ● T Nut SS (M5) ×2
(Hard Bracket SS2040-DE45Kit)
 ● Hard Bracket SS2040-DE45 (or with Tap) ×1
 ● Hexagon Socket Bolt (M5×14) ×4
 ● T Nut SS (M5) ×2
 ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Weight 127g (DE135)
 107g (DE45)
 Environment **RoHS** Compliant
Green Procurement

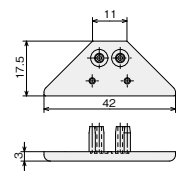
Truss Joint SS



Truss Joint SS



Truss Cap SS



Name (Single Item)	Truss Joint SS	Truss Cap SS (Black) (Light Gray)	
Item No.	SFJ-J01	SFA-J01	SFA-J01G

Usable Frame
 (Frame to reinforce) SF-20-20
 (Frame to combine) SF-20-30-40-45 series are installable

※ Groove size is as same as SF20-20.

Material/Technical Data
 Truss Joint SS Truss Cap SS
 Material Aluminium Alloy Polyamide
 Alumite Treatment
 Weight 15g 2g
 Environment **RoHS** Compliant
Green Procurement

Example of mounting Truss Joint
 Best suited to reinforce in 45° or truss stiffening.

QC-Processed Frame
(Processing instructions P216~)

Hexagon Socket Bolt (※)
(Refer table for bolt size.)

Connecting Frame T Nut (M5)

QC-Processed Frame
(Processing instructions P216~)

Hexagon Socket Bolt (※)
(Refer table for bolt size.)

Connecting Frame T Nut (M5)

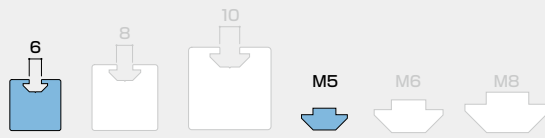
※ Guide of bolt size

Frame to mount to	Bolt size
SF20 Series	M5 × 8
SF30 Series	M5 × 10
SF40 · 45 Series	M5 × 14

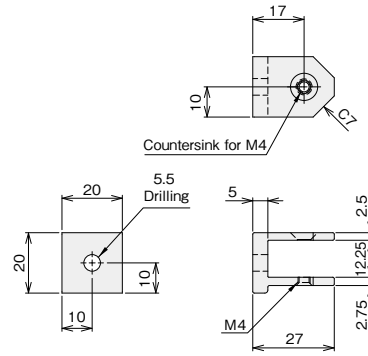
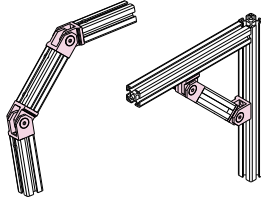
We sell Nut Material and Bracket Material as well.

T Nut SS Material P31 ● Hard Bracket SS Material ● Angle Bracket SS Material





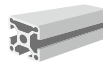
Turn Bracket 20



(Attachment) Hexagon Socket Flat Head Cap Screw M4×6 Stainless 1 pcs/set

Name	Turn Bracket 20
Item No.	SFK-44A

Usable Frame



(End Surface Installation)
SF-20-20 Exclusive
(Side Surface Installation)
Installable if connecting
T Nut is (M5).

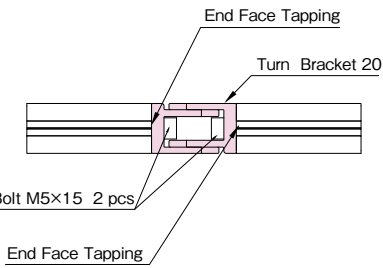
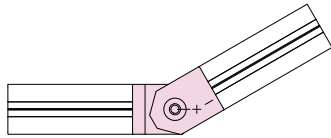
Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Weight 26g/set
Environment RoHS Compliant
Green Procurement

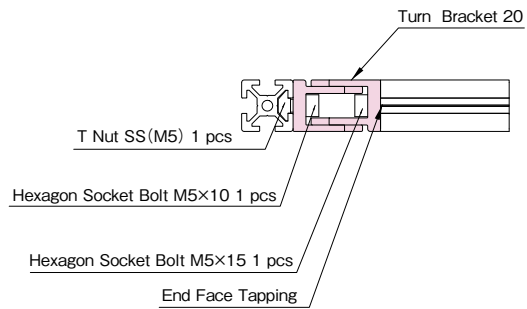
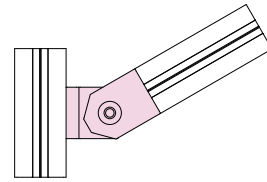
※2 pcs/set

Example of mounting Turn Bracket

<In case of installing to sections of the Frames.>



<In case of installing to side and end of the Frames.>



Parts

How to order

Item No.

SFK-44A

Quantity (set)



Adjuster Kit



■Plate			■Adjuster																																														
<p>Adjuster Caster Plate SS Adjuster Caster Plate SS (Stainless)</p> <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Weight</th></tr> <tr><td>Adjuster Caster Plate SS</td><td>SS400 Uni-chrome</td><td>0.45kg</td></tr> <tr><td>Adjuster Caster Plate SS (Stainless)</td><td>SUS304</td><td>—</td></tr> </table>	Material	Treatment	Weight	Adjuster Caster Plate SS	SS400 Uni-chrome	0.45kg	Adjuster Caster Plate SS (Stainless)	SUS304	—	<p>Adjuster Caster Plate 40</p> <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Weight</th></tr> <tr><td>Adjuster Caster Plate 40</td><td>SS400 Uni-chrome</td><td>0.82kg</td></tr> </table>	Material	Treatment	Weight	Adjuster Caster Plate 40	SS400 Uni-chrome	0.82kg	<p>Adjuster M12 Adjuster M12 (Stainless)</p> <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Last capacity</th><th>Weight</th></tr> <tr><td>Adjuster M12</td><td>SS400 Uni-chrome</td><td>500kg</td><td>169g</td></tr> <tr><td>Adjuster M12 (Stainless)</td><td>SUS304 Electrolytic Polishing</td><td>300kg</td><td>165g</td></tr> </table>	Material	Treatment	Last capacity	Weight	Adjuster M12	SS400 Uni-chrome	500kg	169g	Adjuster M12 (Stainless)	SUS304 Electrolytic Polishing	300kg	165g	<p>Adjuster M16</p> <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Last capacity</th><th>Weight</th><th>Bottom</th></tr> <tr><td>Adjuster M16</td><td>SS400 Zn Black</td><td>500kg</td><td>386g</td><td>Neprene rubber</td></tr> </table>	Material	Treatment	Last capacity	Weight	Bottom	Adjuster M16	SS400 Zn Black	500kg	386g	Neprene rubber	<p>Adjuster BM16 (Stainless)</p> <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Last capacity</th><th>Weight</th></tr> <tr><td>Adjuster BM16 (Stainless)</td><td>SUS304 Electrolytic Polishing</td><td>560kg</td><td>375g</td></tr> </table>	Material	Treatment	Last capacity	Weight	Adjuster BM16 (Stainless)	SUS304 Electrolytic Polishing	560kg	375g
Material	Treatment	Weight																																															
Adjuster Caster Plate SS	SS400 Uni-chrome	0.45kg																																															
Adjuster Caster Plate SS (Stainless)	SUS304	—																																															
Material	Treatment	Weight																																															
Adjuster Caster Plate 40	SS400 Uni-chrome	0.82kg																																															
Material	Treatment	Last capacity	Weight																																														
Adjuster M12	SS400 Uni-chrome	500kg	169g																																														
Adjuster M12 (Stainless)	SUS304 Electrolytic Polishing	300kg	165g																																														
Material	Treatment	Last capacity	Weight	Bottom																																													
Adjuster M16	SS400 Zn Black	500kg	386g	Neprene rubber																																													
Material	Treatment	Last capacity	Weight																																														
Adjuster BM16 (Stainless)	SUS304 Electrolytic Polishing	560kg	375g																																														
<p>Adjuster Plate SS Adjuster Plate SS (Stainless)</p> <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Weight</th></tr> <tr><td>Adjuster Plate SS</td><td>SS400 Uni-chrome</td><td>0.24kg</td></tr> <tr><td>Adjuster Plate SS (Stainless)</td><td>SUS304</td><td>—</td></tr> </table>	Material	Treatment	Weight	Adjuster Plate SS	SS400 Uni-chrome	0.24kg	Adjuster Plate SS (Stainless)	SUS304	—	<p>Adjuster Caster Plate 40 (Stainless)</p> <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Weight</th></tr> <tr><td>Adjuster Caster Plate 40 (Stainless)</td><td>SUS304</td><td>0.83kg</td></tr> </table>	Material	Treatment	Weight	Adjuster Caster Plate 40 (Stainless)	SUS304	0.83kg	<th colspan="3">■Caster</th>			■Caster																													
Material	Treatment	Weight																																															
Adjuster Plate SS	SS400 Uni-chrome	0.24kg																																															
Adjuster Plate SS (Stainless)	SUS304	—																																															
Material	Treatment	Weight																																															
Adjuster Caster Plate 40 (Stainless)	SUS304	0.83kg																																															
	<p>Caster A Caster A with Brake Caster A (Stainless) Caster A with Brake (Stainless)</p> <table border="1"> <tr><th>Material</th><th>Last capacity</th><th>Weight</th></tr> <tr><td>Caster A</td><td>Rubber</td><td>30kg 189g</td></tr> <tr><td>Caster A with Brake</td><td>Rubber</td><td>30kg 223g</td></tr> <tr><td>Caster A (Stainless)</td><td>Nylon</td><td>40.8kg 147g</td></tr> </table>	Material	Last capacity	Weight	Caster A	Rubber	30kg 189g	Caster A with Brake	Rubber	30kg 223g	Caster A (Stainless)	Nylon	40.8kg 147g	<p>Caster B</p> <table border="1"> <tr><th>Material</th><th>Last capacity</th><th>Weight</th></tr> <tr><td>Caster B</td><td>Phenol Resin</td><td>150kg 340g</td></tr> </table>	Material	Last capacity	Weight	Caster B	Phenol Resin	150kg 340g	<p>Caster B (Stainless)</p> <table border="1"> <tr><th>Material</th><th>Last capacity</th><th>Weight</th></tr> <tr><td>Caster B (Stainless)</td><td>Phenol Resin</td><td>71.4kg 285g</td></tr> </table>	Material	Last capacity	Weight	Caster B (Stainless)	Phenol Resin	71.4kg 285g																						
Material	Last capacity	Weight																																															
Caster A	Rubber	30kg 189g																																															
Caster A with Brake	Rubber	30kg 223g																																															
Caster A (Stainless)	Nylon	40.8kg 147g																																															
Material	Last capacity	Weight																																															
Caster B	Phenol Resin	150kg 340g																																															
Material	Last capacity	Weight																																															
Caster B (Stainless)	Phenol Resin	71.4kg 285g																																															

	Item No.	Name	Compatible Frames	Kit Contents
Adjuster + Plate	SFK-510A	Level Adjuster Kit SS	Compatible to all SF20 series (Groove Width 6mm)	● Adjuster Plate SS×1 ● T Nut SS (M5)×4 ● Adjuster M12×1 ● Hexagon Socket Bolt (M5×10)×4
	SFK-510S	Level Adjuster Kit SS (Stainless)	Compatible to all SF20 series (Groove Width 6mm)	● Adjuster Plate SS (Stainless)×1 ● ST Nut SS (M5)×4 ● Adjuster M12 (Stainless)×1 ● Hexagon Socket Bolt (M5×10) Stainless×4
	SFK-C22	Level Adjuster Kit 40	SF-40-40-2S or Black SF-40-60 SF-40-80-SS	● Adjuster Caster Plate 40×1 ● Adjuster M16×1 ● T Nut SS (M5)×8 ● Hexagon Socket Bolt (M5×14)×8
	SFK-C22U	Level Adjuster Kit 40 (Stainless)	SF-40-40-2S or Black SF-40-60 SF-40-80-SS	● Adjuster Caster Plate 40 (Stainless)×1 ● Adjuster BM16 (Stainless)×1 ● ST Nut SS (M5)×8 ● Hexagon Socket Bolt (M5×14) Stainless×8
Caster + Plate	SFK-C21A	Caster Kit SS	Compatible to all SF20 series (Groove Width 6mm)	● Adjuster Plate SS×1 ● T Nut SS (M5)×4 ● Caster A×1 ● Hexagon Socket Bolt (M5×10)×4 ● Hexagon Nut (M12)×1
	SFK-C21S	Caster Kit SS (Stainless)	Compatible to all SF20 series (Groove Width 6mm)	● Adjuster Plate SS (Stainless)×1 ● ST Nut SS (M5)×4 ● Caster A (Stainless)×1 ● Hexagon Socket Bolt (M5×10) Stainless×4 ● Hexagon Nut (M12) Stainless×1
	SFK-C22A	Caster Kit SS with Brake	Compatible to all SF20 series (Groove Width 6mm)	● Adjuster Plate SS×1 ● T Nut SS (M5)×4 ● Caster A with Brake×1 ● Hexagon Socket Bolt (M5×10)×4 ● Hexagon Nut (M12)×1
	SFK-C22B	Caster Kit SS with Brake (Stainless)	Compatible to all SF20 series (Groove Width 6mm)	● Adjuster Plate SS (Stainless)×1 ● ST Nut SS (M5)×4 ● Caster A with Brake (Stainless)×1 ● Hexagon Socket Bolt (M5×10) Stainless×4 ● Hexagon Nut (M12) Stainless×1
Adjuster + Plate	SFK-C20A	Level Adjuster Kit SS with Caster	Compatible to all SF20 series (Groove Width 6mm)	● Adjuster Caster Plate SS×1 ● T Nut SS (M5)×4 ● Caster A×1 ● Hexagon Socket Bolt (M5×10)×4 ● Hexagon Nut (M12)×1 ● Adjuster M12×1
	SFK-C20S	Level Adjuster Kit SS with Caster (Stainless)	Compatible to all SF20 series (Groove Width 6mm)	● Adjuster Caster Plate SS (Stainless)×1 ● ST Nut SS (M5)×4 ● Caster A (Stainless)×1 ● Hexagon Socket Bolt (M5×10) Stainless×4 ● Hexagon Nut (M12) Stainless×1 ● Adjuster M12 (Stainless)×1
	SFK-C23	Level Adjuster Kit 40 with Caster	SF-40-40-2S or Black SF-40-60 SF-40-80-SS	● Adjuster Caster Plate 40×1 ● Adjuster M16×1 ● Caster B×1 ● T Nut SS (M5)×8 ● Hexagon Socket Bolt (M5×14)×8 ● Hexagon Socket Bolt (M6×10)×4
	SFK-C23S	Level Adjuster Kit 40 with Caster (Stainless)	SF-40-40-2S or Black SF-40-60 SF-40-80-SS	● Adjuster Caster Plate 40 (Stainless)×1 ● Adjuster BM16 (Stainless)×1 ● Caster B (Stainless)×1 ● ST Nut SS (M5)×8 ● Hexagon Socket Bolt (M5×14) Stainless×8 ● Hexagon Socket Bolt (M8×10) Stainless×4

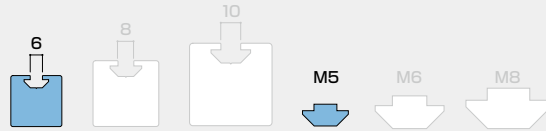


We sell Nut Material and Bracket Material as well.

T Nut SS Material P31

● Hard Bracket SS Material
● Angle Bracket SS Material

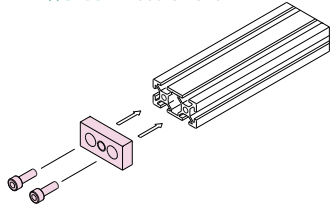




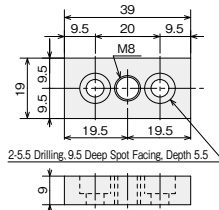
Foot Base



Environment **★RoHS Compliant**
★Green Procurement



Foot Base 2040

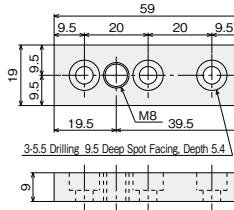


(Material)
Foot Base 2040 SS400 Uni-chrome plating Include 2 Hexagon Socket Bolts (M5×15) Weight/40g
Foot Base 2040 SUS304 Include 2 Hexagon Socket Bolts (Stainless) (M5×15) Stainless Weight/40g

Usable Frame

SF-20-40, SF-20-40-1F

Foot Base 2060

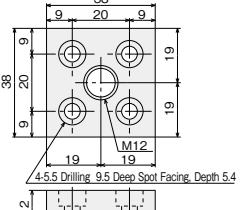


(Material)
Foot Base 2060 SS400 Uni-chrome plating Include 3 Hexagon Socket Bolts (M5×15) Weight/60g
Foot Base 2060 SUS304 Include 3 Hexagon Socket Bolts (Stainless) (M5×15) Stainless Weight/60g

Usable Frame

SF-20-60

Foot Base 40402S



(Material)
Foot Base 40402S SS400 Uni-chrome plating Include 4 Hexagon Socket Bolts (M5×20) Weight/104g
Foot Base 40402S SUS304 Include 4 Hexagon Socket Bolts (Stainless) (M5×20) Stainless Weight/105g

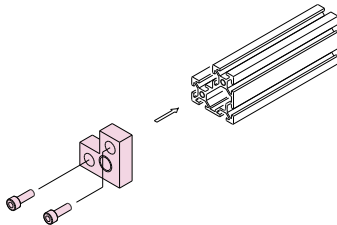
Usable Frame

SF-40-40-2S(1F/2F)

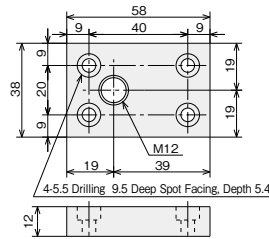
Name	Foot Base 2040 (Foot Base 2040(Stainless))	Foot Base 2060 (Foot Base 2060(Stainless))	Foot Base 40402S (Foot Base 40402S(Stainless))
Item No.	★SFK-55A (★SFK-55AS)	★SFK-50A (★SFK-50AS)	★SFK-51A (★SFK-51AS)



Environment **★RoHS Compliant**
★Green Procurement



Foot Base 4060SS

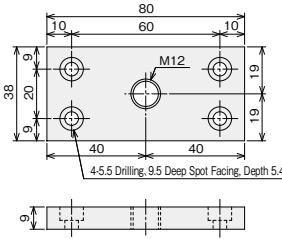


(Material)
Foot Base 4060SS SS400 Uni-chrome plating Include 4 Hexagon Socket Bolts (M5×20) Weight/176g
Foot Base 4060SS SUS304 Include 4 Hexagon Socket Bolts (Stainless) (M5×20) Stainless Weight/177g

Usable Frame

SF-40-60-SS

Foot Base 4080SS

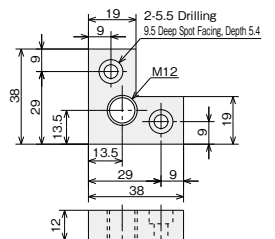


(Material)
Foot Base 4080SS SS400 Uni-chrome plating Include 4 Hexagon Socket Bolts (M5×15) Weight/194g
Foot Base 4080SS SUS304 Include 4 Hexagon Socket Bolts (Stainless) (M5×15) Stainless Weight/196g

Usable Frame

SF-40-80-SS

Foot Base 204040



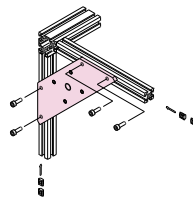
(Material)
Foot Base 204040 SS400 Uni-chrome plating Include 2 Hexagon Socket Bolts (M5×20) Weight/81g
Foot Base 204040 SUS304 Include 2 Hexagon Socket Bolts (Stainless) (M5×20) Stainless Weight/81g

Usable Frame

SF-20-40-40

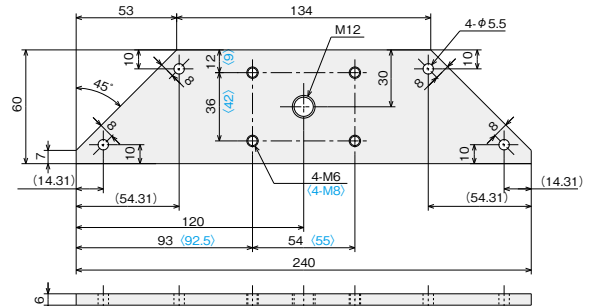
Name	Foot Base 4060SS (Foot Base 4060SS(Stainless))	Foot Base 4080SS (Foot Base 4080SS(Stainless))	Foot Base 204040 (Foot Base 204040(Stainless))
Item No.	★SFK-62A (★SFK-62AS)	★SFK-67A (★SFK-67AS)	★SFK-61A (★SFK-61AS)

Caster Plate SS



How to use

- Adjuster M12
- Caster A
- Caster B
- Commercial Hanging Bolt, etc



Usable Frame

Compatible to all SF20 series (Groove Width 6mm)

Name	Caster Plate SS (Caster Plate SS(Stainless))
Item No.	★SFJ-7A1 (★SFJ-7A1S)

Material/Technical Data

Caster Plate SS	Caster Plate SS(Stainless)
Material SS400	SUS304
Uni-chrome	
Weight 530g	530g
Environment ★RoHS Compliant ★Green Procurement	



Parts

How to order

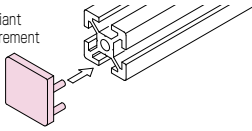
Item No. **SFK-55A** Quantity (set)

Frame for 20 Nut for 20 Bracket for 20 Adjuster for 20 Accessory for 20

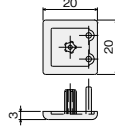
Frame Cap



Material/ Polyamide
Environment/ RoHS Compliant
Green Procurement
Weight/ In the drawing

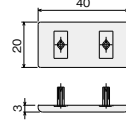


Frame Cap 2020



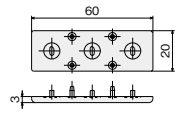
Usable Frame
Weight/1.3g
SF-20-20(1F/2F/3F/2H)

Frame Cap 2040



Usable Frame
Weight/2.3g
SF-20-40, SF-20-40-1F, ※SF-20-80

Frame Cap 2060

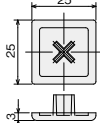


Usable Frame
Weight/4.1g
SF-20-60

Name	Frame Cap 2020 (Black) (Light Gray)		Frame Cap 2040 (Black) (Light Gray)		Frame Cap 2060 (Black) (Light Gray)	
Item No.	SFA-009	SFA-009G	SFA-010	SFA-010G	SFA-012	SFA-012G

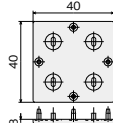
※Use 2 pcs for SF20-80

Frame Cap 2525



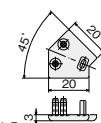
Usable Frame
Weight/2.0g
SF-25-25

Frame Cap 40402S



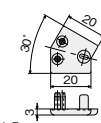
Usable Frame
Weight/5.1g
SF-40-40-2S(1F/2F) ※SF-40-80-SS

Frame Cap 20-DE45



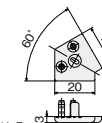
Usable Frame
Weight/1.5g
SF-20-DE45

Frame Cap 20-DE30



Usable Frame
Weight/1.5g
SF-20-DE30

Frame Cap 20-DE60

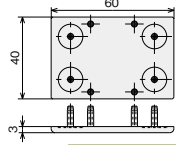


Usable Frame
Weight/1.5g
SF-20-DE60

Name	Frame Cap 2525 (Black) (Light Gray)		Frame Cap 40402S (Black) (Light Gray)		Frame Cap 20-DE45 (Black) (Light Gray)		Frame Cap 20-DE30 (Black) (Light Gray)		Frame Cap 20-DE60 (Black) (Light Gray)	
Item No.	SFA-027	SFA-027G	SFA-014	SFA-014G	SFA-J5B	SFA-J5BG	SFA-J5A	SFA-J5AG	SFA-J5C	SFA-J5CG

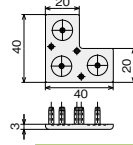
※Use 2 pcs for SF40-80-SS

Frame Cap 4060SS



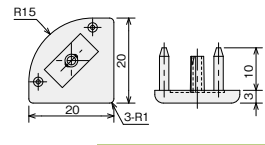
Usable Frame
Weight/8.9g
SF-40-60-SS

Frame Cap 204040



Usable Frame
Weight/4.3g
SF-20-40-40

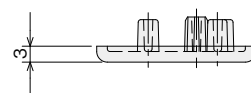
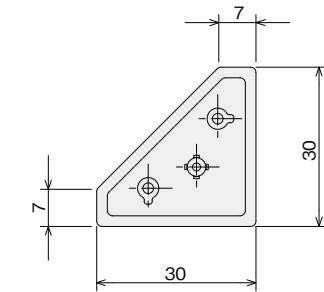
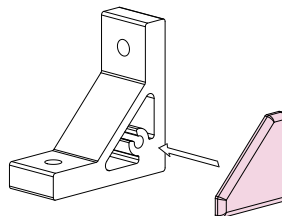
Frame Cap 20-20-R



Usable Frame
Weight/1.2g
SF-20-20-R

Name	Frame Cap 4060SS (Black) (Light Gray)		Frame Cap 204040 (Black) (Light Gray)		Frame Cap 20-20-R (Black) (Light Gray)	
Item No.	SFA-017	SFA-017G	SFA-J9A	SFA-J9AG	SFA-023	SFA-023G

Hard Bracket Cap



Name	(Black)	Hard Bracket Cap	(Light Gray)
Item No.	SFA-J11		SFA-J11G

■ Usable Frame

Hard Bracket SSG
Hard Bracket SSG2040
Hard Bracket SSG2060

■ Material/Technical Data

Material Polyamide
Weight 1.8g
Environment RoHS Compliant
Green Procurement

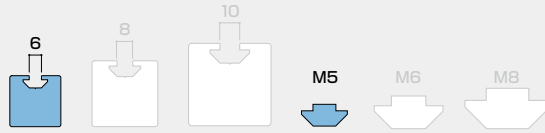


We sell Nut Material and Bracket Material as well.

T Nut SS Material P31

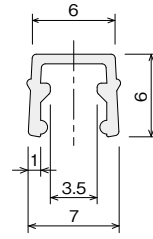
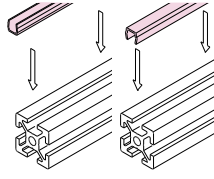
● Hard Bracket SS Material
● Angle Bracket SS Material





Slot Cap SS

Slot Cap SS



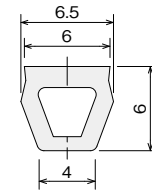
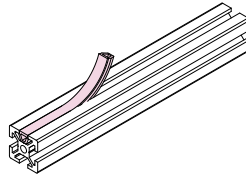
Name	Slot Cap SS $\ell=2000$ /pcs				
	(Black)		(Light Gray)		
Item No.	SFA-103		SFA-103G		
Name	(Blue)	Slot Cap SS $\ell=2000$ /pcs (Ivory)	(Green)	(Yellow)	(Red)
Item No.	SFA-103L	SFA-103V	SFA-103M	SFA-103Y	SFA-103R

Usable Frame Compatible to all SF20 series (Groove Width 6mm)

Material/Technical Data
 Material Polyethylene
 Unit mass 14g/m
 Environment **RoHS** Compliant
Green Procurement

Slot Seal SS

Slot Seal SS



Name	Slot Seal SS $\ell=5000$ /pcs
Item No.	SFA-170

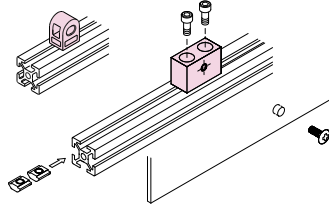
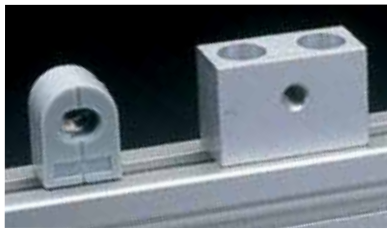
Usable Frame Compatible to all SF20 series (Groove Width 6mm)

Material/Technical Data
 Material Elastomer
 Unit Mass 21g/m
 Environment **RoHS** Compliant
Green Procurement



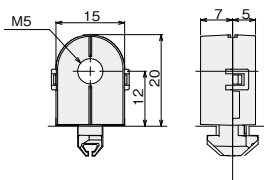
Parts
 How to order
 Item No. Quantity (pcs)
SFA-103

Cover Holder SS / Cover Support SS / Cover Support SS Flat

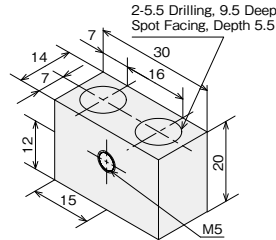


Usable Frame
Compatible to all SF20 series (Groove Width 6mm)

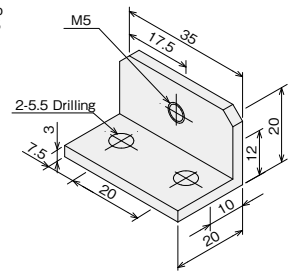
Cover Holder SS



Cover Support SS



Cover Support SS Flat



Kit Contents

- (Cover Support SS Kit)**
 - Cover Support SS×1
 - Hexagon Socket Bolt (M5×20) ×2
 - T Nut SS(M5) ×2
 - Truss Screw(M5×10) ×1
 - (Cover Support SS Flat Kit)**
 - Cover Support SS Flat×1
 - Hexagon Socket Bolt (M5×8) ×2
 - T Nut SS(M5) ×2
 - Truss Screw(M5×10) ×1
- *Bolt and Nut in CN (Stainless) Kit are stainless.

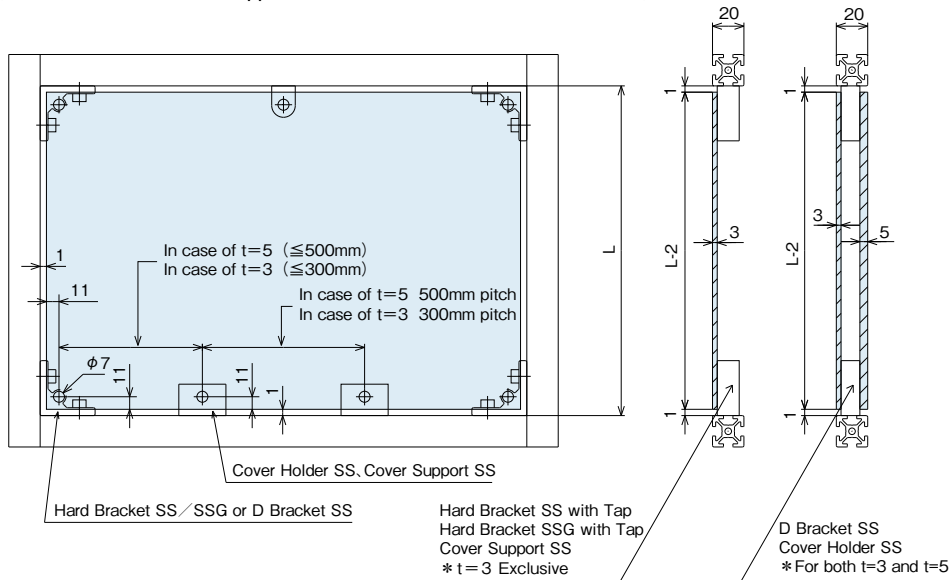
Material/Technical Data

- Cover Holder SS**
Material: Polyamide
Color: Light gray
Weight: 4g
Environment: ★RoHS Compliant, ★Green Procurement
- Cover Support SS / Cover Support SS Flat**
Material: A6063S-T5 (Special order: Black Alumite is also available.)
Weight: 1.9g (Cover Support SS), 1.0g (Cover Support SS Flat)
Environment: ★RoHS Compliant, ★Green Procurement

Name	Cover Holder SS	Cover Support SS	Cover Support SS Kit (Cover Support SS(Stainless)Kit)	Cover Support SS Flat	Cover Support SS Flat Kit (Cover Support SS Flat(Stainless)Kit)
Item No.	★SFA-KH5	★SFJ-K01	★SFK-K01 (★SFK-K01S)	★SFJ-K11	★SFK-K11 (★SFK-K11S)

How to fix Cover

(Cover Holder SS, Cover Support SS Indication of Resin Plate Dimension)



(Resin plate)



Various Resin Plates are available. Refer P182~.

(Door accessories)



Various parts for door are available. Refer P140~.

SF20 SS Size

SF30 S Size

SF40-45 L Size

Complex Parts

Door Panel Clean Equipment

Technical Data

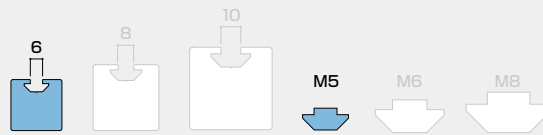


We sell Nut Material and Bracket Material as well.

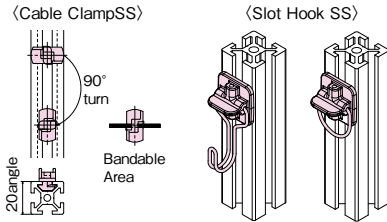
T Nut SS Material P31

● Hard Bracket SS Material ● Angle Bracket SS Material

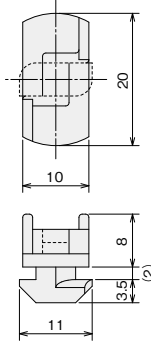




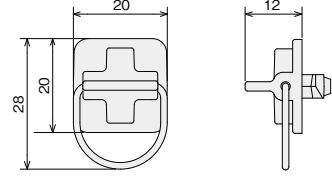
Cable Clamp SS (last-in) / Slot Hook SS (U), (J)



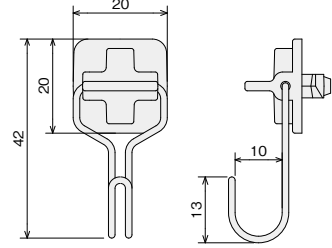
Cable Clamp SS



Slot Hook SS
U Type



J Type



Name	Cable Clamp SS	
	(Black)	(Light Gray)
Item No.	C1P-B03C	C1P-003C
Name	Slot Hook SS	
	(U Type)	(J Type)
Item No.	SFK-K31U	SFK-K31J

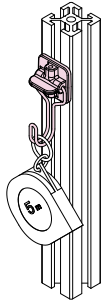
Usable Frame
Compatible to all SF20 series (Groove Width 6mm)

Material/Technical Data

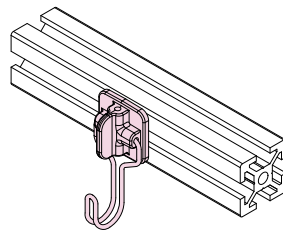
Cable Clamp SS	Slot Hook SS U Type·J Type
Material Polyamide(Body) Stainless(Hook)	Polyamide(Body) Stainless(Hook)
Color/Black-Light Gray	Color/Light Gray
Weight 1g/piece	2.5g(U Type)·3g(J Type)/Load capacity 1.5kg
Environment RoHS Compliant	
Green Procurement	

How to use Slot Hook

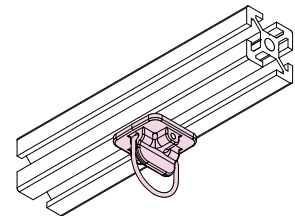
<To hang small article and tool>



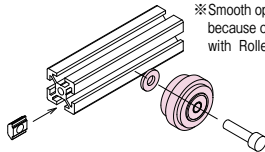
<To hang memo pad>



<To store manual where you can see anytime>

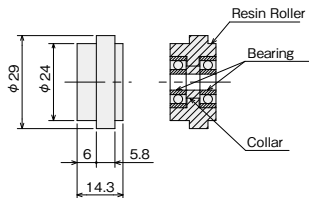


Slot Roller SS



※Smooth operation is possible because cutting work is done with Roller.

Slot Roller SS



Usable Frame
Compatible to all SF20 series (Groove Width 6mm)

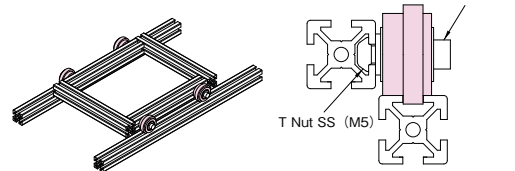
Material/Technical Data

Material Nylon 6(Resin Roller) S45C(Collar) Steel(Bearing)
Weight 18g
Environment RoHS Compliant
Green Procurement

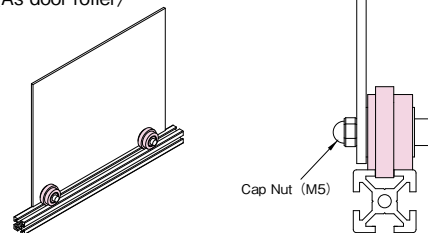
※Size of the attaching bolt : M5
※Appropriate Tightening Torque : 7.4N·m
※2 Bearings·1 Collar·1 Washer

Example of use

<To frame's movable part>



<As door roller>



Name	Slot Roller SS
Item No.	SFK-805



Parts

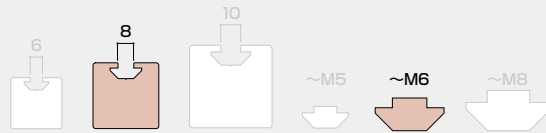
How to order
Item No. Quantity (Pac)
C1P-B03C □□



STANDARD FRAME

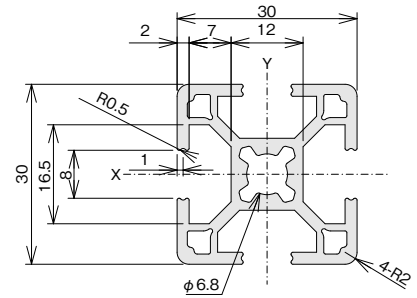
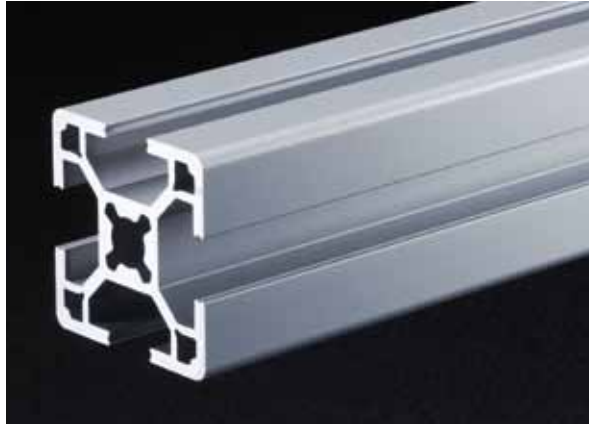
SF30

SERIES



SF2-30-30

Asia



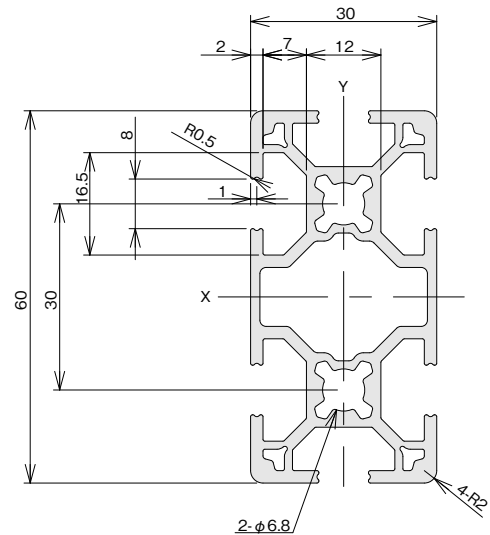
Name	SF2-30-30 ℓ = 4000	SF2-30-30 ℓ = 50~4000
Item No.	SFF-322-T	SFF-324-T

■Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x = 2.85 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y = 2.85 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x = 1.90 \times 10^3 \text{mm}^3$ $Z_y = 1.90 \times 10^3 \text{mm}^3$
Unit Mass	0.83kg/m

SF2-30-60

Asia



Name	SF2-30-60 ℓ = 4000	SF2-30-60 ℓ = 50~4000
Item No.	SFF-332-T	SFF-334-T

■Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x = 20.79 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y = 5.41 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x = 6.93 \times 10^3 \text{mm}^3$ $Z_y = 3.61 \times 10^3 \text{mm}^3$
Unit Mass	1.49kg/m



Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

Asia This sign shows the product is designed for Asia region only

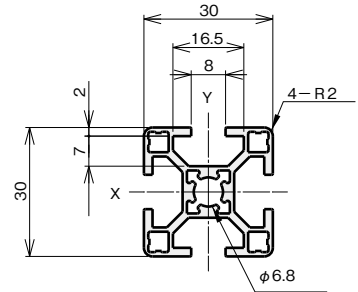
SF-K-30-30

Asia



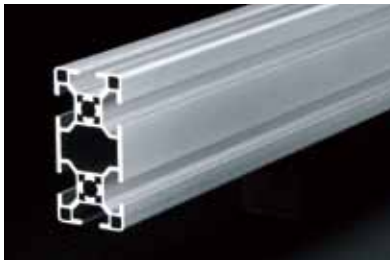
Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=2.38 \times 10^4 \text{mm}^4$ $I_y=2.38 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=1.59 \times 10^3 \text{mm}^3$ $Z_y=1.59 \times 10^3 \text{mm}^3$
Unit Mass	0.73kg/m

Name	SF-K-30-30 $\ell = 4000$	SF-K-30-30 $\ell = 50 \sim 4000$
Item No.	SFF-B12-T	SFF-B14-T



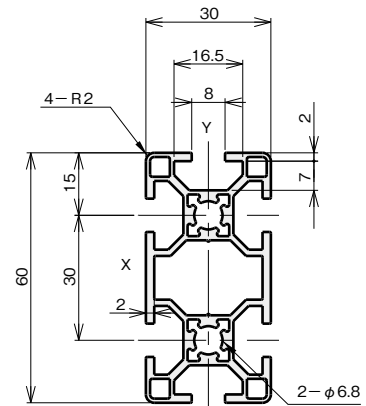
SF-K-30-60

Asia



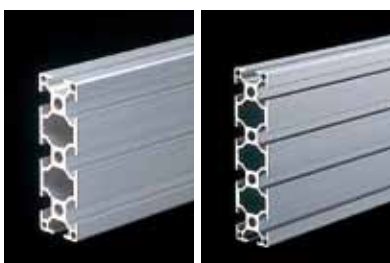
Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=16.68 \times 10^4 \text{mm}^4$ $I_y=4.63 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=5.56 \times 10^3 \text{mm}^3$ $Z_y=3.09 \times 10^3 \text{mm}^3$
Unit Mass	1.30kg/m

Name	SF-K-30-60 $\ell = 4000$	SF-K-30-60 $\ell = 50 \sim 4000$
Item No.	SFF-B22-T	SFF-B24-T



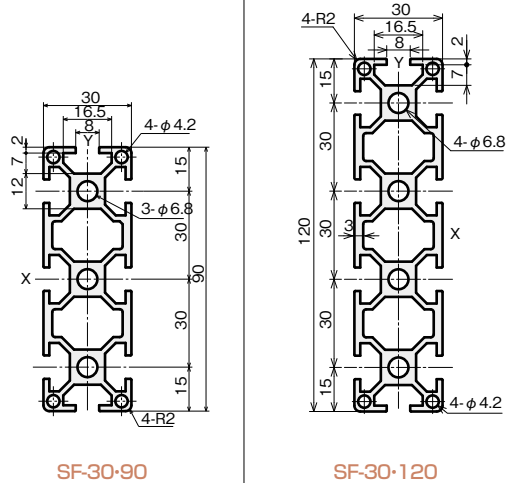
SF-30-90 / SF-30-120

Asia (SF-30-90 only)



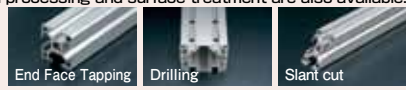
Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	SF-30-90: $I_x=66.28 \times 10^4 \text{mm}^4$, $I_y=8.44 \times 10^4 \text{mm}^4$ SF-30-120: $I_x=152.16 \times 10^4 \text{mm}^4$, $I_y=11.19 \times 10^4 \text{mm}^4$
Section Modulus	SF-30-90: $Z_x=14.7 \times 10^3 \text{mm}^3$, $Z_y=5.6 \times 10^3 \text{mm}^3$ SF-30-120: $Z_x=25.36 \times 10^3 \text{mm}^3$, $Z_y=7.46 \times 10^3 \text{mm}^3$
Unit Mass	SF-30-90: 2.44kg/m SF-30-120: 3.21kg/m

Name	SF-30-90 $\ell = 4000$	SF-30-90 $\ell = 50 \sim 4000$
Item No.	SFF-392-T	SFF-394-T
Name	SF-30-120 $\ell = 4000$	SF-30-120 $\ell = 50 \sim 4000$
Item No.	SFF-312	SFF-314

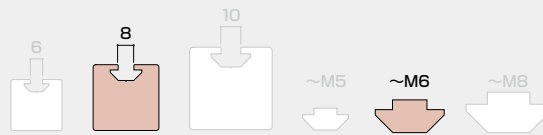


●Exclusive Nut T Nut S After Nut S Last-In Lock Nut S Free Nut S P60~
●Exclusive Cap Frame Cap P80,81

●Additional processing and surface treatment are also available.



P208~

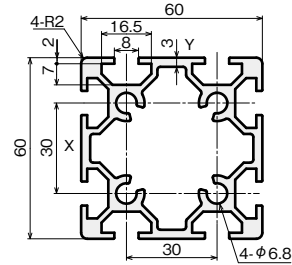


SF-60-60-2S

Asia

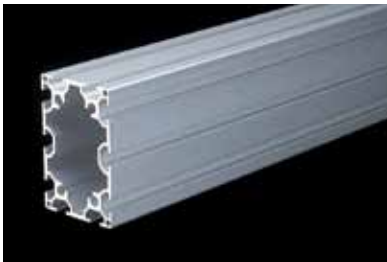


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=41.38 \times 10^4 \text{mm}^4$ $I_y=41.38 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=13.79 \times 10^3 \text{mm}^3$ $Z_y=13.79 \times 10^3 \text{mm}^3$
Unit Mass	2.63kg/m

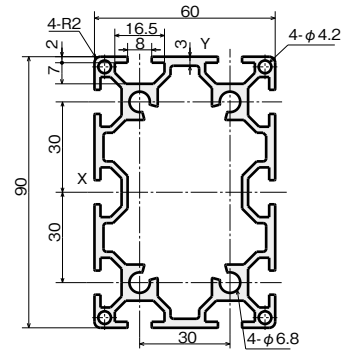


Name	SF-60-60-2S ℓ= 4000	SF-60-60-2S ℓ=50~4000
Item No.	SFF-602W-T	SFF-604W-T

SF-60-90



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=111.61 \times 10^4 \text{mm}^4$ $I_y=52.65 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=24.8 \times 10^3 \text{mm}^3$ $Z_y=17.56 \times 10^3 \text{mm}^3$
Unit Mass	3.10kg/m

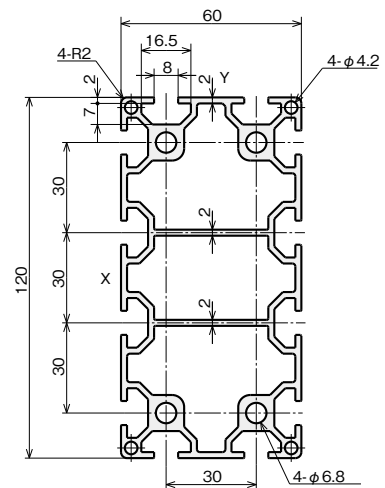


Name	SF-60-90 ℓ= 4000	SF-60-90 ℓ=50~4000
Item No.	SFF-692	SFF-694

SF-60-120



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=242.90 \times 10^4 \text{mm}^4$ $I_y=65.97 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=40.48 \times 10^3 \text{mm}^3$ $Z_y=21.99 \times 10^3 \text{mm}^3$
Unit Mass	4.13kg/m



Name	SF-60-120 ℓ= 4000	SF-60-120 ℓ=50~4000
Item No.	SFF-612	SFF-614



Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

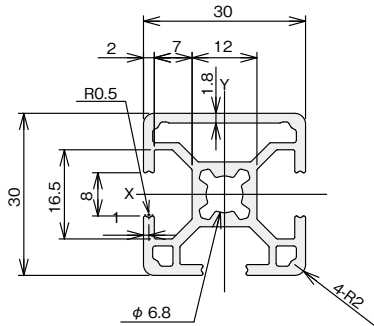
Asia This sign shows the product is designed for Asia region only

SF2-30-30-1F

Asia



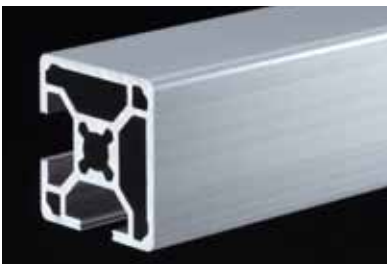
Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=3.03 \times 10^4 \text{mm}^4$ $I_y=2.82 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=1.99 \times 10^3 \text{mm}^3$ $Z_y=1.88 \times 10^3 \text{mm}^3$
Unit Mass	0.85kg/m



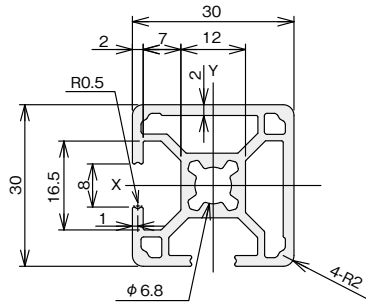
Name	SF2-30-30-1F ℓ = 4000	SF2-30-30-1F ℓ = 50~4000
Item No.	SFF-3E2-T	SFF-3E4-T

SF2-30-30-2F

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=3.09 \times 10^4 \text{mm}^4$ $I_y=3.09 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=1.98 \times 10^3 \text{mm}^3$ $Z_y=1.98 \times 10^3 \text{mm}^3$
Unit Mass	0.89kg/m



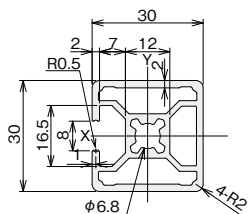
Name	SF2-30-30-2F ℓ = 4000	SF2-30-30-2F ℓ = 50~4000
Item No.	SFF-3F2-T	SFF-3F4-T

SF2-30-30-3F / SF2-30-30-2H

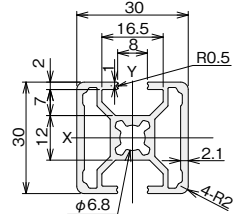
Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	SF2-30-30-3F: $I_x=3.01 \times 10^4 \text{mm}^4$, $I_y=3.27 \times 10^4 \text{mm}^4$ SF2-30-30-2H: $I_x=2.7 \times 10^4 \text{mm}^4$, $I_y=3.25 \times 10^4 \text{mm}^4$
Section Modulus	SF2-30-30-3F: $Z_x=1.93 \times 10^3 \text{mm}^3$, $Z_y=2.18 \times 10^3 \text{mm}^3$ SF2-30-30-2H: $Z_x=1.8 \times 10^3 \text{mm}^3$, $Z_y=2.17 \times 10^3 \text{mm}^3$
Unit Mass	SF2-30-30-3F: 0.90kg/m SF2-30-30-2H: 0.86kg/m



SF2-30-30-3F

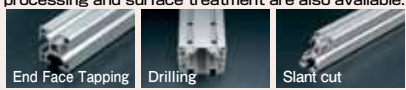


SF2-30-30-2H

Name	SF2-30-30-3F ℓ = 4000	SF2-30-30-3F ℓ = 50~4000
Item No.	SFF-3G2-T	SFF-3G4-T
Name	SF2-30-30-2H ℓ = 4000	SF2-30-30-2H ℓ = 50~4000
Item No.	SFF-3H2-T	SFF-3H4-T

●Exclusive Nut T Nut S After Nut S Last-In Lock Nut S Free Nut S P60~
●Exclusive Cap Frame Cap P80.81

●Additional processing and surface treatment are also available.



P208~

SF20 SS Size

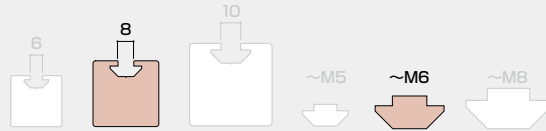
SF30 S Size

SF40 L Size

Complex Parts

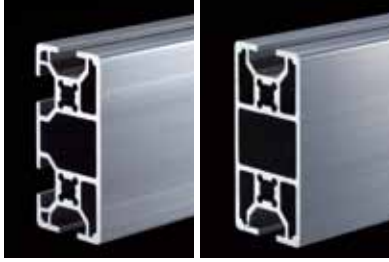
Door Panel Clean Equipment

Technical Data

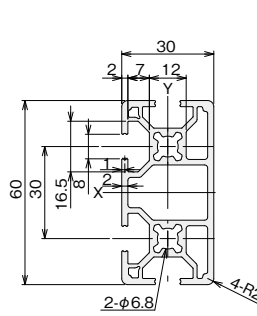


SF2-30-60-1F / SF2-30-60-2H

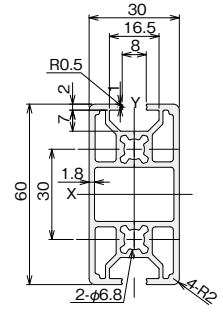
Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	SF2-30-60-1F SF2-30-60-2H
Moment of Inertia	$I_x=20.93 \times 10^4 \text{mm}^4$ $I_x=21.21 \times 10^4 \text{mm}^4$
Section Modulus	$I_y=5.95 \times 10^4 \text{mm}^4$ $I_y=6.35 \times 10^4 \text{mm}^4$ $Z_x=6.98 \times 10^3 \text{mm}^3$ $Z_x=7.08 \times 10^3 \text{mm}^3$ $Z_y=3.81 \times 10^3 \text{mm}^3$ $Z_y=4.23 \times 10^3 \text{mm}^3$
Unit Mass	1.55kg/m 1.58kg/m



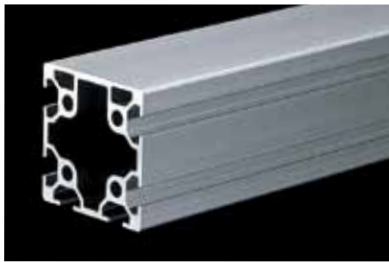
SF2-30-60-1F



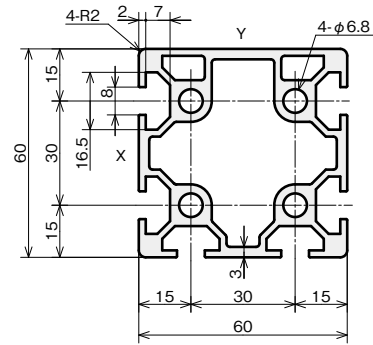
SF2-30-60-2H

Name	SF2-30-60-1F ℓ = 4000	SF2-30-60-1F ℓ =50~4000
Item No.	SFF-5E2-T	SFF-5E4-T
Name	SF2-30-60-2H ℓ = 4000	SF2-30-60-2H ℓ =50~4000
Item No.	SFF-6H2-T	SFF-6H4-T

SF-60-60-2S-1F

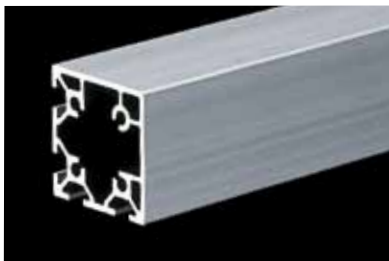


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	SF-60-60-2S-1F
Moment of Inertia	$I_x=45.35 \times 10^4 \text{mm}^4$ $I_x=43.34 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=15.61 \times 10^3 \text{mm}^3$ $Z_x=14.45 \times 10^3 \text{mm}^3$ $Z_y=14.45 \times 10^3 \text{mm}^3$
Unit Mass	2.90kg/m

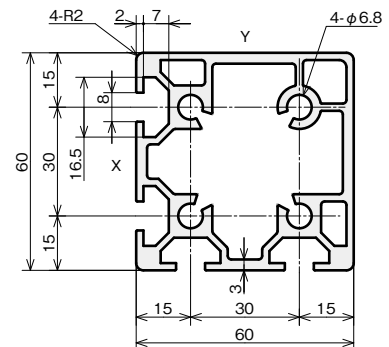


Name	SF-60-60-2S-1F ℓ = 4000	SF-60-60-2S-1F ℓ =50~4000
Item No.	SFF-E62W	SFF-E64W

SF-60-60-2S-2F



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	SF-60-60-2S-2F
Moment of Inertia	$I_x=43.75 \times 10^4 \text{mm}^4$ $I_x=43.75 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=14.66 \times 10^3 \text{mm}^3$ $Z_x=14.66 \times 10^3 \text{mm}^3$ $Z_y=14.66 \times 10^3 \text{mm}^3$
Unit Mass	2.73kg/m



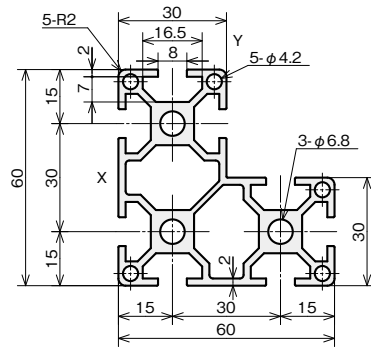
Name	SF-60-60-2S-2F ℓ = 4000	SF-60-60-2S-2F ℓ =50~4000
Item No.	SFF-F62W	SFF-F64W



SF-30-60-60



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=27.29 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=27.29 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=10.75 \times 10^3 \text{mm}^3$ $Z_y=10.75 \times 10^3 \text{mm}^3$
Unit Mass	2.33kg/m

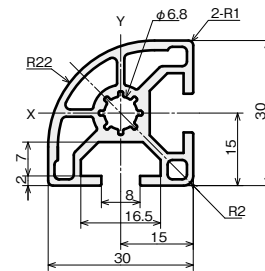


Name	SF-30-60-60 ℓ= 4000	SF-30-60-60 ℓ=50~4000
Item No.	SFF-G12	SFF-G14

SF-30-30-R



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=2.42 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=2.42 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=1.53 \times 10^3 \text{mm}^3$ $Z_y=1.53 \times 10^3 \text{mm}^3$
Unit Mass	0.82/m

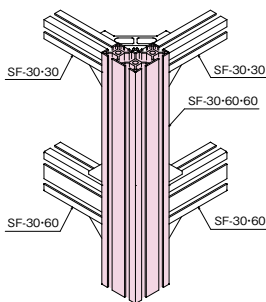


SF-30-30-R

Name	SF-30-30-R ℓ= 4000	SF-30-30-R ℓ=50~4000
Item No.	SFF-R62	SFF-R64

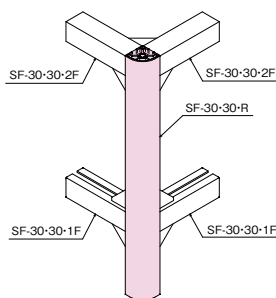
How to use Frames

<SF-30-60-60>



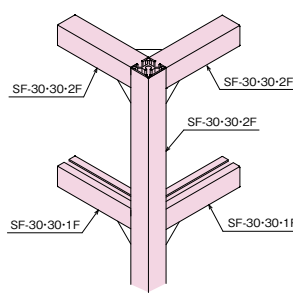
●As the reinforcing Frame at corner, or to ensure space inside.

<SF-30-30-R>



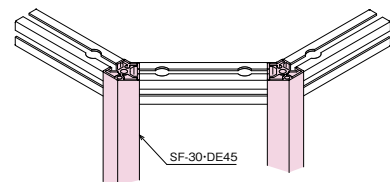
●For safety and beauty by the round corner.

<SF-30-30-1F>
<SF-30-30-2F>



●For the clean environment without Frame grave externally.

<SF-30-DE30>
<SF-30-DE45>
<SF-30-DE60>



●Many variations to construct angles other than 90°

●Exclusive Nut



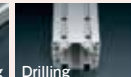
T Nut S
After Nut S
Last-In Lock Nut S
Free Nut S P60~

●Exclusive Cap



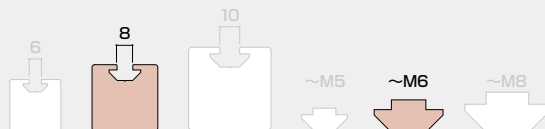
Frame Cap P80,81

●Additional processing and surface treatment are also available.



P208~

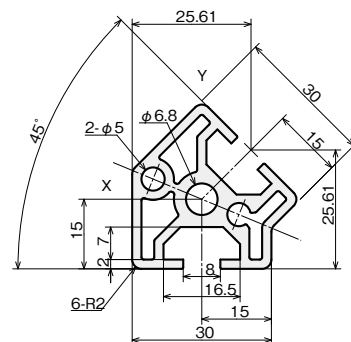
SF30 SERIES



SF-30-DE45



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=3.21 \times 10^4 \text{mm}^4$ $I_y=3.72 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=1.56 \times 10^3 \text{mm}^3$ $Z_y=1.86 \times 10^3 \text{mm}^3$
Unit Mass	1.08kg/m

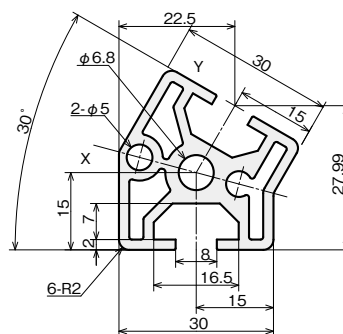


Name	SF-30-DE45 ℓ = 4000	SF-30-DE45 ℓ = 50~4000
Item No.	SFF-J62B	SFF-J64B

SF-30-DE30



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=3.15 \times 10^4 \text{mm}^4$ $I_y=3.86 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=1.58 \times 10^3 \text{mm}^3$ $Z_y=2.00 \times 10^3 \text{mm}^3$
Unit Mass	1.11 kg/m

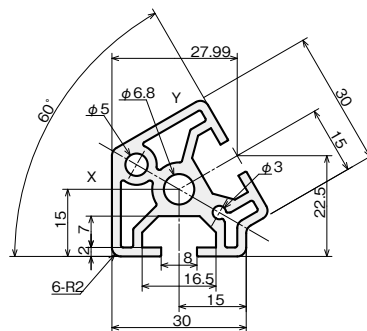


Name	SF-30-DE30 ℓ = 4000	SF-30-DE30 ℓ = 50~4000
Item No.	SFF-J62A	SFF-J64A

SF-30-DE60



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=3.33 \times 10^4 \text{mm}^4$ $I_y=3.70 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=1.67 \times 10^3 \text{mm}^3$ $Z_y=1.89 \times 10^3 \text{mm}^3$
Unit Mass	1.10kg/m



Name	SF-30-DE60 ℓ = 4000	SF-30-DE60 ℓ = 50~4000
Item No.	SFF-J62C	SFF-J64C



SF Frame
Standard (ℓ = 4000) (Cut by customer)
Item No. ℓ = 4030-Effective range of use ℓ = 4000
SFF-J62B



In case of specifying the length (Cut by SUS) ※Order by 0.1mm unit
Quantity (pcs) Item No. Length (mm)
SFF-J64B ℓ = 800

Frame for 30

Nut for 30

Bracket for 30

Adjuster for 30

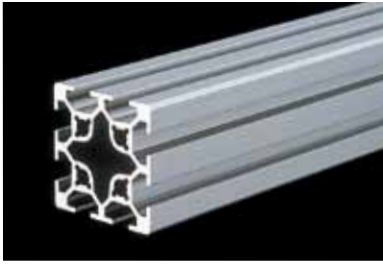
Accessory for 30

Asia

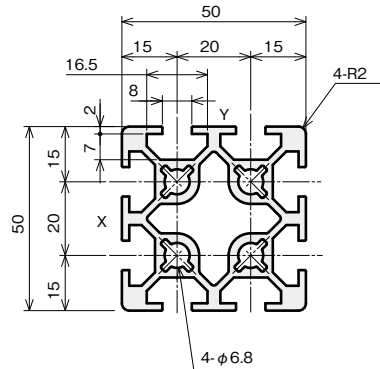
This sign shows the product is designed for Asia region only

SF-50·50·2S

Asia



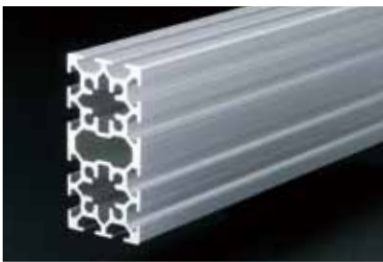
Material/Technical Data
Material Aluminium Alloy
 Alumite Treatment
Environment **RoHS** Compliant
 **Green** Procurement
Geometrical
Moment of Inertia $I_x=21.67 \times 10^4 \text{mm}^4$
 $I_y=21.67 \times 10^4 \text{mm}^4$
Section Modulus $Z_x=8.67 \times 10^3 \text{mm}^3$
 $Z_y=8.67 \times 10^3 \text{mm}^3$
Unit Mass 2.32kg/m



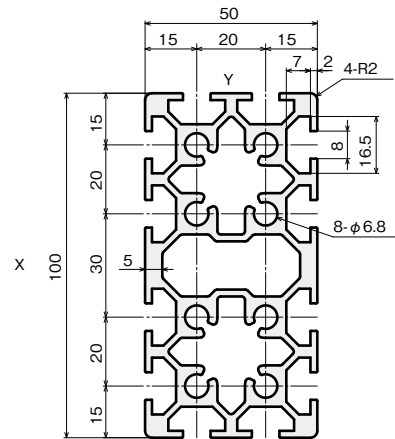
Name	SF-50·50·2S ℓ= 4000	SF-50·50·2S ℓ=50~4000
Item No.	SFF-502-T	SFF-504-T

SF-50·100·2S

Asia

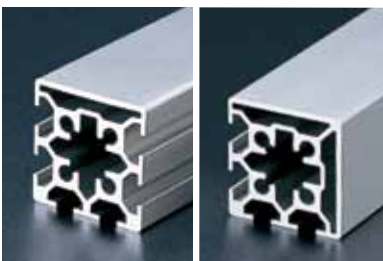


Material/Technical Data
Material Aluminium Alloy
 Alumite Treatment
Environment **RoHS** Compliant
 **Green** Procurement
Geometrical
Moment of Inertia $I_x=153.40 \times 10^4 \text{mm}^4$
 $I_y=42.48 \times 10^4 \text{mm}^4$
Section Modulus $Z_x=30.68 \times 10^3 \text{mm}^3$
 $Z_y=16.99 \times 10^3 \text{mm}^3$
Unit Mass 4.28kg/m

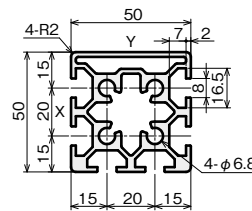


Name	SF-50·100·2S ℓ= 4000	SF-50·100·2S ℓ=50~4000
Item No.	SFF-512-T	SFF-514-T

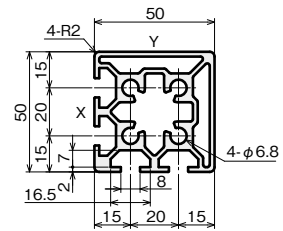
SF-50·50·2S·1F / SF-50·50·2S·2F



Material/Technical Data
Material Aluminium Alloy
 Alumite Treatment
Environment **RoHS** Compliant
 **Green** Procurement
Geometrical
Moment of Inertia $I_x=22.23 \times 10^4 \text{mm}^4$ SF-50·50·2S·1F $I_x=22.26 \times 10^4 \text{mm}^4$ SF-50·50·2S·2F
 $I_y=21.4 \times 10^4 \text{mm}^4$ $I_y=22.26 \times 10^4 \text{mm}^4$
Section Modulus $Z_x=8.87 \times 10^3 \text{mm}^3$ $Z_x=8.77 \times 10^3 \text{mm}^3$
 $Z_y=8.56 \times 10^3 \text{mm}^3$ $Z_y=8.77 \times 10^3 \text{mm}^3$
Unit Mass 2.33kg/m 2.36kg/m



SF-50·50·2S·1F



SF-50·50·2S·2F

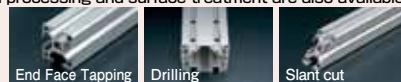
Name	SF-50·50·2S·1F ℓ= 4000	SF-50·50·2S·1F ℓ=50~4000
Item No.	SFF-E52	SFF-E54

Name	SF-50·50·2S·2F ℓ= 4000	SF-50·50·2S·2F ℓ=50~4000
Item No.	SFF-F52	SFF-F54

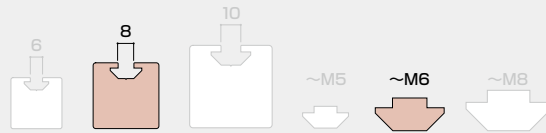
●Exclusive Nut T Nut S
 After Nut S
 Last-In Lock Nut S
 Free Nut S P60~

●Exclusive Cap Frame Cap
 P80.81

●Additional processing and surface treatment are also available.



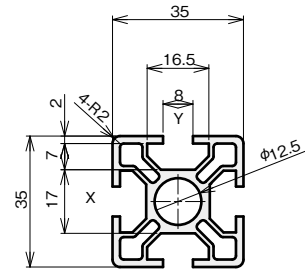
P208~



SF-35·35

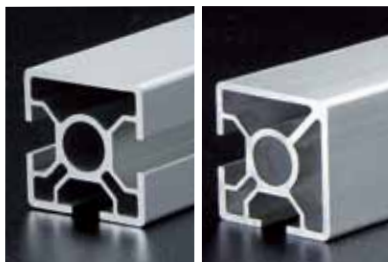


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=5.12 \times 10^4 \text{mm}^4$ $I_y=5.12 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=2.93 \times 10^3 \text{mm}^3$ $Z_y=2.93 \times 10^3 \text{mm}^3$
Unit Mass	1.11 kg/m

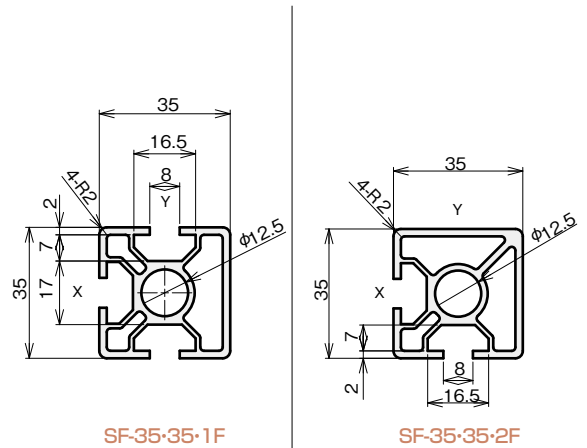


Name	SF-35·35 $\ell=4000$	SF-35·35 $\ell=50\sim4000$
Item No.	SFF-3A2	SFF-3A4

SF-35·35·1F / SF-35·35·2F



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	SF-35·35·1F: $I_x=4.98 \times 10^4 \text{mm}^4$, $I_y=5.17 \times 10^4 \text{mm}^4$ SF-35·35·2F: $I_x=5.37 \times 10^4 \text{mm}^4$, $I_y=5.37 \times 10^4 \text{mm}^4$
Section Modulus	SF-35·35·1F: $Z_x=2.84 \times 10^3 \text{mm}^3$, $Z_y=2.92 \times 10^3 \text{mm}^3$ SF-35·35·2F: $Z_x=2.98 \times 10^3 \text{mm}^3$, $Z_y=2.98 \times 10^3 \text{mm}^3$
Unit Mass	SF-35·35·1F: 1.06 kg/m SF-35·35·2F: 1.09 kg/m

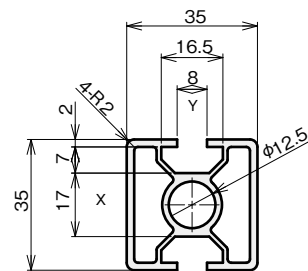


Name	SF-35·35·1F $\ell=4000$	SF-35·35·1F $\ell=50\sim4000$
Item No.	SFF-EA2	SFF-EA4
Name	SF-35·35·2F $\ell=4000$	SF-35·35·2F $\ell=50\sim4000$
Item No.	SFF-FA2	SFF-FA4

SF-35·35·2H



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=4.83 \times 10^4 \text{mm}^4$ $I_y=5.23 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=2.76 \times 10^3 \text{mm}^3$ $Z_y=2.99 \times 10^3 \text{mm}^3$
Unit Mass	1.02 kg/m



Name	SF-35·35·2H $\ell=4000$	SF-35·35·2H $\ell=50\sim4000$
Item No.	SFF-GA2	SFF-GA4



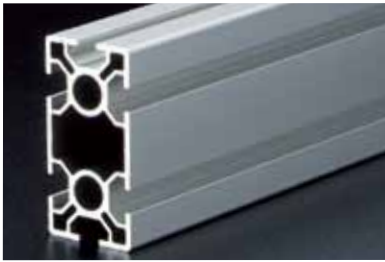
SF Frame
Standard ($\ell=4000$) (Cut by customer)
Item No. $\ell=4030$ -Effective range of use $\ell=4000$
SFF-3A2

Quantity (pcs) SFF-3A4 $\ell=800$

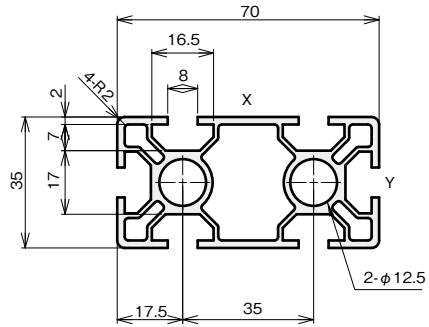
In case of specifying the length (Cut by SUS) *Order by 0.1mm unit
Item No. Length (mm)

Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

SF-35-70

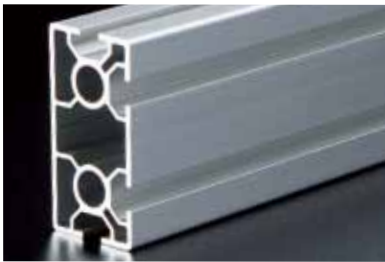


■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Environment **RoHS** Compliant
 Green Procurement
 Geometrical
 Moment of Inertia $I_x=35.09 \times 10^4 \text{mm}^4$
 $I_y=9.04 \times 10^4 \text{mm}^4$
 Section Modulus $Z_x=10.03 \times 10^3 \text{mm}^3$
 $Z_y=5.16 \times 10^3 \text{mm}^3$
 Unit Mass 1.80kg/m

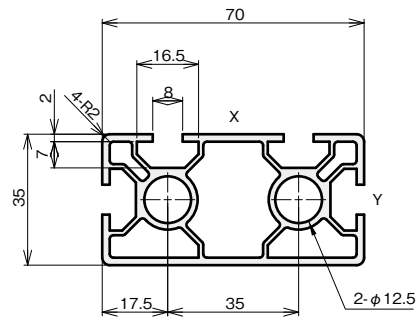


Name	SF-35-70 ℓ= 4000	SF-35-70 ℓ=50~4000
Item No.	SFF-3B2	SFF-3B4

SF-35-70-1F

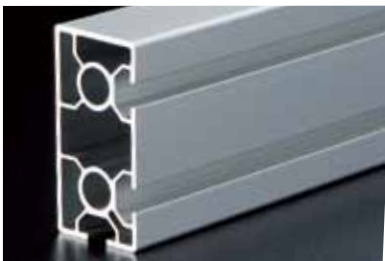


■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Environment **RoHS** Compliant
 Green Procurement
 Geometrical
 Moment of Inertia $I_x=33.94 \times 10^4 \text{mm}^4$
 $I_y=9.47 \times 10^4 \text{mm}^4$
 Section Modulus $Z_x=9.70 \times 10^3 \text{mm}^3$
 $Z_y=5.36 \times 10^3 \text{mm}^3$
 Unit Mass 1.78kg/m

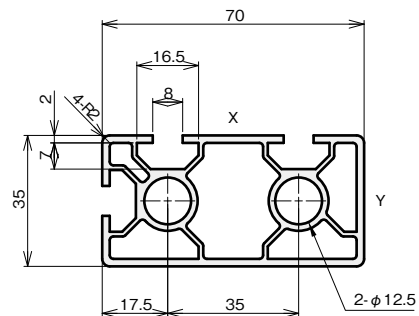


Name	SF-35-70-1F ℓ= 4000	SF-35-70-1F ℓ=50~4000
Item No.	SFF-EB2	SFF-EB4

SF-35-70-2F



■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Environment **RoHS** Compliant
 Green Procurement
 Geometrical
 Moment of Inertia $I_x=34.26 \times 10^4 \text{mm}^4$
 $I_y=9.42 \times 10^4 \text{mm}^4$
 Section Modulus $Z_x=9.79 \times 10^3 \text{mm}^3$
 $Z_y=5.27 \times 10^3 \text{mm}^3$
 Unit Mass 1.77kg/m

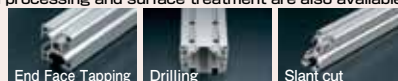


Name	SF-35-70-2F ℓ= 4000	SF-35-70-2F ℓ=50~4000
Item No.	SFF-FB2	SFF-FB4

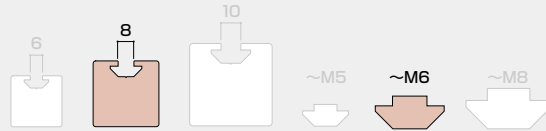
●Exclusive Nut T Nut S
 After Nut S
 Last-In Lock Nut S
 Free Nut S P60~

●Exclusive Cap Frame Cap
 P80, 81

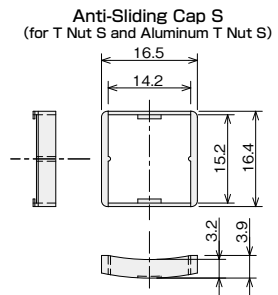
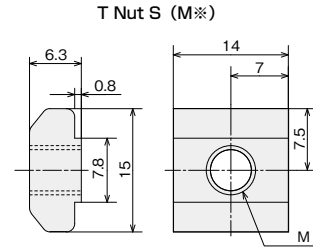
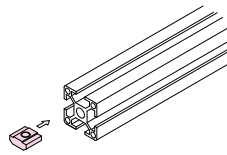
●Additional processing and surface treatment are also available.



P208~



T Nut S (M※) / Anti-Sliding Cap S



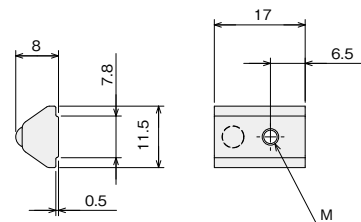
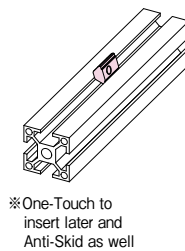
Name	T Nut S(M6) <ST Nut S (M6)>	T Nut S(M5) <ST Nut S (M5)>	T Nut SS(M4) <ST Nut SS (M4)>	T Nut SS(M3) <ST Nut SS (M3)>
Item No.	SFB-002 (SFN-TS6)	SFB-001 (SFN-TS5)	SFB-006 (SFN-TS4)	SFB-005 (SFN-TS3)
Name	Anti-Sliding Cap S (50pcs/pack)			
Item No.	SFA-906			

Usable Frame
Compatible to all SF30 series
(Groove Width 8mm)

Material/Technical Data

T Nut SS	ST Nut SS	Anti-Sliding Cap SS
Material: Equivalent to S10C Uni-Chrome	Material: Stainless With Conductive Function	Material: Black Polyamide
Weight: 8g	Weight: 8g	Weight: 0.2g/piece
Environment: RoHS Compliant	Environment: Green Procurement	

Easy Nut SS (M※)



Name	Easy Nut S (M6)	Easy Nut S (M5)	Easy Nut S (M4)	Easy Nut S (M3)
Item No.	SFB-PN19	SFB-PN18	SFB-PN17	SFB-PN16
Name	S Easy Nut S (M6) Stainless	S Easy Nut S (M5) Stainless	S Easy Nut S (M4) Stainless	S Easy Nut S (M3) Stainless
Item No.	SFN-ES6	SFN-ES5	SFN-ES4	SFN-ES3

Usable Frame
Compatible to all SF30 series
(Groove Width 8mm)

Material/Technical Data

Easy Nut S	S Easy Nut S
Material: Equivalent to S10C Uni-Chrome plating	Material: Stainless With Conductive
Weight: 6g/piece	
Environment: RoHS Compliant	Environment: Green Procurement

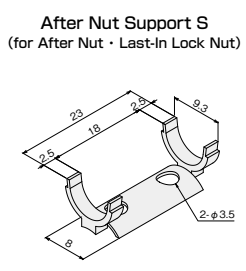
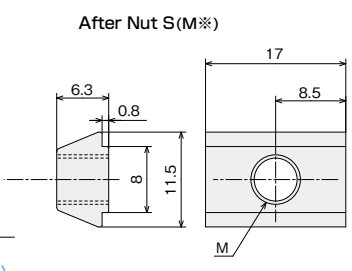
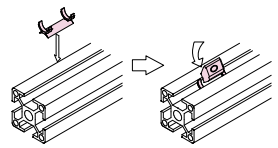


Parts
How to order
Item No.
SFB-002

Quantity (pcs)

Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

After Nut S (M※) / After Nut Support S



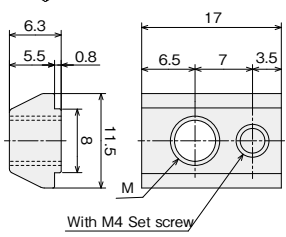
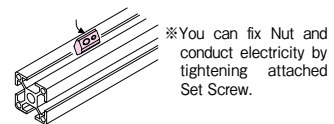
Name	After Nut S(M6) (S After Nut S(M6))	Free Nut S (S After Nut S(M5))	Free Nut S (S After Nut S(M4))	Free Nut S (S After Nut S(M3))
Item No.	SFB-616(SFN-AS6)	SFB-615(SFN-AS5)	SFB-614(SFN-AS4)	SFB-613(SFN-AS3)

Name	After Nut Support S(50pcs/pack)
Item No.	SFA-9A2

■Usable Frame
Compatible to all SF30 series (Groove Width 8mm)

Material/Technical Data		After Nut Support S
After Nut S	S After Nut S	After Nut Support S
Material Equivalent to S10C	Stainless	PP Resin
Uni-Chrome		
Weight 7g	7g	0.2g/piece
Environment	★RoHS Compliant	
	★Green Procurement	

Lock Nut S (M※)

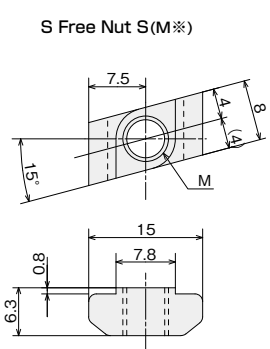
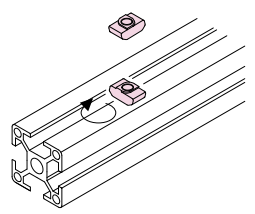
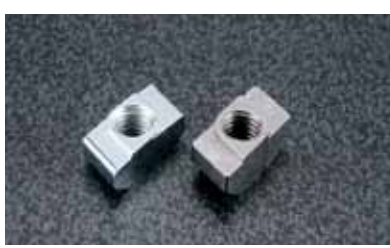


Name	Lock Nut S(M6) (S Lock Nut S(M6))	Lock Nut S(M5) (Lock Nut S(M5))	Lock Nut S(M4) (Lock Nut S(M4))	Lock Nut S(M3) (S Lock Nut S(M3))
Item No.	*SFB-4B6(*SPNLS6)	*SFB-4B5(*SPNLS5)	*SFB-4B4(*SPNLS4)	*SFB-4B3(*SPNLS3)

■Usable Frame
Compatible to all SF30 series (Groove Width 8mm)

Material/Technical Data		S Lock Nut S
Lock Nut S	S Lock Nut S	S Lock Nut S
Material Equivalent to S10C	Stainless	
Uni-Chrome		
Weight 7g	7g	
Environment	★RoHS Compliant	
	★Green Procurement	

S Free Nut S (M※)



Name	※1 S Free Nut S(M6)	S Free Nut S(M5)	S Free Nut S(M4)	S Free Nut S(M3)
Item No.	SFB-S64	SFN-FS5	SFN-FS4	SFN-FS3

■Usable Frame
Compatible to all SF30 series (Groove Width 8mm)

Material/Technical Data		S Free Nut S
S Free Nut S	S Free Nut S	S Free Nut S
Material Stainless	With Conductive Function	
Weight 4g		
Environment	RoHS Compliant	
	Green Procurement	

※1 No conductive type for S Free Nut S (M6)



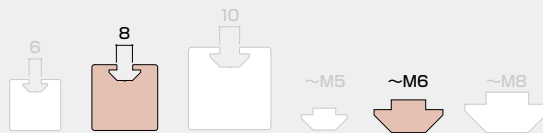
We sell Nut Material and Bracket Material as well.

T Nut S Material P62

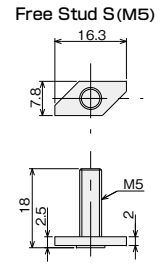
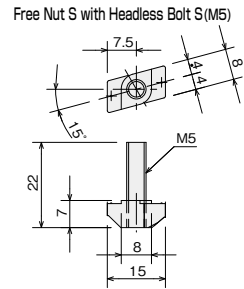
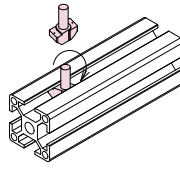
- Hard Bracket S Material
- Angle Bracket S Material



SF30 SERIES



Free Nut S with Headless Bolt S (M5) / Free Stud S (M5) / Free Nut Stopper S



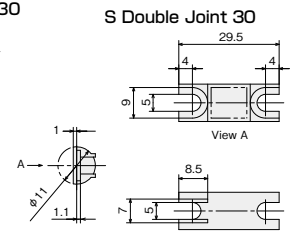
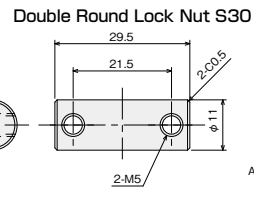
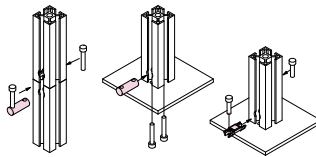
Name	Free Nut S with Headless Bolt S (M5)	Free Stud S (M5)
Item No.	★SFN-NS5	★SFN-NSE1
Name	Free Nut Stopper S	
Item No.	★SFA-9F1	

Usable Frame —
Compatible to all SF30 series
(Groove Width 8mm)

Material/Technical Data		
Free Nut S with Headless Bolt S	Free Stud S	Free Nut Stopper S
Material: Stainless Steel With Conductive Function	SPHC	Polyamide
Weight: 7g	Uni-Chrome Plating	0.3g
Environment: ★RoHS Compliant	4g	
★Green Procurement		

* Tightening Torque is below 1.2N·m for Free Stud S. (Use Knurling Nut)

Double Round Lock Nut S30/S Double Joint 30

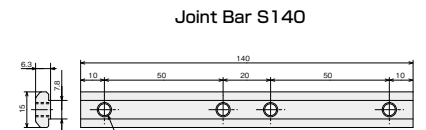
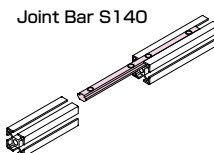


Name	Double Round Lock Nut S30	S Double Joint 30
Item No.	SFJ-250S	SFK-391S

Usable Frame —
SF-30-30, SF-30-60
SF-30-90, SF-30-120

Material/Technical Data	
Double Round Lock Nut S30	S Double Joint 30
Material: Stainless	Stainless
Weight: 19g	34g
Environment: ★RoHS Compliant	
★Green Procurement	

Joint Bar S140 / T Nut S Material / After Nut S Material



Joint Bar S140 Kit Contents

- Joint Bar S140×1
- Set Screw (M6×8)×4

T Nut S Material
(T Nut S Material)

After Nut S Material
(After Nut S Material)

Name (Single Item)	Joint Bar S140	Name (with Set Screw)	Joint Bar S140 Kit
Item No.	★SFJ-606	Item No.	★SFK-606
Name	T Nut S Material $\ell=(2800)$ (ST Nut S Material $\ell=(2800)$)	T Nut S Material $\ell=450$ (S Nut S Material $\ell=(450)$)	
Item No.	★SFX-100 (★SFX-002)	★SFX-120 (★SFX-000)	
Name	After Nut S Material $\ell=(2800)$ (S After Nut S Material $\ell=(2800)$)	After Nut S Material $\ell=450$ (S After Nut S Material $\ell=(450)$)	
Item No.	★SFX-103 (★SFX-007)	★SFX-123 (★SFX-007)	

* Note : T Nut material will be delivered without plating.

Usable Frame —
Compatible to all SF30 series
(Groove Width 8mm)

Material/Technical Data		
Joint Bar S140	T Nut S material	ST Nut S material
Material Equivalent to S10C	After Nut S material	S After Nut S material
Uni-Chrome Plating	Not plating	Stainless
Weight 86g	653g/m (T Nut S)	668g/m (ST Nut S)
	483g/m (After Nut S)	494g/m (S After Nut S)
Environment: ★RoHS Compliant		
★Green Procurement		



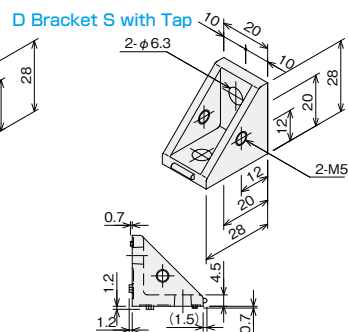
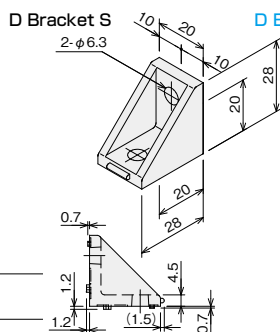
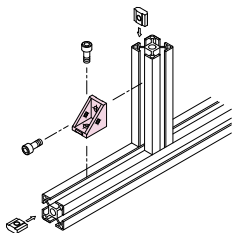
Parts
How to order
Item No.
SFN-NS5

Quantity (pcs)

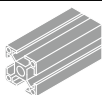


Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

D Bracket S



Name (Single Item)	D Bracket S (D Bracket S with Tap)		D Bracket S-CN (D Bracket S-CN with Tap)
Item No.	SFJ-018 (SFJ-019)		SFJ-018N (SFJ-019N)
Name (Bolt and Nut Kit)	D Bracket S Kit (D Bracket S Kit with Tap)	D Bracket S (Stainless) Kit (D Bracket S with Tap (Stainless) Kit)	D Bracket S-CN Kit (D Bracket S-CN Kit with Tap)
Item No.	SFK-018 (SFK-019)	SFK-018S (SFK-019S)	SFK-018N (SFK-019N)



Usable Frame
Compatible to all SF30 series
(Groove Width 8mm)



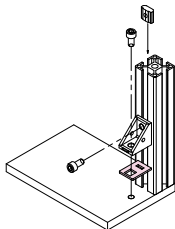
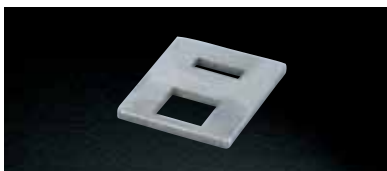
Kit Contents

- D Bracket S (or with Tap) × 1
- Hexagon Socket Bolt (M6×12) × 2
- T nut S (M6) × 2
- ※ Bolt and Nut in CN- (Stainless) Kit are stainless.

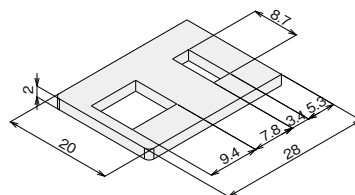
Material/Technical Data

Material Aluminum Die-Cast (ADC12)
(CN/Electroless Nickel Plating)
With Anti-Skid Function
Weight 13g
Environment **RoHS** Compliant
Green Procurement

D Bracket Spacer S



● Setting to bottom of D Bracket enables to fix on a flat base.



Name (Single Item)	D Bracket Spacer S
Item No.	SFJ-401S

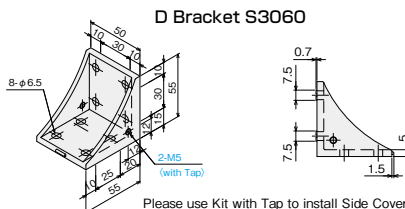
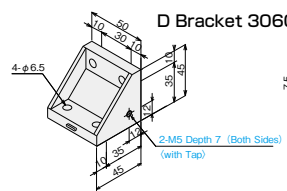
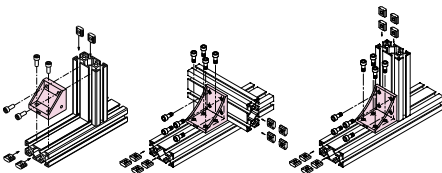
Usable Frame

Compatible to all SF30 series
(Groove Width 8mm)

Material/Technical Data

Material Stainless
Weight 8g
Environment **RoHS** Compliant
Green Procurement

D Bracket 3060 / D Bracket S3060



Please use Kit with Tap to install Side Cover. (P74)

Name (Single Item)	D Bracket 3060 (D Bracket 3060 with Tap)		D Bracket S3060 (D Bracket S 3060 with Tap)	
Item No.	SFJ-021 (SFJ-021T)		SFJ-A13 (SFJ-A13T)	
Name (Bolt and Nut Kit)	3060 Kit (3060 Kit with Tap)	3060 (Stainless) Kit (3060 with Tap (Stainless) Kit)	S3060 Kit (S3060 Kit with Tap)	S3060 (Stainless) Kit (S3060 with Tap (Stainless) Kit)
Item No.	SFK-021 (SFK-021T)	SFK-021S (SFK-021P)	SFK-A13 (SFK-A13T)	SFK-A13S (SFK-A13P)
Name (Single Item)	D Bracket 3060-CN (D Bracket 3060-CN with Tap)			
Item No.	SFJ-021N (SFJ-021C)			
Name (Bolt and Nut Kit)	D Bracket 3060-CN Kit (D Bracket 3060-CN Kit with Tap)			
Item No.	SFK-021N (SFK-021C)			

Usable Frame

SF-30-60 / 1F
SF-60-60: 2S / 1F / 2F
SF-60-90 / 60-120

Kit Contents

- D Bracket 3060 Kit**
- D Bracket 3060 (or with Tap) × 1
 - Hexagon Socket Bolt (M6×15) × 4
 - T Nut S (M6) × 4
- D Bracket S3060 Kit**
- D Bracket S3060 (or with Tap) × 1
 - Hexagon Socket Bolt (M6×12) × 8
 - T Nut S (M6) × 8
 - ※ Bolt and Nut in CN- (Stainless) Kit are stainless.

Material/Technical Data

D Bracket 3060 D Bracket S3060
Material Aluminum Die-Cast (ADC12)
(CN/Electroless Nickel Plating)
Weight With Anti-Skid Function
100g 65g
Environment **RoHS** Compliant
Green Procurement



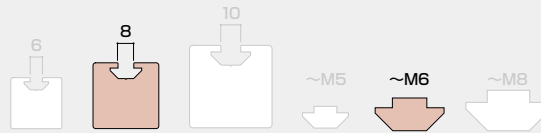
We sell Nut Material and Bracket Material as well.

T Nut S Material
P62

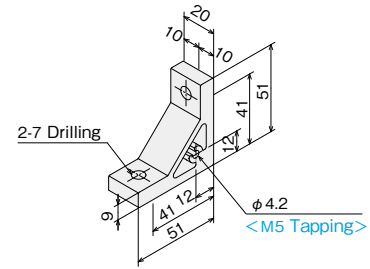
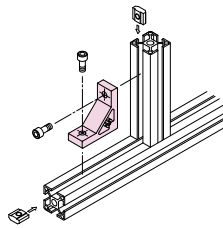
● Hard Bracket S Material
● Angle Bracket S Material



SF30 SERIES

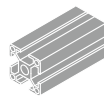


Hard Bracket S



Please use Kit with Tap to install Side Cover. (Refer P82 for details.)

Name(Single Item)	Hard Bracket S (Hard Bracket S with Tap)	
Item No.	SFJ-N03 (SFJ-N03T)	
Name(Bolt and Nut Kit)	Hard Bracket S Kit (Hard Bracket S Kit with Tap)	Hard Bracket S(Stainless)Kit (Hard Bracket S (Stainless) Kit with Tap)
Item No.	SFK-N03 (SFK-N03T)	SFK-N03S (SFK-N03P)



Usable Frame
Compatible to all SF30 series
(Groove Width 8mm)

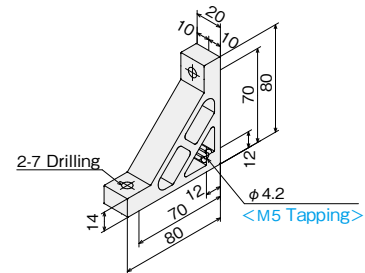
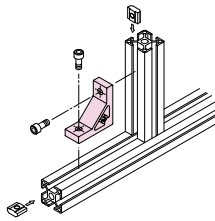
- Kit Contents**
- Hard Bracket S (or with Tap) × 1
 - Hexagon Socket Bolt (M6×15) × 2
 - T Nut S (M6) × 2
 - ※ Bolt and Nut in (Stainless)
 - Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
44g

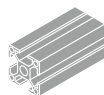
Weight **RoHS** Compliant
Environment **Green** Procurement

Hard Bracket SG



Please use Kit with Tap to install Side Cover. (Refer P82 for details.)

Name(Single Item)	Hard Bracket SG (Hard Bracket SG with Tap)	
Item No.	SFJ-N26 (SFJ-N26T)	
Name(Bolt and Nut Kit)	Hard Bracket SG Kit (Hard Bracket SG Kit with Tap)	Hard Bracket SG(Stainless)Kit (Hard Bracket SG(Stainless)Kit with Tap)
Item No.	SFK-N26 (SFK-N26T)	SFK-N26S (SFK-N26P)



Usable Frame
Compatible to all SF30 series
(Groove Width 8mm)

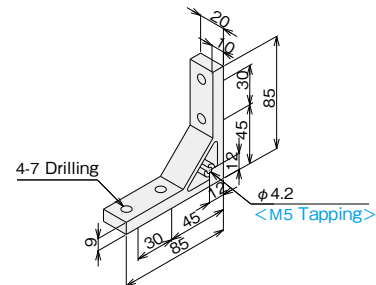
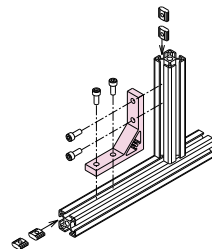
- Kit Contents**
- Hard Bracket SG (or with Tap) × 1
 - Hexagon Socket Bolt (M6×22) × 2
 - T Nut S (M6) × 2
 - ※ Bolt and Nut in (Stainless)
 - Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
101g

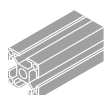
Weight **RoHS** Compliant
Environment **Green** Procurement

Hard Bracket SW3030



Please use Kit with Tap to install Side Cover. (Refer P82 for details.)

Name(Single Item)	Hard Bracket SW3030 (Hard Bracket SW3030 with Tap)	
Item No.	SFJ-N11 (SFJ-N11T)	
Name(Bolt and Nut Kit)	Hard Bracket SW3030 Kit (Hard Bracket SW3030 Kit with Tap)	Hard Bracket SW3030(Stainless)Kit (Hard Bracket SW3030(Stainless)Kit with Tap)
Item No.	SFK-N11 (SFK-N11T)	SFK-N11S (SFK-N11P)



Usable Frame
Compatible to all SF30 series
(Groove Width 8mm)

- Kit Contents**
- Hard Bracket SW3030 (or with Tap) × 1
 - Hexagon Socket Bolt (M6×15) × 4
 - T Nut S (M6) × 4
 - ※ Bolt and Nut in (Stainless)
 - Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Weight 76g
Environment **RoHS** Compliant
Green Procurement



Parts
How to order
Item No.
SFJ-N03

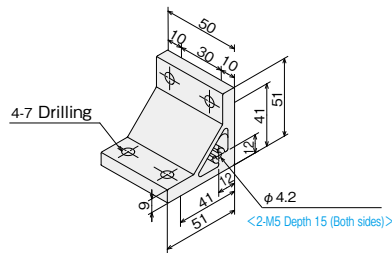
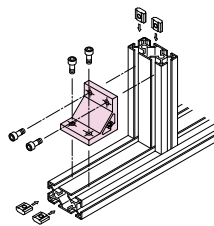
Quantity (pcs)
□□

● Cap for Bracket
P81



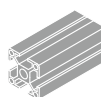
Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

Hard Bracket S3060



Please use Kit with Tap to install Side Cover. (Refer P82 for details.)

Name(Single Item)	Hard Bracket S3060 (Hard Bracket S3060 with Tap)	
Item No.	SFJ-N04(SFJ-N04T)	
Name(Bolt and Nut Kit)	Hard Bracket S3060 Kit (Hard Bracket S3060 Kit with Tap)	Hard Bracket S3060(Stainless)Kit (Hard Bracket S3060 (Stainless) Kit with Tap)
Item No.	SFK-N04(SFK-N04T)	SFK-N04S(SFK-N04P)



Usable Frame
SF-30-60/1F
SF-60-60-2S/1F/2F
SF-60-90/60-120

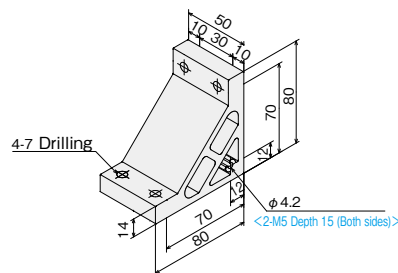
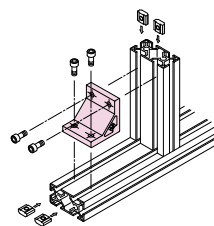
Kit Contents

- Hard Bracket S3060 (or with Tap) ×1
- Hexagon Socket Bolt (M6×15) ×4
- T Nut S (M6) ×4
- ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

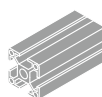
Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
Weight 111g
Environment RoHS Compliant
Green Procurement

Hard Bracket SG3060



Please use Kit with Tap to install Side Cover. (Refer P82 for details.)

Name(Single Item)	Hard Bracket SG3060 (Hard Bracket SG3060 with Tap)	
Item No.	SFJ-N27(SFJ-N27T)	
Name(Bolt and Nut Kit)	Hard Bracket SG3060 Kit (Hard Bracket SG3060 Kit with Tap)	Hard Bracket SG3060(Stainless)Kit (Hard Bracket SG3060 (Stainless) Kit with Tap)
Item No.	SFK-N27(SFK-N27T)	SFK-N27S(SFK-N27P)



Usable Frame
SF-30-60/1F
SF-60-60-2S/1F/2F
SF-60-90/60-120

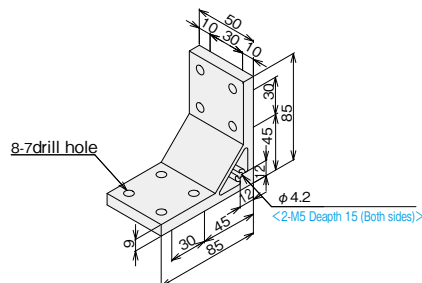
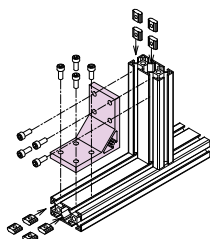
Kit Contents

- Hard Bracket SG3060 (or with Tap) ×1
- Hexagon Socket Bolt (M6×22) ×4
- T Nut S (M6) ×4
- ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

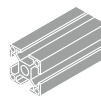
Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
Weight 256g
Environment RoHS Compliant
Green Procurement

Hard Bracket SW3060



Please use Kit with Tap to install Side Cover. (Refer P82 for details.)

Name(Single Item)	Hard Bracket SW3060 (Hard Bracket SW3060 with Tap)	
Item No.	SFJ-N12(SFJ-N12T)	
Name(Bolt and Nut Kit)	Hard Bracket SW3060 Kit (Hard Bracket SW3060 Kit with Tap)	Hard Bracket SW3060(Stainless)Kit (Hard Bracket SW3060 (Stainless) Kit with Tap)
Item No.	SFK-N12(SFK-N12T)	SFK-N12S(SFK-N12P)



Usable Frame
SF-30-60/1F
SF-60-60-2S/1F/2F
SF-60-90/60-120

Kit Contents

- Hard Bracket SW3060 (or with Tap) ×1
- Hexagon Socket Bolt (M6×15) ×8
- T Nut S (M6) ×8
- ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Weight 192g
Environment RoHS Compliant
Green Procurement



We sell Nut Material and Bracket Material as well.

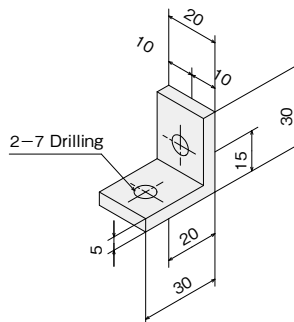
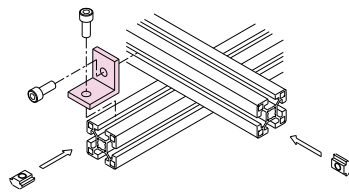
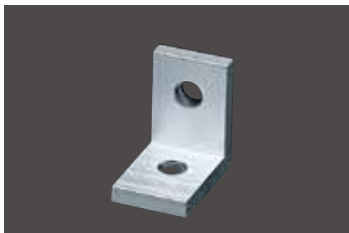
T Nut S Material
P62

● Hard Bracket S Material
● Angle Bracket S Material

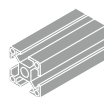


Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

Angle Bracket S



Name(Single Item)	Angle Bracket S
Item No.	★SFJ-A03
Name(Bolt and Nut Kit)	Angle Bracket S Kit (Angle Bracket S(Stainless) Kit)
Item No.	★SFK-A03 ★SFK-A03S



■ Usable Frame
Compatible to all SF30 series
(Groove Width 8mm)

- Kit Contents
- Angle Bracket Hard S x1
 - Hexagon Socket Bolt (M6x12) x2
 - T Nut S (M6) x2
- ※ Bolt and Nut in (Stainless) Kit are stainless.

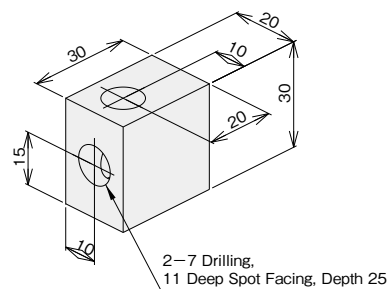
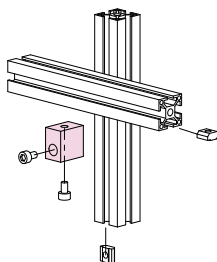
■ Material/Technical Data

Material Aluminium Alloy
Alumite Treatment

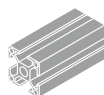
Weight 14g

Environment ★RoHS Compliant
★Green Procurement

Angle Bracket Hard S



Name(Single Item)	Angle Bracket Hard S
Item No.	SFJ-A15
Name(Bolt and Nut Kit)	Angle Bracket Hard S Kit (Angle Bracket Hard S(Stainless) Kit)
Item No.	SFK-A15 (SFK-A15S)



■ Usable Frame
Compatible to all SF30 series
(Groove Width 8mm)

- Kit Contents
- Angle Bracket Hard S x1
 - Hexagon Socket Bolt (M6x12) x2
 - T Nut S (M6) x2
- ※ Bolt and Nut in (Stainless) Kit are stainless.

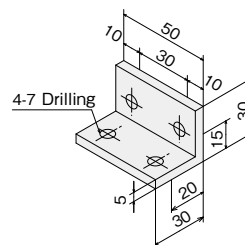
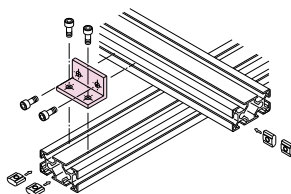
■ Material/Technical Data

Material Aluminium Alloy
Alumite Treatment

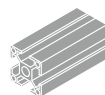
Weight 37g

Environment RoHS Compliant
Green Procurement

Angle Bracket S3060



Name(Single Item)	Angle Bracket S3060
Item No.	★SFJ-A04
Name(Bolt and Nut Kit)	Angle Bracket S3060 Kit (Angle Bracket S3060(Stainless) Kit)
Item No.	★SFK-A04 ★SFK-A04S



■ Usable Frame
Compatible to all SF30 series
(Groove Width 8mm)
※ Doesn't meet with SF-35-35
(include 1F/2F/2H/SF-35-70/include 1F/2F).

- Kit Contents
- Angle Bracket S3060 x1
 - Hexagon Socket Bolt (M6x12) x4
 - T Nut S (M6) x4
- ※ Bolt and Nut in (Stainless) Kit are stainless.

■ Material/Technical Data

Material Aluminium Alloy
Alumite Treatment

Weight 35g

Environment ★RoHS Compliant
★Green Procurement



We sell Nut Material and Bracket Material as well.

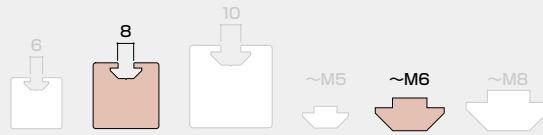
T Nut S Material
P62

● Hard Bracket S Material
● Angle Bracket S Material

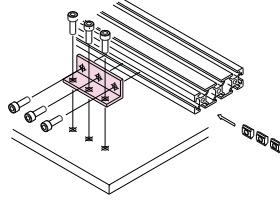


Material Frame

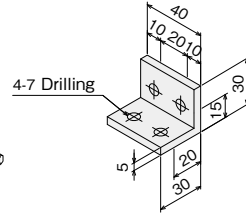
SF30 SERIES



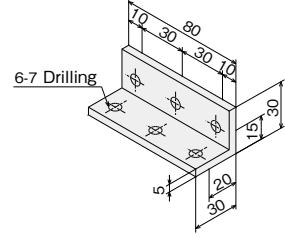
Angle Bracket S50 / S3090



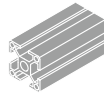
Angle Bracket S50



Angle Bracket S3090



Name(Single Item)	Angle Bracket S50	Angle Bracket S3090
Item No.	SFJ-A11	SFJ-A10
Name(Bolt and Nut Kit)	Angle Bracket S50 Kit (Angle Bracket S50(Stainless) Kit)	Angle Bracket S3090 Kit (Angle Bracket S3090(Stainless) Kit)
Item No.	SFK-A11(SFK-A11S)	SFK-A10(SFK-A10S)



Usable Frame
Compatible to all SF30 series (Groove Width 8mm)
※Doesn't meet with SF-35-35 (include 1F/2F/ZH) SF-35-70 (include 1F/2F).

Kit Contents

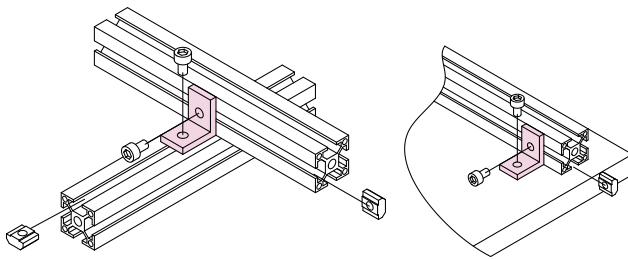
- Angle Bracket S50 Kit
- Angle Bracket S50×1
- Hexagon Socket Bolt (M6×12)×4
- T Nut S (M6)×4
- Angle Bracket S3090 Kit
- Angle Bracket S3090×1
- Hexagon Socket Bolt (M6×12)×6
- T Nut S (M6)×6
- ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Weight 29g (S50)
60g (S3090)
Environment **RoHS** Compliant
Green Procurement

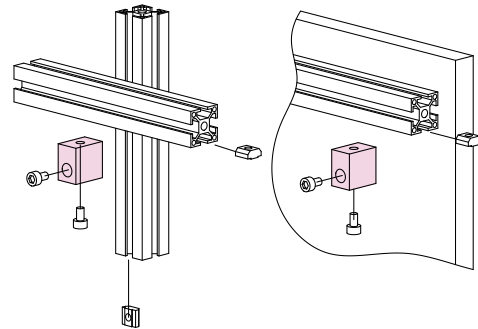
How to use Angle Bracket · Angle Bracket Hard · Offset Angle S3060

Angle Bracket



● For cross joint of frames and base fixing

Angle Bracket Hard



● For the point which is applied vertical load



Parts
How to order
Item No.
SFJ-A11

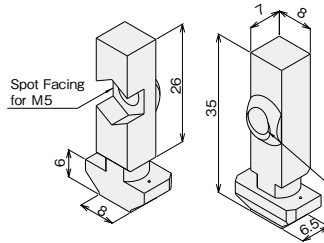
Quantity (pcs)



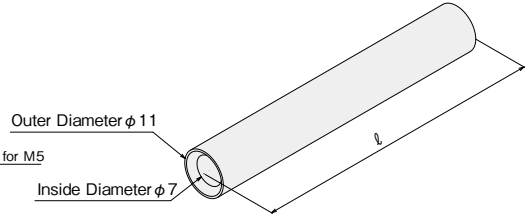
QC Joint S



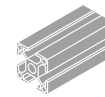
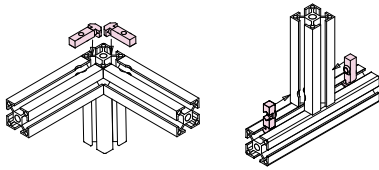
QC Joint S(Common Parts)



Round Metal Tool S



	S Kit	S50 Kit	S60 Kit	S90 Kit	S100 Kit	S120 Kit
L	12	32	42	72	82	102



Usable Frame
Compatible to all SF30 series (Groove Width 8mm)
*Doesn't meet with SF-35-35 (include 1F/2F/2H/SF-35-70(include 1F/2F)).

Name	QC Joint S Kit	QC Joint S50 Kit	QC Joint S60 Kit	QC Joint S90 Kit	QC Joint S100 Kit	QC Joint S120 Kit
Item No.	SFK-Q30	SFK-Q31	SFK-Q32	SFK-Q33	SFK-Q34	SFK-Q35

Kit contents	Kit Name	QC Joint	Round metal tool	Bolt
	QC Joint S Kit	QC Joint Sx1Set	Round metal tool S30x1	Hexagon Socket Bolt (M5x22) Stainlessx1
	QC Joint S50 Kit		Round metal tool S50x1	Hexagon Socket Bolt (M5x45) Stainlessx1
	QC Joint S60 Kit		Round metal tool S60x1	Hexagon Socket Bolt (M5x55) Stainlessx1
	QC Joint S90 Kit		Round metal tool S90x1	Hexagon Socket Bolt (M5x85) Stainlessx1
	QC Joint S100 Kit		Round metal tool S100x1	Hexagon Socket Bolt (M5x90) Stainlessx1
	QC Joint S120 Kit		Round metal tool S120x1	Hexagon Socket Bolt (M5x115)Stainlessx1

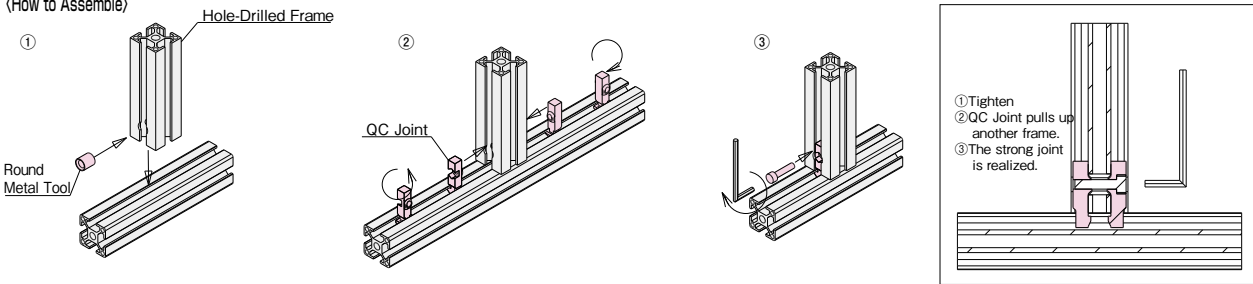
Material/Technical Data

	QC Joint S	Round metal tool S
Material	Stainless	Stainless
	With conductive function	
Weight	S Kit 45g S50 Kit 58g S60 Kit 63g S90 Kit 82g S100 Kit 87g S120 Kit 100g	
Environment	RoHS Compliant	Green Procurement

QC Joint S

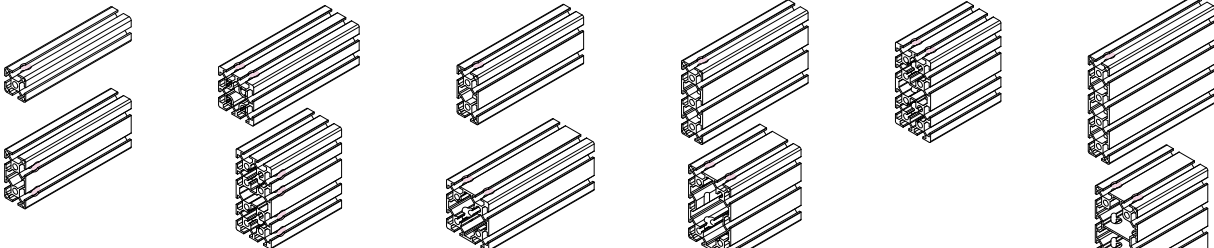
(Characteristics) It's easy to set vertically and hardly make gap, because 2 frames are pulled at each other to combine. Also, you don't have to let nuts into frame in advance, and strong fixing is possible by one bolt, so the assembly man-hour is reduced.

(How to Assemble)



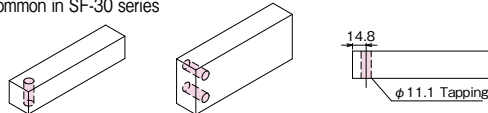
(Example of Kit Selection)

- QC Joint S Kit (For drilled hole to the direction of 30mm)
- QC Joint S50 Kit (For drilled hole to the direction of 50mm)
- QC Joint S60 Kit (For drilled hole to the direction of 60mm)
- QC Joint S90 Kit (For drilled hole to the direction of 90mm)
- QC Joint S100 Kit (For drilled hole to the direction of 100mm)
- QC Joint S120 Kit (For drilled hole to the direction of 120mm)



(Drilling)

Common in SF-30 series



GO ●Drillid by SUS Processing Symbol P212~



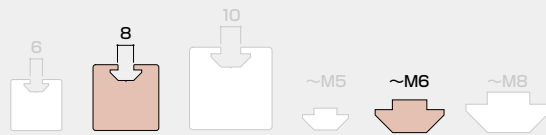
We sell Nut Material and Bracket Material as well.

T Nut S Material P62

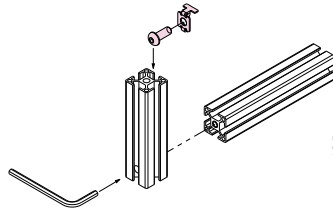
● Hard Bracket S Material
● Angle Bracket S Material



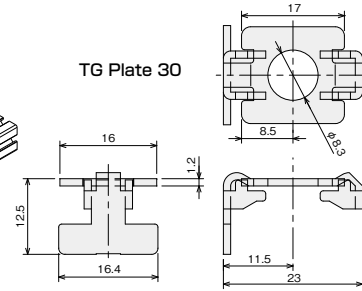
SF30 SERIES



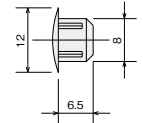
TG Joint Kit 30 / Wrench Hole Cap



TG Plate 30



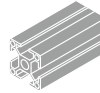
Wrench Hole Cap



*Hole Cover for Flat Type Frame (For 1F,2F,2H,3F)

Name	TG Joint Kit 30
Item No.	*SFK-206

Name	Wrench Hole Cap
Item No.	*SFA-155



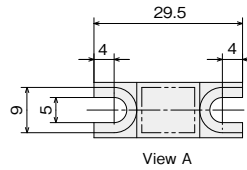
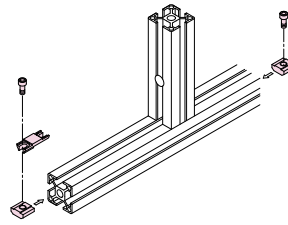
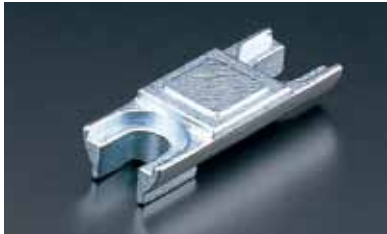
Usable Frame
 SF-30-30/1F/2F/2H/3F
 SF-30-60/1F/2H
 SF-30-90
 SF-60-60-2S/1F/2F

Kit Contents
 ● TG Plate30×1
 ● Hexagon Socket Button Bolt (M8×20)×1

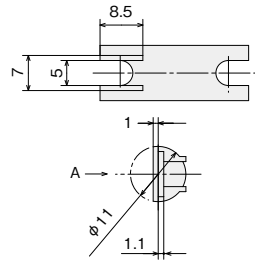
Material/Technical Data

TG Joint kit 30	Wrench Hole Cap
Material SPCC(TG Plate 30)	Polypropylene (Grey)
Uni-Chrome Plating	
Weight 13g	0.2g
Environment RoHS Compliant	
Green Procurement	

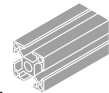
S Double Joint Kit



View A



Usable Frame



Compatible to all SF30 series (Groove Width 8mm)
 * Doesn't meet with SF-30-30-2F/SF-60-60-2S(or 1F/2F)/SF-60-90/SF-60-120. Doesn't meet with SF-35-35(include 1F/2F/2H)/SF-35-70(include 1F/2F).

Kit Contents
 ● S Double Joint S×1
 ● T Nut S(M5)×2
 ● Hexagon Socket Bolt (M5×22)Stainless×2

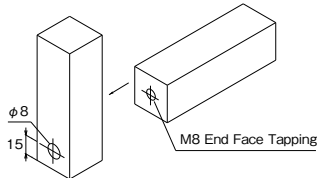
Material/Technical Data

Material Stainless
Weight 34g
Environment RoHS Compliant
Green Procurement

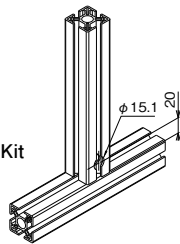
Name	S Double Joint Kit 30
Item No.	SFK-301S

TG Joint · Double Joint · KF Joint

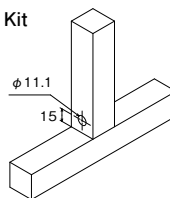
●TG Joint Kit



●KF Joint Kit



●S Double Joint Kit



TG, Double Joint, KF Joint are easy to set vertically and hardly make gap, because 2 frames are pulled each other.

Also, it looks clear because the joint part doesn't bulge outside.

●How to assemble. Refer P198~

●Drillid by SUS Processing Symbol P212~



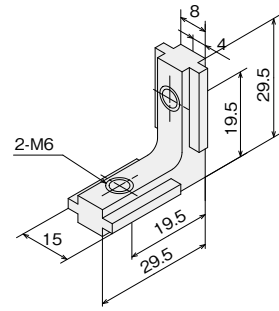
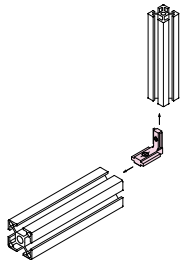
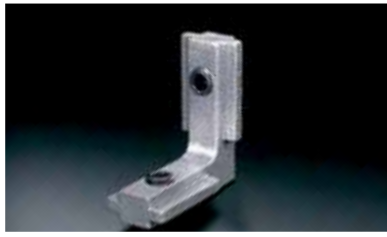
Parts
 How to order
 Item No.
SFK-206

Quantity (pcs)



Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

S Blind Bracket S

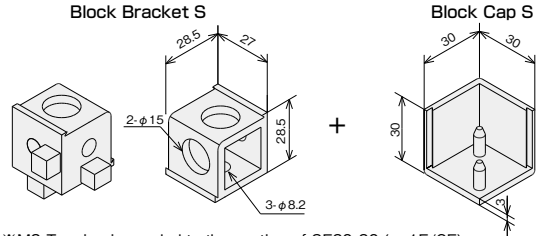


Name	S Blind Bracket S
Item No.	SFK-601S

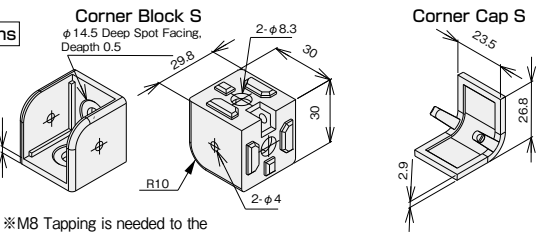
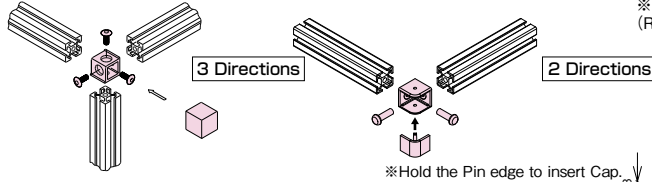
Usable Frame
Compatible to all SF30 series (Groove Width 8mm)

Material/Technical Data
Material: Stainless
Weight: 26g
Environment: RoHS Compliant
Green Procurement
2 Set Screws M6x8 Stainless Included.

Block Bracket S Kit / Corner Block S Kit



*M8 Tapping is needed to the section of SF30-30 (or 1F/2F). (Refer P209~ for details.)



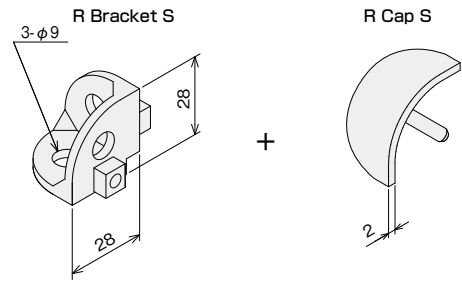
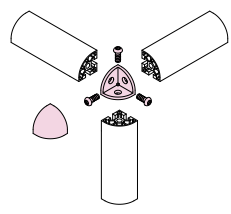
*M8 Tapping is needed to the section of SF30-30 (or 1F/2F). (Refer P209~ for details.)
*Corner block S Kit is installable by Tapping Bolt as well.

Name	(Black) Block Bracket S Kit	(Light Gray) Block Bracket S Kit
Item No.	SFK-Q12	SFK-Q12G
Name	(Black) Corner Block S Kit	(Light Gray) Corner Block S Kit
Item No.	SFK-Q62	SFK-Q62G

Usable Frame
(Block Bracket S Kit) SF-30-30 (Include 1F/2F)
(Corner Block S Kit) SF-30-30 (1F/2F/3F/2H)

Material/Technical Data
Block Bracket S Kit^{#1}: Zinc Die-Cast (Block Bracket S), Polyamide (Block Cap S), Weight: 69g (Block Bracket S), 8g (Block Cap S), Environment: RoHS Compliant.
Corner Block S Kit^{#2}: Stainless (Corner Block S), Polyamide (Corner Cap S), Weight: 71g (Corner Block S), 3.2g (Corner Cap S), Environment: RoHS Compliant.
*#1 3 Hexagon Socket Button Bolt M8x25 Included.
*#2 2 Hexagon Socket Button Bolt M8x25 Included.

R Bracket S Kit



*M8 Tapping is needed to the section of SF30-30-R. (Refer P209~ for details.)

Name	(Black) R Bracket S Kit	(Light Gray) R Bracket S Kit
Item No.	SFK-R02	SFK-R02G

Usable Frame
SF-30-30-R

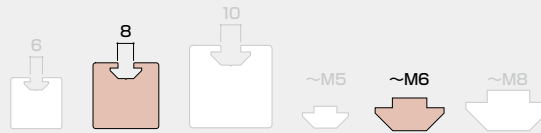
Material/Technical Data
R Bracket S Kit*: Stainless (R Bracket S), Polyamide (R Cap S), Weight: 47g (R Bracket S), 6g (R Cap S), Environment: RoHS Compliant.
*#3 Hexagon Socket Button Bolt M8x25 Included.

We sell Nut Material and Bracket Material as well.

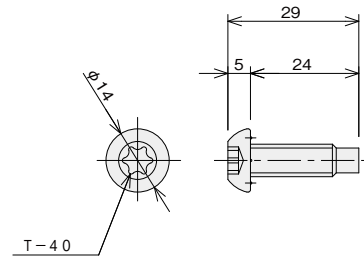
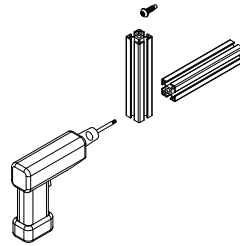
T Nut S Material P62

● Hard Bracket S Material
● Angle Bracket S Material



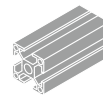


Tapping Bolt S



Name	Tapping Bolt S
Item No.	SFB-T30

Usable Frame

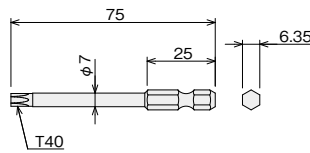


SF-30-30(1F/2F/3F/2H)
SF-30-60(1F)
SF-30-90/30-120
SF-60-60-2S(1F/2F)

Material/Technical Data

Material SWCH 18A
Uni-Chrome Plating
Weight 9g
Environment **RoHS** Compliant
Green Procurement

Torque Bit T40 / Torque Driver T40



Weight 20g

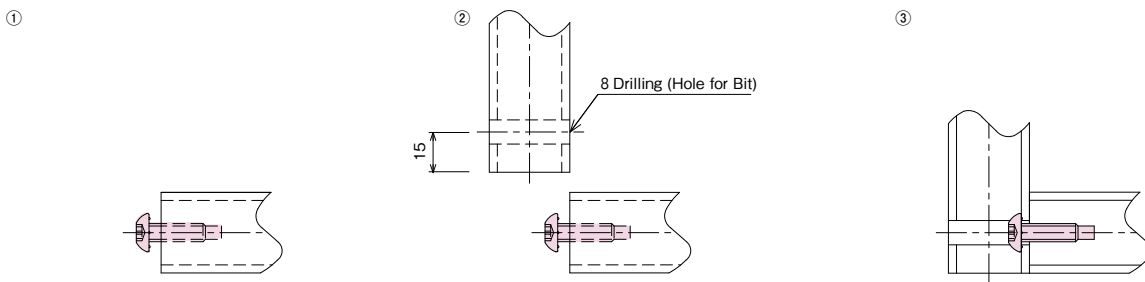


Weight 126g

Name	Torque Bit T40
Item No.	SFA-JT40

Name	Torque Driver T40
Item No.	SFA-T40H

How to fix Tapping Bolt



Fix the frame with jig etc, and screw the Tapping Bolt halfway into the end face. (Temporary joint)
* In case it's too tight, please use cutting oil.

Put the bolt head through T slot of another frame.

Tighten by Manual tool to fix.
※Manual tool is recommended, because the reaction of torque up is big by using electric drill.

●Drillid by SUS
Processing Symbol P212~



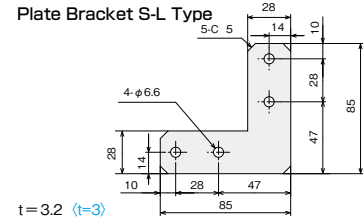
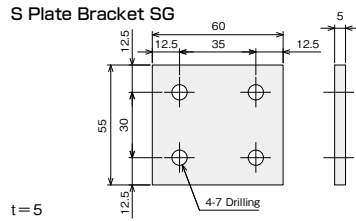
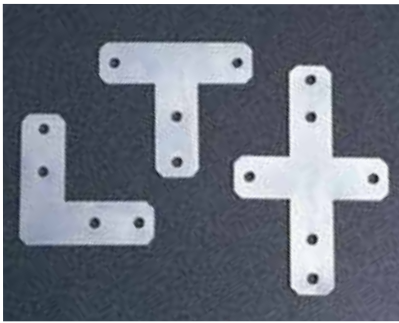
Parts
How to order
Item No.
SFB-T30

Quantity (pcs)



Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

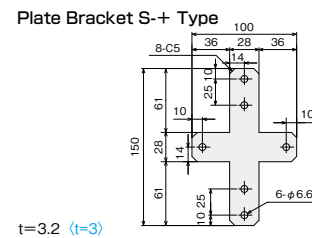
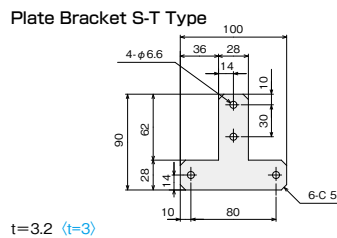
Plate Bracket S



Name	S Plate Bracket SG	S Plate Bracket SG Kit	Plate Bracket S-L Type (S Plate Bracket S-L Type)	Plate Bracket S-L Type Kit (S Plate Bracket S-L Type Kit)
Item No.	SFJ-122S	SFK-122S	SFJ-104(SFJ-104S)	SFK-104(SFK-104S)

- Kit contents**
- Plate Bracket SG×1
 - Hexagon Socket Bolt(M6×12)Stainless×4
 - ST Nut S(M6)×4

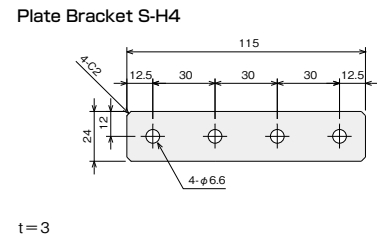
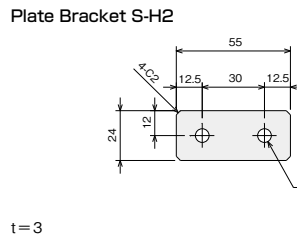
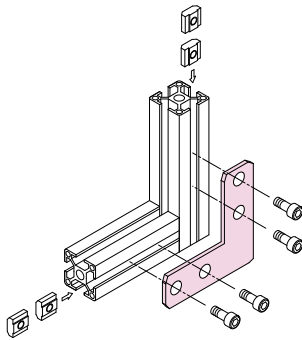
- Kit contents**
- Plate Bracket S-L×1
 - Hexagon Socket Bolt(M6×10)×4
 - T Nut S(M6)×4
 - S Plate Bracket S-L×1
 - Hexagon Socket Bolt(M6×10)Stainless×4
 - ST Nut S(M6)×4



Name	Plate Bracket S-T Type (S Plate Bracket S-T Type)	Plate Bracket S-T Type Kit (S Plate Bracket S-T Type Kit)	Plate Bracket S+ Type (S Plate Bracket + Type)	Plate Bracket S+ Type Kit (S Plate Bracket + Type Kit)
Item No.	SFJ-103(SFJ-103S)	SFK-103(SFK-103S)	SFJ-105(SFJ-105S)	SFK-105(SFK-105S)

- Kit contents**
- Plate Bracket S-T×1
 - Hexagon Socket Bolt(M6×10)×4
 - T Nut S(M6)×4
 - S Plate Bracket S-T×1
 - Hexagon Socket Bolt(M6×10)Stainless×4
 - ST Nut S(M6)×4

- Kit contents**
- Plate Bracket S+×1
 - Hexagon Socket Bolt(M6×10)×6
 - T Nut S(M6)×6
 - S Plate Bracket S+×1
 - Hexagon Socket Bolt(M6×10)Stainless×6
 - ST Nut S(M6)×6



Name	Plate Bracket S-H2	Plate Bracket S-H2 Kit	Plate Bracket S-H4	Plate Bracket S-H4 Kit
Item No.	SFJ-125S	SFK-125S	SFJ-129S	SFK-129S

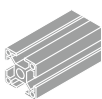
- Kit contents**
- Plate Bracket S-H2×1
 - Hexagon Socket Bolt(M6×10)Stainless×2
 - ST Nut S(M6)×2

- Kit contents**
- Plate Bracket S-H4×1
 - Hexagon Socket Bolt(M6×10)Stainless×4
 - ST Nut S(M6)×4

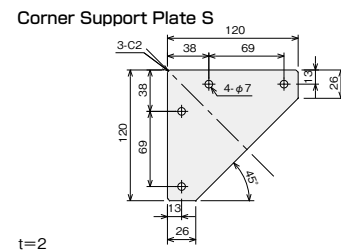
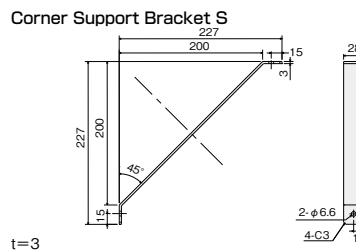
Material/Technical Data

Name	Weight(g)	Material	Environment
Plate Bracket SG	125	SUS304	RoHS Compliant Green Procurement
Plate Bracket S-L	92	SPCC Uni-Chrome	
S Plate Bracket S-L	87	SUS304	
Plate Bracket S-T	106	SPCC Uni-Chrome	
S Plate Bracket S-T	96	SUS304	
Plate Bracket S+	145	SPCC Uni-Chrome	
S Plate Bracket S+	135	SUS304	
Plate Bracket S-H2	29.6	SUS304	
Plate Bracket S-H4	62.2	SUS304	
Corner Reinforced Bracket S	200	SUS304	
Corner Reinforced Plate S	155.8	SUS304	

Usable Frame



Compatible to all SF30 series (Groove Width 8mm)
 ※Plate Bracket S-H2/H4 doesn't meet with SF-35-35(include 1F/2F/2H) SF-35-70(include 1F/2F).



Name	Corner Support Bracket S	Corner Support Bracket S Kit	Corner Support Plate S	Corner Support Plate S Kit
Item No.	SFJ-134S	SFK-134S	SFJ-137S	SFK-137S

- Kit contents**
- Corner Support Bracket S×1
 - Hexagon Socket Bolt(M6×10)Stainless×2
 - ST Nut S(M6)×2

- Kit contents**
- Corner Support Plate S×1
 - Hexagon Socket Bolt(M6×10)Stainless×4
 - ST Nut S(M6)×4



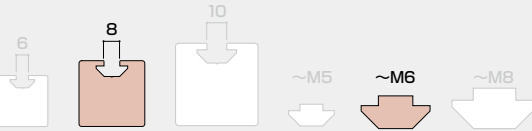
We sell Nut Material and Bracket Material as well.

T Nut S Material P62

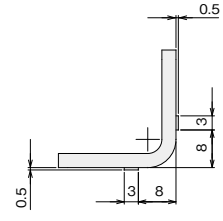
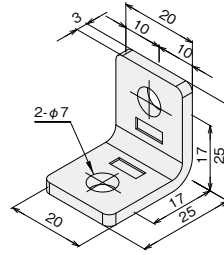
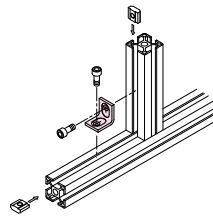
●Hard Bracket S Material
 ●Angle Bracket S Material



SF30 SERIES



L Bracket S (Stainless)



Name (Single Item)	L Bracket S (Stainless)
Item No.	SFJ-101S
Name (Bolt and Nut Kit)	L Bracket S (Stainless) Kit
Item No.	SFK-101S

Usable Frame



Compatible to all SF30 series (Groove Width 8mm)

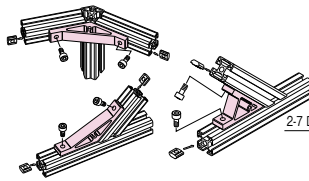
Kit Contents

- L Bracket S (Stainless) × 1
- Hexagon Socket Bolt (M6×10)/Stainless × 2
- ST Nut S (M6) × 2

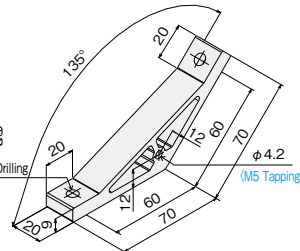
Material/Technical Data

Material SUS304
Weight 18g
Environment **RoHS** Compliant
Green Procurement

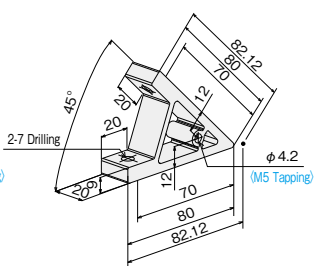
Hard Bracket S-DE



Hard Bracket S · DE135



Hard Bracket S · DE45



Name (Single Item)	Hard Bracket S-DE135 (Hard Bracket S-DE135 with Tap)		Hard Bracket S-DE45 (Hard Bracket S-DE45 with Tap)	
Item No.	SFJ-N33 (SFJ-N33T)		SFJ-N34 (SFJ-N34T)	
Name (Bolt and Nut Kit)	S-DE135 Kit (S-DE135 Kit with Tap)	S-DE135 (Stainless) Kit (S-DE135 (Stainless) Kit with Tap)	S-DE45 Kit (S-DE45 Kit with Tap)	S-DE45 (Stainless) Kit (S-DE45 (Stainless) Kit with Tap)
Item No.	SFK-N33 (SFK-N33T)	SFK-N33S (SFK-N33P)	SFK-N34 (SFK-N34T)	SFK-N34S (SFK-N34P)



Usable Frame
SF30-DE45-SF35 Series
45° slant cut frame (Refer P208)

Kit Contents

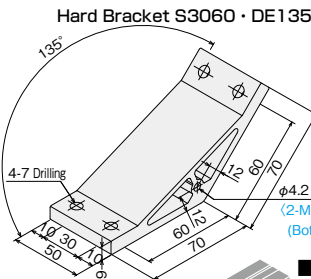
- (Hard Bracket S-DE135 Kit)
- Hard Bracket S-DE135 (or with Tap) × 1
 - Hexagon Socket Bolt (M6×15) × 2
 - T Nut S (M6) × 2
- (Hard Bracket S-DE45 Kit)
- Hard Bracket S-DE45 (or with Tap) × 1
 - Hexagon Socket Bolt (M6×15) × 2
 - T Nut S (M6) × 2
- * Bolt and Nut in (Stainless)
Kit are stainless.

Please use Kit with Tap to install Side Cover. (Refer P82 for details.)

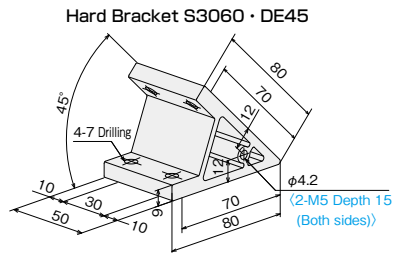
Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Weight 68g (DE135)
58g (DE45)
Environment **RoHS** Compliant
Green Procurement

Hard Bracket SS3060-DE



Hard Bracket S3060 · DE135



Hard Bracket S3060 · DE45

Name (Single Item)	Hard Bracket S3060-DE135 (Hard Bracket S3060-DE135 with Tap)		Hard Bracket S3060-DE45 (Hard Bracket S3060-DE45 with Tap)	
Item No.	SFJ-N40 (SFJ-N40T)		SFJ-N39 (SFJ-N39T)	
Name (Bolt and Nut Kit)	S3060-DE135 Kit (S3060-DE135 Kit with Tap)	S3060-DE135 (Stainless) Kit (S3060-DE135 (Stainless) Kit with Tap)	S3060-DE45 Kit (S3060-DE45 Kit with Tap)	S3060-DE45 (Stainless) Kit (S3060-DE45 (Stainless) Kit with Tap)
Item No.	SFK-N40 (SFK-N40T)	SFK-N40S (SFK-N40P)	SFK-N39 (SFK-N39T)	SFK-N39S (SFK-N39P)



Usable Frame
SF-30-60/60-60-2S/
60-90/60-120 Series
45° slant cut frame (Refer P208)

Kit Contents

- (Hard Bracket S3060-DE135 Kit)
- Hard Bracket S3060-DE135 (or with Tap) × 1
 - Hexagon Socket Bolt (M6×15) × 4
 - T Nut S (M6) × 4
- (Hard Bracket S3060-DE45 Kit)
- Hard Bracket S3060-DE45 (or with Tap) × 1
 - Hexagon Socket Bolt (M6×15) × 4
 - T Nut S (M6) × 4
- * Bolt and Nut in (Stainless)
Kit are stainless.

Please use Kit with Tap to install Side Cover. (Refer P82 for details.)

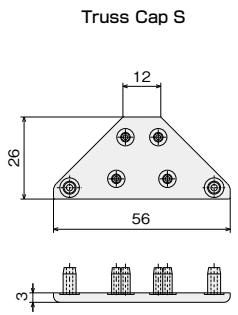
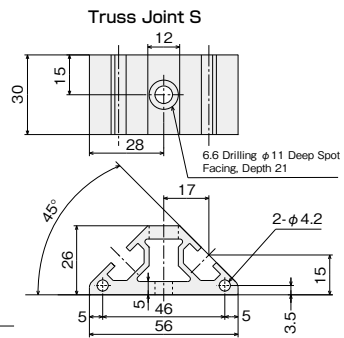
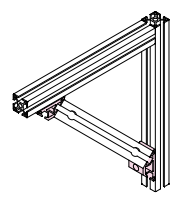
Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Weight 185g (DE135)
158g (DE45)
Environment **RoHS** Compliant
Green Procurement



Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

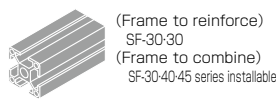
Truss Joint S



Name(Single Item)	Truss Joint S	
Item No.	SFJ-J02	
Name(Bolt and Nut Kit)	(Black)	(Light Gray)
Item No.	SFA-J02	SFA-J02G

※ Groove size is as same as SF-30-30

Usable Frame

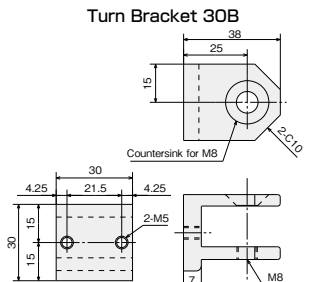
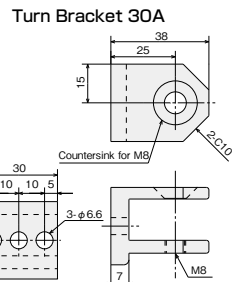
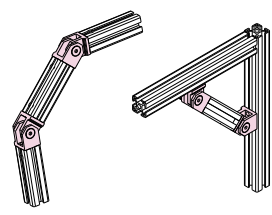


(Frame to reinforce)
SF-30-30
(Frame to combine)
SF-30-40/45 series installable

Material/Technical Data

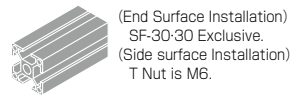
	Truss Joint S	Truss Cap S
Material	Aluminium Alloy	Polyamide
Alumite Treatment	37g	3.5g
Weight	RoHS Compliant	
Environment	Green Procurement	

Turn Bracket 30A / B



Name	Turn Bracket 30A	Turn Bracket 30B
Item No.	SFK-41A	SFK-41B

Usable Frame



(End Surface Installation)
SF-30-30 Exclusive.
(Side surface Installation)
T Nut is M6.

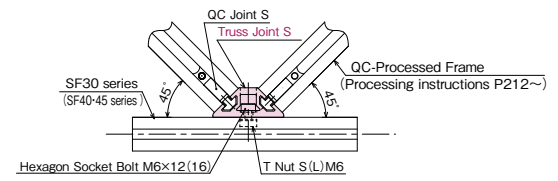
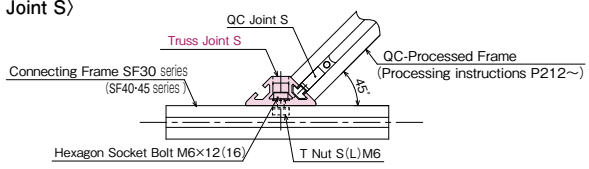
Material/Technical Data

Turn Bracket 30A/B*	
Material	Aluminium Alloy
Alumite Treatment	33g(30A)/35g(30B)
Weight	33g(30A)/35g(30B)
Environment	RoHS Compliant

*30A and B each include Hexagon Socket Flat Head Cap Screw (M8x12).

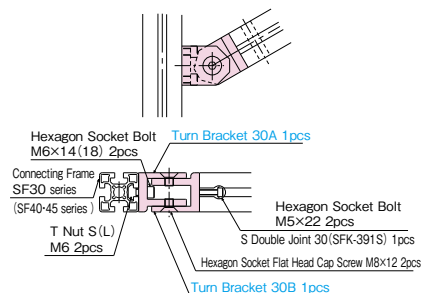
How to use Truss Joint·Turn Bracket

<Truss Joint S>

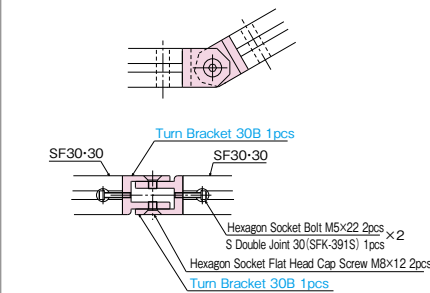


<Turn Bracket>

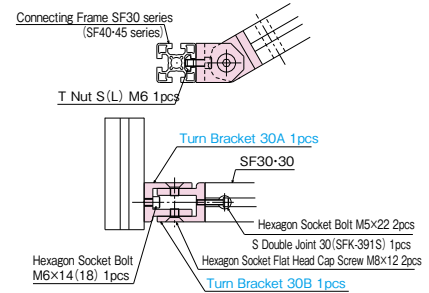
<In case of installing to side and end of the Frames.>



<In case of installing to sections of the Frames.>



<In case of installing to side and end of the Frames.>



● This product cannot be used as supporting point of movable part.

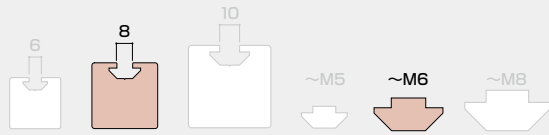
● Use Processing Symbols written from P214~ to specify frilling for Double Joint.

We sell Nut Material and Bracket Material as well.

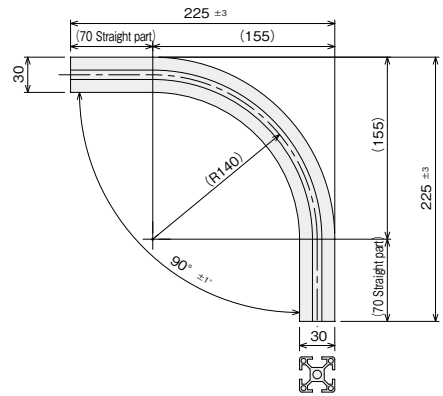
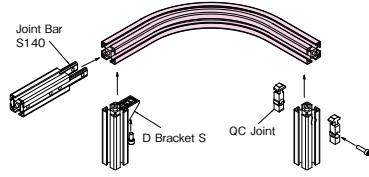
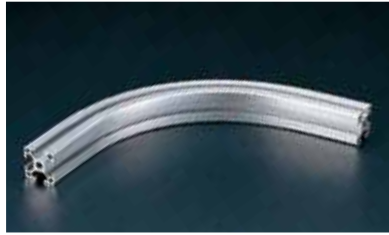
T Nut S Material P62

● Hard Bracket S Material
● Angle Bracket S Material



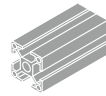


Bend Bracket S



Name	Bend Bracket S (Stainless)
Item No.	SFJ-V01

Kit Contents



Compatible to SF-30-30 series (1F/2F/2H/3F).

Material/Technical Data

Material Aluminium Alloy
 Alumite Treatment
 (Special order Black Alumite is available.)
 Weight 332g
 Environment RoHS Compliant
 Green Procurement



Parts
 How to order
 Item No.
SFJ-V01

Quantity (pcs)



Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

Adjuster Kit



Plate				Adjuster				Caster																																																	
Adjuster Plate S Adjuster Plate S (Stainless) <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Weight</th></tr> <tr><td>Adjuster Plate S</td><td>SS400 Uni-Chrome</td><td>0.24kg</td></tr> <tr><td>Adjuster Plate S (Stainless)</td><td>SUS304</td><td></td></tr> </table>				Material	Treatment	Weight	Adjuster Plate S	SS400 Uni-Chrome	0.24kg	Adjuster Plate S (Stainless)	SUS304		Adjuster Caster Plate S Adjuster Caster Plate S (Stainless) <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Weight</th></tr> <tr><td>Adjuster Caster Plate S</td><td>SS400 Uni-Chrome</td><td>0.44kg</td></tr> <tr><td>Adjuster Caster Plate S (Stainless)</td><td>SUS304</td><td></td></tr> </table>				Material	Treatment	Weight	Adjuster Caster Plate S	SS400 Uni-Chrome	0.44kg	Adjuster Caster Plate S (Stainless)	SUS304		Adjuster M12 Adjuster M12 (Stainless) <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Load Capacity</th><th>Weight</th></tr> <tr><td>Adjuster M12</td><td>SS400 Uni-Chrome</td><td>500kg</td><td>169g</td></tr> <tr><td>Adjuster M12 (Stainless)</td><td>SUS304 Electrolytic Polishing</td><td>300kg</td><td>165g</td></tr> </table>				Material	Treatment	Load Capacity	Weight	Adjuster M12	SS400 Uni-Chrome	500kg	169g	Adjuster M12 (Stainless)	SUS304 Electrolytic Polishing	300kg	165g	Caster A Caster A brake attaching Caster A (Stainless) Caster A with Brake (Stainless) <table border="1"> <tr><th>Material</th><th>Load Capacity</th><th>Weight</th></tr> <tr><td>Caster A</td><td>Rubber</td><td>30kg</td></tr> <tr><td>Caster A with Brake</td><td>Rubber</td><td>30kg</td></tr> <tr><td>Caster A (Stainless)</td><td>Nylon</td><td>40.8kg</td></tr> </table>				Material	Load Capacity	Weight	Caster A	Rubber	30kg	Caster A with Brake	Rubber	30kg	Caster A (Stainless)	Nylon	40.8kg
Material	Treatment	Weight																																																							
Adjuster Plate S	SS400 Uni-Chrome	0.24kg																																																							
Adjuster Plate S (Stainless)	SUS304																																																								
Material	Treatment	Weight																																																							
Adjuster Caster Plate S	SS400 Uni-Chrome	0.44kg																																																							
Adjuster Caster Plate S (Stainless)	SUS304																																																								
Material	Treatment	Load Capacity	Weight																																																						
Adjuster M12	SS400 Uni-Chrome	500kg	169g																																																						
Adjuster M12 (Stainless)	SUS304 Electrolytic Polishing	300kg	165g																																																						
Material	Load Capacity	Weight																																																							
Caster A	Rubber	30kg																																																							
Caster A with Brake	Rubber	30kg																																																							
Caster A (Stainless)	Nylon	40.8kg																																																							
Adjuster Caster Plate 50 <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Weight</th></tr> <tr><td>Adjuster Caster Plate 50</td><td>SS400 Uni-Chrome</td><td>1.03kg</td></tr> </table>				Material	Treatment	Weight	Adjuster Caster Plate 50	SS400 Uni-Chrome	1.03kg	Adjuster Caster Plate 50 (Stainless) <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Weight</th></tr> <tr><td>Adjuster Caster Plate 50 (Stainless)</td><td>SUS304</td><td>1.04kg</td></tr> </table>				Material	Treatment	Weight	Adjuster Caster Plate 50 (Stainless)	SUS304	1.04kg	Adjuster M16 <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Load Capacity</th><th>Weight</th><th>Bottom</th></tr> <tr><td>Adjuster M16</td><td>SS400 Zn Black</td><td>500kg</td><td>386g</td><td>Neoprene rubber</td></tr> </table>				Material	Treatment	Load Capacity	Weight	Bottom	Adjuster M16	SS400 Zn Black	500kg	386g	Neoprene rubber	Caster B <table border="1"> <tr><th>Material</th><th>Load Capacity</th><th>Weight</th></tr> <tr><td>Caster B</td><td>Phenol Resin</td><td>150kg</td></tr> </table>				Material	Load Capacity	Weight	Caster B	Phenol Resin	150kg														
Material	Treatment	Weight																																																							
Adjuster Caster Plate 50	SS400 Uni-Chrome	1.03kg																																																							
Material	Treatment	Weight																																																							
Adjuster Caster Plate 50 (Stainless)	SUS304	1.04kg																																																							
Material	Treatment	Load Capacity	Weight	Bottom																																																					
Adjuster M16	SS400 Zn Black	500kg	386g	Neoprene rubber																																																					
Material	Load Capacity	Weight																																																							
Caster B	Phenol Resin	150kg																																																							
Adjuster Caster Plate 60 <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Load Capacity</th></tr> <tr><td>Adjuster Caster Plate 60</td><td>SS400 Uni-Chrome</td><td>1.03kg</td></tr> </table>				Material	Treatment	Load Capacity	Adjuster Caster Plate 60	SS400 Uni-Chrome	1.03kg	Adjuster Caster Plate 60 (Stainless) <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Load Capacity</th></tr> <tr><td>Adjuster Caster Plate 60 (Stainless)</td><td>SUS304</td><td>1.04kg</td></tr> </table>				Material	Treatment	Load Capacity	Adjuster Caster Plate 60 (Stainless)	SUS304	1.04kg	Adjuster BM16 (Stainless) <table border="1"> <tr><th>Material</th><th>Treatment</th><th>Load Capacity</th><th>Weight</th></tr> <tr><td>Adjuster BM16 (Stainless)</td><td>SUS304 Electrolytic Polishing</td><td>560kg</td><td>375g</td></tr> </table>				Material	Treatment	Load Capacity	Weight	Adjuster BM16 (Stainless)	SUS304 Electrolytic Polishing	560kg	375g	Caster B (Stainless) <table border="1"> <tr><th>Material</th><th>Load Capacity</th><th>Weight</th></tr> <tr><td>Caster B (Stainless)</td><td>Phenol Resin</td><td>71.4kg</td></tr> </table>				Material	Load Capacity	Weight	Caster B (Stainless)	Phenol Resin	71.4kg																
Material	Treatment	Load Capacity																																																							
Adjuster Caster Plate 60	SS400 Uni-Chrome	1.03kg																																																							
Material	Treatment	Load Capacity																																																							
Adjuster Caster Plate 60 (Stainless)	SUS304	1.04kg																																																							
Material	Treatment	Load Capacity	Weight																																																						
Adjuster BM16 (Stainless)	SUS304 Electrolytic Polishing	560kg	375g																																																						
Material	Load Capacity	Weight																																																							
Caster B (Stainless)	Phenol Resin	71.4kg																																																							

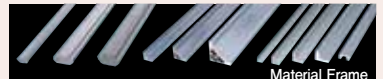
	Item No.	Name	Compatible Frame	Kit contents
Adjuster + Plate	SFK-503A	Level Adjuster Kit S	SF-30-30	● Adjuster Plate Sx1 ● T Nut S (M6)x4 ● Adjuster M12x1 ● Hexagon Socket Bolt (M6x12)x4
	SFK-503S	Level Adjuster Kit S (Stainless)	SF-30-30	● Adjuster Plate S (Stainless)x1 ● ST Nut S (M6)x4 ● Adjuster M12 (Stainless)x1 ● Hexagon Socket Bolt (M6x12)Stainlessx4
	SFK-517	Level Adjuster Kit 50	SF-50-50-2S	● Adjuster Caster Plate 50x1 ● T Nut S (M6)x8 ● Adjuster M16x1 ● Hexagon Socket Bolt (M6x15)x8
	SFK-517S	Level Adjuster Kit 50 (Stainless)	SF-50-50-2S	● Adjuster Caster Plate 50 (Stainless)x1 ● ST Nut S (M6)x8 ● Adjuster BM16 (Stainless)x1 ● Hexagon Socket Bolt (M6x15)Stainlessx8
	SFK-511A	Level Adjuster Kit 60	SF-60-60-2S	● Adjuster Caster Plate 60x1 ● T Nut S (M6)x8 ● Adjuster M16x1 ● Hexagon Socket Bolt (M6x15)x8
	SFK-511S	Level Adjuster Kit 60 (Stainless)	SF-60-60-2S	● Adjuster Caster Plate 60 (Stainless)x1 ● ST Nut S (M6)x8 ● Adjuster BM16 (Stainless)x1 ● Hexagon Socket Bolt (M6x15)Stainlessx8
Caster + Plate	SFK-505A	Caster Kit S	SF-30-30	● Adjuster Plate Sx1 ● T Nut S (M6)x4 ● Caster Ax1 ● Hexagon Socket Bolt (M6x12)x4 ● Hexagon Nut (M12)x1
	SFK-505S	Caster Kit S (Stainless)	SF-30-30	● Adjuster Plate S (Stainless)x1 ● ST Nut S (M6)x4 ● Caster A (Stainless)x1 ● Hexagon Socket Bolt (M6x12)Stainlessx4 ● Hexagon Nut (M12)Stainlessx1
	SFK-506A	Caster Kit S with Brake	SF-30-30	● Adjuster Plate Sx1 ● T Nut S (M6)x4 ● Caster A brake attachingx1 ● Hexagon Socket Bolt (M6x12)x4 ● Hexagon Nut (M12)x1
	SFK-506S	Caster Kit S with Brake (Stainless)	SF-30-30	● Adjuster Plate S (Stainless)x1 ● ST Nut S (M6)x4 ● Caster A brake attaching (Stainless)x1 ● Hexagon Socket Bolt (M6x12)Stainlessx4 ● Hexagon Nut (M12)Stainlessx1
Adjuster + Plate	SFK-504A	Level Adjuster Kit with Caster S	SF-30-30	● Adjuster Caster Plate Sx1 ● Adjuster M12x1 ● Caster Ax1 ● T Nut S (M6)x4 ● Hexagon Socket Bolt (M6x12)x4 ● Hexagon Nut (M12)x1
	SFK-504S	Level Adjuster Kit with Caster S (Stainless)	SF-30-30	● Adjuster Caster Plate S (Stainless)x1 ● Adjuster M12 (Stainless)x1 ● Caster A (Stainless)x1 ● ST Nut S (M6)x4 ● Hexagon Socket Bolt (M6x12)Stainlessx4 ● Hexagon Nut (M12)Stainlessx1
	SFK-518	Level Adjuster Kit with Caster 50	SF-50-50-2S	● Adjuster Caster Plate 50x1 ● Adjuster M16x1 ● Caster Bx1 ● T Nut S (M6)x8 ● Hexagon Socket Bolt (M6x15)x8 ● Hexagon Socket Bolt (M6x10)x4
	SFK-518S	Level Adjuster Kit with Caster 50 (Stainless)	SF-50-50-2S	● Adjuster Caster Plate 50 (Stainless)x1 ● Adjuster BM16 (Stainless)x1 ● ST Nut S (M6)x8 ● Caster B (Stainless)x1 ● Hexagon Socket Bolt (M6x15)Stainlessx8 ● Hexagon Socket Bolt (M6x12)Stainlessx4
	SFK-512A	Level Adjuster Kit with Caster 60	SF-60-60-2S	● Adjuster Caster Plate 60x1 ● Adjuster M16x1 ● Caster Bx1 ● T Nut S (M6)x8 ● Hexagon Socket Bolt (M6x15)x8 ● Hexagon Socket Bolt (M6x10)x4
	SFK-512S	Level Adjuster Kit with Caster 60 (Stainless)	SF-60-60-2S	● Adjuster Caster Plate 60 (Stainless)x1 ● Adjuster BM16 (Stainless)x1 ● ST Nut S (M6)x8 ● Caster B (Stainless)x1 ● Hexagon Socket Bolt (M6x15)Stainlessx8 ● Hexagon Socket Bolt (M6x12)Stainlessx4

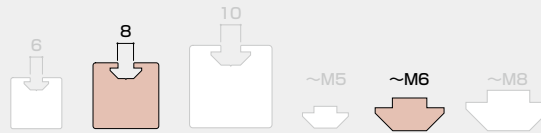


We sell Nut Material and Bracket Material as well.

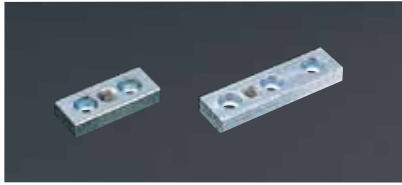
T Nut S Material P62

● Hard Bracket S Material
● Angle Bracket S Material



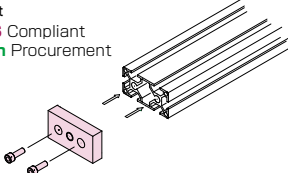


Foot Base

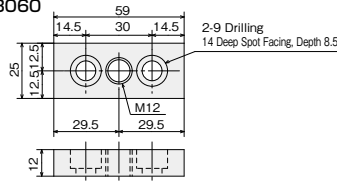


Environment

★RoHS Compliant
★Green Procurement



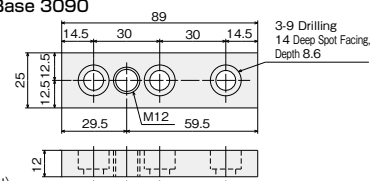
Foot Base 3060



(Material)

Foot Base 3060	SS400 Uni-Chrome Plating Hexagon Socket Bolt (M8×20) Include 2	Weight/100g	Usable Frame SF-30-60 (or 1F)
Foot Base 3060 (Stainless)	SUS304 Hexagon Socket Bolt (M8×20) Include 2	Stainless Bolts Weight/101g	

Foot Base 3090

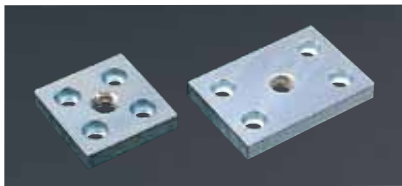


(Material)

Foot Base 3090	SS400 Uni-Chrome Plating Hexagon Socket Bolt (M8×20) Include 3	Weight/156g	Usable Frame SF-30-90
Foot Base 3090 (Stainless)	SUS304 Hexagon Socket Bolt (M8×20) Include 3	Stainless Bolts Weight/157g	

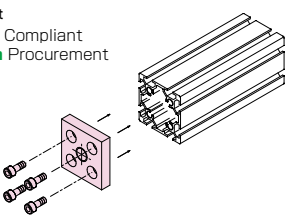
Name	Foot Base 3060 (Foot Base 3060(Stainless))
Item No.	★SFK-56A ★SFK-56AS

Name	Foot Base 3090 (Foot Base 3090(Stainless))
Item No.	★SFK-52A ★SFK-52AS

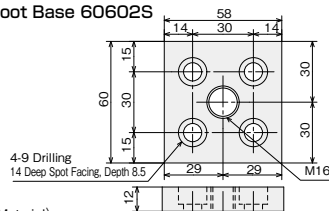


Environment

★RoHS Compliant
★Green Procurement



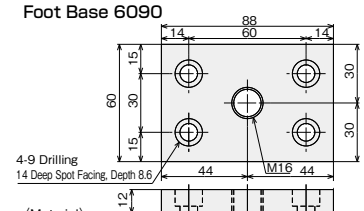
Foot Base 60602S



(Material)

Foot Base 60602S	SS400 Uni-Chrome Plating Hexagon Socket Bolt (M8×20) Include 4	Weight/257g	Usable Frame SF-60-60-2S (or 1F)
Foot Base 60602S (Stainless)	SUS304 Hexagon Socket Bolt (M8×20) Include 4	Stainless Bolts Weight/258g	

Foot Base 6090



(Material)

Foot Base 6090	SS400 Uni-Chrome plating Hexagon Socket Bolt (M8×20) Include 4	Weight/427g	Usable Frame SF-60-90
Foot Base 6090 (Stainless)	SUS304 Hexagon Socket Bolt (M8×20) Include 4	Stainless Bolts Weight/431g	

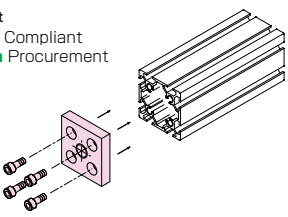
Name	Foot Base 60602S (Foot Base 60602S(Stainless))
Item No.	★SFK-58A ★SFK-58AS

Name	Foot Base 6090 (Foot Base 6090(Stainless))
Item No.	★SFK-53A ★SFK-53AS

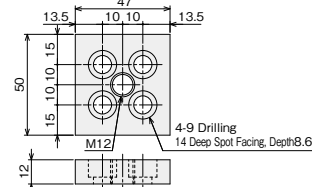


Environment

★RoHS Compliant
★Green Procurement



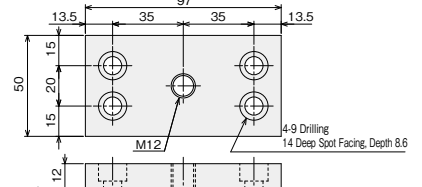
Foot Base 50502S



(Material)

Foot Base 50502S	SS400 Uni-Chrome Plating Hexagon Socket Bolt (M8×20) Include 4	Weight/164g	Usable Frame SF-50-50-2S
Foot Base 50502S (Stainless)	SUS304 Hexagon Socket Bolt (M8×20) Include 4	Stainless Bolts Weight/165g	

Foot Base 501002S

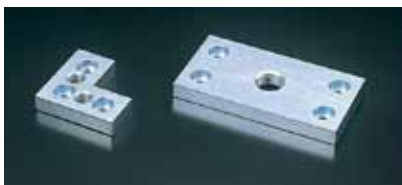


(Material)

Foot Base 501002S	SS400 Uni-chrome Plating Hexagon Socket Bolt (M8×20) Include 4	Weight/400g	Usable Frame SF-50-100-2S
Foot Base 501002S (Stainless)	SUS304 Hexagon Socket Bolt (M8×20) Include 4	Stainless Bolts Weight/404g	

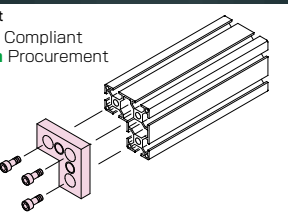
Name	Foot Base 50502S (Foot Base 50502S(Stainless))
Item No.	★SFK-68A ★SFK-68AS

Name	Foot Base 501002S (Foot Base 501002S(Stainless))
Item No.	★SFK-69A ★SFK-69AS

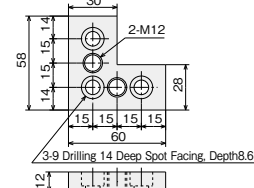


Environment

★RoHS Compliant
★Green Procurement



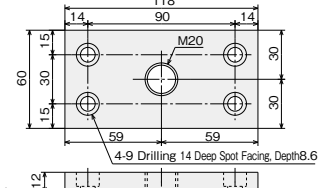
Foot Base 306060



(Material)

Foot Base 306060	SS400 Uni-Chrome Plating Hexagon Bolt with Hole (M8×20) Include 3	Weight/181g	Usable Frame SF-30-60-60
Foot Base 306060 (Stainless)	SUS304 Hexagon Bolt with Hole (M8×20) Include 3	Stainless Bolts Weight/182g	

Foot Base 60120



(Material)

Foot Base 60120	SS400 Uni-Chrome Plating Hexagon Socket Bolt (M8×20) Include 4	Weight/578g	Usable Frame SF-60-120
Foot Base 60120 (Stainless)	SUS304 Hexagon Socket Bolt (M8×20) Include 4	Stainless Bolts Weight/583g	

Name	Foot Base 306060 (Foot Base 306060(Stainless))
Item No.	★SFK-63A ★SFK-63AS

Name	Foot Base 60120 (Foot Base 60120(Stainless))
Item No.	★SFK-64A ★SFK-64AS



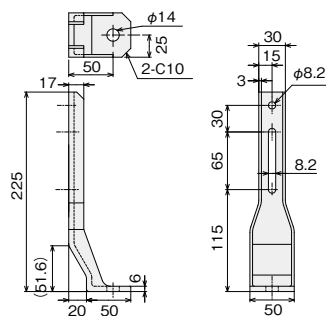
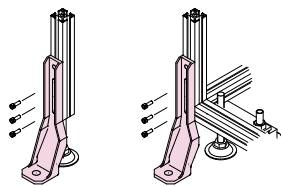
Parts
How to order
Item No.
SFK-56A

Quantity (pcs)



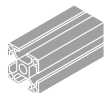
Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

Anchor Bracket



Name (Single Item)	Anchor Bracket (Anchor Bracket (Electroless nickel plating))
Item No.	SFJ-70A (SFJ-70AS)
Name (Bolt and Nut Kit)	Anchor Kit S (Anchor Kit S (Electroless nickel plating))
Item No.	SFK-70A (SFK-70AS)

Usable Frame



Compatible to all SF30 series (Groove Width 8mm)
*2F Frame excluded

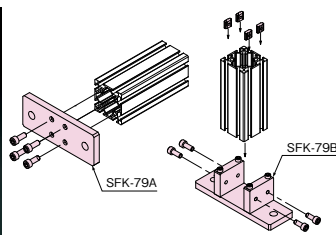
Kit Contents

- Anchor Bracket x1
- T Nut S (M6) x3
- Hexagon Socket Bolt (M6x14) x3
- M6 Flat Washer x3
- ※ Bolt and Nut in (Electroless nickel) Kit are stainless.

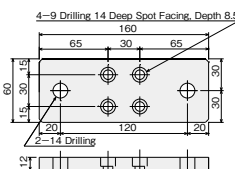
Material/Technical Data

	Anchor Bracket	Anchor Bracket (Electroless nickel plating)
Material	S45C	S45C
	Anion Electrodeposition Coating	Electroless nickel plating
Weight	577g	577g
Environment	RoHS Compliant	Green Procurement

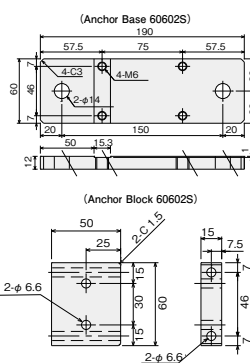
Anchor Plate 60602S / Anchor Plate Bracket 60602S Kit



Anchor Plate 60602S

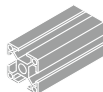


Anchor Plate Bracket 60602S Kit



Name (Single Item)	Anchor Plate 60602S
Item No.	SFK-79A
Name (Bolt and Nut Kit)	Anchor Plate Bracket 60602S Kit
Item No.	SFK-79B

Usable Frame



SF-60-60-2S

Kit Contents

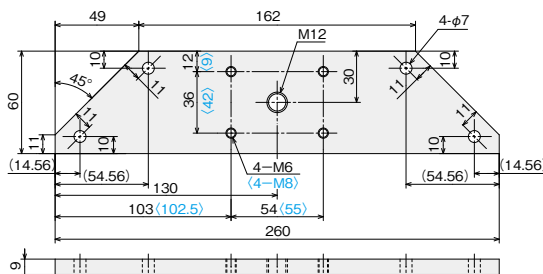
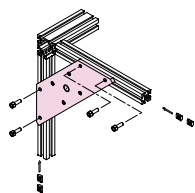
- Anchor Base 60602S x1
- Anchor Block 60602S x2
- Hexagon Socket Bolt (M6x60) Stainless x4
- Hexagon Socket Bolt (M6x22) Stainless x4
- ST Nut S (M6) x4
- Anti-Sliding Cap S

Material/Technical Data

	Anchor Plate 60602S [※]	Anchor Plate Bracket 60602S Kit
Material	SUS304	SUS304 (Base) A6063 Alumite Treatment (Anchor Block)
Weight	890g	1328g
Environment	RoHS Compliant	Green Procurement

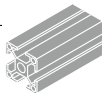
※Hexagon Socket Bolt (M6x25) Stainless 4

Caster Plate S



Name	Caster Plate S (Caster Plate S (Stainless))
Item No.	★SFJ-7A2 (SFJ-7A2S)

Usable Frame



Compatible to all SF30 series (Groove Width 8mm)

How to use

- Adjuster M12
- Caster A
- Caster B
- Commercial Hanging Bolt, etc

Material/Technical Data

	Caster Plate S	Caster Plate S (Stainless)
Material	SS400	SUS304
	Uni-Chrome Plating	
Weight	900g	909g
Environment	★RoHS Compliant	Green Procurement

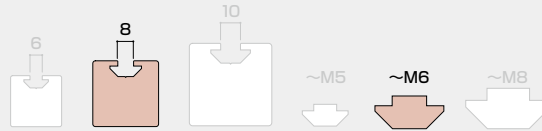


We sell Nut Material and Bracket Material as well.

T Nut S Material
P62

● Hard Bracket S Material
● Angle Bracket S Material

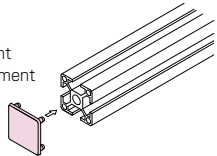




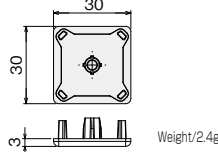
Frame Cap



Material Polyamide
 Weight Refer Drawing
 Environment **RoHS** Compliant
Green Procurement

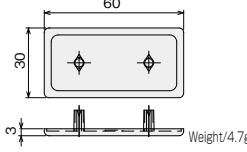


Frame Cap N3030



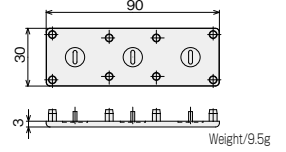
■ Usable Frame
 SF-30-30 (or 1F/2F/3F/2H)
 SF Light 30-30/SF-K-30-30

Frame Cap 3060



■ Usable Frame
 SF-30-60, SF-30-60-1F,
 SF-K-30-60*SF-30-120

Frame Cap 3090

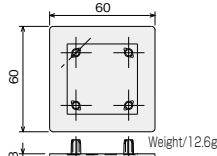


■ Usable Frame
 SF-30-90

Name	Frame Cap 3030 (Black) (Light Gray)	Frame Cap 3060 (Black) (Light Gray)	Frame Cap 3090 (Black) (Light Gray)
Item No.	SFA-033B SFA-033G	SFA-005 SFA-005G	SFA-013 SFA-013G

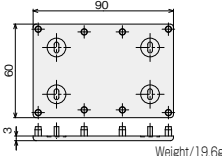
*Use 2 pcs for SF-30-120.

Frame Cap 60602S



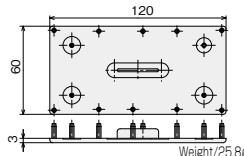
■ Usable Frame
 SF-60-60 (or 1F/2F)

Frame Cap 6090



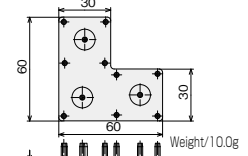
■ Usable Frame
 SF-60-90

Frame Cap 60120



■ Usable Frame
 SF-60-120

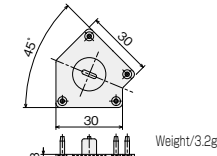
Frame Cap 306060



■ Usable Frame
 SF-30-60-60

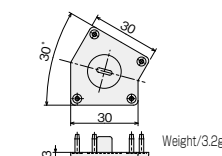
Name	Frame Cap 60602S (Black) (Light Gray)	Frame Cap 6090 (Black) (Light Gray)	Frame Cap 60120 (Black) (Light Gray)	Frame Cap 306060 (Black) (Light Gray)
Item No.	SFA-011 SFA-011G	SFA-015 SFA-015G	SFA-018 SFA-018G	SFA-J9B SFA-J9BG

Frame Cap 30-DE45



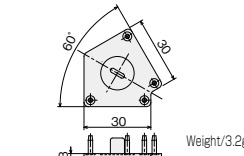
■ Usable Frame
 SF-30-DE45

Frame Cap 30-DE30



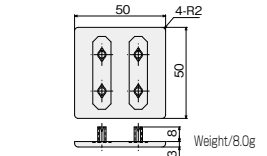
■ Usable Frame
 SF-30-DE30

Frame Cap 30-DE60



■ Usable Frame
 SF-30-DE60

Frame Cap 5050

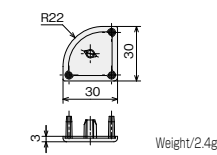


■ Usable Frame
 SF-50-50-2S*SF-50-100-2S

Name	Frame Cap 30-DE45 (Black) (Light Gray)	Frame Cap 30-DE30 (Black) (Light Gray)	Frame Cap 30-DE60 (Black) (Light Gray)	Frame Cap 5050 (Black) (Light Gray)
Item No.	SFA-J6B SFA-J6BG	SFA-J6A SFA-J6AG	SFA-J6C SFA-J6CG	SFA-026 SFA-026G

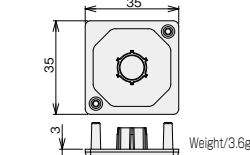
*Use 2 pcs for SF-50-100.

Frame Cap 30-30-R



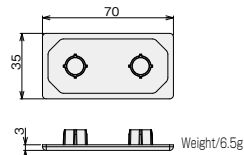
■ Usable Frame
 SF-30-30-R

Frame Cap 3535



■ Usable Frame
 SF-35-35 (or 1F/2F/2H)

Frame Cap 3570



■ Usable Frame
 SF-35-70 (or 1F/2F)

Name	Frame Cap 30-30-R (Black) (Light Gray)	Frame Cap 3535 (Black) (Light Gray)	Frame Cap 3570 (Black) (Light Gray)
Item No.	SFA-020 SFA-020G	SFA-031 SFA-031G	SFA-032 SFA-032G

Parts

How to order

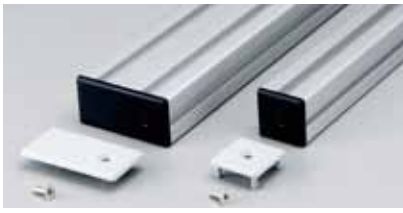
Item No. Quantity (pcs)

SFA-001

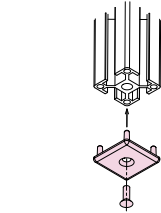


Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

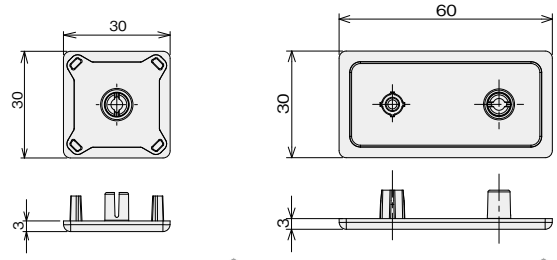
Frame Cap Lock Type



Material Polyamide(Cap), SWDHD(R Bolt), Chromate Black Treatment or Stainless(Bolt)
 Weight 3.7g(3030), 5.9g(3060)
 Environment **RoHS** Compliant
Green Procurement



※ Provided bolt enabled to lock without Tap Processing to Frame.



■ Usable Frame — SF-30-30/SF-K-30-30

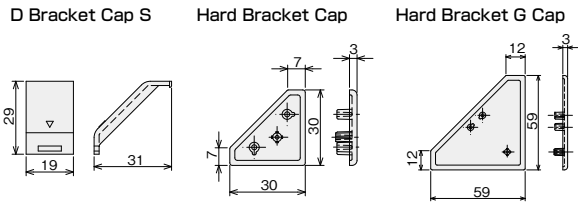
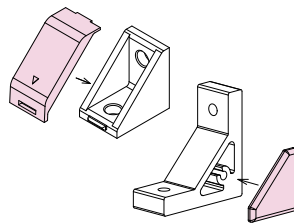
■ Usable Frame — SF-30-60/SF-K-30-60

Name	Frame Cap Lock Type 3030(Black) ^{※1}	Frame Cap Lock Type 3030(Light Gray) ^{※2}
Item No.	SFK-05LB	SFK-05LG

Name	Frame Cap Lock Type 3060(Black) ^{※3}	Frame Cap Lock Type 3060(Light Gray) ^{※4}
Item No.	SFK-04L	SFK-04LG

※1 With Small Flat Screw with Cross Hole (M4×12) Chromate Black ※2 With Small Flat Screw with Cross Hole (M4×12) Stainless ※3 With Small Flat Screw with Cross Hole (M4×12) Chromate Black ※4 With Small Flat Screw with Cross Hole (M4×12) Stainless

D Bracket Cap S / Hard Bracket Cap / G Cap

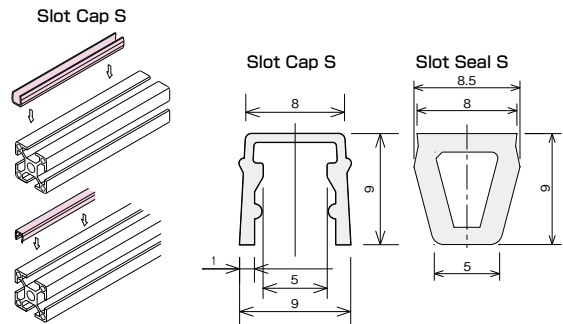


Name	D Bracket Cap S		Hard Bracket Cap		Hard Bracket G Cap	
	(Black)	(Light Gray)	(Black)	(Light Gray)	(Black)	(Light Gray)
Item No.	SFA-J13	SFA-J13G	SFA-J11	SFA-J11G	SFA-J12	SFA-J12G

■ Usable Bracket —
 (D Bracket Cap)
 D Bracket S/Black/CN
 (Hard Bracket Cap)
 Hard Bracket S/S3060
 S3090/Black
 (Hard Bracket G Cap)
 Hard Bracket SG/SG3060
 SG3090/Black

■ Material/Technical Data
 Material Polyamide
 Weight 2.1g(D Bracket Cap S)
 1.8g(Hard Bracket Cap)
 6.1g(Hard Bracket G Cap)
 Environment **RoHS** Compliant
Green Procurement

Slot Cap S / Slot Seal S



Name	Slot Cap S (ℓ=2000mm/pcs)						
	(Black)	(Light Gray)	(Blue)	(Ivory)	(Green)	(Yellow)	(Red)
Item No.	SFA-104	SFA-104G	SFA-104L	SFA-104V	SFA-104M	SFA-104Y	SFA-104R

Name	Slot Seal S (ℓ=5000mm/pcs)
Item No.	SFA-171

■ Usable Frame —
 Compatible to all SF30 series
 (Groove Width 8mm)

■ Material/Technical Data
 Slot Cap S Slot Seal S
 Material Polyethylene Elastomer
 unit mass 25g/m 45g/m
 Environment **RoHS** Compliant
Green Procurement

• Exclusive Cutter for Slot Cap and Slot Seal is available.



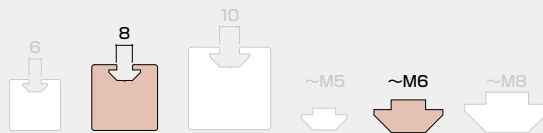
We sell Nut Material and Bracket Material as well.

T Nut S Material P62

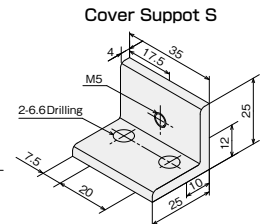
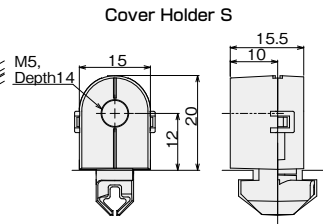
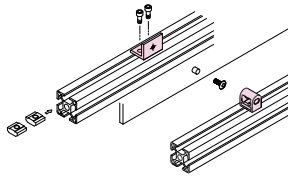
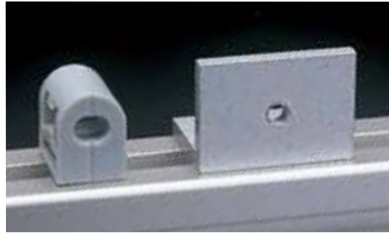
● Hard Bracket S Material ● Angle Bracket S Material



SF30 SERIES



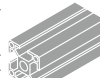
Cover Holder S / Cover Support S



Name (Single Item)	Cover Holder S	Cover Support S
Item No.	*SFA-KH6	*SFJ-K02
Name (Bolt and Nut Kit)		Cover Support S Kit (Cover Support S (Stainless) Kit)
Item No.	*SFK-K02 (*SFK-K02S)	

Usable Frame

Compatible to all SF30 series (Groove Width 8mm)



Kit contents

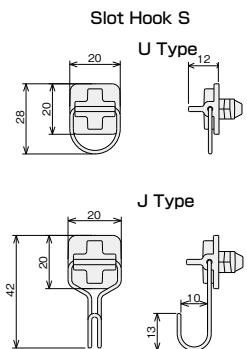
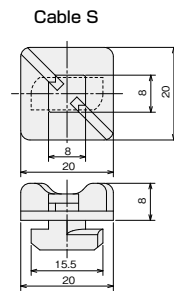
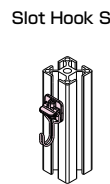
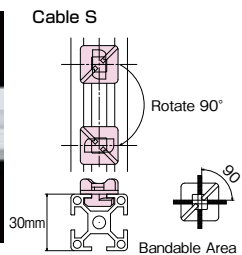
- Cover Support S x1
- Hexagon Socket Bolt (M6x12) x2
- T Nut S (M6) x2
- Truss Screw (M5x10) x1
- ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

	Cover Holder S*	Cover Support S
Material	Polyamide	Aluminium Alloy Alumite Treatment (Special order Black Alumite is also available.)
Weight	6g	17g
Environment	RoHS Compliant Green Procurement	

*With M5 nut

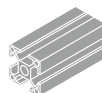
Cable Clamp S / Slot Hook S (U)•(J)



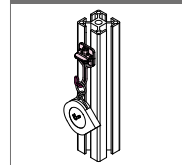
Name	Cable S (50pcs/pack)
	(Black) (Light Gray)
Item No.	C1P-B04C C1P-004C
Name	Slot Hook S
	(U Type) (J Type)
Item No.	SFK-K32U SFK-K32J

Usable Frame

Compatible to all SF30 series (Groove Width 8mm)



How to use Slot Hook

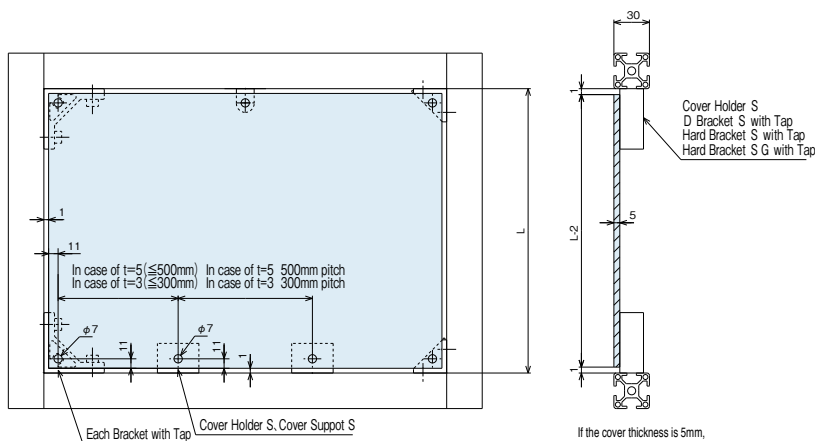


Material/Technical Data

	Cable S	Slot Hook S
Material	Polyamide	Polyamide (Body) Stainless (Hook)
Weight	2g/piece	3g (U Type) / 4g (J Type) / Load capacity 1.5kg
Environment	RoHS Compliant Green Procurement	

How to fix Cover

<Indication of Cover Holder S, Cover Support S, Resin Plate Size>



<Resin plate>



GO Various Resin plates are available. Refer P182~.

<Door accessories>



GO Various parts for doors are available. Refer P140~.



Parts

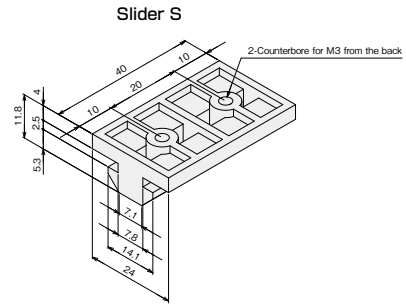
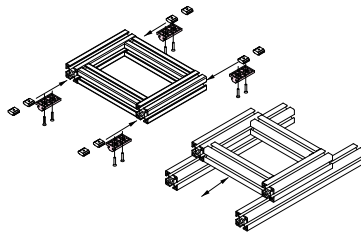
How to order

Item No. Quantity (pcs)

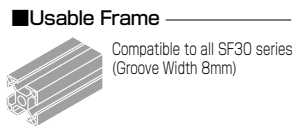
SFK-K96

Frame for 30 Nut for 30 Bracket for 30 Adjuster for 30 Accessory for 30

Slider S



Name	Slider S
Item No.	SFA-510

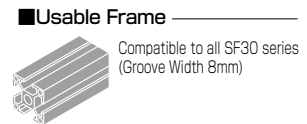
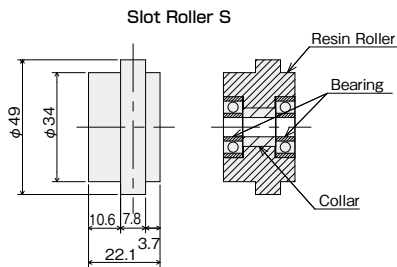


Material/Technical Data
 Material Polyacetal (Gray)
 Weight 9g
 Environment **RoHS** Compliant
Green Procurement

Recommendation Bolt and Nut Installation List

Name	Installation Frame	Recommendation Bolt	Recommendation Nut	Appropriate Tightening Torque(N·m)
Slider S	SF30 series	Hexagon Socket Flat Head Cap Screw(M3x20)	T Nut S(M3)	0.7

Slot Roller S



Material/Technical Data
 Material Nylon 6 (Resin Roller)
 S45C (Collar)
 Steel (Bearing)
 Weight 45g
 Environment **RoHS** Compliant
Green Procurement

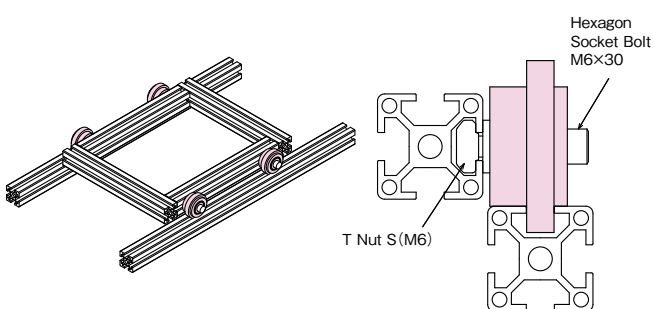
※Smooth operation is possible because cutting work is done with Roller.

Name	Slot Roller S
Item No.	SFK-806

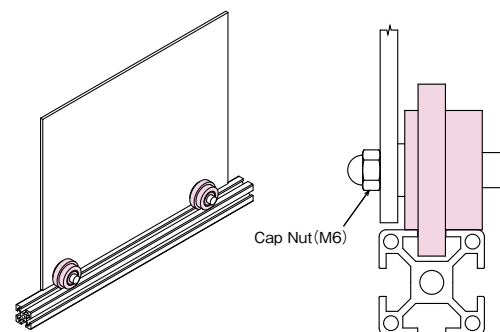
※Installation bolt size M6
 ※Appropriate Tightening Torque 9.0N·m
 ※With 2 Bearings, Collar and Flat Washer.

How to use Slot Roller

〈To frame's movable part〉



〈As door roller〉



We sell Nut Material and Bracket Material as well.

T Nut S Material P62

● Hard Bracket S Material
 ● Angle Bracket S Material



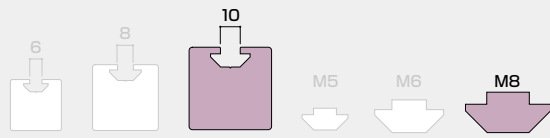


STANDARD FRAME

SF40·45

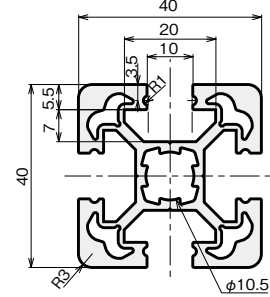
SERIES

SF40•45 SERIES



SF2-40•40

Asia

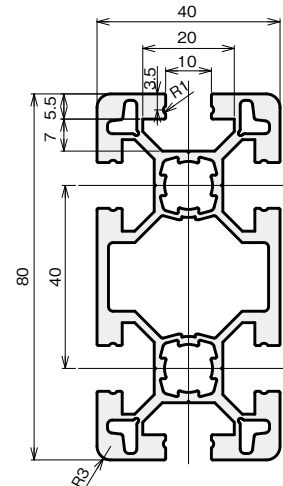


Name	SF2-40•40 (ℓ=4000)	SF2-40•40 ℓ=50~4000
Item No.	SFF-422-T	SFF-424-T

Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=10.54 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=10.54 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=5.27 \times 10^3 \text{mm}^3$ $Z_y=5.27 \times 10^3 \text{mm}^3$
Unit Mass	1.61kg/m

SF2-40•80

Asia



Name	SF2-40•80 (ℓ=4000)	SF2-40•80 ℓ=50~4000
Item No.	SFF-432-T	SFF-434-T

Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=72.40 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=19.92 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=18.10 \times 10^3 \text{mm}^3$ $Z_y=9.96 \times 10^3 \text{mm}^3$
Unit Mass	2.8kg/m



SF Frame
Standard (ℓ=4000) (Cut by customer)
Item No.
SFF-422-T

In case of specifying the length (Cut by SUS) ※Order by 0.1mm unit
Quantity (pcs) Item No. Length (mm)
 SFF-424-T ℓ=800

Frame for 40·45
Nut for 40·45
Bracket for 40·45
Adjuster for 40·45
Accessory for 40·45

Asia This sign shows the product is designed for Asia region only

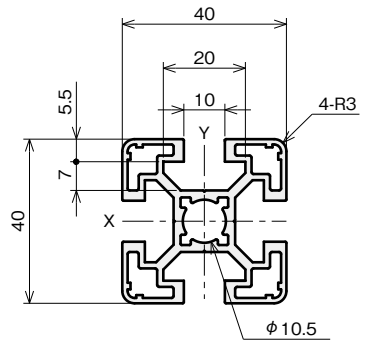
SF-K·40·40

Asia



■Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=7.5 \times 10^4 \text{mm}^4$ $I_y=7.5 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=3.7 \times 10^3 \text{mm}^3$ $Z_y=3.7 \times 10^3 \text{mm}^3$
Unit Mass	1.33kg/m



Name	SF-K-40-40 (ℓ=4000)	SF-K-40-40 ℓ=50~4000
Item No.	SFF-C02-T	SFF-C04-T

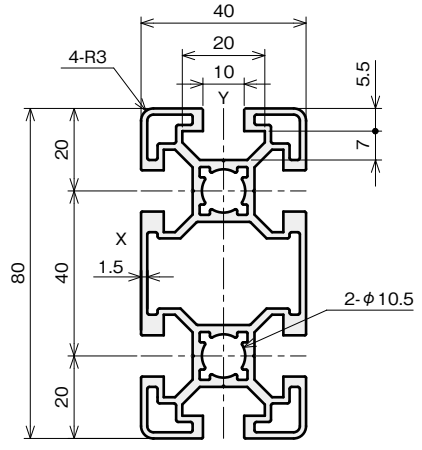
SF-K·40·80

Asia



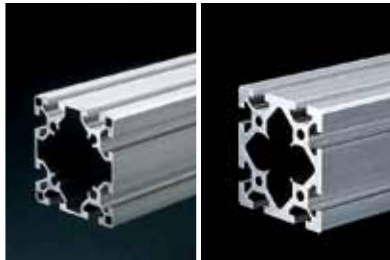
■Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=55.3 \times 10^4 \text{mm}^4$ $I_y=14.4 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=13.8 \times 10^3 \text{mm}^3$ $Z_y=7.2 \times 10^3 \text{mm}^3$
Unit Mass	2.31kg/m



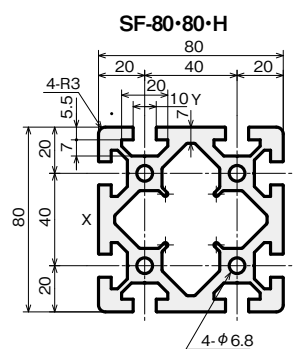
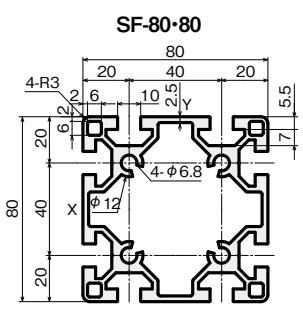
Name	SF-K-40-80 (ℓ=4000)	SF-K-40-80 ℓ=50~4000
Item No.	SFF-C482-T	SFF-C484-T

SF-80·80 / SF-80·80·H



■Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=129.84 \times 10^4 \text{mm}^4$ (SF-80-80) $I_x=182.5 \times 10^4 \text{mm}^4$ (SF-80-80-H) $I_y=129.84 \times 10^4 \text{mm}^4$ (SF-80-80) $I_y=182.5 \times 10^4 \text{mm}^4$ (SF-80-80-H)
Section Modulus	$Z_x=32.46 \times 10^3 \text{mm}^3$ (SF-80-80) $Z_x=45.6 \times 10^3 \text{mm}^3$ (SF-80-80-H) $Z_y=32.46 \times 10^3 \text{mm}^3$ (SF-80-80) $Z_y=45.6 \times 10^3 \text{mm}^3$ (SF-80-80-H)
Unit Mass	4.57kg/m (SF-80-80) 7.13kg/m (SF-80-80-H)



Name	SF-80-80 (ℓ=4000)	SF-80-80 ℓ=50~4000
Item No.	SFF-802	SFF-804
Name	SF-80-80-H (ℓ=4000)	SF-80-80-H ℓ=50~4000
Item No.	SFF-H82	SFF-H84

●Exclusive Nut
T Nut L
After Nut L
Lock Nut L
Free Nut L
P9B~

●Exclusive Cap
Frame Cap
P122·123

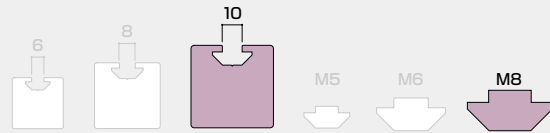
●Additional processing and surface treatment are also available.



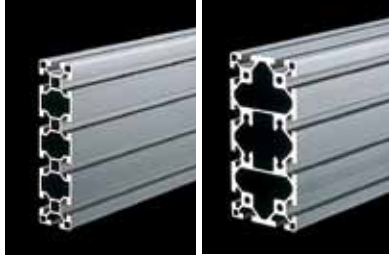
P206~

SF20 SS Size
SF30 S Size
SF40·45 L Size
Complex Parts
Door Panel Clean Equipment
Technical Data

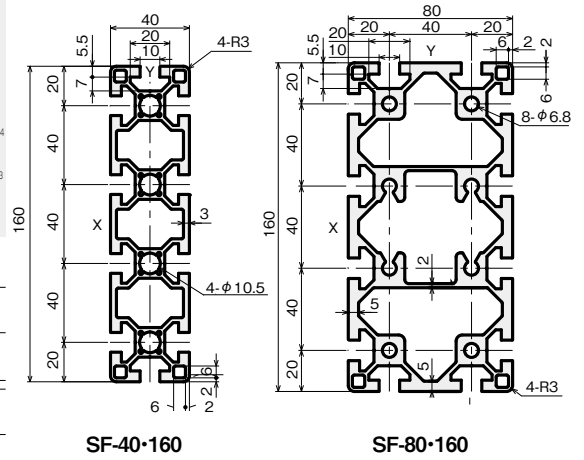
SF40•45 SERIES



SF-40•160 / SF-80•160



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
	SF-40•160 SF-80•160
Geometrical Moment of Inertia	$I_x=498.8 \times 10^4 \text{mm}^4$ $I_y=1000.9 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=62.3 \times 10^3 \text{mm}^3$ $Z_y=73.8 \times 10^3 \text{mm}^3$
Unit Mass	5.54kg/m 10.51kg/m



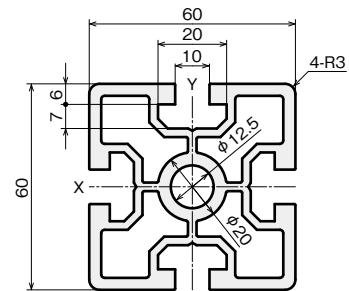
Name	SF-40•160 (ℓ=4000)	SF-40•160 ℓ=50~4000
Item No.	SFF-4162	SFF-4164
Name	SF-80•160 (ℓ=4000)	SF-80•160 ℓ=50~4000
Item No.	SFF-812	SFF-814

SF-60•60•1S

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=49.27 \times 10^4 \text{mm}^4$ $I_y=49.27 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=16.42 \times 10^3 \text{mm}^3$ $Z_y=16.42 \times 10^3 \text{mm}^3$
Unit Mass	3.72kg/m



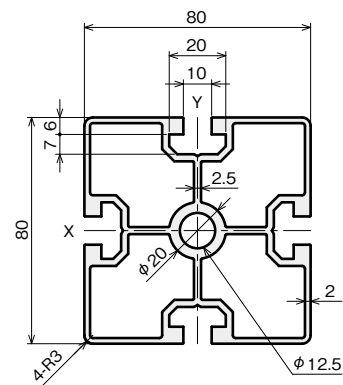
Name	SF-60•60•1S (ℓ=4000)	SF-60•60•1S ℓ=50~4000
Item No.	SFF-602-T	SFF-604-T

SF-80•80•1S

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=90.46 \times 10^4 \text{mm}^4$ $I_y=90.46 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=22.62 \times 10^3 \text{mm}^3$ $Z_y=22.62 \times 10^3 \text{mm}^3$
Unit Mass	3.94kg/m



Name	SF-80•80•1S (ℓ=4000)	SF-80•80•1S ℓ=50~4000
Item No.	SFF-822-T	SFF-824-T



SF Frame
Standard (ℓ=4000) (Cut by customer)
Item No. SFF-4162

In case of specifying the length (Cut by SUS) ※Order by 0.1mm unit
Quantity (pcs) Item No. Length (mm)
□□ SFF-4164 ℓ=800

Frame for 40·45
Nut for 40·45
Bracket for 40·45
Adjuster for 40·45
Accessory for 40·45

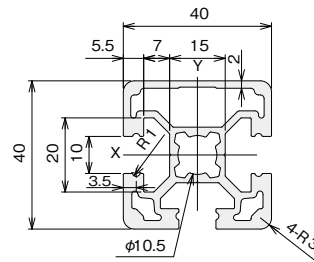
Asia This sign shows the product is designed for Asia region only

SF2-40·40·1F

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=9.7 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=9.99 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=4.58 \times 10^3 \text{mm}^3$ $Z_y=5.00 \times 10^3 \text{mm}^3$
Unit Mass	1.53kg/m



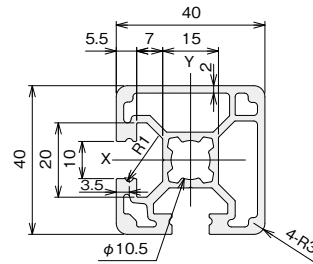
Name	SF2-40·40·1F (ℓ=4000)	SF2-40·40·1F ℓ=50~4000
Item No.	SFF-E12-T	SFF-E14-T

SF2-40·40·2F

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=9.72 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=9.72 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=4.81 \times 10^3 \text{mm}^3$ $Z_y=4.81 \times 10^3 \text{mm}^3$
Unit Mass	1.49kg/m



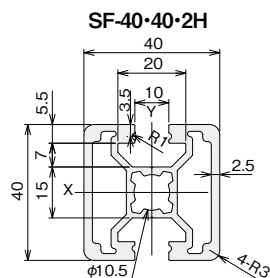
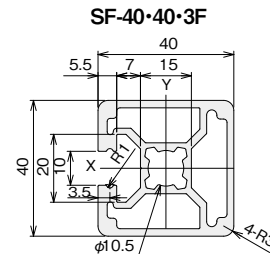
Name	SF2-40·40·2F (ℓ=4000)	SF2-40·40·2F ℓ=50~4000
Item No.	SFF-F12-T	SFF-F14-T

SF2-40·40·3F / SF2-40·40·2H

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=10.1 \times 10^4 \text{mm}^4$ $I_x=10.15 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=10.52 \times 10^4 \text{mm}^4$ $I_y=10.55 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=5.00 \times 10^3 \text{mm}^3$ $Z_x=5.08 \times 10^3 \text{mm}^3$ $Z_y=5.26 \times 10^3 \text{mm}^3$ $Z_y=5.28 \times 10^3 \text{mm}^3$
Unit Mass	1.55kg/m 1.57kg/m



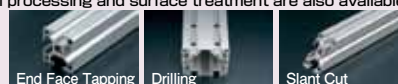
Name	SF2-40·40·3F (ℓ=4000)	SF2-40·40·3F ℓ=50~4000
Item No.	SFF-FF12-T	SFF-FF14-T

Name	SF2-40·40·2H (ℓ=4000)	SF2-40·40·2H ℓ=50~4000
Item No.	SFF-FH12-T	SFF-FH14-T

●Exclusive Nut
T Nut L
After Nut L
Lock Nut L
Free Nut L
P98~

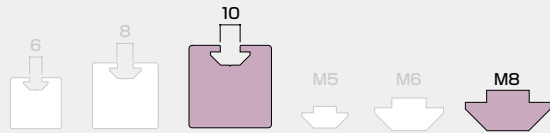
●Exclusive Cap
Frame Cap
P122-123

●Additional processing and surface treatment are also available.



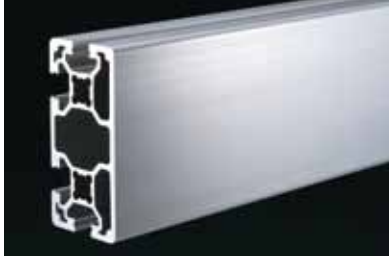
P206~

SF40·45 SERIES

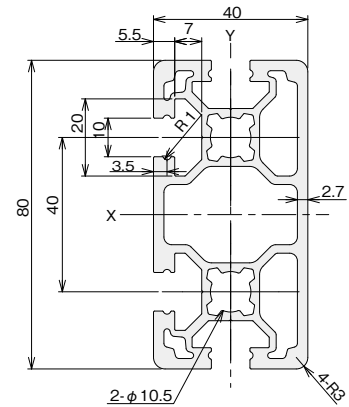


SF2-40·80·1F

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=71.00 \times 10^4 \text{mm}^4$ $I_y=20.35 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=17.75 \times 10^3 \text{mm}^3$ $Z_y=10.16 \times 10^3 \text{mm}^3$
Unit Mass	2.82kg/m

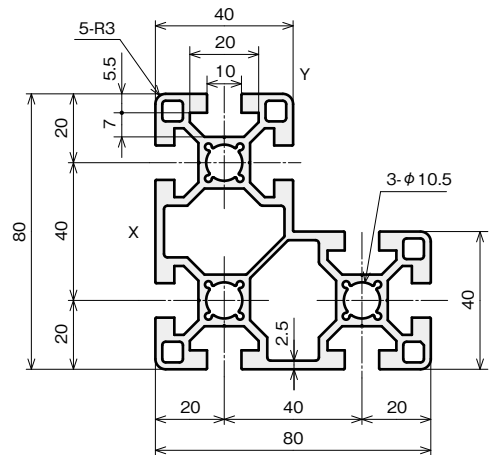


Name	SF2-40·80·1F (ℓ=4000)	SF2-40·80·1F ℓ=50~4000
Item No.	SFF-4E82-T	SFF-4E84-T

SF-40·80·80

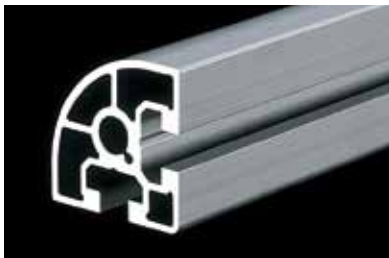


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=94.15 \times 10^4 \text{mm}^4$ $I_y=94.15 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=20.53 \times 10^3 \text{mm}^3$ $Z_y=20.53 \times 10^3 \text{mm}^3$
Unit Mass	4.19kg/m

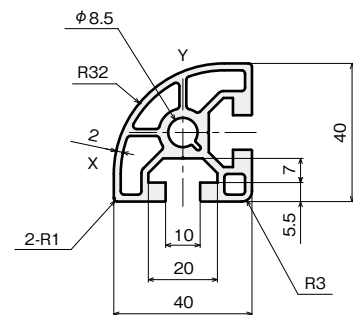


Name	SF-40·80·80 (ℓ=4000)	SF-40·80·80 ℓ=50~4000
Item No.	SFF-G22	SFF-G24

SF-40·40·R



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=7.82 \times 10^4 \text{mm}^4$ $I_y=7.82 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=3.53 \times 10^3 \text{mm}^3$ $Z_y=3.53 \times 10^3 \text{mm}^3$
Unit Mass	1.53kg/m



Name	SF-40·40·R (ℓ=4000)	SF-40·40·R ℓ=50~4000
Item No.	SFF-R72	SFF-R74



SF Frame Standard (ℓ=4000) (Cut by customer)
Item No. SFF-4E82-T

In case of specifying the length (Cut by SUS) ※ Order by 0.1mm unit
Quantity (pcs) Item No. Length (mm)
□ □ SFF-4E84-T ℓ=800

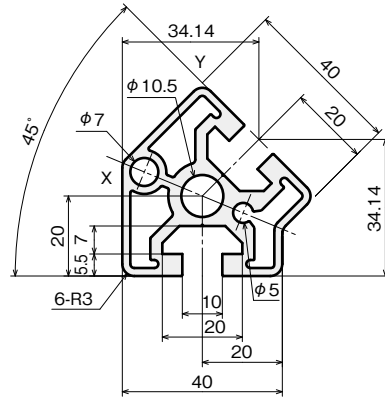
Frame for 40·45
Nut for 40·45
Bracket for 40·45
Adjuster for 40·45
Accessory for 40·45

Asia This sign shows the product is designed for Asia region only

SF-40·DE45



■Material/Technical Data
Material Aluminium Alloy
 Alumite Treatment
Environment RoHS Compliant
 Green Procurement
Geometrical
 Moment of Inertia $I_x=9.87 \times 10^4 \text{mm}^4$
 $I_y=10.37 \times 10^4 \text{mm}^4$
Section Modulus $Z_x=3.59 \times 10^3 \text{mm}^3$
 $Z_y=3.99 \times 10^3 \text{mm}^3$
Unit Mass 1.83kg/m

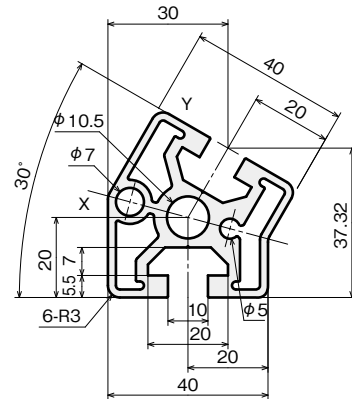


Name	SF-40-DE45 (ℓ=4000)	SF-40-DE45 ℓ=50~4000
Item No.	SFF-J72B	SFF-J74B

SF-40·DE30



■Material/Technical Data
Material Aluminium Alloy
 Alumite Treatment
Environment RoHS Compliant
 Green Procurement
Geometrical
 Moment of Inertia $I_x=9.89 \times 10^4 \text{mm}^4$
 $I_y=10.64 \times 10^4 \text{mm}^4$
Section Modulus $Z_x=3.73 \times 10^3 \text{mm}^3$
 $Z_y=4.20 \times 10^3 \text{mm}^3$
Unit Mass 1.88kg/m

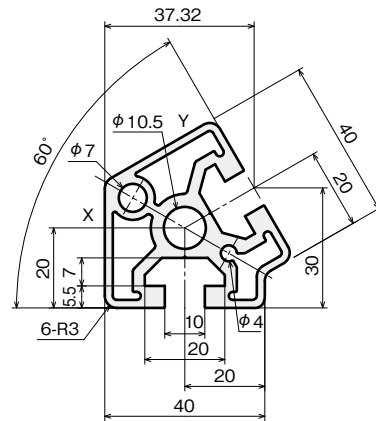


Name	SF-40-DE30 (ℓ=4000)	SF-40-DE30 ℓ=50~4000
Item No.	SFF-J72A	SFF-J74A

SF-40·DE60



■Material/Technical Data
Material Aluminium Alloy
 Alumite Treatment
Environment RoHS Compliant
 Green Procurement
Geometrical
 Moment of Inertia $I_x=9.99 \times 10^4 \text{mm}^4$
 $I_y=10.53 \times 10^4 \text{mm}^4$
Section Modulus $Z_x=3.74 \times 10^3 \text{mm}^3$
 $Z_y=4.14 \times 10^3 \text{mm}^3$
Unit Mass 1.84kg/m

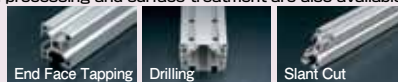


Name	SF-40-DE60 (ℓ=4000)	SF-40-DE60 ℓ=50~4000
Item No.	SFF-J72C	SFF-J74C

●Exclusive Nut
 T Nut L
 After Nut L
 Lock Nut L
 Free Nut L
 P98~

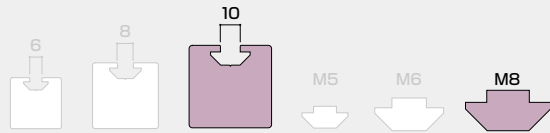
●Exclusive Cap
 Frame Cap
 P122-123

●Additional processing and surface treatment are also available.



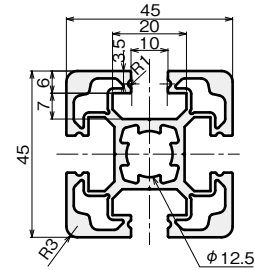
P206~

SF40•45 SERIES



SF2-45•45

Asia



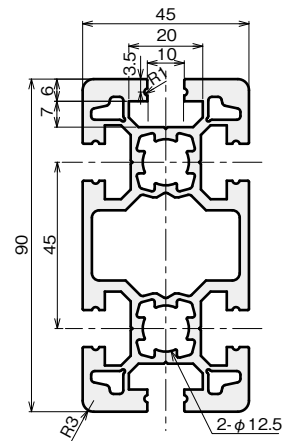
Name	SF2-45•45 (ℓ=4000)	SF2-45•45 ℓ=50~4000
Item No.	SFF-442-T	SFF-444-T

■Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=15.28 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=15.28 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=6.79 \times 10^3 \text{mm}^3$ $Z_y=6.79 \times 10^3 \text{mm}^3$
Unit Mass	1.92kg/m

SF2-45•90

Asia



Name	SF2-45•90 (ℓ=4000)	SF2-45•90 ℓ=50~4000
Item No.	SFF-472-T	SFF-474-T

■Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=129.24 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=33.32 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=28.72 \times 10^3 \text{mm}^3$ $Z_y=14.81 \times 10^3 \text{mm}^3$
Unit Mass	3.87kg/m



SF Frame
Standard (ℓ=4000) (Cut by customer)
Item No.
SFF-442-T

In case of specifying the length (Cut by SUS) ※Order by 0.1mm unit
Quantity (pcs) Item No. Length (mm)
 SFF-444-T ℓ=800

- Frame for 40·45
- Nut for 40·45
- Bracket for 40·45
- Adjuster for 40·45
- Accessory for 40·45

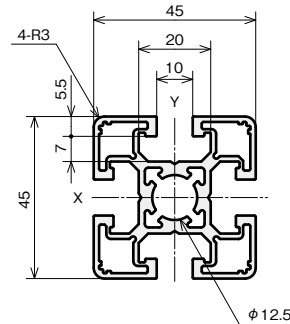
Asia This sign shows the product is designed for Asia region only

SF-K·45·45

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=1.73 \times 10^4 \text{mm}^4$ $I_y=1.73 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=5.21 \times 10^3 \text{mm}^3$ $Z_y=5.21 \times 10^3 \text{mm}^3$
Unit Mass	1.70kg/m



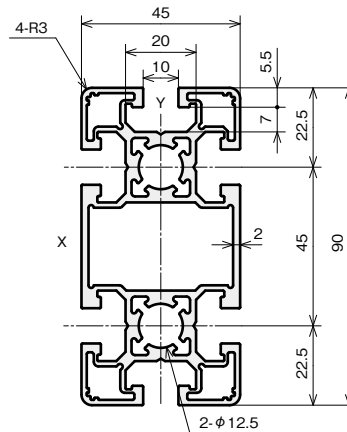
Name	SF-K-45-45 (ℓ=4000)	SF-K-45-45 ℓ=50~4000
Item No.	SFF-B02-T	SFF-B04-T

SF-K·45·90

Asia

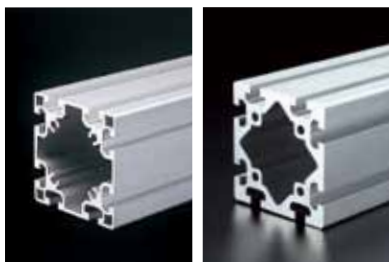


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=87.16 \times 10^4 \text{mm}^4$ $I_y=22.87 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=19.37 \times 10^3 \text{mm}^3$ $Z_y=10.16 \times 10^3 \text{mm}^3$
Unit Mass	2.98kg/m

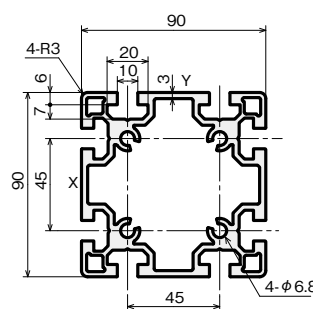


Name	SF-K-45-90 (ℓ=4000)	SF-K-45-90 ℓ=50~4000
Item No.	SFF-B492-T	SFF-B494-T

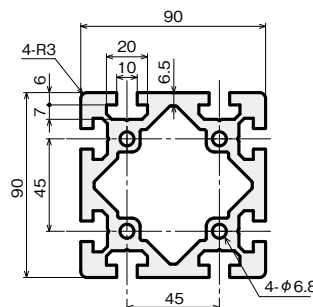
SF-90·90 / SF-90·90·H



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	SF-90-90: $I_x=209.2 \times 10^4 \text{mm}^4$, $I_y=209.2 \times 10^4 \text{mm}^4$ SF-90-90-H: $I_x=303.40 \times 10^4 \text{mm}^4$, $I_y=303.40 \times 10^4 \text{mm}^4$
Section Modulus	SF-90-90: $Z_x=46.5 \times 10^3 \text{mm}^3$, $Z_y=46.5 \times 10^3 \text{mm}^3$ SF-90-90-H: $Z_x=67.42 \times 10^3 \text{mm}^3$, $Z_y=67.42 \times 10^3 \text{mm}^3$
Unit Mass	SF-90-90: 5.8kg/m, SF-90-90-H: 8.83kg/m



SF-90·90



SF-90·90·H

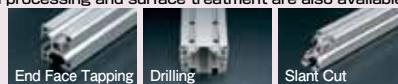
Name	SF-90-90 (ℓ=4000)	SF-90-90 ℓ=50~4000
Item No.	SFF-902	SFF-904

Name	SF-90-90-H (ℓ=4000)	SF-90-90-H ℓ=50~4000
Item No.	SFF-H92	SFF-H94

●Exclusive Nut
T Nut L
After Nut L
Lock Nut L
Free Nut L
P98~

●Exclusive Cap
Frame Cap
P122-123

●Additional processing and surface treatment are also available.



P206~

SF20
SS Size

SF30
S Size

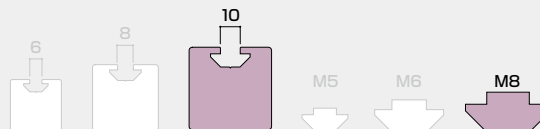
SF40-45
L Size

Complex Parts

Door Panel
Clean Equipment

Technical Data

SF40•45 SERIES

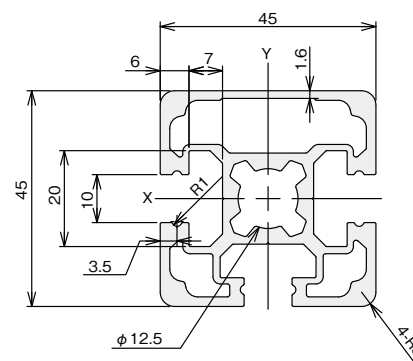


SF2-45•45•1F

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=13.94 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=14.71 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=6.97 \times 10^3 \text{mm}^3$ $Z_y=6.53 \times 10^3 \text{mm}^3$
Unit Mass	1.83kg/m



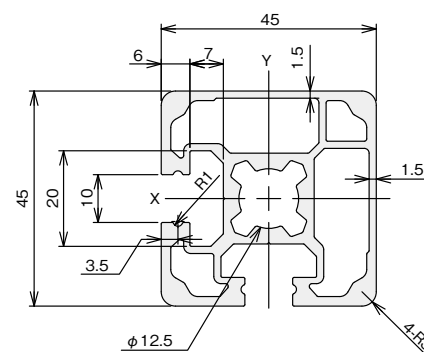
Name	SF2-45-45-1F (ℓ=4000)	SF2-45-45-1F ℓ=50~4000
Item No.	SFF-4J2-T	SFF-4J4-T

SF2-45•45•2F

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=14.14 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=14.14 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=6.15 \times 10^3 \text{mm}^3$ $Z_y=6.15 \times 10^3 \text{mm}^3$
Unit Mass	1.78kg/m



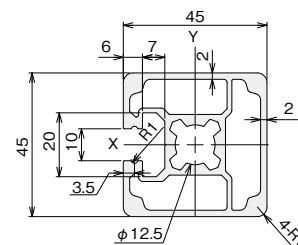
Name	SF2-45-45-2F (ℓ=4000)	SF2-45-45-2F ℓ=50~4000
Item No.	SFF-4K2-T	SFF-4K4-T

SF2-45•45•3F / SF2-45•45•2H

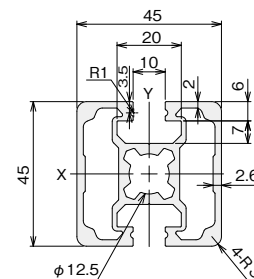
Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	$I_x=14.91 \times 10^4 \text{mm}^4$ $I_x=14.55 \times 10^4 \text{mm}^4$
Moment of Inertia	$I_y=15.09 \times 10^4 \text{mm}^4$ $I_y=14.73 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=6.54 \times 10^3 \text{mm}^3$ $Z_x=6.47 \times 10^3 \text{mm}^3$ $Z_y=6.71 \times 10^3 \text{mm}^3$ $Z_y=6.55 \times 10^3 \text{mm}^3$
Unit Mass	1.83kg/m 1.83kg/m



SF2-45•45•3F



SF2-45•45•2H

Name	SF2-45-45-3F (ℓ=4000)	SF2-45-45-3F ℓ=50~4000
Item No.	SFF-4L2-T	SFF-4L4-T

Name	SF2-45-45-2H (ℓ=4000)	SF2-45-45-2H ℓ=50~4000
Item No.	SFF-4M2-T	SFF-4M4-T



SF Frame
Standard (ℓ=4000) (Cut by customer)
Item No. **SFF-4J2-T**

In case of specifying the length (Cut by SUS) ※Order by 0.1mm unit
Quantity (pcs) Item No. Length (mm)
 SFF-4J4-T ℓ=800

Frame for 40·45
 Nut for 40·45
 Bracket for 40·45
 Adjuster for 40·45
 Accessory for 40·45

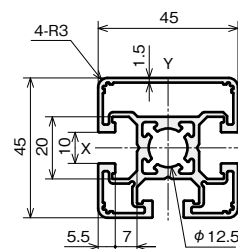
Asia This sign shows the product is designed for Asia region only

SF-K·45·45·1F / SF-K·45·45·2F

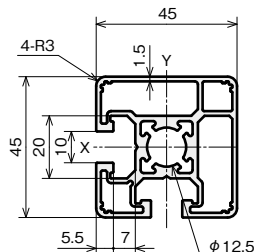


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	SF-K-45-45-1F SF-K-45-45-2F
Moment of Inertia	$I_x=10.88 \times 10^4 \text{mm}^4$ $I_y=11.13 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=5.04 \times 10^3 \text{mm}^3$ $Z_y=4.99 \times 10^3 \text{mm}^3$
Unit Mass	1.60kg/m 1.58kg/m

Name	SF-K-45-45-1F (ℓ=4000)	SF-K-45-45-1F ℓ=50~4000
Item No.	SFF-BE02	SFF-BE04
Name	SF-K-45-45-2F (ℓ=4000)	SF-K-45-45-2F ℓ=50~4000
Item No.	SFF-BF02	SFF-BF04



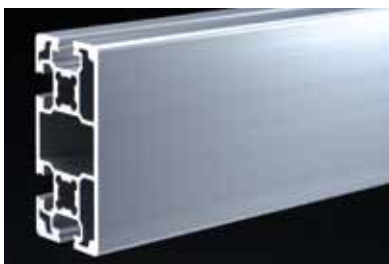
SF-K·45·45·1F



SF-K·45·45·2F

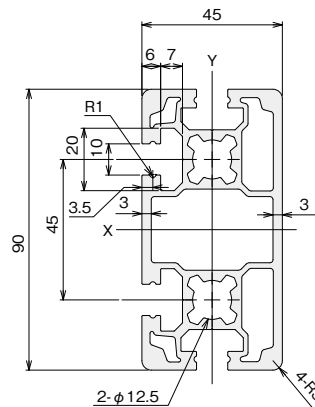
SF2-45·90·1F

Asia



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	SF2-45-90-1F
Moment of Inertia	$I_x=117.53 \times 10^4 \text{mm}^4$ $I_y=32.08 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=26.12 \times 10^3 \text{mm}^3$ $Z_y=14.07 \times 10^3 \text{mm}^3$
Unit Mass	3.61kg/m

Name	SF2-45-90-1F (ℓ=4000)	SF2-45-90-1F ℓ=50~4000
Item No.	SFF-EF2-T	SFF-EF4-T

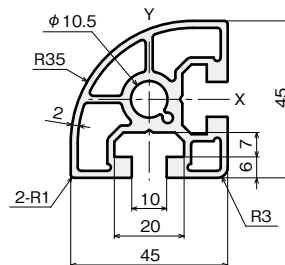


SF-45·45·R



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	SF-45-45-R
Moment of Inertia	$I_x=11.33 \times 10^4 \text{mm}^4$ $I_y=11.33 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=4.52 \times 10^3 \text{mm}^3$ $Z_y=4.52 \times 10^3 \text{mm}^3$
Unit Mass	1.79kg/m

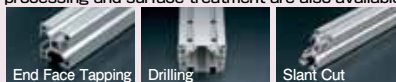
Name	SF-45-45-R (ℓ=4000)	SF-45-45-R ℓ=50~4000
Item No.	SFF-R82	SFF-R84



●Exclusive Nut
 T Nut L
 After Nut L
 Lock Nut L
 Free Nut L
 P98~

●Exclusive Cap
 Frame Cap
 P122-123

●Additional processing and surface treatment are also available.



P206~

SF20
SS Size

SF30
S Size

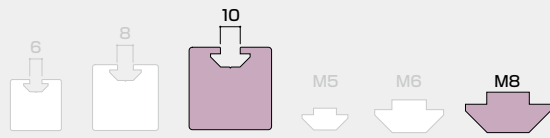
SF40-45
L Size

Complex Parts

Door Panel
Clean Equipment

Technical Data

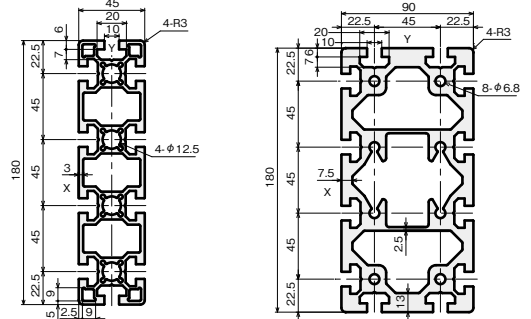
SF40•45 SERIES



SF-45•180 / SF-90•180



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	SF-45•180 SF-90•180
Moment of Inertia	$I_x=804.81 \times 10^4 \text{mm}^4$ $I_x=2136.6 \times 10^4 \text{mm}^4$
Section Modulus	$I_y=60.75 \times 10^4 \text{mm}^4$ $I_y=598.51 \times 10^4 \text{mm}^4$
	$Z_x=89.42 \times 10^3 \text{mm}^3$ $Z_x=237.4 \times 10^3 \text{mm}^3$
	$Z_y=27 \times 10^3 \text{mm}^3$ $Z_y=133 \times 10^3 \text{mm}^3$
Unit Mass	7.12kg/m 17.07kg/m

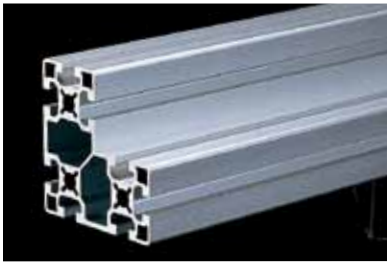


SF-45•180

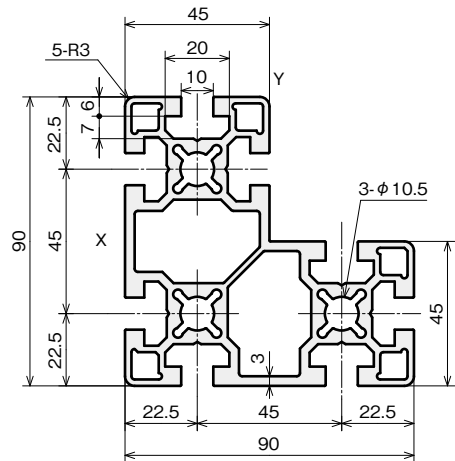
SF-90•180

Name	SF-45•180 (ℓ=4000)	SF-45•180 ℓ=50~4000
Item No.	SFF-4182	SFF-4184
Name	SF-90•180 (ℓ=4000)	SF-90•180 ℓ=50~4000
Item No.	SFF-912	SFF-914

SF-45•90•90

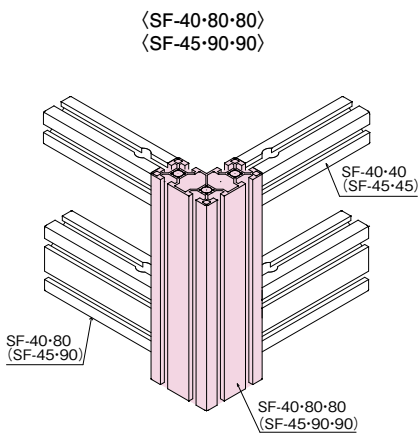


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical	
Moment of Inertia	$I_x=149.53 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=28.83 \times 10^3 \text{mm}^3$
	$Z_y=28.83 \times 10^3 \text{mm}^3$
Unit Mass	5.55kg/m

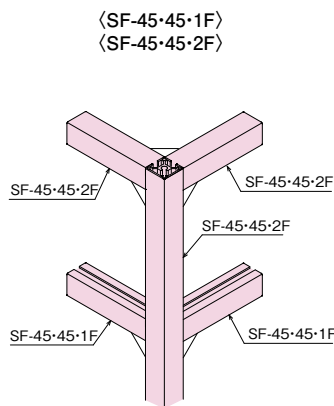


Name	SF-45•90•90 (ℓ=4000)	SF-45•90•90 ℓ=50~4000
Item No.	SFF-G32	SFF-G34

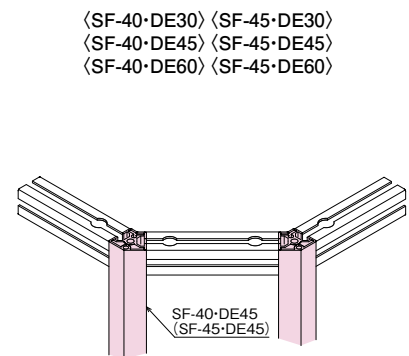
How to use Frame



●As the reinforcing Frame at corner, or to ensure space inside



●For the clean environment without groove on Frame externally



●Many variations to construct angles other than 90°



SF Frame Standard (ℓ=4000) (Cut by customer)
Item No. SFF-4182

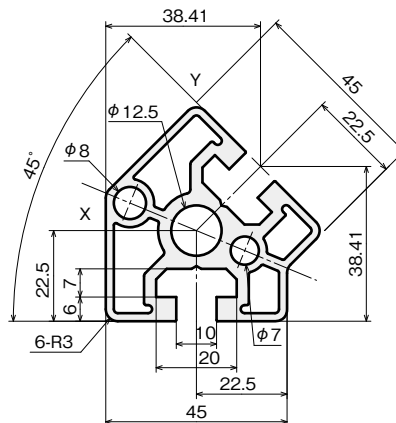
In case of specifying the length (Cut by SUS) ※Order by 0.1mm unit
Quantity (pcs) Item No. Length (mm)
□□ SFF-4184 ℓ=800

Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

SF-45·DE45

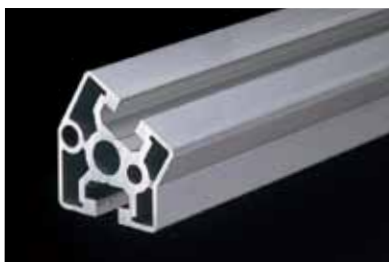


Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=14.78 \times 10^4 \text{mm}^4$ $I_y=15.49 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=4.72 \times 10^3 \text{mm}^3$ $Z_y=5.36 \times 10^3 \text{mm}^3$
Unit Mass	2.22kg/m

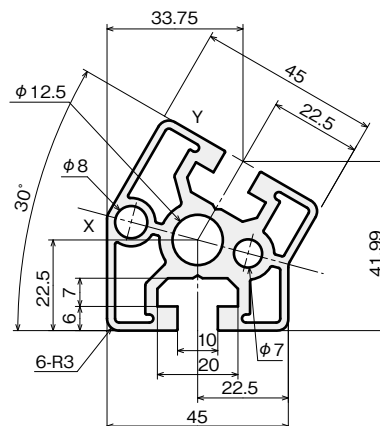


Name	SF-45·DE45 (ℓ=4000)	SF-45·DE45 ℓ=50~4000
Item No.	SFF-J82B	SFF-J84B

SF-45·DE30



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=14.91 \times 10^4 \text{mm}^4$ $I_y=15.95 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=4.95 \times 10^3 \text{mm}^3$ $Z_y=5.70 \times 10^3 \text{mm}^3$
Unit Mass	2.30kg/m

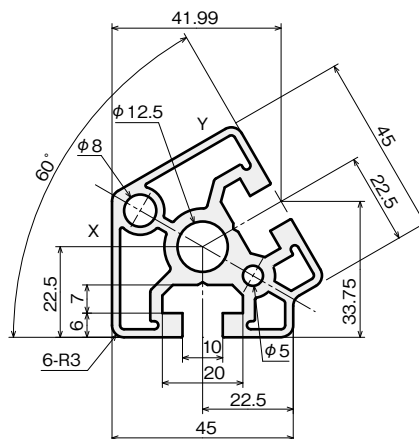


Name	SF-45·DE30 (ℓ=4000)	SF-45·DE30 ℓ=50~4000
Item No.	SFF-J82A	SFF-J84A

SF-45·DE60



Material/Technical Data	
Material	Aluminium Alloy Alumite Treatment
Environment	RoHS Compliant Green Procurement
Geometrical Moment of Inertia	$I_x=14.94 \times 10^4 \text{mm}^4$ $I_y=15.93 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=4.86 \times 10^3 \text{mm}^3$ $Z_y=5.78 \times 10^3 \text{mm}^3$
Unit Mass	2.26kg/m

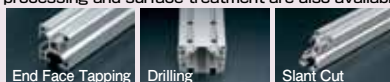


Name	SF-45·DE60 (ℓ=4000)	SF-45·DE60 ℓ=50~4000
Item No.	SFF-J82C	SFF-J84C

●Exclusive Nut
T Nut L
After Nut L
Lock Nut L
Free Nut L
P98~

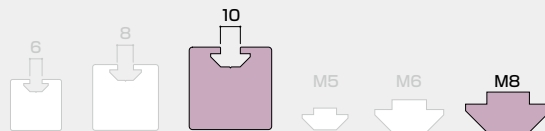
●Exclusive Cap
Frame Cap
P122·123

●Additional processing and surface treatment are also available.

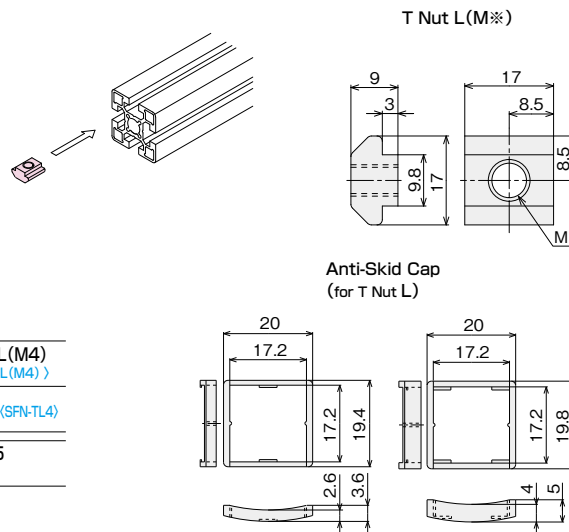
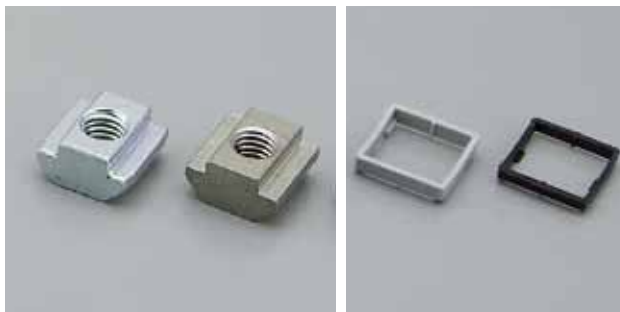


P206~

SF40•45 SERIES



T Nut L(M※) / Anti-Skid Cap L40 / L45

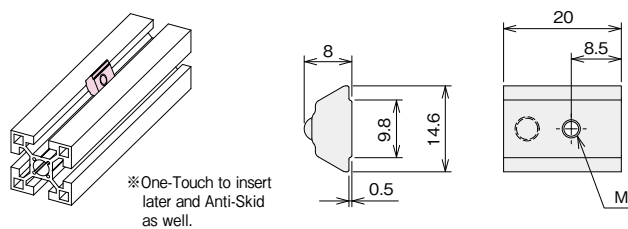


Name	T Nut L(M8) (ST Nut L(MB))	T Nut L(M6) (ST Nut L(M6))	T Nut L(M5) (ST Nut L(M5))	T Nut L(M4) (ST Nut L(M4))
Item No.	SFB-004(SFN-TL8)	SFB-003(SFN-TL6)	SFB-008(SFN-TL5)	SFB-007(SFN-TL4)
Name	Anti-Skid Cap L40 (50pcs/pack)		Anti-Skid Cap L45 (50pcs/pack)	
Item No.	SFA-907		SFA-908	

Usable Frame
Compatible to all SF40 and 45 series
(Groove Width 10mm)

Material/Technical Data			
	T Nut L	ST Nut L	Anti-Skid Cap
Material	Equivalent to S10C Uni-Chrome	Stainless With Conductive Function	Black Polyamide(L40) Gray Polyamide(L45)
Weight	14g	14g	0.3g/piece(L40) 0.5g/piece(L45)
Environment	RoHS Compliant Green Procurement		

Easy Nut L(M※)



Name	Easy Nut L (M8)	Easy Nut L (M6)	Easy Nut L (M5)	Easy Nut L (M4)	Easy Nut L (M3)
Item No.	SFB-PN24	SFB-PN23	SFB-PN22	SFB-PN21	SFB-PN20
Name	S Easy Nut L (M8) Stainless	S Easy Nut L (M6) Stainless	S Easy Nut L (M5) Stainless	S Easy Nut L (M4) Stainless	S Easy Nut L (M3) Stainless
Item No.	SFN-EL8	SFN-EL6	SFN-EL5	SFN-EL4	SFN-EL3

Usable Frame
Compatible to all SF40 and 45 series
(Groove Width 10mm)

Material/Technical Data		
	Easy Nut L	S Easy Nut L
Material	Equivalent to S10C Uni-Chrome plating	Stainless With Conductive
Weight	10g/piece	
Environment	RoHS Compliant Green Procurement	

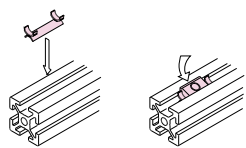
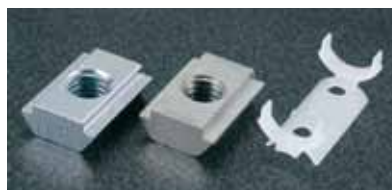


Parts
How to order
Item No.
SFB-004

Quantity (pcs)

Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

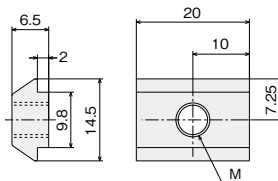
After Nut L(M※) / After Nut Support L



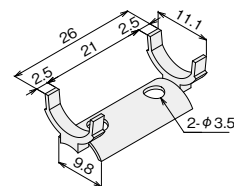
※Using After Nut Support together prevents from slipping.

Name	After Nut L(M8) (S After Nut L(M8))	After Nut L(M6) (S After Nut L(M6))	After Nut L(M5) (S After Nut L(M5))	After Nut L(M4) (S After Nut L(M4))
Item No.	SFB-628(SFN-AL8)	SFB-626(SFN-AL6)	SFB-625(SFN-AL5)	SFB-624(SFN-AL4)
Name	After Nut Support L(50pcs/pack)			
Item No.	SFA-9A3			

After Nut L(M※)



After Nut Support L
(for After Nut and Lock Nut)



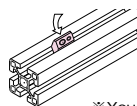
■Usable Frame

Compatible to all SF40 and 45 series (Groove Width 10mm)

■Material/Technical Data

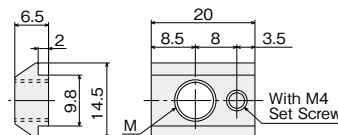
	After Nut L	S After Nut L	After Nut Support L
Material	Equivalent to S10C Uni-Chrome	Stainless With Conductive Function	PP Resin
Weight	10g	10g	0.3g/piece
Environment	RoHS Compliant	Green Procurement	

Lock Nut L(M※)



※You can fix nut and conduct electricity by tightening attached Set Screw.

Lock Nut L(M※)



Name	Lock Nut L(M8) (S Lock Nut L(M8))	Lock Nut L(M6) (S Lock Nut L(M6))	Lock Nut L(M5) (S Lock Nut L(M5))	Lock Nut L(M4) (S Lock Nut L(M4))
Item No.	*SFB-4A8(SFN-L8)	*SFB-4A6(SFN-L6)	*SFB-4A5(SFN-L5)	*SFB-4A4(SFN-L4)

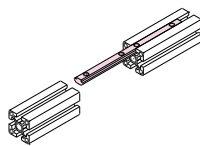
■Usable Frame

Compatible to all SF40 and 45 series (Groove Width 10mm)

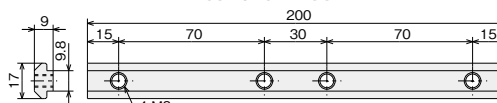
■Material/Technical Data

	Lock Nut L	S Lock Nut L
Material	Equivalent to S10C Uni-Chrome	Stainless With Conductive Function
Weight	10g	10g
Environment	RoHS Compliant	Green Procurement

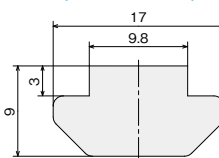
Joint Bar L200 / T Nut L Material / After Nut L Material



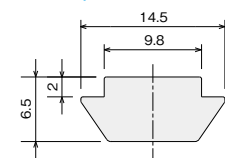
Joint Bar L200



T Nut L Material
(ST Nut L Material)



After Nut L Material
(S After Nut L Material)



Name(Single Item)	Joint Bar L200	Name(With Set screw)	Joint Bar L200 Kit
Item No.	*SFJ-607	Item No.	*SFK-607
Name	T Nut L Material $\varnothing=(2800)$ (S T Nut L Material $\varnothing=(2800)$)	T Nut L Material $\varnothing=450$ (S T Nut L Material $\varnothing=450$)	
Item No.	*SFX-101(SFX-003)	*SFX-121(SFX-S01)	
Name	After Nut L Material $\varnothing=(2800)$ (S After Nut L Material $\varnothing=(2800)$)	After Nut L Material $\varnothing=450$ (S After Nut L Material $\varnothing=450$)	
Item No.	*SFX-102(SFX-008)	*SFX-122(SFX-S08)	

• Note : T Nut material will be delivered without plating.

■Usable Frame

Compatible to all SF40 and 45 series (Groove Width 10mm)

■Kit contents

- Joint Bar L200×1
- Set screw(M8×10) ×4

■Material/Technical Data

	Joint Bar L200	T Nut L Material After Nut L Material	ST Nut L Material S After Nut L Material
Material	Equivalent to S10C Uni-Chrome plating	Equivalent to S10C Not plating	SUS303
Weight	171g	925g/m(T Nut L) 574g/m(After Nut L)	940g/m(ST Nut L) 583g/m(S After Nut L)
Environment	RoHS Compliant	Green Procurement	



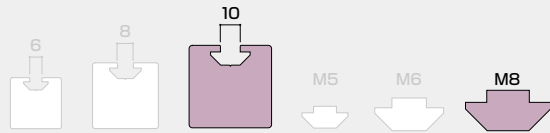
We sell Nut Material and Bracket Material as well.

T Nut L Material
P99

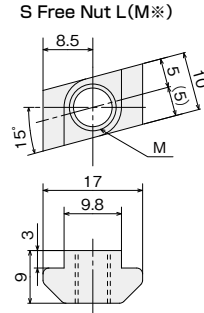
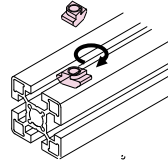
● Hard Bracket L Material
● Angle Bracket L Material



SF40•45 SERIES



S Free Nut L(M※)

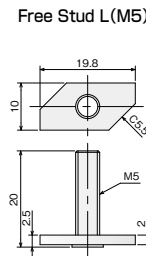
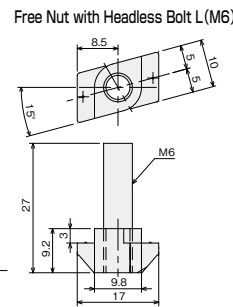
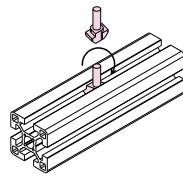


Name	S Free Nut L(M8)	S Free Nut L(M6)	S Free Nut L(M5)	S Free Nut L(M4)
Item No.	SFN-FL8	SFN-FL6	SFN-FL5	SFN-FL4

Usable Frame
Compatible to all SF40 and 45 series (Groove Width 10mm)

Material/Technical Data
S Free Nut L
 Material: Stainless
 With Conductive Function
 Weight: 7g
 Environment: RoHS Compliant, Green Procurement

Free Nut with Headless Bolt L(M6) / Free Stud L(M5) / Free Nut Stopper L

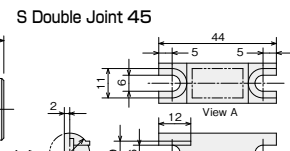
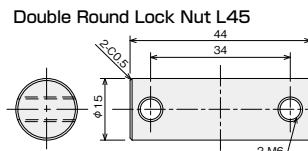
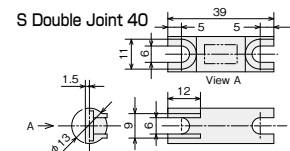
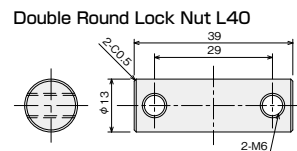
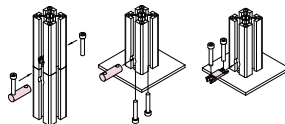


Name	Free Nut with Headless Bolt L (M6)	Free Nut Stopper L
Item No.	★SFN-NL6	★SFA-9F2
Name	Free Stud L (M5)	
Item No.	★SFN-NLE1	

Usable Frame
Compatible to all SF40 and 45 series (Groove Width 10mm)

Material/Technical Data
 Free Nut with Headless Bolt L: Stainless, With Conductive Function, Weight 1.2g, Environment ★RoHS Compliant
 Free Stud L: SPHC, Uni-Chrome, Weight 4.7g, Environment ★Green Procurement
 Free Nut Stopper L: Polyamide, Weight 0.6g, Environment ★Green Procurement

Double Round Lock Nut L40/L45 / S Double Joint 40/45



Name	Double Round Lock Nut L40	Double Round Lock Nut L45
Item No.	SFJ-251S	SFJ-252S
Name	S Double Joint 40	S Double Joint 45
Item No.	SFK-394S	SFK-392S

Usable Frame
SF-40-40, SF-40-80, SF-40-120, SF-45-45, SF-45-90, SF-45-180

Material/Technical Data
 Double Round Lock Nut L40/L45: SUS304, Weight 36g (L40), 55g (L45), Environment RoHS Compliant
 S Double Joint 40/45: SCS13 (Stainless), Weight 61g (40), 73g (45), Environment Green Procurement

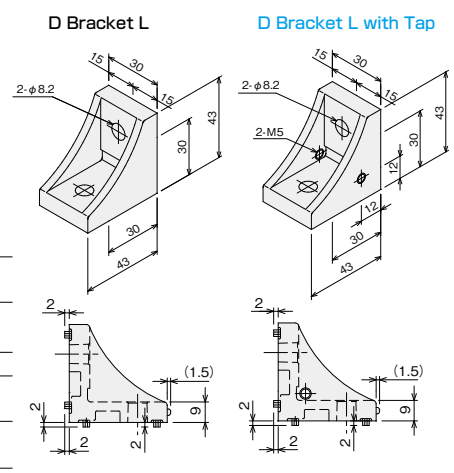
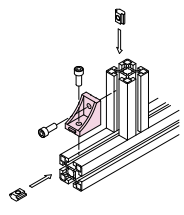


Parts How to order
Item No. SFB-104

Quantity (pcs) □□

Frame for 40·45
 Nut for 40·45
 Bracket for 40·45
 Adjuster for 40·45
 Accessory for 40·45

D Bracket L



Name (Single Item)	D Bracket L (D Bracket L with Tap)	D Bracket L-CN (D Bracket L-CN with Tap)	
Item No.	SFJ-013 (SFJ-014)	SFJ-013N (SFJ-014N)	
Name (Bolt and Nut Kit)	D Bracket L Kit (D Bracket L Kit with Tap)	D Bracket L (Stainless) Kit (D Bracket L with Tap (Stainless) Kit)	D Bracket L-CN Kit (D Bracket L-CN Kit with Tap)
Item No.	SFK-013 (SFK-014)	SFK-013S (SFK-014S)	SFK-013N (SFK-014N)

Usable Frame
 Compatible to all SF40 and 45 series
 (Groove Width 10mm)

Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

- Kit Contents**
- D Bracket L (or with Tap) × 1
 - Hexagon Socket Bolt (M8×20) × 2
 - T Nut (M8) × 2
 - ※ Bolt and Nut in CN (Stainless) Kit are stainless.

Material/Technical Data

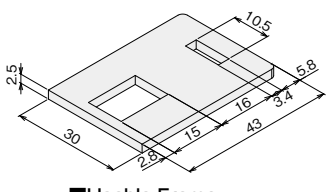
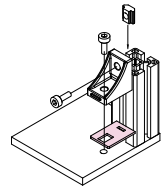
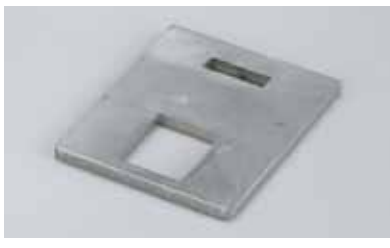
Material Aluminum Die-Cast
 (CN: Electroless Nickel Plating)
 With Anti-Skid Function

Weight 54g (D Bracket L)
 53g (D Bracket L with Tap)

Environment RoHS Compliant
 Green Procurement



D Bracket Spacer L



Name	D Bracket Spacer L
Item No.	SFJ-402S

● Setting to bottom of D Bracket enables to fix on a flat base.

Usable Frame
 Compatible to all SF40 and 45 series
 (Groove Width 10mm)

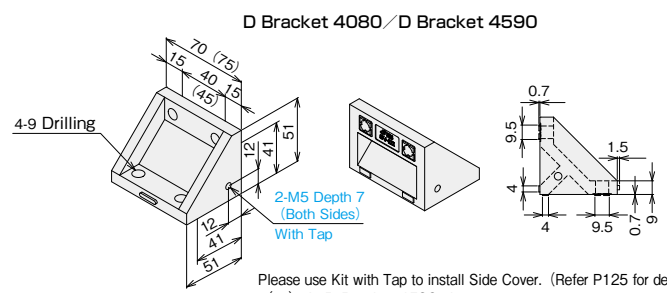
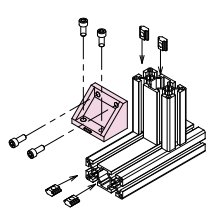
Material/Technical Data

Material SUS304

Weight 22g

Environment RoHS Compliant
 Green Procurement

D Bracket 4080 / 4590



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)
 () is D Bracket 4590 size.

Name (Single Item)	D Bracket 4080 (4080 with Tap)	D Bracket 4080-CN (4080-CN with Tap)	D Bracket 4590 (4590 with Tap)	D Bracket 4590-CN (4590-CN with Tap)
Item No.	SFJ-022 (SFJ-022T)	SFJ-022N (SFJ-022C)	SFJ-023 (SFJ-023T)	SFJ-023N (SFJ-023C)
Name (Bolt and Nut Kit)	4080 Kit (4080 Kit with Tap)	4080-CN Kit (4080-CN Kit with Tap)	4590 Kit (4590 Kit with Tap)	4590-CN Kit (4590-CN Kit with Tap)
Item No.	SFK-022 (SFK-022T)	SFK-022N (SFK-022C)	SFK-023 (SFK-023T)	SFK-023N (SFK-023C)
Name (Bolt and Nut Kit)	D Bracket 4080 (Stainless) Kit (D Bracket 4080 with Tap (Stainless) Kit)	D Bracket 4590 (Stainless) Kit (D Bracket 4590 with Tap (Stainless) Kit)		
Item No.	SFK-022S (SFK-022P)	SFK-023S (SFK-023P)		

Usable Frame
 SF-40-80/1F, SF-80-80/H
 SF-45-90/1F, SF-90-90/H

- Kit Contents**
- (D Bracket 4080 Kit)
 ● D Bracket 4080 (or with Tap) × 1
 ● Hexagon Socket Bolt (M8×20) × 4
 ● T Nut L (M8) × 4
 (D Bracket 4590 Kit)
 ● D Bracket 4590 (or with Tap) × 1
 ● Hexagon Socket Bolt (M8×20) × 4
 ● T Nut L (M8) × 4
 ※ Bolt and Nut in CN (Stainless) Kit are stainless.

Material/Technical Data

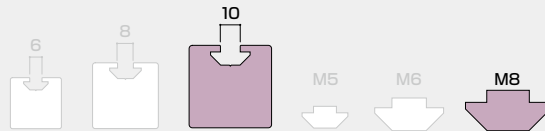
	D Bracket 4080	D Bracket 4590
Material	Aluminum Die-Cast (ADC-12) (CN: Electroless Nickel Plating) With Anti-Skid Function	Aluminum Die-Cast (ADC-12) (CN: Electroless Nickel Plating) With Anti-Skid Function
Weight	170g	180g
Environment	RoHS Compliant	Green Procurement

We sell Nut Material and Bracket Material as well.

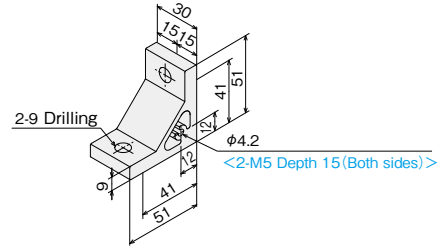
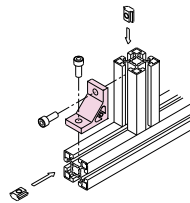
T Nut L Material P99
 ● Hard Bracket L Material
 ● Angle Bracket L Material



SF40•45 SERIES



Hard Bracket L



Name(Single Item)	Hard Bracket L (Hard Bracket L with Tap)	
Item No.	★SFJ-N05 ★SFJ-N05T	
Name(Bolt and Nut Kit)	Hard Bracket L Kit (Hard Bracket L Kit with Tap)	Hard Bracket L(Stainless)Kit (Hard Bracket L with Tap (Stainless) Kit)
Item No.	★SFK-N05 ★SFK-N05T	★SFK-N05S ★SFK-N05P

Usable Frame
 Compatible to all SF40 and 45 series (Groove Width 10mm)

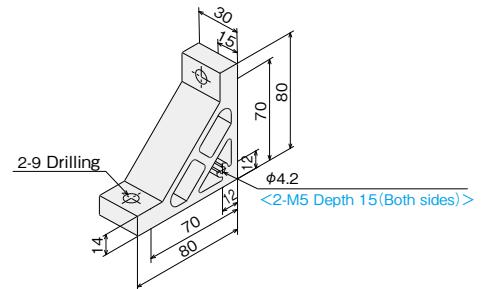
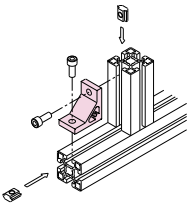
Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

- Kit Contents**
- Hard Bracket L (or with Tap) × 1
 - Hexagon Socket Bolt (M8×20) × 2
 - T Nut L (M8) × 2
 - ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
 Alumite Treatment
 Perpendicular surface is machining finished.
 Weight 66g
 Environment ★RoHS Compliant
 ★Green Procurement

Hard Bracket LG



Name(Single Item)	Hard Bracket LG (Hard Bracket LG with Tap)	
Item No.	★SFJ-N29 ★SFJ-N29T	
Name(Bolt and Nut Kit)	Hard Bracket LG Kit (Hard Bracket LG with Tap Kit)	Hard Bracket LG(Stainless)Kit (Hard Bracket LG with Tap (Stainless) Kit)
Item No.	★SFK-N29 ★SFK-N29T	★SFK-N29S ★SFK-N29P

Usable Frame
 Compatible to all SF40 and 45 series (Groove Width 10mm)

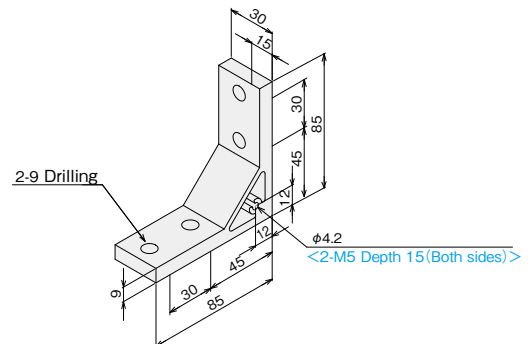
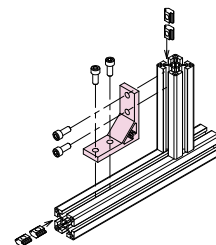
Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

- Kit Contents**
- Hard Bracket LG (or with Tap) × 1
 - Hexagon Socket Bolt (M8×25) × 2
 - T Nut L (M8) × 2
 - ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
 Alumite Treatment
 Perpendicular surface is machining finished.
 Weight 151g
 Environment ★RoHS Compliant
 ★Green Procurement

Hard Bracket LW



Name(Single Item)	Hard Bracket LW (Hard Bracket LW with Tap)	
Item No.	SFJ-N19(SFJ-N19T)	
Name(Bolt and Nut Kit)	Hard Bracket LW Kit (Hard Bracket LW Kit with Tap)	Hard Bracket LW(Stainless)Kit (Hard Bracket LW with Tap (Stainless) Kit)
Item No.	SFK-N19(SFK-N19T)	SFK-N19S(SFK-N19P)

Usable Frame
 Compatible to all SF40 and 45 series (Groove Width 10mm)

Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

- Kit Contents**
- Hard Bracket LW (or with Tap) × 1
 - Hexagon Socket Bolt (M8×20) × 4
 - T Nut L (M8) × 4
 - ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
 Alumite Treatment
 Perpendicular surface is machining finished.
 Weight 113g
 Environment ★RoHS Compliant
 ★Green Procurement



Parts
 How to order
 Item No.
SFJ-N05

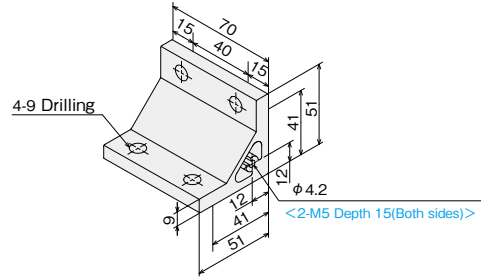
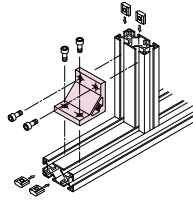
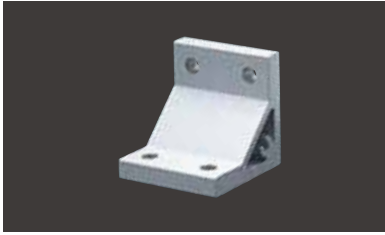
Quantity (pcs)

● Cap for Bracket
 P123



Frame for 40·45
 Nut for 40·45
 Bracket for 40·45
 Adjuster for 40·45
 Accessory for 40·45

Hard Bracket L4080



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

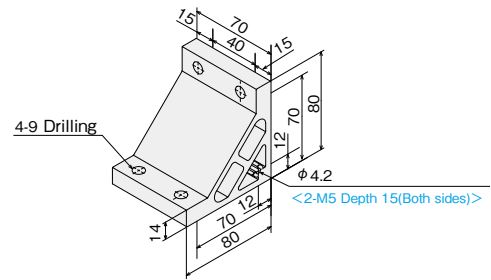
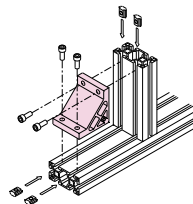
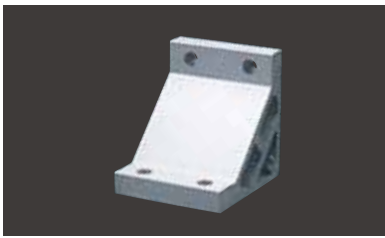
Name(Single Item)	Hard Bracket L4080 (Hard Bracket L4080 with Tap)	
Item No.	★SFJ-N06 ★SFJ-N06T	
Name(Bolt and Nut Kit)	Hard Bracket L4080 Kit (Hard Bracket L4080 Kit with Tap)	Hard Bracket L4080(Stainless)Kit (Hard Bracket L4080 with Tap (Stainless) Kit)
Item No.	★SFK-N06 ★SFK-N06T	★SFK-N06S ★SFK-N06P

■Usable Frame
 SF-40-80/1F
 SF-80-80/H

- Kit Contents
- Hard Bracket L4080(or with Tap)×1
 - Hexagon Socket Bolt (M8×20)×4
 - T Nut L (M8)×4
- ※Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Perpendicular surface is machining finished.
 Weight 154g
 Environment ★RoHS Compliant
 ★Green Procurement

Hard Bracket G80



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

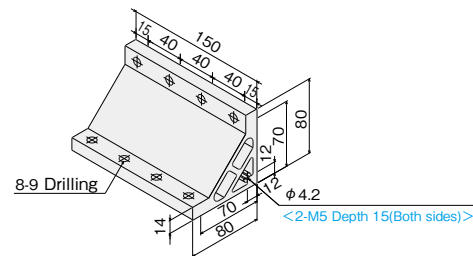
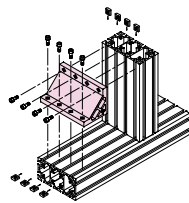
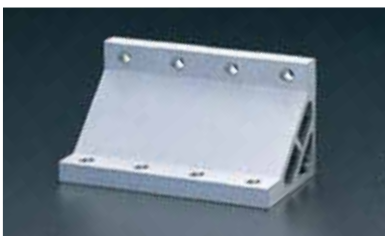
Name(Single Item)	Hard Bracket G80 (Hard Bracket G80 with Tap)	
Item No.	★SFJ-N07 ★SFJ-N07T	
Name(Bolt and Nut Kit)	Hard Bracket G80 Kit (Hard Bracket G80 Kit with Tap)	Hard Bracket G80(Stainless)Kit (Hard Bracket G80 with Tap (Stainless) Kit)
Item No.	★SFK-N07 ★SFK-N07T	★SFK-N07S ★SFK-N07P

■Usable Frame
 SF-40-80/1F
 SF-80-80/H

- Kit Contents
- Hard Bracket G80(or with Tap)×1
 - Hexagon Socket Bolt (M8×25)×4
 - T Nut L (M8)×4
- ※Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Perpendicular surface is machining finished.
 Weight 380g
 Environment ★RoHS Compliant
 ★Green Procurement

Hard Bracket G80160



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

Name(Single Item)	Hard Bracket G80160 (Hard Bracket G80160 with Tap)	
Item No.	SFJ-N48 (SFJ-N48T)	
Name(Bolt and Nut Kit)	Hard Bracket G80160 Kit (Hard Bracket G80160 Kit with Tap)	Hard Bracket G80160(Stainless)Kit (Hard Bracket G80160 with Tap (Stainless) Kit)
Item No.	SFK-N48 (SFK-N48T)	SFK-N48S (SFK-N48P)

■Usable Frame
 SF-80-160

- Kit Contents
- Hard Bracket G80160(or with Tap)×1
 - Hexagon Socket Bolt (M8×25)×8
 - T Nut L (M8)×8
- ※Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Perpendicular surface is machining finished.
 Weight 770g
 Environment ★RoHS Compliant
 ★Green Procurement



We sell Nut Material and Bracket Material as well.

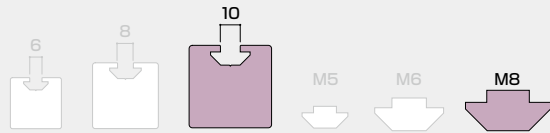
T Nut L Material
 P99

●Hard Bracket L Material
 ●Angle Bracket L Material

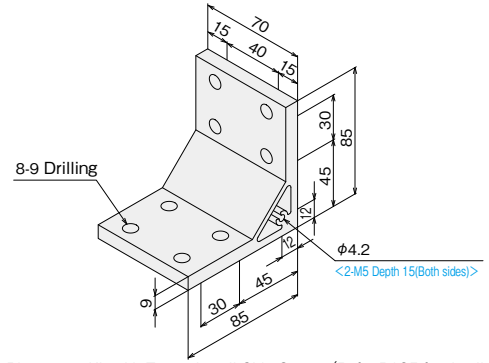
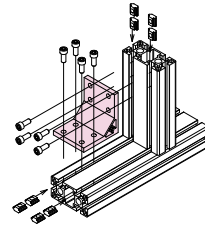


Material Frame

SF40•45 SERIES



Hard Bracket LW4080



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

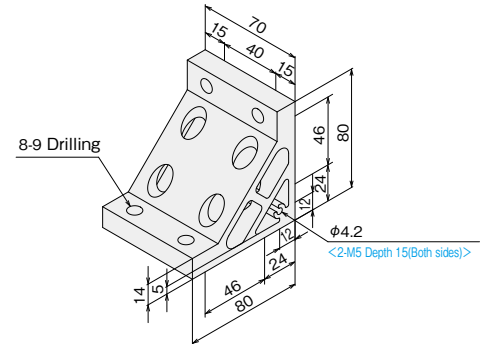
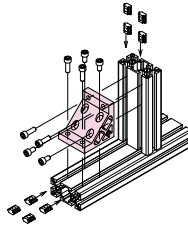
Name(Single Item)	Hard Bracket LW4080 (Hard Bracket LW4080 with Tap)	
Item No.	SFJ-N20(SFJ-N20T)	
Name(Bolt and Nut Kit)	Hard Bracket LW4080 Kit (Hard Bracket LW4080 Kit with Tap)	Hard Bracket LW4080(Stainless)Kit (Hard Bracket LW4080 with Tap (Stainless) Kit)
Item No.	SFK-N20(SFK-N20T)	SFK-N20S(SFK-N20P)

■Usable Frame
SF-40-80/1F
SF-80-80/H

- Kit Contents
- Hard Bracket LW4080 (or with Tap) × 1
 - Hexagon Socket Bolt (M8×20) × 8
 - T Nut L (M8) × 8
- ※ Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data
Material Aluminium Alloy
Alumite Treatment
Weight 267g
Environment RoHS Compliant
Green Procurement

Hard Bracket GW80



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

Name(Single Item)	Hard Bracket GW80 (Hard Bracket GW80 with Tap)	
Item No.	SFJ-N17(SFJ-N17T)	
Name(Bolt and Nut Kit)	Hard Bracket GW80 Kit (Hard Bracket GW80 Kit with Tap)	Hard Bracket GW80(Stainless)Kit (Hard Bracket GW80 with Tap (Stainless) Kit)
Item No.	SFK-N17(SFK-N17T)	SFK-N17S(SFK-N17P)

■Usable Frame
SF-40-80/1F
SF-80-80/H

- Kit Contents
- Hard Bracket GW80 (or with Tap) × 1
 - Hexagon Socket Bolt (M8×25) × 4
 - Hexagon Socket Bolt (M8×15) × 4
 - T Nut L (M8) × 8
- ※ Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data
Material Aluminium Alloy
Alumite Treatment
Weight 333g
Environment RoHS Compliant
Green Procurement



Parts
How to order
Item No.
SFJ-N20

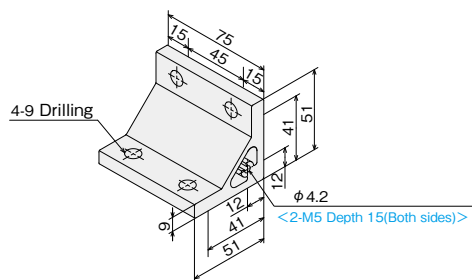
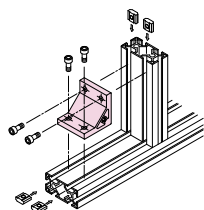
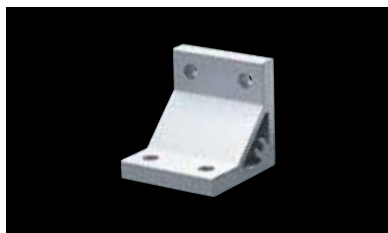
Quantity (pcs)

● Cap for Bracket
P123



Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

Hard Bracket L4590



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

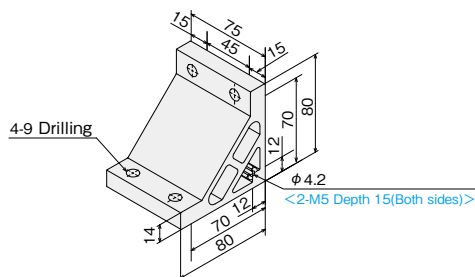
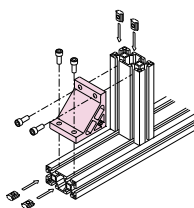
Name(Single Item)	Hard Bracket L4590 (Hard Bracket L4590 with Tap)	
Item No.	★SFJ-N08 ★SFJ-N08T	
Name(Bolt and Nut Kit)	Hard Bracket L4590 Kit (Hard Bracket L4590 Kit with Tap)	Hard Bracket L4590(Stainless)Kit (Hard Bracket L4590 with Tap (Stainless) Kit)
Item No.	★SFK-N08 ★SFK-N08T	★SFK-N08S ★SFK-N08P

■Usable Frame
SF-45-90/1F
SF-90-90/45-90-90

■Kit Contents
●Hard Bracket L4590(or with Tap)×1
●Hexagon Socket Bolt (M8×20)×4
●T Nut L (M8)×4
※Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data
Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
Weight 163g
Environment ★RoHS Compliant
★Green Procurement

Hard Bracket G90



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

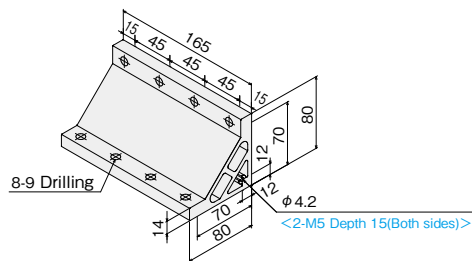
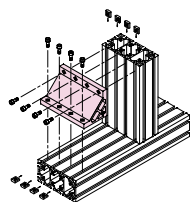
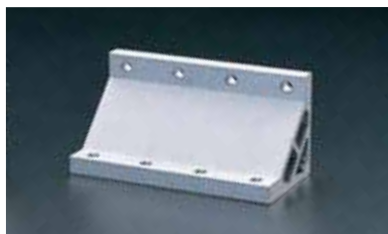
Name(Single Item)	Hard Bracket G90 (Hard Bracket G90 with Tap)	
Item No.	★SFJ-N18 ★SFJ-N18T	
Name(Bolt and Nut Kit)	Hard Bracket G90 Kit (Hard Bracket G90 Kit with Tap)	Hard Bracket G90(Stainless)Kit (Hard Bracket G90 with Tap (Stainless) Kit)
Item No.	★SFK-N18 ★SFK-N18T	★SFK-N18S ★SFK-N18P

■Usable Frame
SF-45-90/1F
SF-90-90/H

■Kit Contents
●Hard Bracket G90(or with Tap)×1
●Hexagon Socket Bolt (M8×25)×4
●T Nut L (M8)×4
※Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data
Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
Weight 387g
Environment ★RoHS Compliant
★Green Procurement

Hard Bracket G90180



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

Name(Single Item)	Hard Bracket G90180 (Hard Bracket G90180 with Tap)	
Item No.	SFJ-N49(SFJ-N49T)	
Name(Bolt and Nut Kit)	Hard Bracket G90180 Kit (Hard Bracket G90180 Kit with Tap)	Hard Bracket G90180(Stainless)Kit (Hard Bracket G90180 with Tap (Stainless) Kit)
Item No.	SFK-N49(SFK-N49T)	SFK-N49S(SFK-N49P)

■Usable Frame
SF-90-180

■Kit Contents
●Hard Bracket G90180(or with Tap)×1
●Hexagon Socket Bolt (M8×25)×8
●T Nut L (M8)×8
※Bolt and Nut in (Stainless) Kit are stainless.

■Material/Technical Data
Material Aluminium Alloy
Alumite Treatment
Weight 846g
Environment RoHS Compliant
Green Procurement



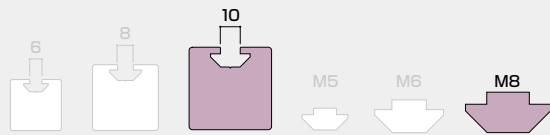
We sell Nut Material and Bracket Material as well.

T Nut L Material
P99

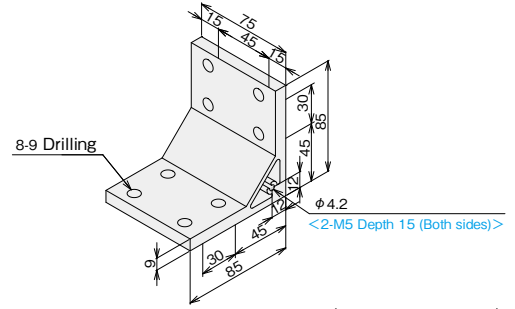
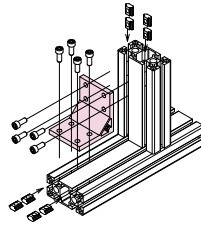
●Hard Bracket L Material
●Angle Bracket L Material



SF40•45 SERIES



Hard Bracket LW4590



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

Name(Single Item)	Hard Bracket LW4590 (Hard Bracket LW4590 with Tap)	
Item No.	SFJ-N21 (SFJ-N21T)	
Name(Bolt and Nut Kit)	Hard Bracket LW4590 Kit (Hard Bracket LW4590 Kit with Tap)	Hard Bracket LW4590(Stainless)Kit (Hard Bracket LW4590 with Tap (Stainless) Kit)
Item No.	SFK-N21 (SFK-N21T)	SFK-N21S (SFK-N21P)

Usable Frame

SF-45-90/1F
SF-90-90/45-90-90

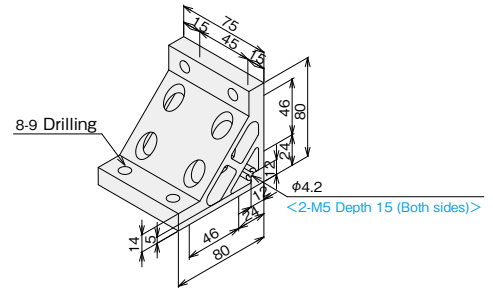
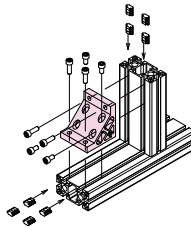
Kit Contents

- Hard Bracket LW4590 (or with Tap) × 1
- Hexagon Socket Bolt (M8×20) × 8
- T Nut L (M8) × 8
- ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
Weight 287g
Environment **RoHS** Compliant
Green Procurement

Hard Bracket GW90



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

Name(Single Item)	Hard Bracket GW90 (Hard Bracket GW90 with Tap)	
Item No.	SFJ-N22 (SFJ-N22T)	
Name(Bolt and Nut Kit)	Hard Bracket GW90 Kit (Hard Bracket GW90 Kit with Tap)	Hard Bracket GW90(Stainless)Kit (Hard Bracket GW90 with Tap (Stainless) Kit)
Item No.	SFK-N22 (SFK-N22T)	SFK-N22S (SFK-N22P)

Usable Frame

SF-45-90/1F
SF-90-90/45-90-90

Kit Contents

- Hard Bracket GW90 (or with Tap) × 1
- Hexagon Socket Bolt (M8×25) × 4
- Hexagon Socket Bolt (M8×15) × 4
- T Nut L (M8) × 8
- ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Perpendicular surface is machining finished.
Weight 359g
Environment **RoHS** Compliant
Green Procurement

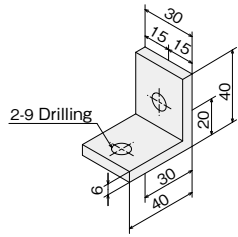
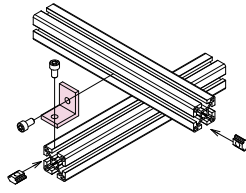
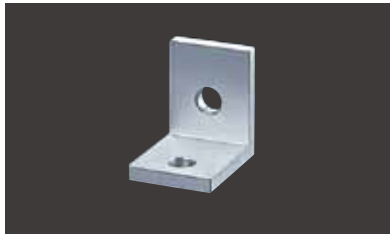


Parts
How to order
Item No.
SFJ-N21

Quantity (pcs)

Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

Angle Bracket L40



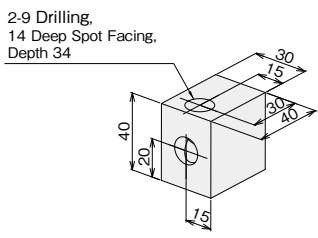
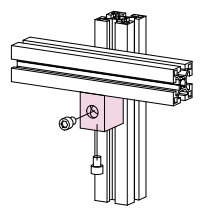
Name(Single Item)	Angle Bracket L40
Item No.	SFJ-A05
Name(Bolt and Nut Kit)	Angle Bracket L40 Kit (Angle Bracket L40 (Stainless) Kit)
Item No.	SFK-A05(SFK-A05S)

Usable Frame
 Compatible to all SF40 series (Groove Width 10mm)

- Kit Contents**
- Angle Bracket L40×1
 - Hexagon Socket Bolt (M8×15)×2
 - T Nut L(M8)×2
- ※Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Weight 34g
 Environment **RoHS** Compliant
Green Procurement

Angle Bracket Hard L40



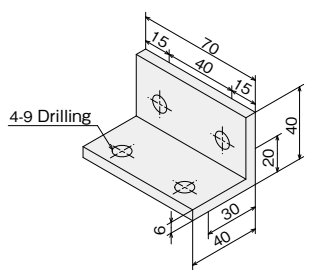
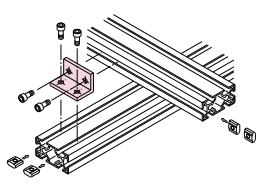
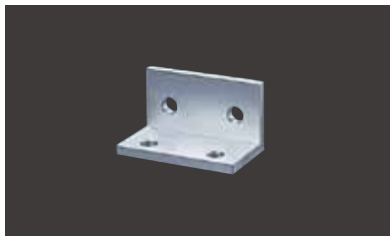
Name(Single Item)	Angle Bracket Hard L40
Item No.	SFJ-A16
Name(Bolt and Nut Kit)	Angle Bracket Hard L40 Kit (Angle Bracket Hard L40 (Stainless) Kit)
Item No.	SFK-A16(SFK-A16S)

Usable Frame
 Compatible to all SF40 series (Groove Width 10mm)

- Kit Contents**
- Angle Bracket Hard L40×1
 - Hexagon Socket Bolt (M8×15)×2
 - T Nut L(M8)×2
- ※Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Weight 103g
 Environment **RoHS** Compliant
Green Procurement

Angle Bracket L4080



Name(Single Item)	Angle Bracket L4080
Item No.	SFJ-A06
Name(Bolt and Nut Kit)	Angle Bracket L4080 Kit (Angle Bracket L4080(Stainless) Kit)
Item No.	SFK-A06(SFK-A06S)

Usable Frame
 Compatible to all SF40 series (Groove Width 10mm)

- Kit Contents**
- Angle Bracket L4080×1
 - Hexagon Socket Bolt (M8×15)×4
 - T Nut L(M8)×4
- ※Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Weight 80g
 Environment **RoHS** Compliant
Green Procurement

SF20 SS Size

SF30 S Size

SF40·45 L Size

Complex Parts

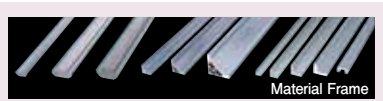
Door Panel Clean Equipment

Technical Data

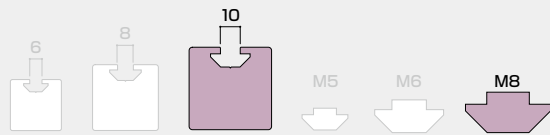
We sell Nut Material and Bracket Material as well.

T Nut L Material P99

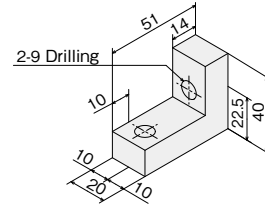
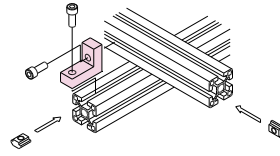
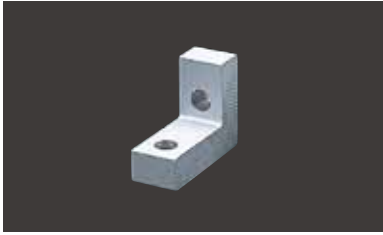
● Hard Bracket L Material
 ● Angle Bracket L Material




SF40•45 SERIES



Angle Bracket L45



Name (Single Item)	Angle Bracket L45
Item No.	SFJ-007
Name (Bolt and Nut Kit)	Angle Bracket L45 Kit (Angle Bracket L45 (Stainless) Kit)
Item No.	SFK-007 (SFK-007S)

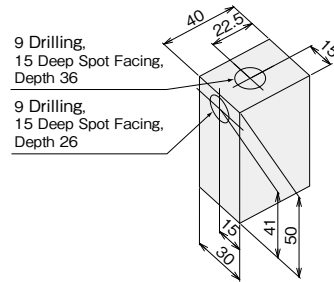
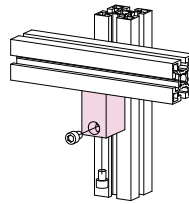
Usable Frame
 Compatible to all SF45 series
 (Groove Width 10mm)

- Kit Contents**
- Angle Bracket L45×1
 - Hexagon Socket Button Bolt (M8×25)×2
 - T Nut L (M8)×2
- ※ Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

Material Aluminium Alloy
 Alumite Treatment
 Weight 52g
 Environment **RoHS** Compliant
Green Procurement

Angle Bracket Hard L45



Name (Single Item)	Angle Bracket Hard L45
Item No.	SFJ-A17
Name (Bolt and Nut Kit)	Angle Bracket Hard L45 Kit (Angle Bracket Hard L45 (Stainless) Kit)
Item No.	SFK-A17 (SFK-A17S)

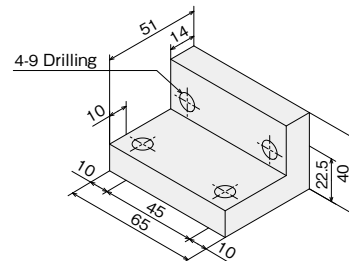
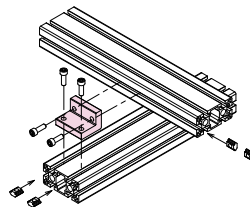
Usable Frame
 Compatible to all SF 45 series
 (Groove Width 10mm)

- Kit Contents**
- Angle Bracket Hard L45×1
 - Hexagon Socket Bolt (M8×25)×2
 - T Nut L (M8)×2
- ※ Bolt and Nut in (Stainless) Kit are stainless.


Material/Technical Data

Material Aluminium Alloy
 Alumite Treatment
 Weight 135g
 Environment **RoHS** Compliant
Green Procurement

Angle Bracket L4590



Name (Single Item)	Angle Bracket L4590
Item No.	SFJ-A08
Name (Bolt and Nut Kit)	Angle Bracket L4590 Kit (Angle Bracket L4590 (Stainless) Kit)
Item No.	SFK-A08 (SFK-A08S)

Usable Frame
 Compatible to all SF45 series
 (Groove Width 10mm)

- Kit Contents**
- Angle Bracket L4590×1
 - Hexagon Socket Button Bolt (M8×25)×4
 - T Nut L (M8)×4
- ※ Bolt and Nut in (Stainless) Kit are stainless.

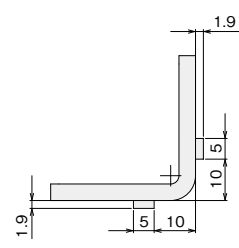
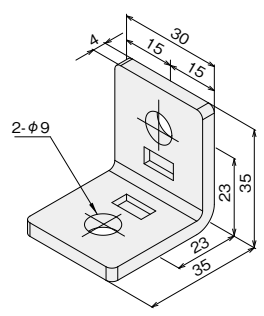
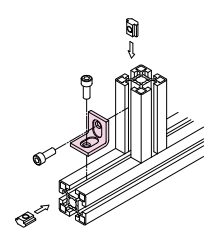
Material/Technical Data

Material Aluminium Alloy
 Alumite Treatment
 Weight 175g
 Environment **RoHS** Compliant
Green Procurement



Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

L Bracket L (Stainless)



Name (Single Item)	L Bracket L (Stainless)
Item No.	SFJ-102S
Name (Bolt and Nut Kit)	L Bracket L (Stainless) Kit
Item No.	SFK-102S

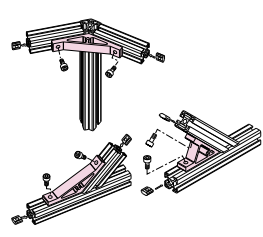
Usable Frame
 Compatible to all SF40 and 45 series (Groove Width 10mm)

- Kit Contents**
- L Bracket L (Stainless)×1
 - Hexagon Socket Bolt (M8×15)Stainless×2
 - ST Nut L (M8)×2

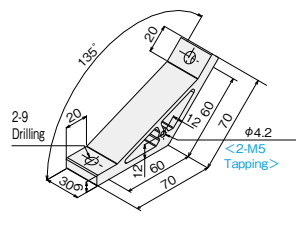
Material/Technical Data

Material SUS304
 Weight 58g
 Environment **RoHS** Compliant
Green Procurement

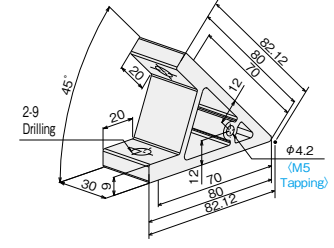
Hard Bracket L·DE



Hard Bracket L-DE135



Hard Bracket L-DE45



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

Name (Single Item)	Hard Bracket L-DE135 (Hard Bracket L-DE135 with Tap)	Hard Bracket L-DE45 (Hard Bracket L-DE45 with Tap)
Item No.	SFJ-N35 (SFJ-N35T)	SFJ-N36 (SFJ-N36T)
Name (Bolt and Nut Kit)	L-DE135 Kit (L-DE135 Kit with Tap)	L-DE45 Kit (L-DE45 Kit with Tap)
Item No.	SFK-N35 (SFK-N35T)	SFK-N36 (SFK-N36T)

Usable Frame
 SF-40-45 Series 45°slant cut frame
 SF-40-DE45/SF-45-DE45 (L-DE135 only)

- Kit Contents**
- (Hard Bracket L-DE135 Kit)**
- Hard Bracket L-DE135 (or with Tap)×1
 - Hexagon Socket Bolt (M8×20)×2
 - T Nut L (M8)×2
- (Hard Bracket L-DE45 Kit)**
- Hard Bracket L-DE45 (or with Tap)×1
 - Hexagon Socket Bolt (M8×20)×2
 - T Nut L (M8)×2
- *Bolt and Nut in (Stainless) Kit are stainless.

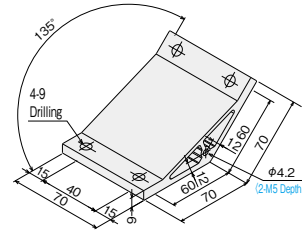
Material/Technical Data

Material Aluminium Alloy
 Alumite Treatment
 Weight 103g (L-DE135)
 88g (L-DE45)
 Environment **RoHS** Compliant
Green Procurement

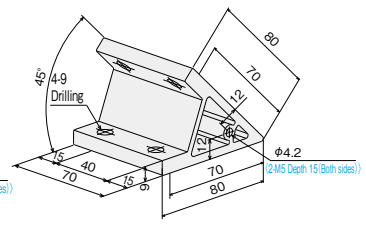
Hard Bracket L4080·DE



Hard Bracket L4080-DE135



Hard Bracket L4080-DE45



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

Name (Single Item)	Hard Bracket L4080-DE135 (Hard Bracket L4080-DE135 with Tap)	Hard Bracket L4080-DE45 (Hard Bracket L4080-DE45 with Tap)
Item No.	SFJ-N42 (SFJ-N42T)	SFJ-N41 (SFJ-N41T)
Name (Bolt and Nut Kit)	L4080-DE135 Kit (L4080-DE135 Kit with Tap)	L4080-DE45 Kit (L4080-DE45 Kit with Tap)
Item No.	SFK-N42 (SFK-N42T)	SFK-N41 (SFK-N41T)

Usable Frame
 SF-40-80 45°slant cut frame

- Kit Contents**
- (Hard Bracket L4080-DE135 Kit)**
- Hard Bracket L4080-DE135 (or with Tap)×1
 - Hexagon Socket Bolt (M8×20)×4
 - T Nut L (M8)×4
- (Hard Bracket L4080-DE45 Kit)**
- Hard Bracket L4080-DE45 (or with Tap)×1
 - Hexagon Socket Bolt (M8×20)×4
 - T Nut L (M8)×4
- *Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

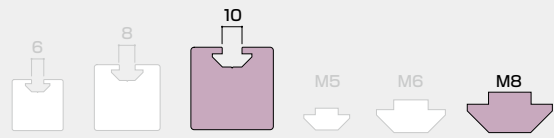
Material Aluminium Alloy
 Alumite Treatment
 Weight 258g (L4080-DE135)
 221g (L4080-DE45)
 Environment **RoHS** Compliant
Green Procurement

We sell Nut Material and Bracket Material as well.

T Nut L Material P99 ● Hard Bracket L Material ● Angle Bracket L Material



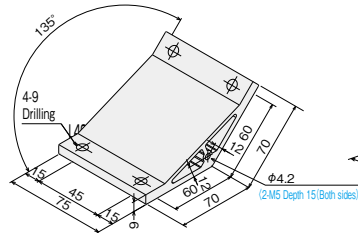
SF40•45 SERIES



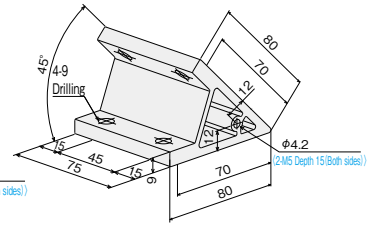
Hard Bracket L4590•DE



Hard Bracket L4590-DE135



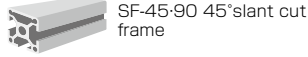
Hard Bracket L4590-DE45



Please use Kit with Tap to install Side Cover. (Refer P125 for details.)

Name(Single Item)	Hard Bracket L4590-DE135 (Hard Bracket L4590-DE135 with Tap)		Hard Bracket L4590-DE45 (Hard Bracket L4590-DE45 with Tap)	
Item No.	SFJ-N44 (SFJ-N44T)		SFJ-N43 (SFJ-N43T)	
Name(Bolt and Nut Kit)	L4590-DE135 Kit (L4590-DE135 Kit with Tap)	L4590-DE135(Stainless)Kit (L4590-DE135 with Tap/Stainless Kit)	L4590-DE45 Kit (L4590-DE45 Kit with Tap)	L4590-DE45(Stainless)Kit (L4590-DE45 with Tap/Stainless Kit)
Item No.	SFK-N44 (SFK-N44T)	SFK-N44S (SFK-N44PT)	SFK-N43 (SFK-N43T)	SFK-N43S (SFK-N43PT)

Usable Frame



Kit Contents

(Hard Bracket L4590-DE135 Kit)

- Hard Bracket L4590-DE135 (or with Tap) ×1
- Hexagon Socket Bolt (M8×20) ×4
- T Nut L (M8) ×4

(Hard Bracket L4590-DE45 Kit)

- Hard Bracket L4590-DE45 (or with Tap) ×1
- Hexagon Socket Bolt (M8×20) ×4
- T Nut L (M8) ×4
- * Bolt and Nut in (Stainless) Kit are stainless.

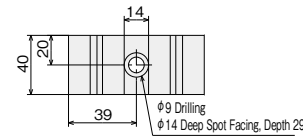
Material/Technical Data

Material	Aluminium Alloy Alumite Treatment
Weight	277g (L4590-DE135) 236g (L4590-DE45)
Environment	RoHS Compliant Green Procurement

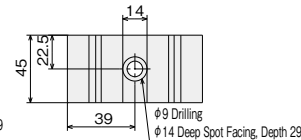
Truss Joint L40 / L45



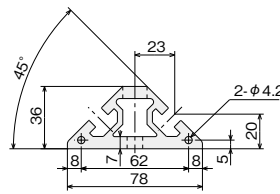
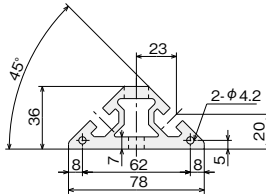
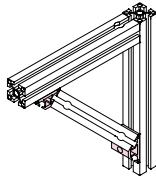
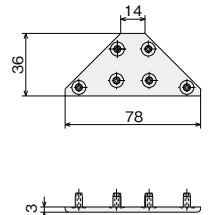
Truss Joint L40



Truss Joint L45



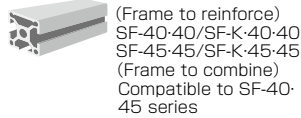
Truss Cap L



※ Groove size is as same as SF-40-40, SF-45-45

Name	Truss Joint L40	Truss Joint L45
Item No.	SFJ-J03	SFJ-J04
Name	Truss Cap L (Black)	Truss Cap L (Light gray)
Item No.	SFA-J03	SFA-J03G

Usable Frame



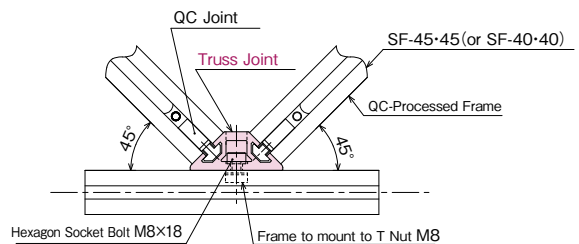
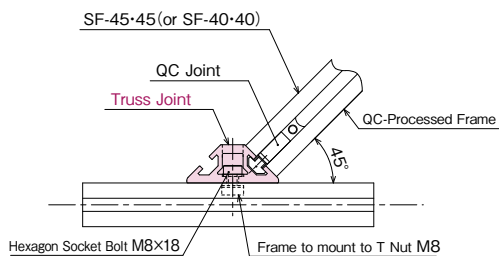
Material/Technical Data

Material	Truss Joint L40/L45 Aluminium Alloy Alumite Treatment	Truss Cap L Polyamide
Weight	103g (L40) 117g (L45)	6.5g
Environment	RoHS Compliant Green Procurement	

Truss Joint

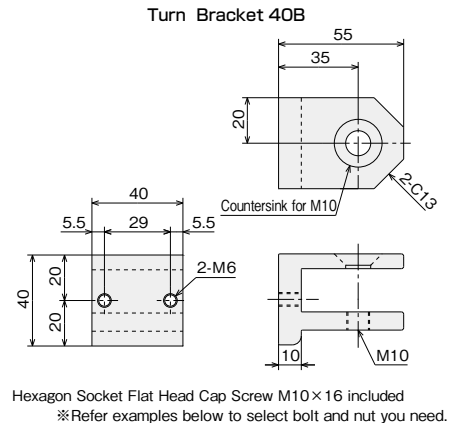
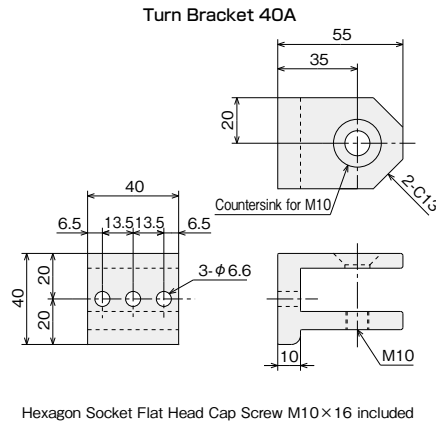
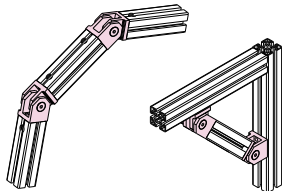
<Truss Joint>

Best suited to reinforce in 45° or truss stiffening.



Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

Turn Bracket 40A / 40B



Name	Turn Bracket 40A	Turn Bracket 40B
Item No.	SFK-42A	SFK-42B

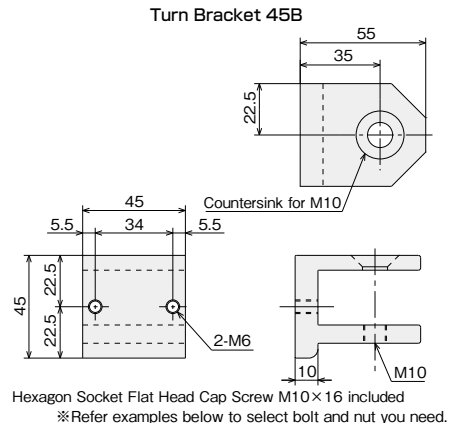
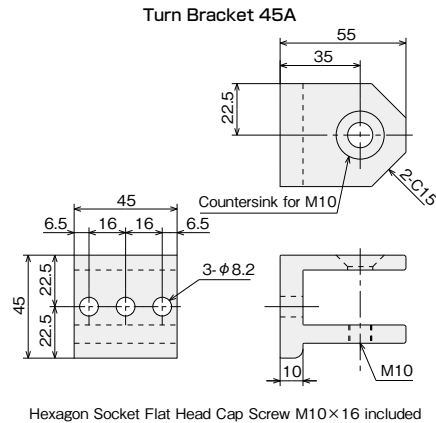
Usable Frame

<Section Installation>
SF-40-40(1F/K/2H include)
<Side Installation>
Compatible to all SF40 series

Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Weight 97g(40A)
98g(40B)
Environment **RoHS** Compliant

Turn Bracket 45A / 45B



Name	Turn Bracket 45A	Turn Bracket 45B
Item No.	SFK-43A	SFK-43B

Usable Frame

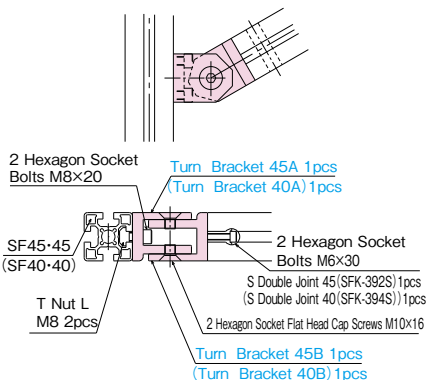
<Section Installation>
SF-45-45(1F/K/2H include)
<Side Installation>
Compatible to all SF45 series

Material/Technical Data

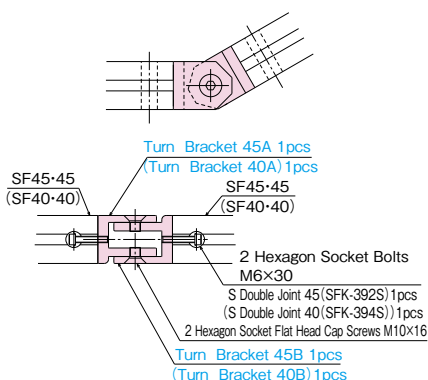
Material Aluminium Alloy
Alumite Treatment
Weight 113g(45A)
116g(45B)
Environment **RoHS** Compliant

Example of mounting Turn Bracket *This product cannot be used as supporting point of movable part.

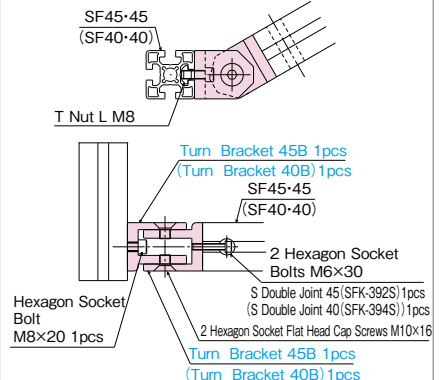
<In case of installing to side and end of the Frames.>



<In case of installing to sections of the Frames.>



<In case of installing to side and end of the Frames.>



GO Use Processing Symbols written from P214, P215 to specify frilling for Double Joint.



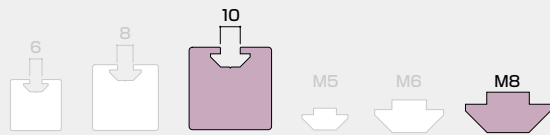
We sell Nut Material and Bracket Material as well.

T Nut L Material P99

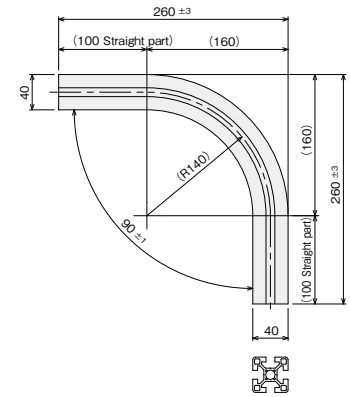
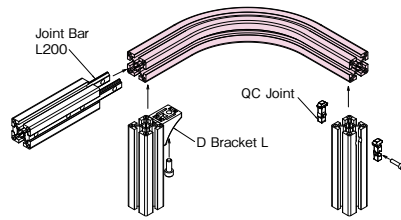
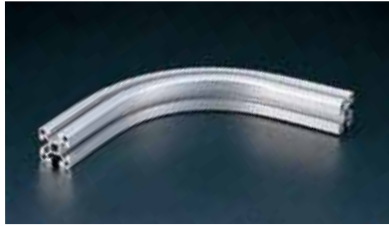
● Hard Bracket L Material
● Angle Bracket L Material



SF40•45 SERIES



Bend Bracket L40

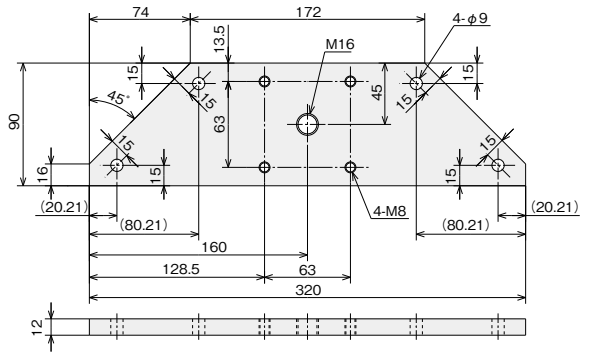
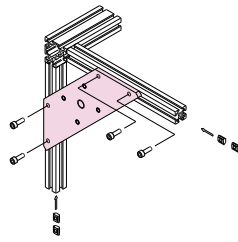


Name	Bend Bracket L40
Item No.	SFJ-V02

Usable Frame
 Compatible to SF40-40 (1F, 2F, 2H, 3F, K)

Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Weight 774g
 Environment **RoHS** Compliant
Green Procurement

Caster Plate L



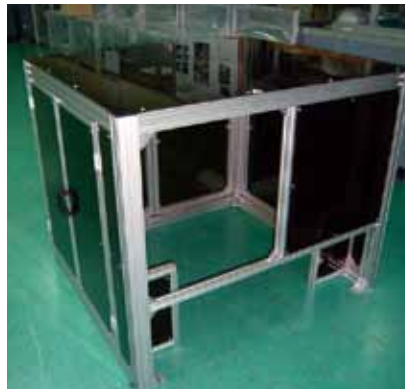
Name	Caster Plate L (Caster Plate L (Stainless))
Item No.	★SFJ-7A3 (★SFJ-7A3S)

Usable Frame
 Compatible to all SF40 and 45 series (Groove Width 10mm)

Material/Technical Data

	Caster Plate L	Caster Plate L (Stainless)
Material	SS400 Uni-Chrome	SUS304
Weight	2.1kg	2.1kg
Environment	★RoHS Compliant	★Green Procurement

Use Example
 ● Adjuster M16 ● Caster C
 ● Double-Wheel Caster M16
 ● Marketing Hanging Bolt etc



Parts
 How to order
 Item No.
SFJ-V02

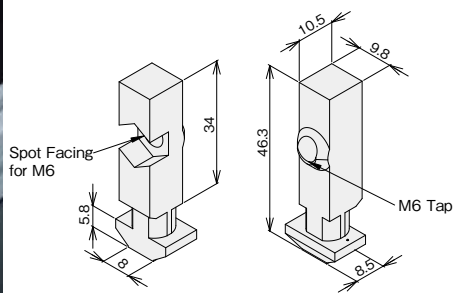
Quantity (pcs)

Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

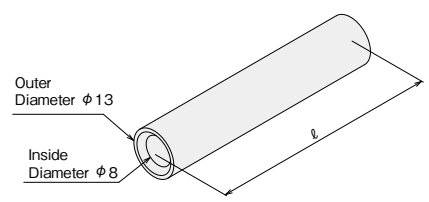
QC Joint L



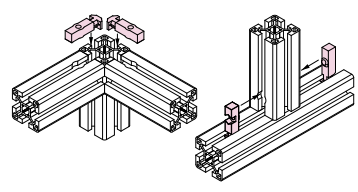
QC Joint L(Common Parts)



SS Round Metal Tool



	L40 Kit	L45 Kit	L60 Kit	L80 Kit	L90 Kit
R	15	19	34	55	64



Name	QC Joint L40 Kit	QC Joint L45 Kit	QC Joint L60 Kit	QC Joint L80 Kit	QC Joint L90 Kit
Item No.	SFK-Q40	SFK-Q41	SFK-Q42	SFK-Q43	SFK-Q44

Kit Contents	Kit Name	QC Joint	Round Metal Tool	Bolt
	QC Joint L40 Kit	QC Joint L ×1set	L Round Metal Tool 40×1	Hexagon Socket Bolt (M6×30) Stainless×1
	QC Joint L45 Kit		L Round Metal Tool 45×1	Hexagon Socket Bolt (M6×35) Stainless×1
	QC Joint L60 Kit		L Round Metal Tool 60×1	Hexagon Socket Bolt (M6×50) Stainless×1
	QC Joint L80 Kit		L Round Metal Tool 80×1	Hexagon Socket Bolt (M6×70) Stainless×1
	QC Joint L90 Kit		L Round Metal Tool 90×1	Hexagon Socket Bolt (M6×80) Stainless×1

■Material/Technical Data

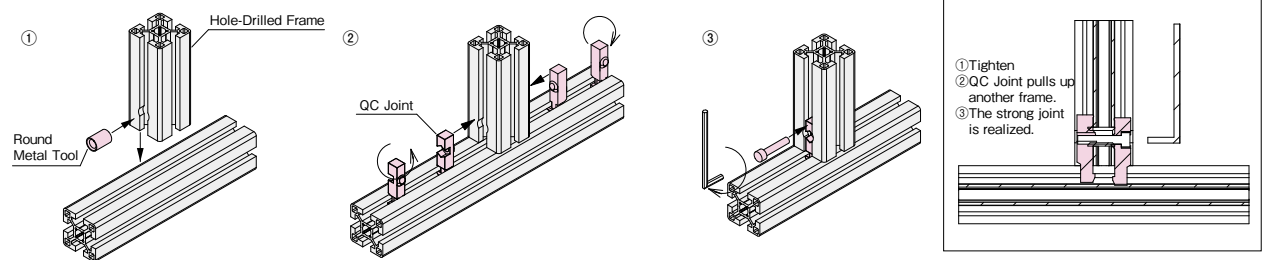
QC Joint L		L Round metal tool		
Material	Stainless	Stainless		
	With Conductive Function			
Weight	L40 Kit 88g	L45 Kit 92g	L60 Kit 104g	L80 Kit 119g
Environment	RoHS Compliant Green Procurement			

QC Joint L

(Characteristics)

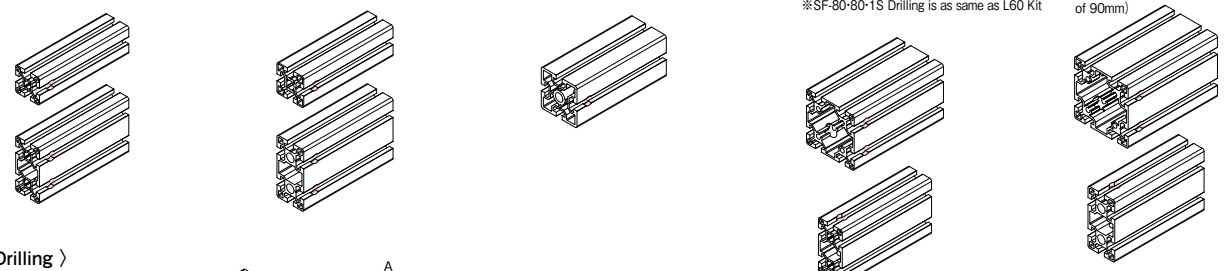
It's easy to set vertically and hardly make gap, because 2 frames are pulled at each other to combine. Also, you don't have to let nuts into frame in advance, and strong fixing is possible by one bolt, so the assembly man-hour is reduced.

(How to assemble)

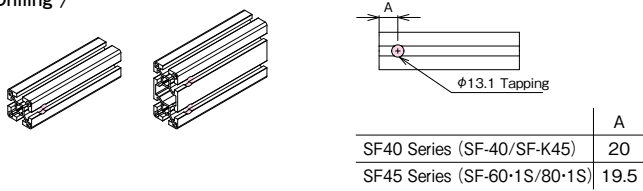


(Example of Kit Selection)

- QC Joint L40 Kit (For drilled hole to the direction of 40mm)
- QC Joint L45 Kit (For drilled hole to the direction of 45mm)
- QC Joint L60 Kit (For drilled hole to the direction of 60mm)
- QC Joint L80 Kit (For drilled hole to the direction of 80mm) ※SF-80-80-1S Drilling is as same as L60 Kit
- QC Joint L90 Kit (For drilled hole to the direction of 90mm)



(Drilling)



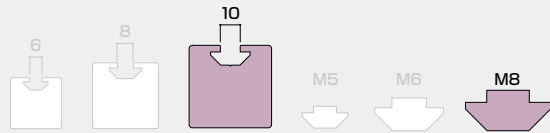
Drillid by SUS Processing Symbol P212

We sell Nut Material and Bracket Material as well.

T Nut L Material P99 ●Hard Bracket L Material ●Angle Bracket L Material



SF40・45 SERIES



TG Joint Kit 4045 / 60 / 80 / Wrench Hole Cap

<TG Bolt M12>

<TG Plate 4045>

<TG Plate 60>

<TG Plate 80>

Wrench Hole Cap

Usable Frame

SF-40-40, SF-40-80, SF-40-160
SF-45-45, SF-45-90, SF-45-180
SF-K-40-40 / K-40-80

Kit Contents

<TG Joint Kit 4045>
● TG Plate 4045×1
● TG Bolt M12×1

Usable Frame

SF-60-60-1S

Kit Contents

<TG Joint Kit 60>
● TG Plate 60×1
● TG Bolt M12×1

Usable Frame

SF-80-80(H)

Kit Contents

<TG Joint Kit 80>
● TG Plate 80×1
● Hexagon Socket Button Bolt M8×20(Uni-chrome) ×2

※For Anacac of Flat type frame (For 1F,2F,2H,3F)

Name	4045	TG Joint Kit 60	80	Wrench Hole Cap
Item No.	★SFK-207	★SFK-208	★SFK-307	★SFA-155

Material/Technical Data

TG Bolt M12	TG Plate 4045/60/80	Wrench Hole Cap
Material SCM435 Uni-chrome	SPCC Uni-chrome	Polypropylene (Color/Gray) 0.3g(Wrench Hole Cap)
Weight 34.6g(Kit4045)	43.4g(Kit60)	43g(Kit80)
Environment ★RoHS Compliant	★Green Procurement	

S Double Joint Kit 40 / 45 / 60 / 80

S Double Joint Kit 40

S Double Joint Kit 45

S Double Joint Kit 60

S Double Joint Kit 80

Usable Frame

SF-40-40, SF-40-80
SF-K-40-40, SF-K-40-80

Usable Frame

SF-45-45, SF-45-90
SF-K-45-45, SF-K-45-90

Usable Frame

SF-60-60-1S

Usable Frame

SF-80-80(H)
SF-80-80-1S
SF-40-80

Name	40	S Double Joint Kit 45	60	80
Item No.	SFK-304S	SFK-302S	SFK-303S	SFK-305S

Kit Contents

<S Double Joint Kit 40/45/60/80>
● Each S Double Joint Kit×1
● Hexagon Socket Bolt (M6×30) Stainless ×2
● ST Nut L (M6) ×2

Material/Technical Data

Material	Stainless(SCS13)
Weight	61g(Kit40) 85g(Kit60) 73g(Kit45) 103g(Kit80)
Environment	RoHS Compliant Green Procurement

<TG Joint Drilling Jig>

M12 Tapping or Heli-Sert
4-M8 Tapping

<S Double Joint Drilling Jig>

TG Joint · S Double Joint

TG, S Double Joint are easy to set vertically and hardly make gap, because 2 frames are pulled each other. Also, it looks clear because the joint part doesn't bulge outside.

GO ●Refer from P198 how to assemble

Processing size (mm)

Usable Frame	H	h	D	d
SF-40-40/K-40-40	20	20	φ13.1	φ8
		22.5		
		30	φ15.1	
SF-80-80(H)	20	20	40	φ13.1
SF-80-80-1S		—	—	—

GO ●Drillid by SUS Processing Symbol P212~

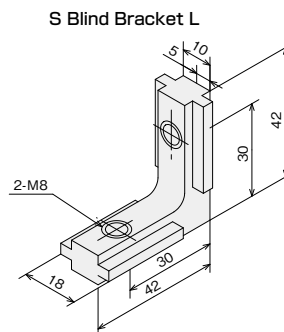
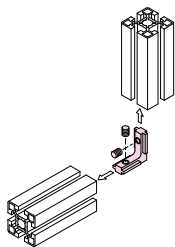
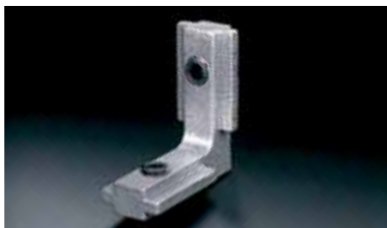


Parts
How to order
Item No.
SFK-207

Quantity (pcs)

- Frame for 40·45
- Nut for 40·45
- Bracket for 40·45**
- Adjuster for 40·45
- Accessory for 40·45

S Blind Bracket L



Name	S Blind Bracket L
Item No.	SFK-602S

Usable Frame



Compatible to all SF40 and 45 series (430); Other Frame SF30 series (K Frame excluded)

Material/Technical Data

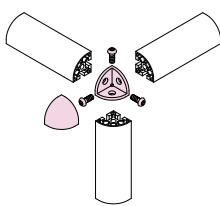
S Blind Bracket L

Material Stainless (SCS13)
(2 Set Screws (M8×10) Stainless Included)

Weight 70g

Environment **RoHS** Compliant **Green** Procurement

R Bracket L40 Kit / L45 Kit

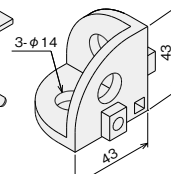
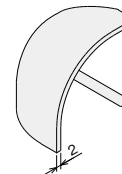
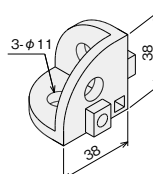
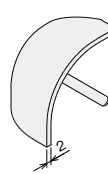


R Cap L40

R Bracket L40

R Cap L45

R Bracket L45



Name	R Bracket L40 Kit (Black)	R Bracket L40 Kit (Light Gray)
Item No.	SFK-R03	SFK-R03G
Name	R Bracket L45 Kit (Black)	R Bracket L45 Kit (Light Gray)
Item No.	SFK-R04	SFK-R04G

Usable Frame



(R Bracket L40 Kit) SF-40-40-R
(R Bracket L45 Kit) SF-45-45-R

Material/Technical Data

	R Bracket L40/L45	R Cap L40/L45
Material	Stainless (SCS13)	Polyamide
Weight	130g (L40) 167g (L45)	10g (L40) 12g (L45)

Environment **RoHS** Compliant

※L40 Kit: With 3 Hexagon Socket Button Bolts (M10×30)
L45 Kit: With 3 Hexagon Socket Button Bolts (M12×35)



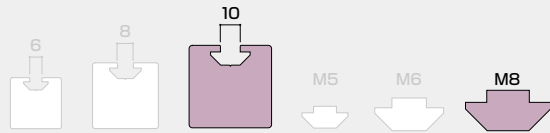
We sell Nut Material and Bracket Material as well.

T Nut L Material P99

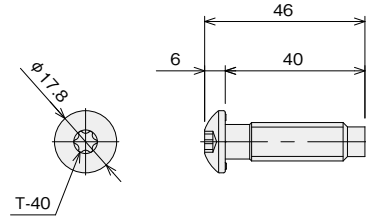
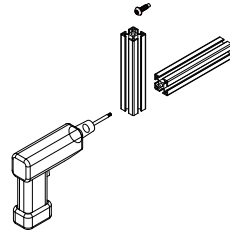
- Hard Bracket L Material
- Angle Bracket L Material



Material Frame



Tapping Bolt L40

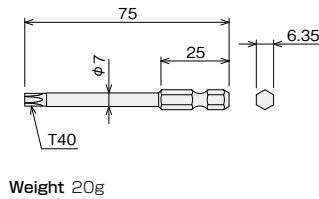


Name	Tapping Bolt L40
Item No.	SFB-T40

■ Usable Frame
 SF-40-40(1F/2F/3F/2H)
 SF-40-80(1F)

■ Material/Technical Data
 Material SAE1022Si
 Uni-Chrome Plating
 Weight 31g
 Environment RoHS Compliant
 Green Procurement

Torque Bit T40 / Torque Driver T40

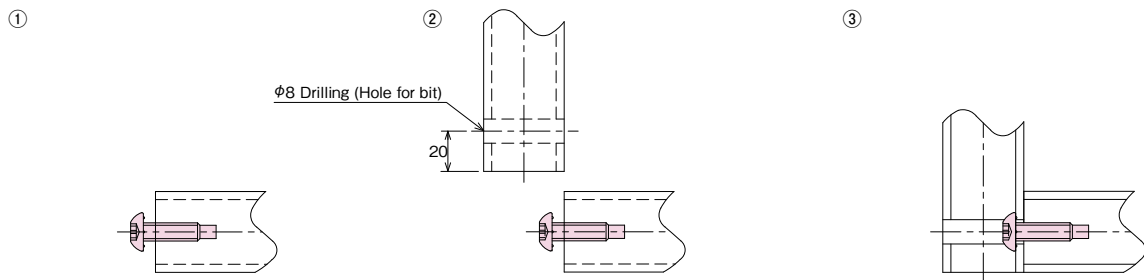


Weight 126g

Name	Torque Bit T40
Item No.	SFA-JT40

Name	Torque Driver T40
Item No.	SFA-T40H

How to fix Tapping Bolt



Fix the frame with jig etc, and screw the Tapping Bolt halfway into the end face. (Temporary joint)
 ※ In case it is too tight, please use cutting oil.

Put the bolt head through T slot of another frame.

Tighten by Manual tool to fix.

※Manual tool is recommended, because the reaction of torque up is big by using electric drill.

GO ● Drillid by SUS
 Processing Symbol P212~

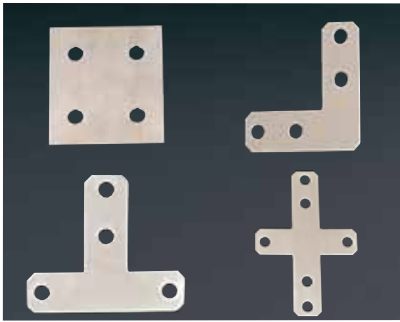


Parts
 How to order
 Item No.
SFB-T40

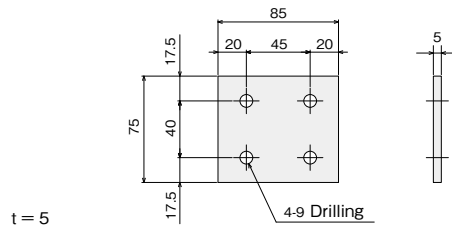
Quantity (pcs)

Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

Plate Bracket L



S Plate Bracket LG

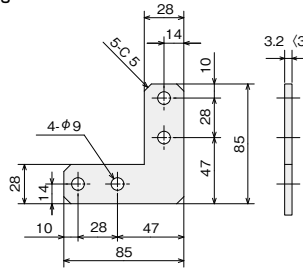


Kit Contents

- <Plate Bracket LG Kit>
- Plate Bracket LG×1
- Hexagon Socket Bolt (M8×15)Stainless×4
- ST Nut L (M8)×4

Name	S Plate Bracket LG	S Plate Bracket LG Kit
Item No.	★SFJ-123S	★SFK-123S

Plate Bracket L-L Type

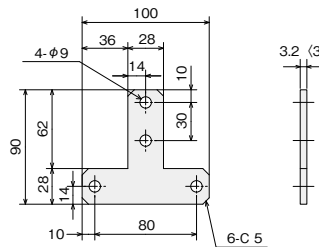


Kit Contents

- <Plate Bracket L-L Type Kit>
- Plate Bracket L-L×1
- Hexagon Socket Bolt (M8×15)×4
- T Nut L (M8)×4
- <S Plate Bracket L-L Type Kit>
- S Plate Bracket L-L×1
- Hexagon Socket Bolt (M8×15)Stainless×4
- ST Nut L (M8)×4

Name	Plate Bracket L-L Type <S Plate Bracket L-L Type>	Plate Bracket L-L Type Kit <S Plate Bracket L-L Type Kit>
Item No.	★SFJ-106★SFJ-106S	★SFK-106★SFK-106S

Plate Bracket L-T Type

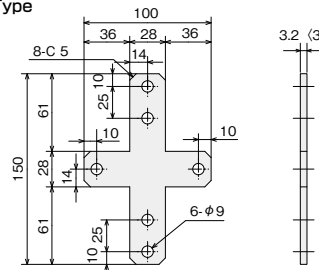


Kit Contents

- <Plate Bracket L-T Type Kit>
- Plate Bracket L-T×1
- Hexagon Socket Bolt (M8×15)×4
- T Nut L (M8)×4
- <S Plate Bracket L-T Type Kit>
- S Plate Bracket L-T×1
- Hexagon Socket Bolt (M8×15)Stainless×4
- ST Nut L (M8)×4

Name	Plate Bracket L-T Type <S Plate Bracket L-T Type>	Plate Bracket L-T Type Kit <S Plate Bracket L-T Type Kit>
Item No.	★SFJ-107★SFJ-107S	★SFK-107★SFK-107S

Plate Bracket L-+ Type



Kit Contents

- <Plate Bracket L-+ Type Kit>
- Plate Bracket L-+×1
- Hexagon Socket Bolt (M8×15)×6
- T Nut L (M8)×6
- <S Plate Bracket L-+ Type Kit>
- S Plate Bracket L-+×1
- Hexagon Socket Bolt (M8×15)×6
- ST Nut L (M8)×6

Name	Plate Bracket L-+ Type <S Plate Bracket L-+ Type>	Plate Bracket L-+ Type Kit <S Plate Bracket L-+ Type Kit>
Item No.	★SFJ-108★SFJ-108S	★SFK-108★SFK-108S

Usable Frame

Compatible to all SF40 and 45 series (Groove Width 10mm) (SF-60-60-1S, SF-40-DE#, SF-45-DE#excluded)

Material/Technical Data

Name	Weight(g)	Material	Environment
Plate Bracket LG	242	SUS304	★RoHS Compliant ★Green Procurement
Plate Bracket L-L	89	SPCC Uni-chrome	
S Plate Bracket L-L	89	SUS304	
Plate Bracket L-T	103	SPCC Uni-chrome	
S Plate Bracket L-T	103	SUS304	
Plate Bracket L-+	140	SPCC Uni-chrome	
S Plate Bracket L-+	140	SUS304	

SF20 SS Size

SF30 S Size

SF40-45 L Size

Complex Parts

Door Panel Clean Equipment

Technical Data

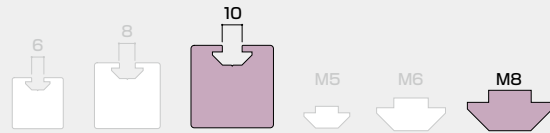


We sell Nut Material and Bracket Material as well.

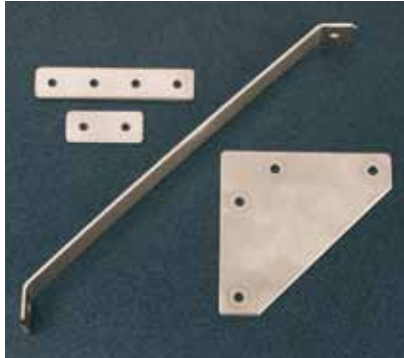
T Nut L Material P99

● Hard Bracket L Material
● Angle Bracket L Material



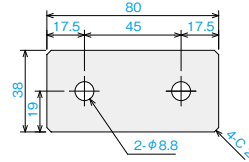
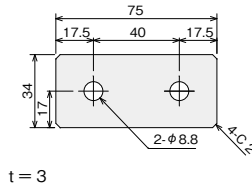


S Plate Bracket



S Plate Bracket L40-H2

S Plate Bracket L45-H2

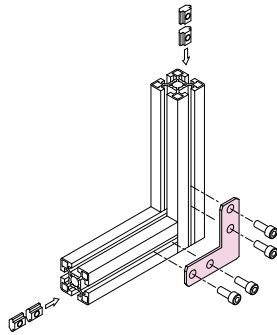


t = 3

■Kit Contents

- ◁Plate Bracket L40(L45) -H2 Kit
- Plate Bracket L40-H2(or L45-H2)×1
- Hexagon Socket Bolt(M8×15)Stainless×2
- ST Nut L(M8)×2

Name	S Plate Bracket L40-H2 (S Plate Bracket L45-H2)	S Plate Bracket L40-H2 Kit (S Plate Bracket L45-H2 Kit)
Item No.	SFJ-126S(SFJ-127S)	SFK-126S(SFK-127S)



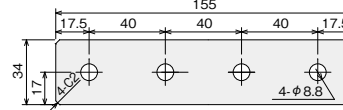
■Usable Frame

Compatible to all SF40 and 45 series (Groove Width 10mm)
(SF-60-60-1S, SF-40-DE#, SF-45-DE#excluded)

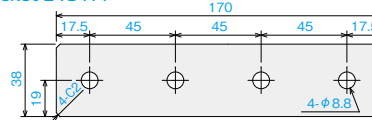
■Material/Technical Data

Name	Weight(g)	Material	Environment
S Plate Bracket L40-H2	57.6	SUS304	RoHS Compliant Green Procurement
S Plate Bracket L45-H2	69.2		
S Plate Bracket L40-H4	119.4		
S Plate Bracket L45-H4	147.7		
S Corner Support Bracket L	570.6		
S Corner Support Plate L	374.4		

S Plate Bracket L40-H4



S Plate Bracket L45-H4



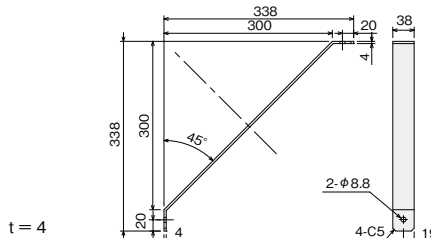
t = 3

■Kit Contents

- ◁Plate Bracket L40(L45) -H4 Kit
- Plate Bracket L40-H4(or L45-H4)×1
- Hexagon Socket Bolt(M8×15)Stainless×4
- ST Nut L(M8)×4

Name	S Plate Bracket L40-H4 (S Plate Bracket L45-H4)	S Plate Bracket L40-H4 Kit (S Plate Bracket L45-H4 Kit)
Item No.	SFJ-131S(SFJ-132S)	SFK-131S(SFK-132S)

S Corner Support Bracket L



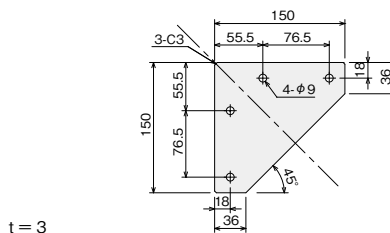
t = 4

■Kit Contents

- ◁Corner Support Bracket L Kit
- Corner Support Bracket L×1
- Hexagon Socket Bolt(M8×15)Stainless×2
- ST Nut L(M8)×2

Name	S Corner Support Bracket L	S Corner Support Bracket L Kit
Item No.	SFJ-133S	SFK-133S

S Corner Support Plate L



t = 3

■Kit Contents

- ◁Corner Support Plate L Kit
- Corner Support Plate L×1
- Hexagon Socket Bolt(M8×15)Stainless×4
- ST Nut L(M8)×4

Name	S Corner Support Plate L	S Corner Support Plate L Kit
Item No.	SFJ-138S	SFK-138S



Frame for 40-45
Nut for 40-45
Bracket for 40-45
Adjuster for 40-45
Accessory for 40-45

Adjuster Kit



■ Plate			■ Adjuster			■ Caster																																																																																		
<p>Adjuster Plate L Adjuster Plate L (Stainless)</p> <table border="1"> <tr><td>Material</td><td>SS400</td><td>Treatment</td><td>Uni-Chrome</td><td>Weight</td><td>0.65kg</td></tr> <tr><td>Adjuster Plate L</td><td>SS400</td><td>Uni-Chrome</td><td>—</td><td>0.65kg</td><td>—</td></tr> <tr><td>Adjuster Plate L (Stainless)</td><td>SUS304</td><td>—</td><td>—</td><td>0.66kg</td><td>—</td></tr> </table>	Material	SS400	Treatment	Uni-Chrome	Weight	0.65kg	Adjuster Plate L	SS400	Uni-Chrome	—	0.65kg	—	Adjuster Plate L (Stainless)	SUS304	—	—	0.66kg	—	<p>Adjuster Caster Plate 80 Adjuster Caster Plate 80 (Stainless)</p> <table border="1"> <tr><td>Material</td><td>SS400</td><td>Treatment</td><td>Uni-Chrome</td><td>Weight</td><td>2kg</td></tr> <tr><td>Adjuster Caster Plate 80</td><td>SS400</td><td>Uni-Chrome</td><td>—</td><td>2kg</td><td>—</td></tr> <tr><td>Adjuster Caster Plate 80 (Stainless)</td><td>SUS304</td><td>—</td><td>—</td><td>2.02kg</td><td>—</td></tr> </table>	Material	SS400	Treatment	Uni-Chrome	Weight	2kg	Adjuster Caster Plate 80	SS400	Uni-Chrome	—	2kg	—	Adjuster Caster Plate 80 (Stainless)	SUS304	—	—	2.02kg	—	<p>Adjuster M16</p> <table border="1"> <tr><td>Material</td><td>SS400</td><td>Treatment</td><td>Zn Black</td><td>Load Capacity</td><td>500kg</td><td>Weight</td><td>386g</td><td>Bottom</td><td>Neoprene Rubber</td></tr> <tr><td>Adjuster M16</td><td>SS400</td><td>Zn Black</td><td>—</td><td>500kg</td><td>386g</td><td>—</td><td>—</td><td>—</td><td>—</td></tr> </table>	Material	SS400	Treatment	Zn Black	Load Capacity	500kg	Weight	386g	Bottom	Neoprene Rubber	Adjuster M16	SS400	Zn Black	—	500kg	386g	—	—	—	—	<p>Adjuster BM20 (Stainless)</p> <table border="1"> <tr><td>Material</td><td>SUS304</td><td>Treatment</td><td>Electrolytic Polishing</td><td>Load Capacity</td><td>880kg</td><td>Weight</td><td>540g</td></tr> <tr><td>Adjuster BM20 (Stainless)</td><td>SUS304</td><td>Electrolytic Polishing</td><td>—</td><td>880kg</td><td>540g</td><td>—</td><td>—</td></tr> </table>	Material	SUS304	Treatment	Electrolytic Polishing	Load Capacity	880kg	Weight	540g	Adjuster BM20 (Stainless)	SUS304	Electrolytic Polishing	—	880kg	540g	—	—	<p>Caster C</p> <table border="1"> <tr><td>Material</td><td>Nylon</td><td>Load Capacity</td><td>300kg</td><td>Weight</td><td>902g</td></tr> <tr><td>Caster C</td><td>Nylon</td><td>—</td><td>300kg</td><td>902g</td><td>—</td></tr> </table>	Material	Nylon	Load Capacity	300kg	Weight	902g	Caster C	Nylon	—	300kg	902g	—
Material	SS400	Treatment	Uni-Chrome	Weight	0.65kg																																																																																			
Adjuster Plate L	SS400	Uni-Chrome	—	0.65kg	—																																																																																			
Adjuster Plate L (Stainless)	SUS304	—	—	0.66kg	—																																																																																			
Material	SS400	Treatment	Uni-Chrome	Weight	2kg																																																																																			
Adjuster Caster Plate 80	SS400	Uni-Chrome	—	2kg	—																																																																																			
Adjuster Caster Plate 80 (Stainless)	SUS304	—	—	2.02kg	—																																																																																			
Material	SS400	Treatment	Zn Black	Load Capacity	500kg	Weight	386g	Bottom	Neoprene Rubber																																																																															
Adjuster M16	SS400	Zn Black	—	500kg	386g	—	—	—	—																																																																															
Material	SUS304	Treatment	Electrolytic Polishing	Load Capacity	880kg	Weight	540g																																																																																	
Adjuster BM20 (Stainless)	SUS304	Electrolytic Polishing	—	880kg	540g	—	—																																																																																	
Material	Nylon	Load Capacity	300kg	Weight	902g																																																																																			
Caster C	Nylon	—	300kg	902g	—																																																																																			
<p>Adjuster Caster Plate L</p> <table border="1"> <tr><td>Material</td><td>SS400</td><td>Treatment</td><td>Uni-Chrome</td><td>Weight</td><td>1.03kg</td></tr> <tr><td>Adjuster Caster Plate L</td><td>SS400</td><td>Uni-Chrome</td><td>—</td><td>1.03kg</td><td>—</td></tr> </table>	Material	SS400	Treatment	Uni-Chrome	Weight	1.03kg	Adjuster Caster Plate L	SS400	Uni-Chrome	—	1.03kg	—	<p>Adjuster Caster Plate 90 Adjuster Caster Plate 90 (Stainless)</p> <table border="1"> <tr><td>Material</td><td>SS400</td><td>Treatment</td><td>Uni-Chrome</td><td>Weight</td><td>2.5kg</td></tr> <tr><td>Adjuster Caster Plate 90</td><td>SS400</td><td>Uni-Chrome</td><td>—</td><td>2.5kg</td><td>—</td></tr> <tr><td>Adjuster Caster Plate 90 (Stainless)</td><td>SUS304</td><td>—</td><td>—</td><td>2.53kg</td><td>—</td></tr> </table>	Material	SS400	Treatment	Uni-Chrome	Weight	2.5kg	Adjuster Caster Plate 90	SS400	Uni-Chrome	—	2.5kg	—	Adjuster Caster Plate 90 (Stainless)	SUS304	—	—	2.53kg	—	<p>Adjuster BM16 (Stainless)</p> <table border="1"> <tr><td>Material</td><td>SS400</td><td>Treatment</td><td>Electrolytic Polishing</td><td>Load Capacity</td><td>560kg</td><td>Weight</td><td>375g</td></tr> <tr><td>Adjuster BM16 (Stainless)</td><td>SS400</td><td>Electrolytic Polishing</td><td>—</td><td>560kg</td><td>375g</td><td>—</td><td>—</td></tr> </table>	Material	SS400	Treatment	Electrolytic Polishing	Load Capacity	560kg	Weight	375g	Adjuster BM16 (Stainless)	SS400	Electrolytic Polishing	—	560kg	375g	—	—	<p>Caster B</p> <table border="1"> <tr><td>Material</td><td>Phenol Resin</td><td>Load Capacity</td><td>150kg</td><td>Weight</td><td>340g</td></tr> <tr><td>Caster B</td><td>Phenol Resin</td><td>—</td><td>150kg</td><td>340g</td><td>—</td></tr> </table>	Material	Phenol Resin	Load Capacity	150kg	Weight	340g	Caster B	Phenol Resin	—	150kg	340g	—	<p>Caster C (Stainless)</p> <table border="1"> <tr><td>Material</td><td>MC Nylon</td><td>Load Capacity</td><td>150kg</td><td>Weight</td><td>520g</td></tr> <tr><td>Caster C (Stainless)</td><td>MC Nylon</td><td>—</td><td>150kg</td><td>520g</td><td>—</td></tr> </table>	Material	MC Nylon	Load Capacity	150kg	Weight	520g	Caster C (Stainless)	MC Nylon	—	150kg	520g	—														
Material	SS400	Treatment	Uni-Chrome	Weight	1.03kg																																																																																			
Adjuster Caster Plate L	SS400	Uni-Chrome	—	1.03kg	—																																																																																			
Material	SS400	Treatment	Uni-Chrome	Weight	2.5kg																																																																																			
Adjuster Caster Plate 90	SS400	Uni-Chrome	—	2.5kg	—																																																																																			
Adjuster Caster Plate 90 (Stainless)	SUS304	—	—	2.53kg	—																																																																																			
Material	SS400	Treatment	Electrolytic Polishing	Load Capacity	560kg	Weight	375g																																																																																	
Adjuster BM16 (Stainless)	SS400	Electrolytic Polishing	—	560kg	375g	—	—																																																																																	
Material	Phenol Resin	Load Capacity	150kg	Weight	340g																																																																																			
Caster B	Phenol Resin	—	150kg	340g	—																																																																																			
Material	MC Nylon	Load Capacity	150kg	Weight	520g																																																																																			
Caster C (Stainless)	MC Nylon	—	150kg	520g	—																																																																																			
<p>Adjuster Caster Plate L (Stainless)</p> <table border="1"> <tr><td>Material</td><td>SUS304</td><td>Treatment</td><td>—</td><td>Weight</td><td>1.04kg</td></tr> <tr><td>Adjuster Caster Plate L (Stainless)</td><td>SUS304</td><td>—</td><td>—</td><td>1.04kg</td><td>—</td></tr> </table>	Material	SUS304	Treatment	—	Weight	1.04kg	Adjuster Caster Plate L (Stainless)	SUS304	—	—	1.04kg	—	<p>Adjuster M20</p> <table border="1"> <tr><td>Material</td><td>SS400</td><td>Treatment</td><td>Zn Black</td><td>Load Capacity</td><td>500kg</td><td>Weight</td><td>536g</td></tr> <tr><td>Adjuster M20</td><td>SS400</td><td>Zn Black</td><td>—</td><td>500kg</td><td>536g</td><td>—</td><td>—</td></tr> </table>	Material	SS400	Treatment	Zn Black	Load Capacity	500kg	Weight	536g	Adjuster M20	SS400	Zn Black	—	500kg	536g	—	—	<p>Caster B (Stainless)</p> <table border="1"> <tr><td>Material</td><td>Phenol Resin</td><td>Load Capacity</td><td>71.4kg</td><td>Weight</td><td>285g</td></tr> <tr><td>Caster B (Stainless)</td><td>Phenol Resin</td><td>—</td><td>71.4kg</td><td>285g</td><td>—</td></tr> </table>	Material	Phenol Resin	Load Capacity	71.4kg	Weight	285g	Caster B (Stainless)	Phenol Resin	—	71.4kg	285g	—																																														
Material	SUS304	Treatment	—	Weight	1.04kg																																																																																			
Adjuster Caster Plate L (Stainless)	SUS304	—	—	1.04kg	—																																																																																			
Material	SS400	Treatment	Zn Black	Load Capacity	500kg	Weight	536g																																																																																	
Adjuster M20	SS400	Zn Black	—	500kg	536g	—	—																																																																																	
Material	Phenol Resin	Load Capacity	71.4kg	Weight	285g																																																																																			
Caster B (Stainless)	Phenol Resin	—	71.4kg	285g	—																																																																																			

	Item No.	Name	Compatible Frames	Kit Contents
Adjuster + Plate	SFK-501A	Level Adjuster Kit L	Compatible to all SF40 and 45 series (Groove Width 10mm)	●Adjuster Plate Lx1 ●Adjuster M16x1 ●T Nut L (M8)x4 ●Hexagon Socket Bolt (M8x20)x4
	SFK-501S	Level Adjuster Kit L (Stainless)	Compatible to all SF40 and 45 series (Groove Width 10mm)	●Adjuster Plate L (Stainless)x1 ●Adjuster BM16 (Stainless)x1 ●ST Nut L (M8)x4 ●Hexagon Socket Bolt (M8x20)Stainlessx4
	SFK-513A	Level Adjuster Kit 80	SF-80-80 SF-80-80-H	●Adjuster Caster Plate 80x1 ●Adjuster M20x1 ●Flat Washer (M8)x8 ●T Nut L (M8)x8 ●Hexagon Socket Bolt (M8x25)x8
	SFK-513S	Level Adjuster Kit 80 (Stainless)	SF-80-80 SF-80-80-H	●Adjuster Caster Plate 80 (Stainless)x1 ●Hexagon Socket Bolt (M8x25)Stainlessx8 ●ST Nut L (M8)x8 ●Adjuster BM20 (Stainless)x1 ●Flat Washer (M8)Stainlessx8
	SFK-515	Level Adjuster Kit 90	SF-90-90 SF-90-90-H	●Adjuster Caster Plate 90x1 ●Adjuster M20x1 ●Flat Washer (M8)x8 ●T Nut (M8)x8 ●Hexagon Socket Bolt (M8x25)x8
	SFK-515S	Level Adjuster Kit 90 (Stainless)	SF-90-90 SF-90-90-H	●Adjuster Caster Plate 90 (Stainless)x1 ●Hexagon Socket Bolt (M8x25)Stainlessx8 ●ST Nut (M8)x8 ●Adjuster BM20 (Stainless)x1 ●Flat Washer (M8)Stainlessx8
Adjuster Caster + Plate	SFK-502A	Level Adjuster Kit L with Caster	Compatible to all SF40 and 45 series (Groove Width 10mm)	●Adjuster Caster Plate Lx1 ●Caster Bx1 ●Hexagon Socket Bolt (M6x10)x4 ●Adjuster M16x1 ●T Nut L (M8)x4 ●Hexagon Socket Bolt (M8x20)x4
	SFK-502S	Level Adjuster Kit L with Caster (Stainless)	Compatible to all SF40 and 45 series (Groove Width 10mm)*	●Adjuster Caster Plate L (Stainless)x1 ●ST Nut L (M8)x4 ●Hexagon Socket Bolt (M8x12)Stainlessx4 ●Adjuster BM16 (Stainless)x1 ●Caster B (Stainless)x1 ●Hexagon Socket Bolt (M8x20)Stainlessx4
	SFK-514A	Level Adjuster Kit 80 with Caster	SF-80-80 SF-80-80-H	●Adjuster Caster Plate 80x1 ●Adjuster M20x1 ●Hexagon Socket Bolt (M8x25)x8 ●Caster Cx1 ●T Nut L (M8)x8 ●Flat Washer (M8)x8 ●Hexagon Socket Bolt (M8x12)x4
	SFK-514S	Level Adjuster Kit 80 with Caster (Stainless)	SF-80-80 SF-80-80-H	●Adjuster Caster Plate 80 (Stainless)x1 ●Adjuster BM20 (Stainless)x1 ●Hexagon Socket Bolt (M8x25)Stainlessx8 ●Caster C (Stainless)x1 ●ST Nut L (M8)x8 ●Flat Washer (M8)Stainlessx8 ●Hexagon Socket Bolt (M8x12)Stainlessx4
	SFK-516	Level Adjuster Kit 90 with Caster	SF-90-90 SF-90-90-H	●Adjuster Caster Plate 90x1 ●Adjuster M20x1 ●Hexagon Socket Bolt (M8x25)x8 ●Caster Cx1 ●T Nut L (M8)x8 ●Flat Washer (M8)x8 ●Hexagon Socket Bolt (M8x12)x4
	SFK-516S	Level Adjuster Kit 90 with Caster (Stainless)	SF-90-90 SF-90-90-H	●Adjuster Caster Plate 90 (Stainless)x1 ●Adjuster BM20 (Stainless)x1 ●Hexagon Socket Bolt (M8x25)x8 ●Caster C (Stainless)x1 ●ST Nut L (M8)x8 ●Flat Washer (M8)Stainlessx8 ●Hexagon Socket Bolt (M8x12)x4



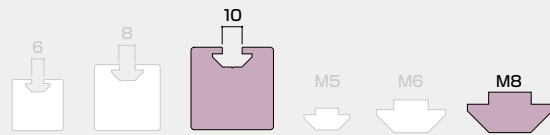
We sell Nut Material and Bracket Material as well.

T Nut L Material P99

● Hard Bracket L Material
● Angle Bracket L Material



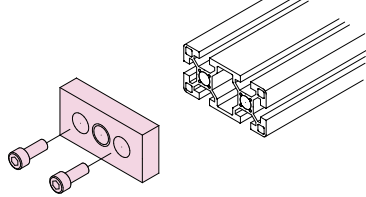
SF40•45 SERIES



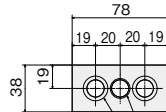
Foot Base



Environment ★RoHS Compliant
★Green Procurement



Foot Base 4080



2-14 Drilling, 20 Deep Spot Facing, Depth 12.5 M16

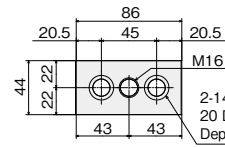
t=16



(Material)	
Foot Base 4080	SS400 Uni-Chrome Plating 2 Hexagon Socket Bolts (M12×25) Included Weight/274g
Foot Base 4080 (Stainless)	SUS304 2 Hexagon Socket Bolts (M12×25) Stainless Included Weight/276g

Name	Foot Base 4080 (Foot Base 4080(Stainless))
Item No.	★SFK-57A (★SFK-57AS)

Foot Base 4590



2-14 Drilling, 20 Deep Spot Facing, Depth 12.5

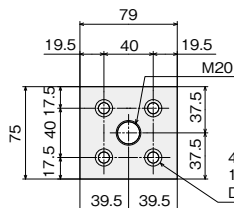
t=16



(Material)	
Foot Base 4590	SS400 Uni-Chrome Plating 2 Hexagon Socket Bolts (M12×25) Included Weight/371g
Foot Base 4590 (Stainless)	SUS304 2 Hexagon Socket Bolts (M12×25) Stainless Included Weight/374g

Name	Foot Base 4590 (Foot Base 4590(Stainless))
Item No.	★SFK-60A (★SFK-60AS)

Foot Base 8080



4-9 Drilling, 14 Deep Spot Facing, Depth 8.5

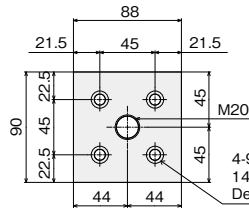
t=16



(Material)	
Foot Base 8080	SS400 Uni-Chrome Plating 4 Hexagon Socket Bolts (M8×25) Included Weight/625g
Foot Base 8080 (Stainless)	SUS304 4 Hexagon Socket Bolts (M8×25) Stainless Included Weight/631g

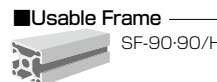
Name	Foot Base 8080 (Foot Base 8080(Stainless))
Item No.	★SFK-59A (★SFK-59AS)

Foot Base 9090



4-9 Drilling, 14 Deep Spot Facing, Depth 8.6

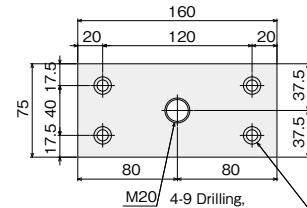
t=16



(Material)	
Foot Base 9090	SS400 Uni-Chrome Plating 4 Hexagon Socket Bolts (M8×25) Included Weight/861g
Foot Base 9090 (Stainless)	SUS304 4 Hexagon Socket Bolts (M8×25) Stainless Included Weight/869g

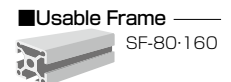
Name	Foot Base 9090 (Foot Base 9090(Stainless))
Item No.	★SFK-54A (★SFK-54AS)

Foot Base 80160



4-9 Drilling, 14 Deep Spot Facing, Depth 8.6

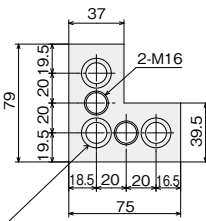
t=16



(Material)	
Foot Base 80160	SS400 Uni-Chrome Plating 4 Hexagon Socket Bolts (M8×25) Included Weight/1417g
Foot Base 80160 (Stainless)	SUS304 4 Hexagon Socket Bolts (M8×25) Stainless Included Weight/1431g

Name	Foot Base 80160 (Foot Base 80160(Stainless))
Item No.	★SFK-72A (★SFK-72AS)

Foot Base 408080



3-14 Drilling 20 Deep Spot Facing, Depth 12.5

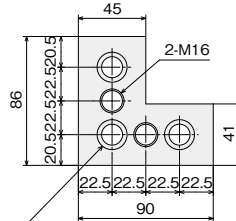
t=16



(Material)	
Foot Base 408080	SS400 Uni-Chrome Plating 3 Hexagon Socket Bolts (M12×25) Included Weight/383g
Foot Base 408080 (Stainless)	SUS304 3 Hexagon Socket Bolts (M12×25) Stainless Included Weight/387g

Name	Foot Base 408080 (Foot Base 408080(Stainless))
Item No.	★SFK-65A (★SFK-65AS)

Foot Base 459090



3-14 Drilling 20 Deep Spot Facing, Depth 12.5

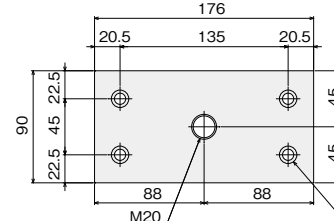
t=16



(Material)	
Foot Base 459090	SS400 Uni-Chrome Plating 3 Hexagon Socket Bolts (M12×25) Included Weight/541g
Foot Base 459090 (Stainless)	SUS304 3 Hexagon Socket Bolts (M12×25) Stainless Included Weight/546g

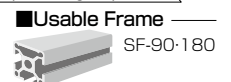
Name	Foot Base 459090 (Foot Base 459090(Stainless))
Item No.	★SFK-66A (★SFK-66AS)

Foot Base 90180



4-9 Drilling 14 Deep Spot Facing, Depth 8.6

t=16



(Material)	
Foot Base 90180	SS400 Uni-Chrome Plating 4 Hexagon Socket Bolts (M8×30) Included Weight/1899g
Foot Base 90180 (Stainless)	SUS304 4 Hexagon Socket Bolts (M8×30) Stainless Included Weight/1918g

Name	Foot Base 90180 (Foot Base 90180(Stainless))
Item No.	★SFK-73A (★SFK-73AS)



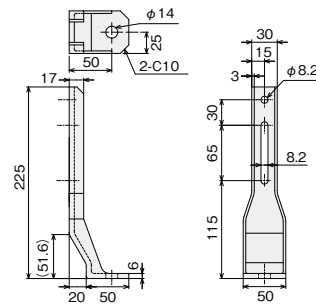
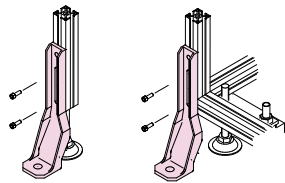
Parts
How to order
Item No.
SFK-57A

Quantity (pcs)



Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

Anchor Bracket



Name (Single Item)	Anchor Bracket (Anchor Bracket (Electroless Nickel Plating))
Item No.	SFJ-70A (SFJ-70AS)
Name (Bolt and Nut Kit)	Anchor Kit L (Anchor Kit L (Electroless Nickel Plating))
Item No.	SFK-71A (SFK-71AS)

Usable Frame



SF40-45 series (Groove Width 10mm)
*2F Frame excluded

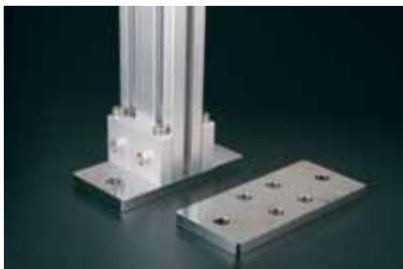
Kit Contents

- Anchor Bracket x1
- T Nut L (M8) x2
- Hexagon Socket Bolt (M8x18) x2
- ※ (Electroless Nickel Plating) Kit Bolt and Nut in Stainless are stainless.

Material/Technical Data

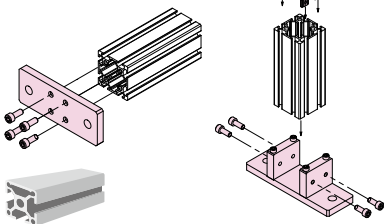
	Anchor Bracket	Anchor Bracket (Electroless Nickel Plating)
Material	S45C Anion Electrodeposition Black Coating	S45C Electroless Nickel Plating
Weight	577g	577g
Environment	RoHS Compliant	Green Procurement

Anchor Plate / Anchor Plate Bracket



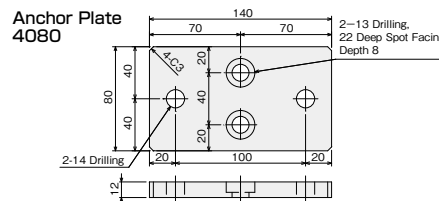
[Left] Anchor Plate Bracket Kit [Right] Anchor Plate

Environment **RoHS** Compliant
Green Procurement



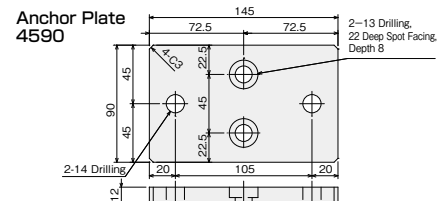
Usable Frame

(Anchor Plate 4080)SF-40-80, (Anchor Plate 4590)SF-45-90
(Anchor Plate 8080)SF-80-80, (Anchor Plate 9090)SF-90-90



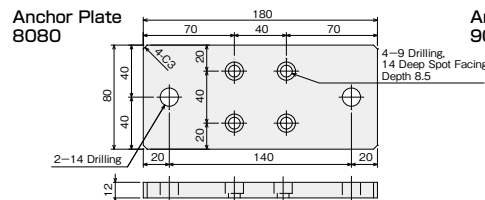
(Material)

Anchor Plate 4080	SUS304 With 4 Hexagon Socket Bolts (M12x35) Stainless Weight/1049g
-------------------	--



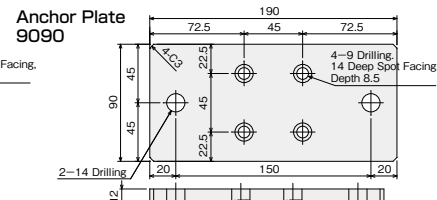
(Material)

Anchor Plate 4590	SUS304 With 4 Hexagon Socket Bolts (M12x35) Stainless Weight/1224g
-------------------	--



(Material)

Anchor Plate 8080	SUS304 With 4 Hexagon Socket Bolts (M8x25) Stainless Weight/1345g
-------------------	---

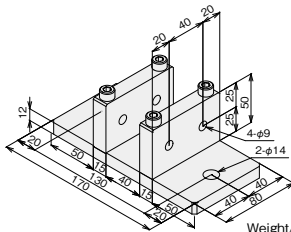


(Material)

Anchor Plate 9090	SUS304 With 4 Hexagon Socket Bolts (M8x25) Stainless Weight/1601g
-------------------	---

Name	Anchor Plate 4080	Anchor Plate 4590	Anchor Plate 8080	Anchor Plate 9090
Item No.	SFK-75A	SFK-76A	SFK-77A	SFK-78A

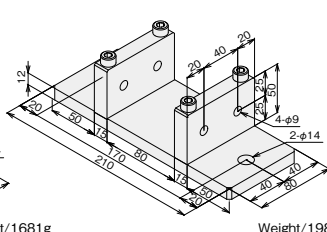
Anchor Plate Bracket 4080 Kit



Weight/1681g

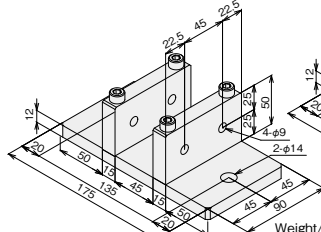
(Material) Base / SUS304, Anchor Block / A6063 (Alumite Treatment)

Anchor Plate Bracket 8080 Kit



Weight/1985g

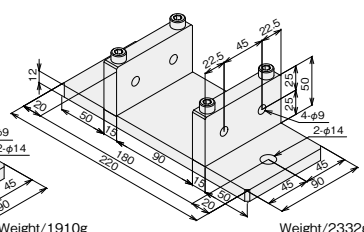
Anchor Plate Bracket 4590 Kit



Weight/1910g

(Material) Base / SUS304, Anchor Block / A6063 (Alumite Treatment)

Anchor Plate Bracket 9090 Kit



Weight/2332g



Usable Frame

(Anchor Plate Bracket 4080)SF-40-80
(Anchor Plate Bracket 8080)SF-80-80
(Anchor Plate Bracket 4590)SF-45-90
(Anchor Plate Bracket 9090)SF-90-90

Kit Contents

- Anchor Base 4080 (or 8080) x1
- Hexagon Socket Bolt (M8x60) Stainless x4
- Hexagon Socket Bolt (M8x25) Stainless x4
- ST Nut L (M8) x4
- Nut Anti-Skid Cap L40 x4
- Anchor Block 4080 x2
- Hexagon Socket Bolt (M8x60) Stainless x4
- Hexagon Socket Bolt (M8x25) Stainless x4
- ST Nut L (M8) x4
- Nut Anti-Skid Cap L45 x4

Name	4080 Kit	8080 Kit	4590 Kit	9090 Kit
Item No.	SFK-75B	SFK-77B	SFK-76B	SFK-78B



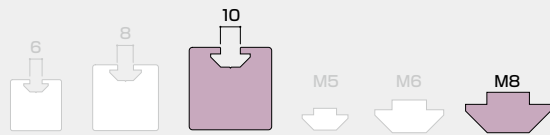
We sell Nut Material and Bracket Material as well.

T Nut L Material
P99

● Hard Bracket L Material
● Angle Bracket L Material



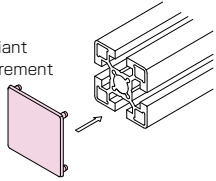
SF40•45 SERIES



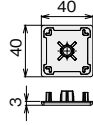
Frame Cap



Material Polyamide
 Weight In Drawing
 Environment **RoHS** Compliant
Green Procurement



Frame Cap N4040

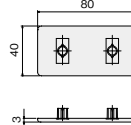


Weight/5.4g

■ Usable Frame

SF-40-40, SF-40-40-1F/2F/3F/2H/SF-K-40-40

Frame Cap 4080

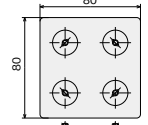


Weight/10.5g

■ Usable Frame

SF-40-80, SF-40-80-1F**SF-40-160/SF-K-40-80

Frame Cap 8080



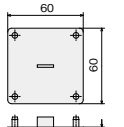
Weight/22.1g

■ Usable Frame

SF-80-80/H **SF-80-160

Name	Frame Cap 4040 (Black) (Light Gray)	Frame Cap 4080 (Black) (Light Gray)	Frame Cap 8080 (Black) (Light Gray)
Item No.	SFA-034B SFA-034G	SFA-007 SFA-007G ※Use 2 pcs for SF-40-160	SFA-008 SFA-008G ※Use 2 pcs for SF-80-160

Frame Cap 60601S

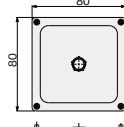


Weight/12.5g

■ Usable Frame

SF-60-60-1S

Frame Cap 80801S

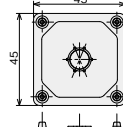


Weight/17.4g

■ Usable Frame

SF-80-80-1S

Frame Cap 4545

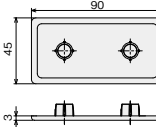


Weight/7.5g

■ Usable Frame

SF-45-45/1F/2F/3F/2H, SF-K-45-45/1F/2F

Frame Cap 4590

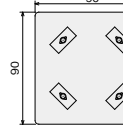


Weight/14.2g

■ Usable Frame

SF-45-90/1F, SF-K-45-90**SF-45-180

Frame Cap 9090



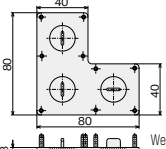
Weight/28.2g

■ Usable Frame

SF-90-90/H **SF-90-180

Name	Frame Cap 60601S (Black) (Light Gray)	Frame Cap 80801S (Black) (Light Gray)	Frame Cap 4545 (Black) (Light Gray)	Frame Cap 4590 (Black) (Light Gray)	Frame Cap 9090 (Black) (Light Gray)
Item No.	SFA-003 SFA-003G	SFA-030 SFA-030G	SFA-035B SFA-035G	SFA-004 SFA-004G ※Use 2 pcs for SF-90-180	SFA-016 SFA-016G ※Use 2 pcs for SF-45-180

Frame Cap 40-80-80

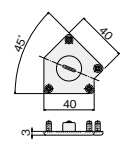


Weight/16.9g

■ Usable Frame

SF-40-80-80

Frame Cap 40-DE45

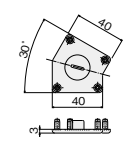


Weight/5.8g

■ Usable Frame

SF-40-DE45

Frame Cap 40-DE30

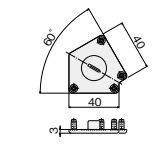


Weight/5.8g

■ Usable Frame

SF-40-DE30

Frame Cap 40-DE60

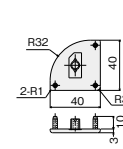


Weight/5.8g

■ Usable Frame

SF-40-DE60

Frame Cap 40-40-R



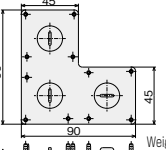
Weight/4.8g

■ Usable Frame

SF-40-40-R

Name	Frame Cap 40-80-80 (Black) (Light Gray)	Frame Cap 40-DE45 (Black) (Light Gray)	Frame Cap 40-DE30 (Black) (Light Gray)	Frame Cap 40-DE60 (Black) (Light Gray)	Frame Cap 40-40-R (Black) (Light Gray)
Item No.	SFA-J9C SFA-J9CG	SFA-J7B SFA-J7BG	SFA-J7A SFA-J7AG	SFA-J7C SFA-J7CG	SFA-024 SFA-024G

Frame Cap 45-90-90

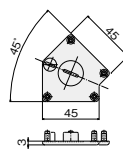


Weight/21.1g

■ Usable Frame

SF-45-90-90

Frame Cap 45-DE45

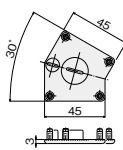


Weight/7.5g

■ Usable Frame

SF-45-DE45

Frame Cap 45-DE30

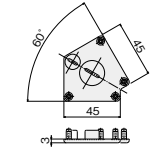


Weight/7.5g

■ Usable Frame

SF-45-DE30

Frame Cap 45-DE60

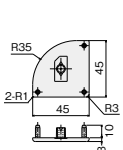


Weight/7.5g

■ Usable Frame

SF-45-DE60

Frame Cap 45-45-R



Weight/6.1g

■ Usable Frame

SF-45-45-R

Name	Frame Cap 45-90-90 (Black) (Light Gray)	Frame Cap 45-DE45 (Black) (Light Gray)	Frame Cap 45-DE30 (Black) (Light Gray)	Frame Cap 45-DE60 (Black) (Light Gray)	Frame Cap 45-45-R (Black) (Light Gray)
Item No.	SFA-J9D SFA-J9DG	SFA-J8B SFA-J8BG	SFA-J8A SFA-J8AG	SFA-J8C SFA-J8CG	SFA-025 SFA-025G



Parts
 How to order
 Item No.
SFA-034B

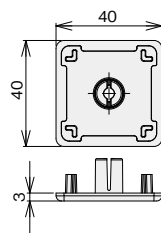
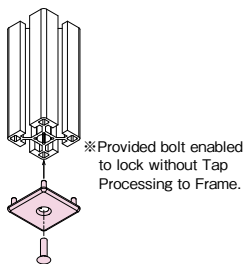
Quantity (pcs)

Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

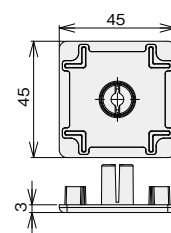
Frame Cap Lock Type N4040 / 4045



Material Polyamide(Cap), SWCHIOR(Screw), Chromate Black or Stainless(Screw)
Weight 7.3g(4040), 10.2g(4545)
Environment **RoHS** Compliant **Green** Procurement



■ Usable Frame ——— SF-40-40



■ Usable Frame ——— SF-45-45

Name	Frame Cap Lock Type N4040(Black)* ¹	Frame Cap Lock Type 4040(Light Gray)* ²	Frame Cap Lock Type 4545(Black)* ³	Frame Cap Lock Type 4545(Light Gray)* ⁴
Item No.	SFK-06LB	SFK-06LG	SFK-07LB	SFK-07LG

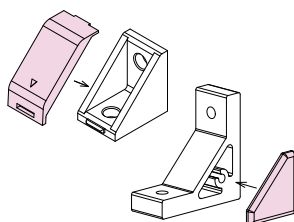
*1 With Small Flat Screw with Cross Hole (M5x16) Chromate Black

*2 With Small Flat Screw with Cross Hole (M5x16) Stainless

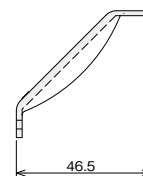
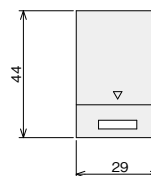
*3 With Small Flat Screw with Cross Hole (M6x18) Chromate Black

*4 With Small Flat Screw with Cross Hole (M6x18) Stainless

D Bracket Cap L / Hard Bracket Cap / G Cap

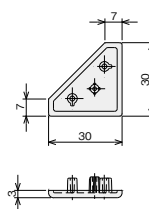


D Bracket Cap L

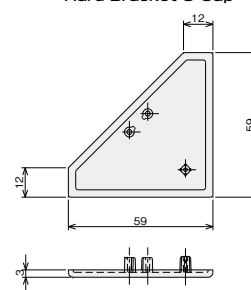


Name	D Bracket Cap L(Black)	D Bracket Cap L(Light Gray)
Item No.	SFA-J14	SFA-J14G
Name	Hard Bracket Cap(Black)	Hard Bracket Cap(Light Gray)
Item No.	SFA-J11	SFA-J11G
Name	Hard Bracket G Cap(Black)	Hard Bracket G Cap(Light Gray)
Item No.	SFA-J12	SFA-J12G

Hard Bracket Cap



Hard Bracket G Cap



- Usable Frame ———
- (D Bracket Cap L)
D Bracket L
 - (Hard Bracket Cap)
Hard Bracket L/Black
L4080/Black
L4590/Black
 - (Hard Bracket G Cap)
Hard Bracket LG/Black
G80/Black
G90/Black
G80160
G90180

■ Material/Technical Data

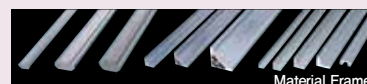
Material Polyamide
Weight 6.0g(D Bracket Cap L)
 1.8g(Hard Bracket Cap)
 6.1g(Hard Bracket G Cap)
Environment **RoHS** Compliant
Green Procurement



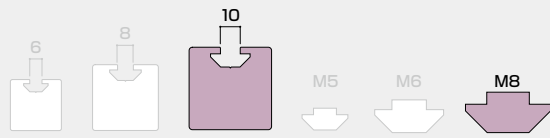
We sell Nut Material and Bracket Material as well.

T Nut L Material
P99

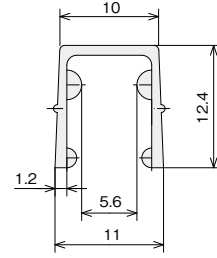
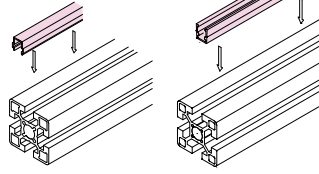
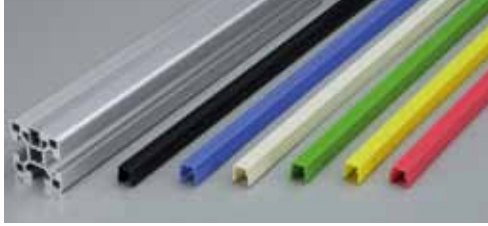
● Hard Bracket L Material
● Angle Bracket L Material



SF40•45 SERIES



Slot Cap



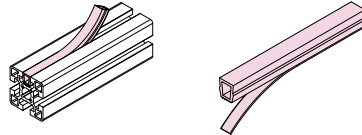
Name	Slot Cap L (ℓ=2000)				
	(Black)			(Light Gray)	
Item No.	SFA-102			SFA-102G	

Name	Slot Cap L (ℓ=2000)				
	(Blue)	(Ivory)	(Green)	(Yellow)	(Red)
Item No.	SFA-102L	SFA-102V	SFA-102M	SFA-102Y	SFA-102R

■ Usable Frame
 Compatible to all SF40 and 45 series (Groove Width 10mm)

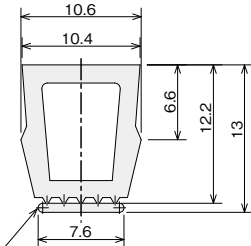
■ Material/Technical Data
 Material Polyethylene
 Weight 46g/m
 Environment **RoHS** Compliant
Green Procurement

Slot Seal



※Please remove the bottom part to install SF40 Series.

Please remove to install SF40 Series.



Name	Slot Seal L (ℓ=5000)
Item No.	SFA-172

■ Usable Frame
 Compatible to all SF40 and 45 series (Groove Width 10mm)

■ Material/Technical Data
 Material Elastomer
 Weight 68g/m
 Environment **RoHS** Compliant
Green Procurement

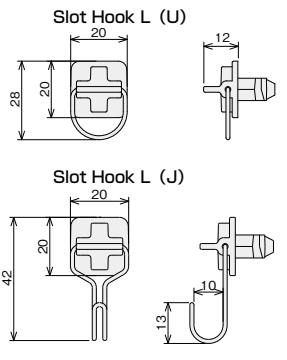
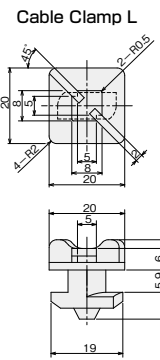
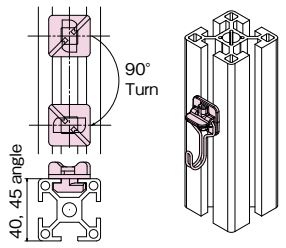


Parts How to order
 Item No. SFA-102

Quantity (pcs)

Frame for 40·45 Nut for 40·45 Bracket for 40·45 Adjuster for 40·45 Accessory for 40·45

Cable Clamp L / Slot Hook / Slot Hook L (U), (J)



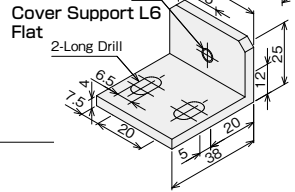
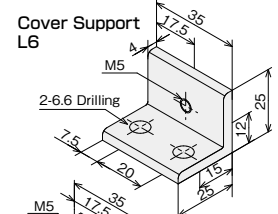
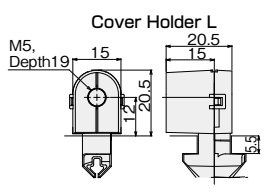
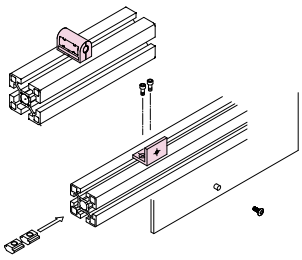
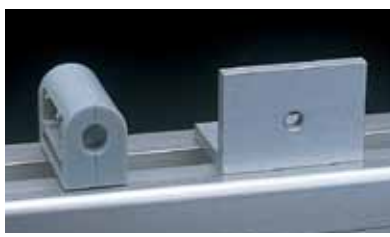
Name	Cable Clamp L (50 pcs/Pack) (Black)	Cable Clamp L (50 pcs/Pack) (Light Gray)
Item No.	C1P-B12C	C1P-O12C
Name	Slot Hook L (U)	Slot Hook L (J)
Item No.	SFK-K33U	SFK-K33J

Usable Frame
Compatible to all SF40 and 45 series
(Groove Width 10mm)

Material/Technical Data

	Cable Clamp L	Slot Hook L (U), (J)
Material	Polyamide	Polyamide
Weight	2.5g/pcs	3.7g(U) 4.5g(J)
Environment	RoHS Compliant	RoHS Compliant
	Green Procurement	Green Procurement

Cover Holder L / Cover Support L6



Name (Single Item)	Cover Holder L	Cover Support L6	Cover Support L6 Flat
Item No.	*SFA-KH7	*SFJ-K04	*SFJ-K14
Name (Bolt and Nut Kit)	Cover Support L6 Kit (Cover Support L6 (Stainless) Kit)	Cover Support L6 Flat Kit (Cover Support L6 Flat (Stainless) Kit)	
Item No.	*SFK-K04 / *SFK-K04S	*SFK-K14 / *SFK-K14S	

Usable Frame
Compatible to all SF40 and 45 series
(Groove Width 10mm)

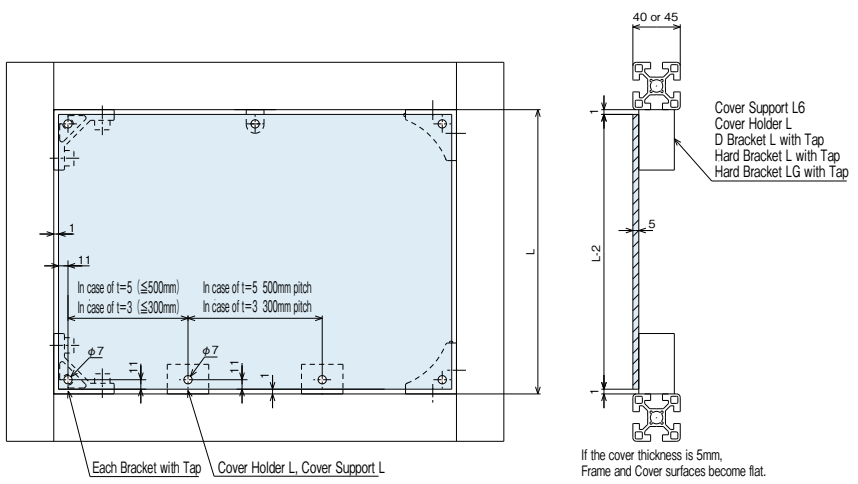
- Kit Contents**
- <Cover Support L6 Kit>**
 - Cover Support L6×1
 - T Nut L (M6)×2
 - Truss screw (M5×10)×1
 - Hexagon Socket Bolt (M6×15)×2
 - <Cover Support L6 Flat Kit>**
 - Cover Support L6 Flat×1
 - T Nut L (M6)×2
 - Truss screw (M5×10)×1
 - Hexagon Socket Bolt (M6×15)×2
- * Bolt and Nut in (Stainless) Kit are stainless.

Material/Technical Data

	Cover Holder L	Cover Support L6	Cover Support L6 Flat
Material	Polyamide	Polyamide	Al6063S-T5
Color	Color/Light Gray	Alumite Treatment	(Special order Black Alumite is available)
Weight	8g	1.7g (Cover Support L6)	2.1g (Cover Support L6 Flat)
Environment	RoHS Compliant	RoHS Compliant	RoHS Compliant
	Green Procurement	Green Procurement	Green Procurement

How to fix Cover

(Indication of Cover Holder, Cover Support, Resin Plate Dimension)



(Resin Plate)



GO Various Resin plates are available. Refer P182~.

(Door accessories)



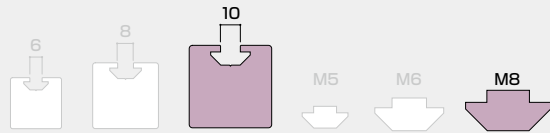
GO Various parts for door are available. Refer P140~.

We sell Nut Material and Bracket Material as well.

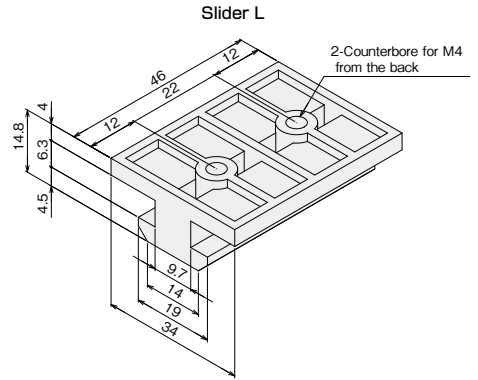
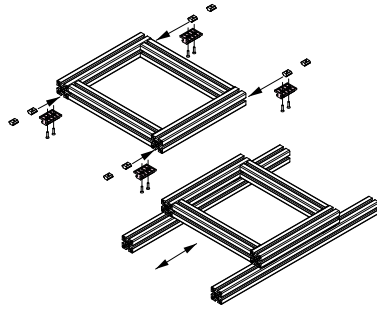
T Nut L Material P99

● Hard Bracket L Material
● Angle Bracket L Material





Slider L



Name	Slider L
Item No.	SFA-511

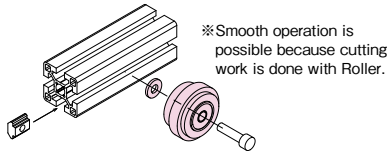
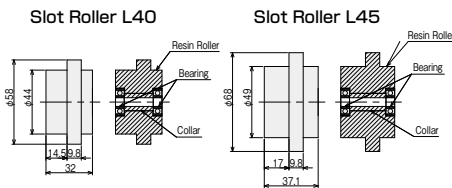
Usable Frame
 Compatible to all SF40 and 45 series (Groove Width 10mm)


Material/Technical Data
 Material Polyacetal(Gray)
 Weight 15g
 Environment **RoHS** Compliant
Green Procurement

Installation list of recommendation Bolt•Nut

Name	Installation Frame	Recommended Bolt	Recommended Nut	Appropriate Tightening Torque(N•m)
Slider L	SF40-45 series	Flat Bolt with Cross Hole(M4x25)	T Nut L (M4)	1.0

Slot Roller L40 / L45



Usable Frame
 (L40) Compatible to all SF40 series (Groove Width 10mm)
 (L45) Compatible to all SF45 series (Groove Width 10mm)

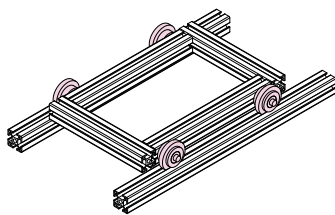
Material/Technical Data
 Material 6 Nylon(Resin Roller)
 Steel(Bearing)
 SC45C(Collar)
 Weight 86.5g(L40)·120g(L45)
 Environment **RoHS** Compliant
Green Procurement

Name	Slot Roller L40	Slot Roller L45
Item No.	SFK-807	SFK-808

※Installation bolt size M6
 ※With 2 Bearings•Collar•Washer
 ※Appropriate Tightening Torque 9.0N•m

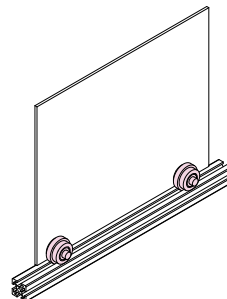
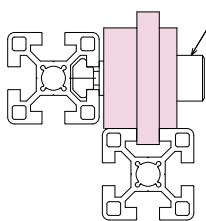
Example of using Slot Roller L

〈To frame's movable part〉

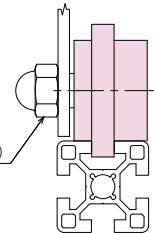


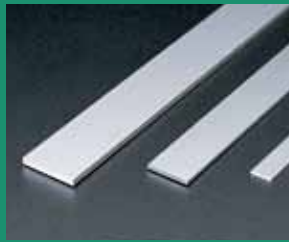
〈As door roller〉

Hexagon Socket Bolt M6×45(L40)
 Hexagon Socket Bolt M6×50(L45)



Cap Nut (M6)



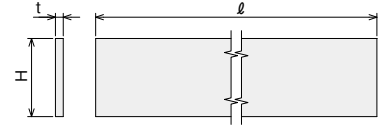


STANDARD FRAME

Complex Parts

Complex Parts

Flat Bar



Material/Technical Data
Material Aluminium Alloy
 Alumite Treatment
 Section Performance and Unit Mass Refer Table Below
Environment RoHS Compliant Green Procurement

Name	Item No.	H	t	Geometrical Moment of Inertia($\times 10^4 \text{mm}^4$)		Section Modulus($\times 10^3 \text{mm}^3$)		Unit Mass (kg/m)
				Ix	Iy	Zx	Zy	
Flat Bar15 T=2 $l = 50 \sim 2000$	SFF-A154	15	2	0.0562	0.001	0.075	0.01	0.08
Flat Bar15 T=3 $l = 50 \sim 2000$	SFF-A164	15	3	0.0843	0.0033	0.112	0.022	0.12
Flat Bar20 T=2 $l = 50 \sim 2000$	SFF-A174	20	2	0.1333	0.0013	0.133	0.013	0.11
Flat Bar20 T=3 $l = 50 \sim 2000$	SFF-A184	20	3	0.2	0.0045	0.2	0.03	0.16
Flat Bar20 T=5 $l = 50 \sim 2000$	SFF-A194	20	5	0.3333	0.0208	0.333	0.083	0.27
Flat Bar30 T=2 $l = 50 \sim 2000$	SFF-A204	30	2	0.45	0.002	0.3	0.02	0.16
Flat Bar30 T=3 $l = 50 \sim 2000$	SFF-A214	30	3	0.675	0.0067	0.45	0.045	0.24
Flat Bar30 T=5 $l = 50 \sim 2000$	SFF-A224	30	5	1.125	0.0312	0.75	0.125	0.41
Flat Bar40 T=3 $l = 50 \sim 2000$	SFF-A234	40	3	1.6	0.009	0.8	0.06	0.32
Flat Bar40 T=5 $l = 50 \sim 2000$	SFF-A244	40	5	2.666	0.0416	1.333	0.166	0.54
Flat Bar50 T=3 $l = 50 \sim 2000$	SFF-A384	50	3	3.125	0.011	1.25	0.075	0.40
Flat Bar50 T=5 $l = 50 \sim 2000$	SFF-A394	50	5	5.208	0.052	2.083	0.208	0.68

SF20 SS Size

SF30 S Size

SF40-45 L Size

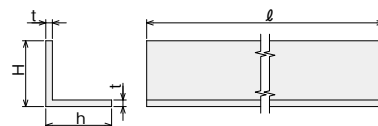
Complex Parts

Door Panel
Clean Equipment

Technical Data



Angle



Material/Technical Data
Material Aluminium Alloy
 Alumite Treatment
Section Performance and Unit Mass Refer Table Below
Environment RoHS Compliant Green Procurement

Name	Item No.	H	h	t	Geometrical Moment of Inertia($\times 10^4 \text{mm}^4$)		Section Modulus($\times 10^3 \text{mm}^3$)		Unit Mass (kg/m)
					Ix	Iy	Zx	Zy	
Angle2020 T=2 $l = 50 \sim 2000$	SFF-A014	20	20	2	0.288	0.288	0.201	0.201	0.21
Angle2020 T=3 $l = 50 \sim 2000$	SFF-A024	20	20	3	0.403	0.403	0.289	0.289	0.30
Angle2040 T=2 $l = 50 \sim 2000$	SFF-A034	20	40	2	0.348	1.964	0.219	0.758	0.31
Angle2040 T=3 $l = 50 \sim 2000$	SFF-A044	20	40	3	0.489	2.828	0.315	1.108	0.46
Angle3030 T=2 $l = 50 \sim 2000$	SFF-A054	30	30	2	1.019	1.019	0.468	0.468	0.31
Angle3030 T=3 $l = 50 \sim 2000$	SFF-A064	30	30	3	1.458	1.458	0.681	0.681	0.46
Angle3030 T=5 $l = 50 \sim 2000$	SFF-A074	30	30	5	2.216	2.216	1.071	1.071	0.74
Angle4040 T=2 $l = 50 \sim 2000$	SFF-A084	40	40	2	2.476	2.476	0.846	0.846	0.42
Angle4040 T=3 $l = 50 \sim 2000$	SFF-A094	40	40	3	3.581	3.581	1.239	1.239	0.62
Angle4040 T=5 $l = 50 \sim 2000$	SFF-A104	40	40	5	5.561	5.561	1.974	1.974	1.01
UF · 51 · 40 $l = 50 \sim 2000$	A-032-4	40	51	14	12.86	24.32	4.899	7.661	2.91
Angle2550 T=3 $l = 50 \sim 2000$	SFF-A334	25	50	3	0.993	5.661	0.504	1.759	0.58
Angle5050 T=3 $l = 50 \sim 2000$	SFF-A344	50	50	3	7.149	7.149	1.964	1.964	0.79
Angle7575 T=6 $l = 50 \sim 2000$	SFF-A514	75	75	6	46.882	46.882	8.677	8.677	2.33
Angle100100 T=6 $l = 50 \sim 2000$	SFF-A524	100	100	6	114.390	114.390	15.718	15.718	3.14
Angle150150 T=6 $l = 50 \sim 2000$	SFF-A534	150	150	6	397.520	397.520	36.051	36.051	4.76

SF20
SS Size

SF30
S Size

SF40-45
L Size

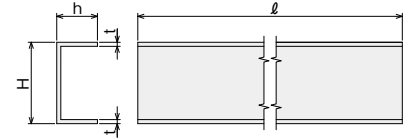
Complex Parts

Door Panel
Clean Equipment

Technical Data

Complex Parts

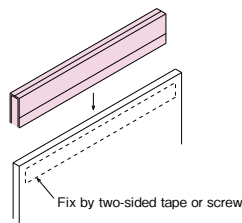
Channel



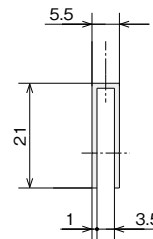
■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Section Performance and Unit Mass Refer Table Below
 Environment RoHS Compliant Green Procurement

Name	Item No.	H	h	t	Geometrical Moment of Inertia($\times 10^4 \text{mm}^4$)		Section Modulus($\times 10^3 \text{mm}^3$)		Unit Mass (kg/m)
					Ix	Iy	Zx	Zy	
Channel1515 T=2 $l=50\sim 2000$	SFF-A114	15	15	2	0.277	0.181	0.37	0.196	0.22
Channel1530 T=2 $l=50\sim 2000$	SFF-A124	30	15	2	1.47	0.231	0.98	0.22	0.30
Channel2020 T=2 $l=50\sim 2000$	SFF-A134	20	20	2	0.718	0.452	0.718	0.36	0.30
Channel2040 T=2 $l=50\sim 2000$	SFF-A144	40	20	2	3.668	0.576	1.834	0.403	0.41
Channel2550 T=3 $l=50\sim 2000$	SFF-A374	50	25	3	10.42	1.64	4.169	0.929	0.76
Channel1848 T=2 $l=50\sim 2000$	SFX-535	48	18.5	2	5.69	0.498	2.369	0.355	0.49

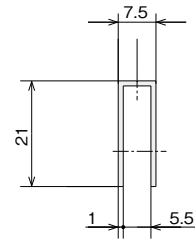
Panel Guard



Panel Guard T3



Panel Guard T5



Name	Panel Guard T3 ($l=3000$)	Panel Guard T3 ($l=50\sim 3000$)	Panel Guard T5 ($l=3000$)	Panel Guard T5 ($l=50\sim 3000$)
Item No.	SFF-K32	SFF-K34	SFF-K52	SFF-K54

■Material/Technical Data
 Material Aluminium Alloy
 Alumite Treatment
 Unit Mass 0.4kg/m
 Environment RoHS Compliant Green Procurement

● $l=3000$ Type is to be cut by customer. Effective range of use $l=(3000)$

Panel Guard Slat Cut Service



	Processing Contents	Processing Symbol
One Side		DVS
Both Side		DVW



Panel Guard T5 800mm In case both sides are cut aslant
SFF-K54 800mm DVW (Or both sides are cut aslant)



SF Frame

Standard Length (Cut by customer) $l=3100$ -Effective range of use $l=3000$
 Item No. **SFF-K32**

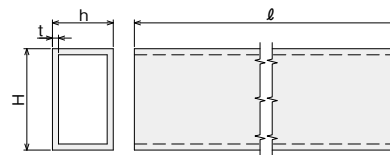
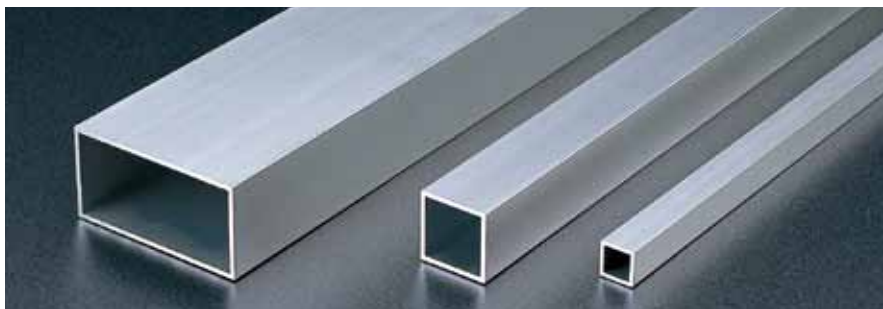
Quantity (pcs)

In case of specifying the length (Cut by SUS) ※Order by 0.1mm unit
 Item No. **SFF-K34**
 Length (mm) $l=800$

Parts

How to order
 Item No. **SFA-109**
 Quantity (pcs)

Square

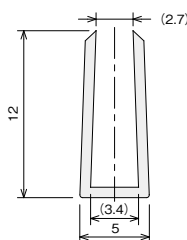
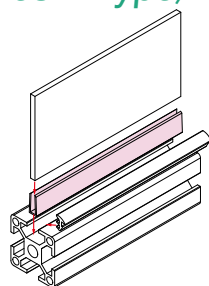


Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Section Performance and Unit Mass Refer Table Below
Environment RoHS Compliant Green Procurement

Name	Item No.	H	h	t	Geometrical Moment of Inertia($\times 10^6 \text{mm}^4$)		Section Modulus($\times 10^3 \text{mm}^3$)		Unit Mass (kg/m)
					Ix	Iy	Zx	Zy	
Square1515 T=1.5 $\ell=50\sim 2000$	SFF-A254	15	15	1.5	0.249	0.249	0.332	0.332	0.22
Square1530 T=1.5 $\ell=50\sim 2000$	SFF-A264	30	15	1.5	1.406	0.454	0.937	0.606	0.34
Square2020 T=2 $\ell=50\sim 2000$	SFF-A274	20	20	2	0.787	0.787	0.787	0.787	0.39
Square2040 T=2 $\ell=50\sim 2000$	SFF-A284	40	20	2	4.445	1.437	2.222	1.437	0.61
Square3030 T=2 $\ell=50\sim 2000$	SFF-A294	30	30	2	2.941	2.941	1.961	1.961	0.61
Square3060 T=2 $\ell=50\sim 2000$	SFF-A304	60	30	2	15.94	5.297	5.316	3.531	0.93
Square4040 T=2 $\ell=50\sim 2000$	SFF-A314	40	40	2	7.336	7.336	3.668	3.668	0.82
Square4080 T=2 $\ell=50\sim 2000$	SFF-A324	80	40	2	38.97	13.11	9.743	6.558	1.25
Square2550 T=2 $\ell=50\sim 2000$	SFF-A354	50	25	2	9.007	2.96	3.603	2.368	0.77
Square5050 T=2 $\ell=50\sim 2000$	SFF-A364	50	50	2	14.77	14.77	5.908	5.908	1.04

Panel Guard T3 (Resin Type)



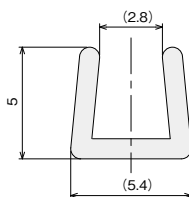
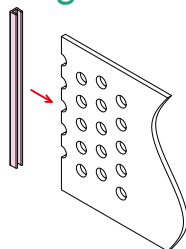
Name	Panel Guard T3 (Resin Type)
Item No.	SFA-109

It becomes Spacer of t=5 by installing t=3 Panel.

Material/Technical Data

Material Polyethylene (Silver)
Unit Mass 21 g/m ($\ell=2000\text{mm}/\text{PCS}$)
Environment RoHS Compliant Green Procurement

Punching Plate Guard



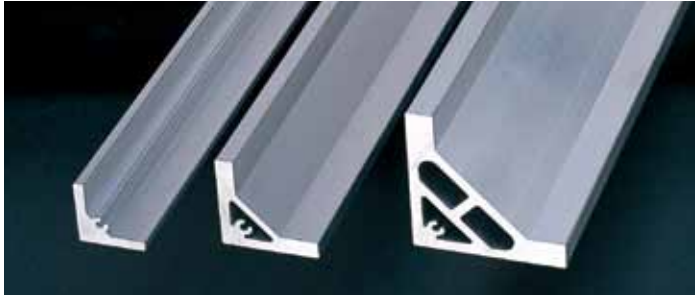
Name	Punching Plate Guard
Item No.	EMP-020

Material/Technical Data

Material Nylon 6
Unit Mass 15 g/m ($\ell=1000\text{mm}/\text{PCS}$)
Environment RoHS Compliant Green Procurement

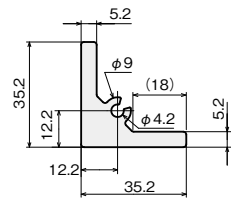
• Installable to end face of t=3 Panel.

Complex Parts



Note : This product will be delivered without being Anodized.

UF-35·35

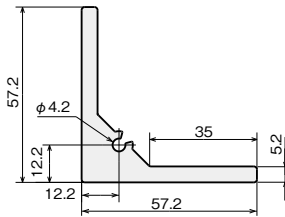


Material/Technical Data

Material	Aluminium Alloy Non Alumite Treatment	Geometrical Moment of Inertia	$I_x=3.70 \times 10^4 \text{mm}^4$ $I_y=3.70 \times 10^4 \text{mm}^4$	Section Modulus	$Z_x=3.68 \times 10^3 \text{mm}^3$ $Z_y=3.68 \times 10^3 \text{mm}^3$
Unit Mass	1.1kg/m	Environment	RoHS Compliant	Green Procurement	

Name	UF-35·35 ℓ=50~2000
Item No.	SFF-U14

UF-57·57

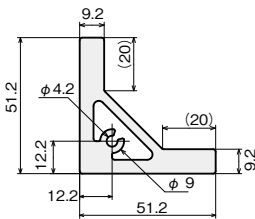


Material/Technical Data

Material	Aluminium Alloy Non Alumite Treatment	Geometrical Moment of Inertia	$I_x=17.4 \times 10^4 \text{mm}^4$ $I_y=17.4 \times 10^4 \text{mm}^4$	Section Modulus	$Z_x=11.62 \times 10^3 \text{mm}^3$ $Z_y=11.62 \times 10^3 \text{mm}^3$
Unit Mass	1.9kg/m	Environment	RoHS Compliant	Green Procurement	

Name	UF-57·57 ℓ=50~2000
Item No.	SFF-U84

UF-H51·51

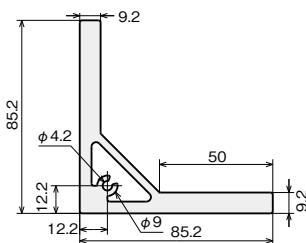


Material/Technical Data

Material	Aluminium Alloy Non Alumite Treatment	Geometrical Moment of Inertia	$I_x=19.06 \times 10^4 \text{mm}^4$ $I_y=19.06 \times 10^4 \text{mm}^4$	Section Modulus	$Z_x=11.79 \times 10^3 \text{mm}^3$ $Z_y=11.79 \times 10^3 \text{mm}^3$
Unit Mass	2.3kg/m	Environment	RoHS Compliant	Green Procurement	

Name	UF-H51·51 ℓ=50~2000
Item No.	SFF-U24

UF-85·85

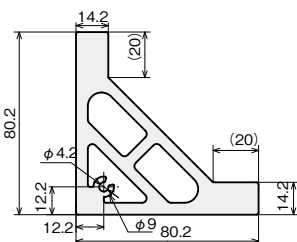


Material/Technical Data

Material	Aluminium Alloy Non Alumite Treatment	Geometrical Moment of Inertia	$I_x=100.0 \times 10^4 \text{mm}^4$ $I_y=100.0 \times 10^4 \text{mm}^4$	Section Modulus	$Z_x=40.13 \times 10^3 \text{mm}^3$ $Z_y=40.13 \times 10^3 \text{mm}^3$
Unit Mass	4.0kg/m	Environment	RoHS Compliant	Green Procurement	

Name	UF-85·85 ℓ=50~2000
Item No.	SFF-U74

UF-80·80



Material/Technical Data

Material	Aluminium Alloy Non Alumite Treatment	Geometrical Moment of Inertia	$I_x=109.9 \times 10^4 \text{mm}^4$ $I_y=109.9 \times 10^4 \text{mm}^4$	Section Modulus	$Z_x=40.54 \times 10^3 \text{mm}^3$ $Z_y=40.54 \times 10^3 \text{mm}^3$
Unit Mass	5.3kg/m	Environment	RoHS Compliant	Green Procurement	

Name	UF-80·80 ℓ=50~2000
Item No.	SFF-U34



SF Frame

Standard Length (Cut by customer) ℓ=4000-Effective range of use ℓ=4000

Item No. SFF-U12

Quantity (pcs)

In case of specifying the length (Cut by SUS)**Order by 0.1mm unit

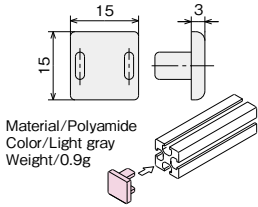
Item No. SFF-U14 Length (mm) ℓ=800

SF Light 15·15



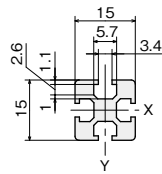
Best suited for installing sensor, etc.

Frame Cap 1515



Material/Polyamide
Color/Light gray
Weight/0.9g

Name	Frame Cap 1515
Item No.	*SFA-021G

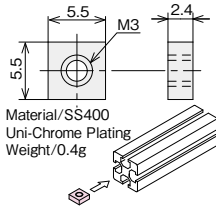


Material/Technical Data

Material Aluminium Alloy Geometrical Moment of Inertia $I_x=0.28 \times 10^4 \text{mm}^4$ Section Modulus $Z_x=0.37 \times 10^3 \text{mm}^3$
Alumite Treatment $I_y=0.28 \times 10^4 \text{mm}^4$ $Z_y=0.37 \times 10^3 \text{mm}^3$
Unit Mass 0.35kg/m Environment *RoHS Compliant *Green Procurement

Name	SF Light 15·15 (ℓ=2000)	SF Light 15·15 ℓ=50~2000
Item No.	*SFF-L11	*SFF-L14

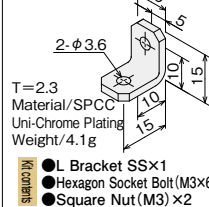
Square Nut M3



Material/SS400
Uni-Chrome Plating
Weight/0.4g

Name	Square Nut M3
Item No.	*SFB-201

L Bracket SS

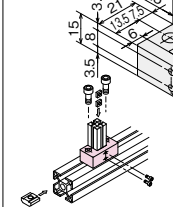


T=2.3
Material/SPCC
Uni-Chrome Plating
Weight/4.1g

- L Bracket SS×1
- Hexagon Socket Bolt (M3×6)×2
- Square Nut (M3)×2

Name	L Bracket SS
Item No.	*SFJ-903

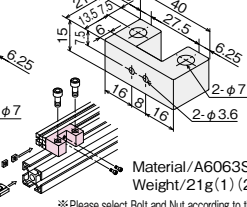
Bracket 1



Material/A6063S-T5
Weight/21g(1)(2)

Name	Bracket 1
Item No.	*SFJ-901

Bracket 2



Material/A6063S-T5
Weight/21g(1)(2)

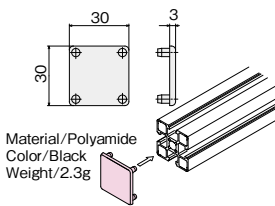
Name	Bracket 2
Item No.	*SFJ-902

*Please select Bolt and Nut according to the purpose.

SF Light 30·30

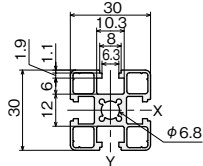


Frame Cap 3030



Material/Polyamide
Color/Black
Weight/2.3g

Name	Frame Cap 3030
Item No.	*SFA-001

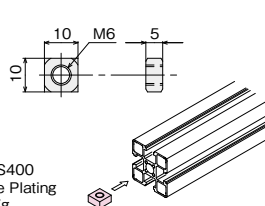


Material/Technical Data

Material Aluminium Alloy Geometrical Moment of Inertia $I_x=2.14 \times 10^4 \text{mm}^4$ Section Modulus $Z_x=1.42 \times 10^3 \text{mm}^3$
Alumite Treatment $I_y=2.14 \times 10^4 \text{mm}^4$ $Z_y=1.42 \times 10^3 \text{mm}^3$
Unit Mass 0.74kg/m Environment *RoHS Compliant *Green Procurement ●Please select Bracket from SF30 Series.

Name	SF Light30·30 (ℓ=4000)	SF Light30·30 ℓ=50~4000
Item No.	*SFF-L32	*SFF-L34

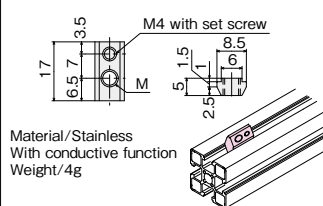
Square Nut M6



Material/SS400
Uni-Chrome Plating
Weight/2.7g

Name	Square Nut M6
Item No.	*SFB-202

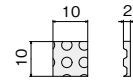
Lock Nut C (M※)



Material/Stainless
With conductive function
Weight/4g

S Lock Nut C(M5)	S Lock Nut C(M4)	S Lock Nut C(M3)
*SFN-LC5	*SFN-LC4	*SFN-LC3

Anti-Skid Sheet L



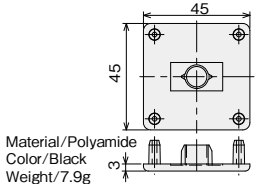
Material/Compressed Urethane
Compatible to Square Nut M6, M8
50 Sheets/1 Pack
Weight/2.9g

Name	Anti-Skid Sheet L
Item No.	*SFA-902

SF Light 45·45

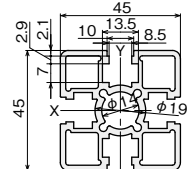


Frame Cap 4545 (Light)



Material/Polyamide
Color/Black
Weight/7.9g

Name	Frame Cap 4545 (Light)
Item No.	*SFA-022

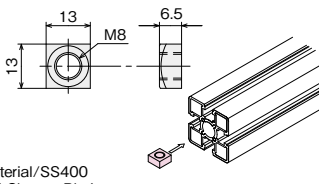


Material/Technical Data

Material Aluminium Alloy Geometrical Moment of Inertia $I_x=11.97 \times 10^4 \text{mm}^4$ Section Modulus $Z_x=5.32 \times 10^3 \text{mm}^3$
Alumite Treatment $I_y=11.97 \times 10^4 \text{mm}^4$ $Z_y=5.32 \times 10^3 \text{mm}^3$
Unit Mass 1.65kg/m Environment *RoHS Compliant *Green Procurement ●Please select Bracket from SF4045 Series.

Name	SF Light 45·45 (ℓ=4000)	SF Light 45·45 ℓ=50~4000
Item No.	*SFF-L42	*SFF-L44

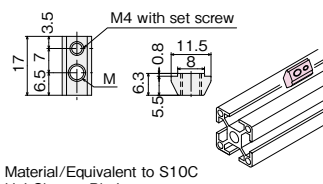
Square Nut M8



Material/SS400
Uni-Chrome Plating
Weight/5.5g

Name	Square Nut M8
Item No.	*SFB-204

Lock Nut S (M※)

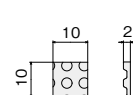


Material/Equivalent to S10C
Uni-Chrome Plating
Weight/7.0g

Lock Nut S(M6)	Lock Nut S(M5)	Lock Nut S(M4)	Lock Nut S(M3)
(S Lock Nut S(M6))	(S Lock Nut S(M5))	(S Lock Nut S(M4))	(S Lock Nut S(M3))
*SFB-4B6	*SFB-4B5	*SFB-4B4	*SFB-4B3
*SFN-LS6	*SFN-LS5	*SFN-LS4	*SFN-LS3

(S Lock Nut S): Stainless With conductive function

Anti-Skid Sheet L



Material/Compressed Urethane
Compatible to Square Nut M6, M8
50 Sheets/1 Pack
Weight/2.9g

Name	Anti-Skid Sheet L
Item No.	*SFA-902

SF20
SS Size

SF30
S Size

SF40-45
L Size

Complex Parts

Door Panel
Clean Equipment

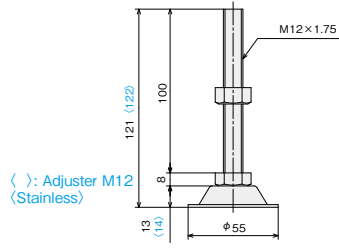
Technical Data

Complex Parts

Adjuster · Foot as Single Item

Adjuster M12

Adjuster M12 (Stainless)

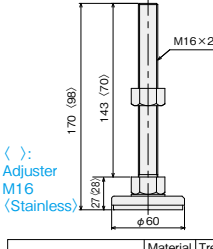


< >: Adjuster M12 (Stainless)

	Material	Treatment	Load Capacity	Weight
Adjuster M12	SS400	Uni-Chrome Plating	500kg	169g
Adjuster M12 (Stainless)	SUS304	Electropolishing	300kg	165g

Name	Adjuster M12	Adjuster M12(Stainless)
Item No.	SFK-584	SFK-584U

Adjuster M16
Adjuster M16S (short)

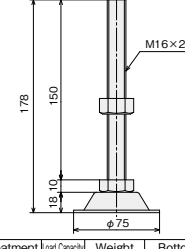


< >: Adjuster M16 (Stainless)

	Material	Treatment	Load Capacity	Weight	Bottom
Adjuster M16-M16 (short)	SS400	Zn Black	500kg	386g (240g)	Neo Prene Rubber
Adjuster BM16	SS400	Uni-Chrome Plating	560kg	375g	SPCC
Adjuster BM16 (Stainless)	SUS304	Electropolishing	560kg	375g	SUS304

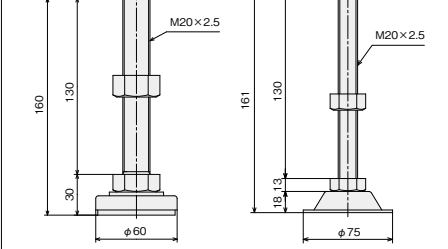
Name	Adjuster M16	Adjuster M16S (Short)	Adjuster BM16	Adjuster BM16(Stainless)	Adjuster M20	Adjuster BM20(Stainless)
Item No.	SFK-596	SFK-596S	SFK-589	SFK-589S	SFK-599	SFK-598S

Adjuster BM16
Adjuster BM16 (Stainless)



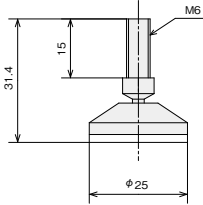
Adjuster M20

Adjuster BM20 (Stainless)



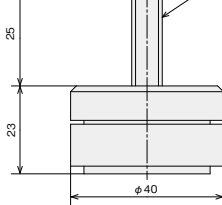
	Material	Treatment	Load Capacity	Weight	Bottom
Adjuster M20	SS400	Zn Black	500kg	536g	Neo Prene Rubber
Adjuster BM20 (Stainless)	SUS304	Electropolishing	880kg	540g	SUS304

Foot M6



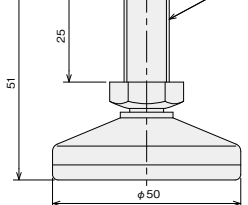
Material/Axis: Low-Carbon Steel Wire Rod Bottom: Polyamide Load capacity/30kg Weight/11g

Foot M8



Material/Axis: Low-Carbon Steel Wire Rod Bottom: Polyamide Load capacity/80kg Weight/35g

Foot M12



Material/Axis: Low-Carbon Steel Wire Rod Bottom: Polyamide Load capacity/100kg Weight/71g

Name	Foot M6	Foot M8	Foot M12
Item No.	SFA-601	SFA-602	SFA-603



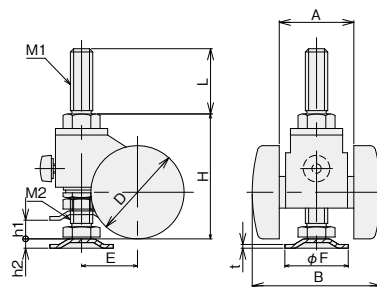
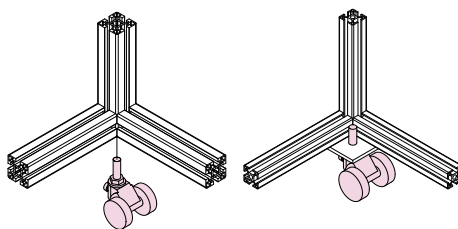
Parts

How to order

Item No. SFK-584

Quantity (pcs)

Caster Pad



Name	Caster Pad $\phi 50$ -M12	Caster Pad $\phi 75$ -M16
Item No.	SFA-703	SFA-704

Dimension Table

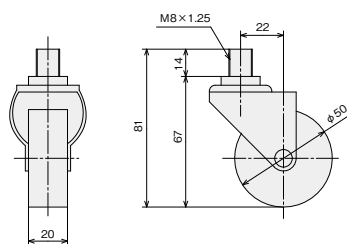
	D	H	h1	h2	E	F	A	B	L	t	M1	M2	Load Capacity(N)
Caster Pad $\phi 50$ -M12	50	67	10	5	30	34	40	69	35	2	M12	M12	588
Caster Pad $\phi 75$ -M16	75	95	24	5	35	42	50	84	35	2	M16	M12	1176

Material/Technical Data

Material Nylon (Black) (Caster)
Equivalent to SS400 Uni-Chrome (Adjuster-Bolt)
Weight 253g ($\phi 50$) 392g ($\phi 75$)
Environment RoHS Compliant Green Procurement

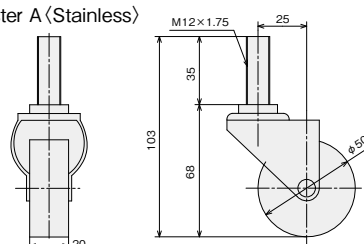
Caster as Single Item

Caster M8



Material/Rubber Load Capacity/30kg With Brake Available Weight/154g (165g with Brake)

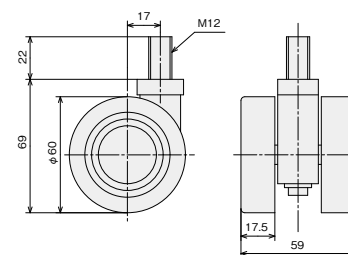
Caster A Caster A (Stainless)



	Material	Load Capacity	Weight
Caster A	Rubber	30kg	189g (223g)
Caster A (Stainless)	Nylon	40.8kg	147g (175g)

() : with Brake

Double-Wheel Casters M12



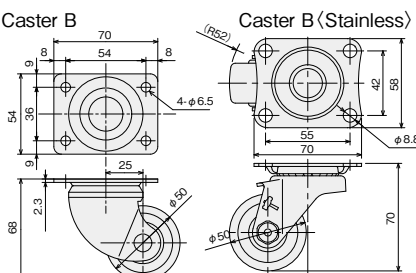
Material/Nylon Load Capacity/150kg With Brake Available Weight/210g (219g with Brake)

Name	Caster M8	Caster M8 with Brake
Item No.	SFA-701	SFA-702

Caster A	Caster A with Brake	Caster A (Stainless)	Caster A with Brake (Stainless)
SFK-582	SFK-583	SFK-582S	SFK-583S

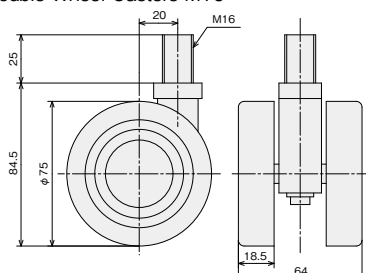
Double-Wheel Casters M12	Double-Wheel Casters M12 with Brake
TY60-12	TY60-12S

Caster B



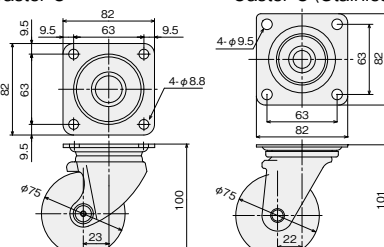
	Material	Load Capacity	Weight
Caster B	Phenol Resin	150kg	340g
Caster B (Stainless)	Phenol Resin	71.4kg	285g

Double-Wheel Casters M16



Material/Nylon Load Capacity/170kg Only with Brake Weight/291g

Caster C



	Material	Load Capacity	Weight
Caster C	Nylon	300kg	902g
Caster C (Stainless)	MC Nylon	150kg	520g

Name	Caster B	Caster B (Stainless)
Item No.	SFK-595	SFK-595S

Double-Wheel Casters M16 with Brake
TY75-16S

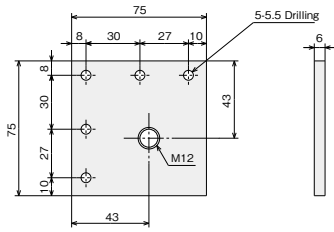
Caster C	Caster C (Stainless)
SFK-594	SFK-594S

Complex Parts

Adjuster·Caster Plate as Single Item

Environment Compliant RoHS Compliant Green Procurement

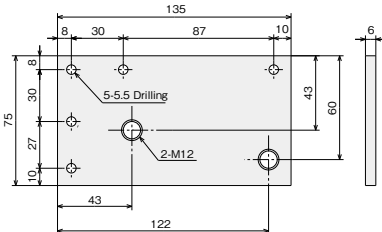
Adjuster Plate SS



	Material	Treatment	Weight
Adjuster Plate SS	SS400	Uni-Chrome Plating	0.24kg
Adjuster Plate SS (Stainless)	SUS304	—	0.24kg

Name	Adjuster Plate SS	Adjuster Plate SS (Stainless)
Item No.	★SFK-570A	★SFK-570S

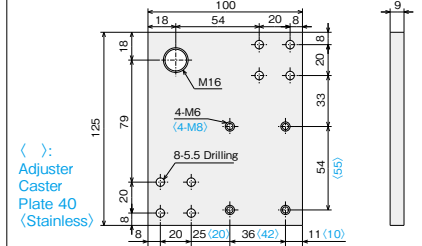
Adjuster Caster Plate SS



	Material	Treatment	Weight
Adjuster Caster Plate SS	SS400	Uni-Chrome Plating	0.45kg
Adjuster Caster Plate SS (Stainless)	SUS304	—	0.45kg

Name	Adjuster Caster Plate SS	Adjuster Caster Plate SS (Stainless)
Item No.	★SFK-575A	★SFK-575S

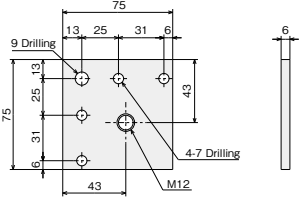
Adjuster Caster Plate 40



	Material	Treatment	Weight
Adjuster Caster Plate 40	SS400	Uni-Chrome Plating	0.82kg
Adjuster Caster Plate 40 (Stainless)	SUS304	—	0.83kg

Name	Adjuster Caster Plate 40	Adjuster Caster Plate 40 (Stainless)
Item No.	★SFK-576A	★SFK-576S

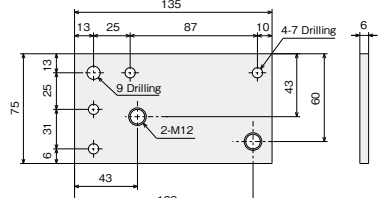
Adjuster Plate S



	Material	Treatment	Weight
Adjuster Plate S	SS400	Uni-Chrome Plating	0.24kg
Adjuster Plate S (Stainless)	SUS304	—	0.24kg

Name	Adjuster Plate S	Adjuster Plate S (Stainless)
Item No.	★SFK-580A	★SFK-580S

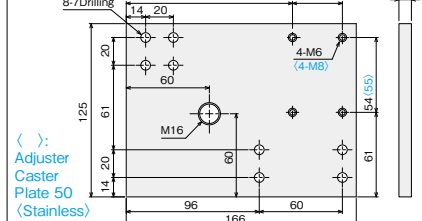
Adjuster Caster Plate S



	Material	Treatment	Weight
Adjuster Caster Plate S	SS400	Uni-Chrome Plating	0.44kg
Adjuster Caster Plate S (Stainless)	SUS304	—	0.44kg

Name	Adjuster Caster Plate S	Adjuster Caster Plate S (Stainless)
Item No.	★SFK-581A	★SFK-581S

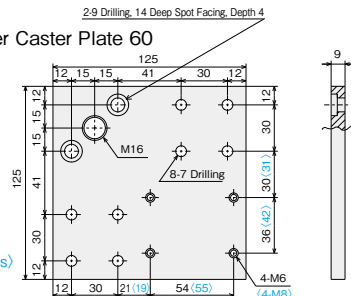
Adjuster Caster Plate 50



	Material	Treatment	Weight
Adjuster Caster Plate 50	SS400	Uni-Chrome Plating	1.03kg
Adjuster Caster Plate 50 (Stainless)	SUS304	—	1.04kg

Name	Adjuster Caster Plate 50	Adjuster Caster Plate 50 (Stainless)
Item No.	★SFK-7B1	★SFK-7B1S

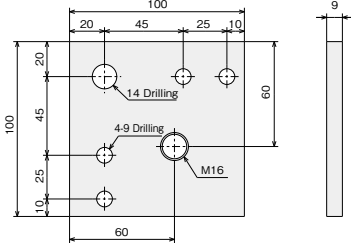
Adjuster Caster Plate 60



	Material	Treatment	Weight
Adjuster Caster Plate 60	SS400	Uni-Chrome Plating	1.03kg
Adjuster Caster Plate 60 (Stainless)	SUS304	—	1.04kg

Name	Adjuster Caster Plate 60	Adjuster Caster Plate 60 (Stainless)
Item No.	★SFK-592A	★SFK-592S

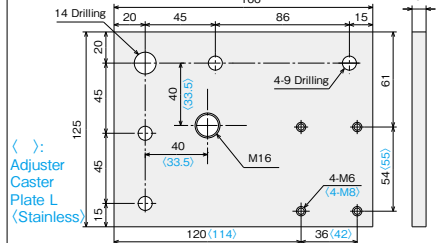
Adjuster Plate L



	Material	Treatment	Weight
Adjuster Plate L	SS400	Uni-Chrome Plating	0.65kg
Adjuster Plate L (Stainless)	SUS304	—	0.66kg

Name	Adjuster Plate L	Adjuster Plate L (Stainless)
Item No.	★SFK-590A	★SFK-590S

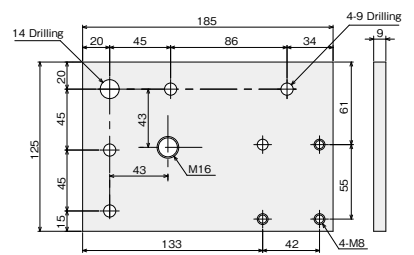
Adjuster Caster Plate L



	Material	Treatment	Weight
Adjuster Caster Plate L	SS400	Uni-Chrome Plating	1.03kg
Adjuster Caster Plate L (Stainless)	SUS304	—	1.04kg

Name	Adjuster Caster Plate L	Adjuster Caster Plate L (Stainless)
Item No.	★SFK-591A	★SFK-591S

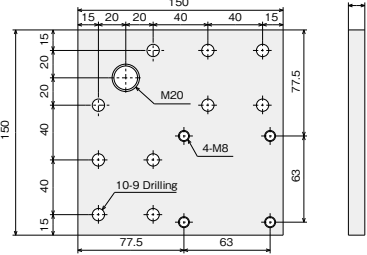
Adjuster Caster Plate L60 (Stainless)



	Material	Treatment	Weight
Adjuster Caster Plate L60 (Stainless)	SUS304	—	1.54kg

Name	Adjuster Caster Plate L60 (Stainless)
Item No.	★SFK-7C1S

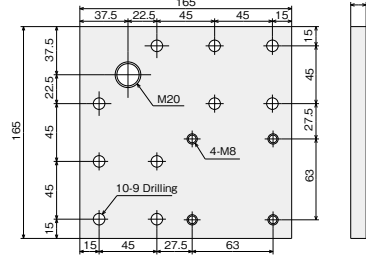
Adjuster Caster Plate 80



	Material	Treatment	Weight
Adjuster Caster Plate 80	SS400	Uni-Chrome Plating	2.0kg
Adjuster Caster Plate 80 (Stainless)	SUS304	—	2.02kg

Name	Adjuster Caster Plate 80	Adjuster Caster Plate 80 (Stainless)
Item No.	★SFK-593A	★SFK-593S

Adjuster Caster Plate 90



	Material	Treatment	Weight
Adjuster Caster Plate 90	SS400	Uni-Chrome Plating	2.5kg
Adjuster Caster Plate 90 (Stainless)	SUS304	—	2.53kg

Name	Adjuster Caster Plate 90	Adjuster Caster Plate 90 (Stainless)
Item No.	★SFK-597A	★SFK-597S

*Please refer P44, 79 and 112 for Caster Plates.



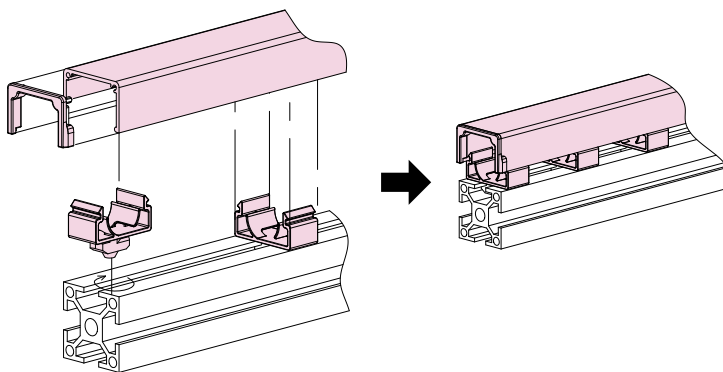
Parts

How to order

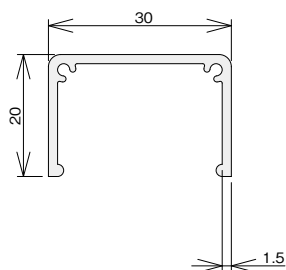
Item No. Quantity (pcs)

SFK-570A

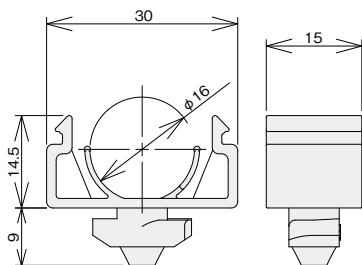
Duct Cover S



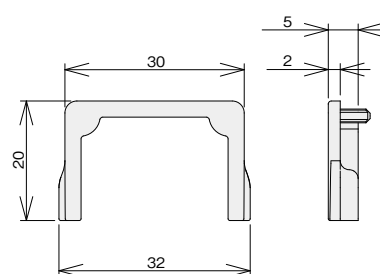
Duct Cover S



Duct Piece S



Duct Cap S



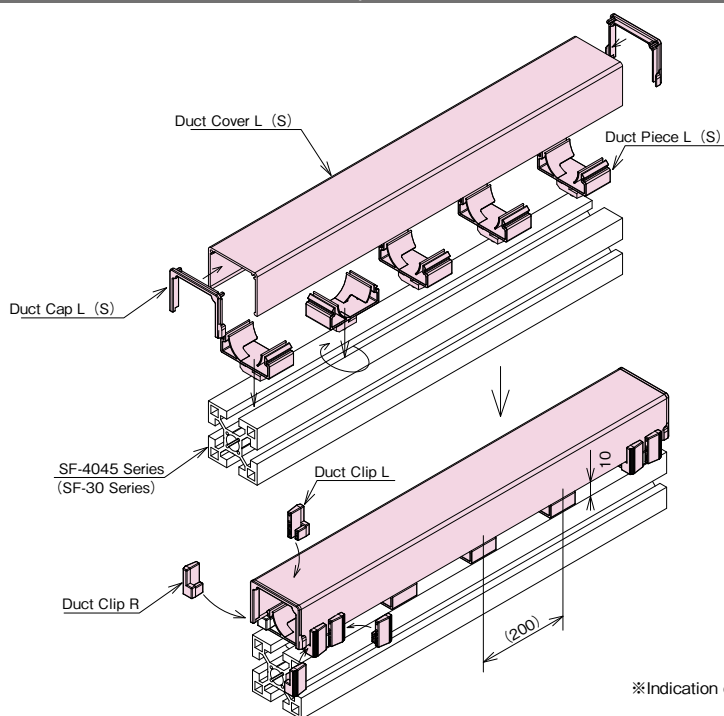
Name	Duct Cover S	
	(ℓ=4000)	(ℓ=50~4000)
Item No.	SFF-DA2	SFF-DA4

Name	Duct Piece S
Item No.	SFA-DAP1

Name	Duct Cap S
Item No.	SFA-DAK1

● ℓ=4000 Type is to be cut by customer. Effective range of use ℓ=4000

Example of use Duct Cover



※Indication of the pitch to attach Duct Piece is 200mm.

SF20
SS Size

SF30
S Size

SF40-45
L Size

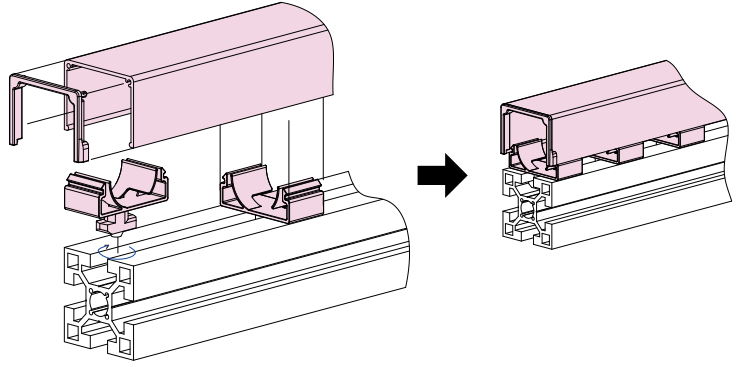
Complex Parts

Door Panel
Clean Equipment

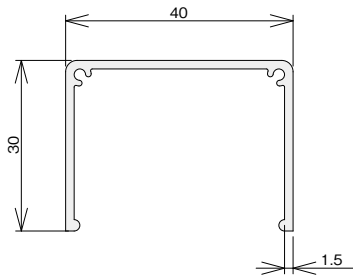
Technical Data

Complex Parts

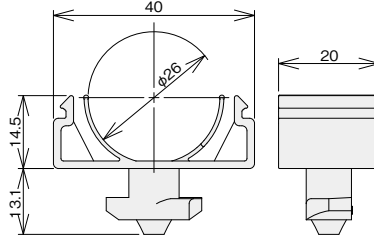
Duct Cover L



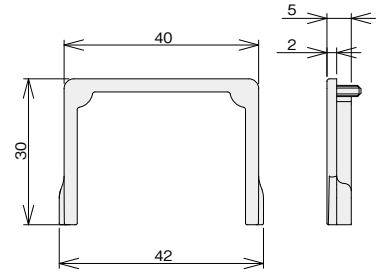
Duct Cover L



Duct Piece L



Duct Cap L



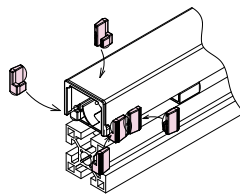
Name	Duct Cover L	
	($\ell=4000$)	($\ell=50\sim4000$)
Item No.	SFF-DB2	SFF-DB4

Name	Duct Piece L
Item No.	SFA-DBP1

Name	Duct Cap L
Item No.	SFA-DBK1

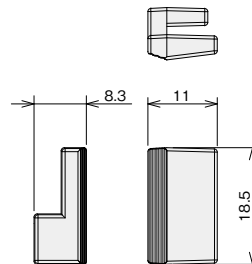
● $\ell=4000$ Type is to be cut by customer. Effective range of use $\ell=4000$

Duct Clip Kit

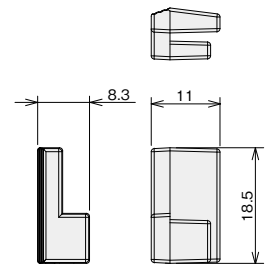


Item to prevent Duct Cover from coming off

Duct Clip L



Duct Clip R



Name	Duct Clip Kit
Item No.	SFK-DACP

- Kit contents
- Duct Clip L×2
- Duct Clip R×2

Material/Technical Data		Duct Piece S/L	Duct Cap S/L	Duct Clip L/R
Material	Duct Cover S/L Aluminium Alloy Alumite Treatment (Special Order : Black Alumite is also available)	Polyamide	Polyamide	Polyamide
Unit Mass	0.29kg/m(S) 0.41kg/m(L)	3.0g(S) 4.5g(L)	0.7g(S) 1.0g(L)	1.0g/pcs
Environment	RoHS Compliant Green Procurement			

- Usable Frame
- (Duct Cover S)
Meet with all SF30 Series (Groove Width 8mm)
- (Duct Cover L)
Meet with all SF4045 Series (Groove Width 10mm)



SF Frame

Standard Length (Cut by customer)
Item No. **SFF-DB2**

$\ell=4000$ -Effective range of use $\ell=4000$

Quantity (pcs)

In case of specifying the length (Cut by SUS) ※Order by 0.1mm unit
Item No. **SFF-DB4** Length (mm) $\ell=800$

Parts

How to order

Item No. **SFA-DBP1** Quantity (pcs)



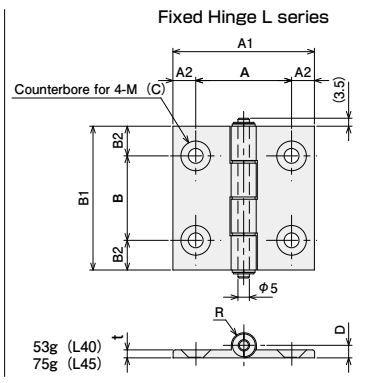
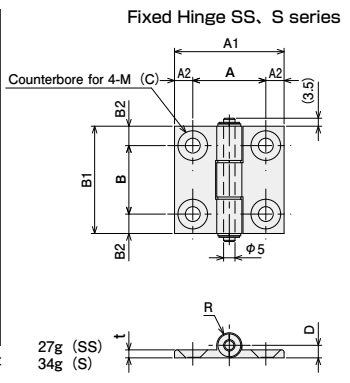
STANDARD FRAME

Door·Panel

Clean Equipment

Door Panel Parts Fixed Hinge

Fixed Hinge



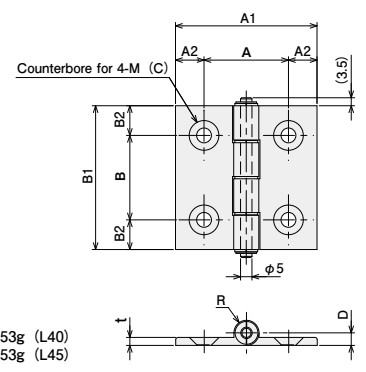
Material/Aluminium Alloy Alumite Treatment
 ■Environment **RoHS** Compliant **Green** Procurement

Name	Item No.	A	B	A1	A2	B1	B2	(C)	D	t	R	Indication of the Load (N/Piece)
Fixed Hinge SS	SFA-211	21	25	36	7.5	47	11	5	5		5	49
Fixed Hinge SS Kit (Fixed Hinge SS(Stainless)Kit)	SFK-211 (SFK-211S)											
Fixed Hinge S	SFA-221	32	30	48	8	63	8.5	6	5.5	3.5	5.5	73
Fixed Hinge S Kit (Fixed Hinge S (Stainless) Kit)	SFK-221 (SFK-221S)											
Fixed Hinge L40(M6)	SFA-231	42	37	62	10	63	13	6	5.5	4.5	5.5	73
Fixed Hinge L40(M6)Kit (Fixed Hinge L40(M6)Stainless Kit)	SFK-231 (SFK-231S)											
Fixed Hinge L45(M6)	SFA-241	47	43	80	16.5	63	10	6	5.5	4.5	5.5	73
Fixed Hinge L45(M6)Kit (Fixed Hinge L45(M6)Stainless Kit)	SFK-241 (SFK-241S)											

- | | | | |
|---|--|---|---|
| (Fixed Hinge SS Kit)
● Fixed Hinge SS×1
● Hexagon Socket Flat Head Cap Screw(M5×8)×4
● T Nut S(M5)×4 | (Fixed Hinge S Kit)
● Fixed Hinge S×1
● Hexagon Socket Flat Head Cap Screw(M6×10)×4
● T Nut S(M6)×4 | (Fixed Hinge L40(M6)Kit)
● Fixed Hinge L40(M6)×1
● Hexagon Socket Flat Head Cap Screw(M6×12)×4
● T Nut L(M6)×4 | (Fixed Hinge L45(M6)Kit)
● Fixed Hinge L45(M6)×1
● Hexagon Socket Flat Head Cap Screw(M6×15)×4
● T Nut L(M6)×4 |
|---|--|---|---|

※Bolt and Nut for (Stainless)Kit is stainless.
 Bolt of Stainless Kit is small flat screw with cross hole.

Fixed Hinge for Irregular Shape Frame



Material/Aluminium Alloy Alumite Treatment
 ■Environment **RoHS** Compliant **Green** Procurement

Name	Item No.	A	B	A1	A2	B1	B2	(C)	D	t	R	Indication of the Load (N/Piece)
Fixed Hinge L40-S	SFA-281	37	37	62	12.5	63	13	6	5.5	3.5	5.5	73
Fixed Hinge L40-S Kit (Fixed Hinge L40-S (Stainless) Kit)	SFK-281 (SFK-281S)											
Fixed Hinge L45-S	SFA-291	39	39	80	11.5	63	13	6	5.5	3.5	5.5	73
Fixed Hinge L45-S Kit (Fixed Hinge L45-S (Stainless) Kit)	SFK-291 (SFK-291S)											

- | | | | |
|--|------------------------------------|--|------------------------------------|
| (Fixed Hinge L40-S Kit)
● Fixed Hinge L40-S×1
● Hexagon Socket Flat Head Cap Screw(M6×10)×2
● Hexagon Socket Flat Head Cap Screw(M6×12)×2 | ● T Nut L(M6)×2
● T Nut S(M6)×2 | (Fixed Hinge L45-S Kit)
● Fixed Hinge L45-S×1
● Hexagon Socket Flat Head Cap Screw(M6×10)×2
● Hexagon Socket Flat Head Cap Screw(M6×15)×2 | ● T Nut L(M6)×2
● T Nut S(M6)×2 |
|--|------------------------------------|--|------------------------------------|

※Bolt and Nut for (Stainless)Kit is stainless.
 Bolt of Stainless Kit is small flat screw with cross hole.

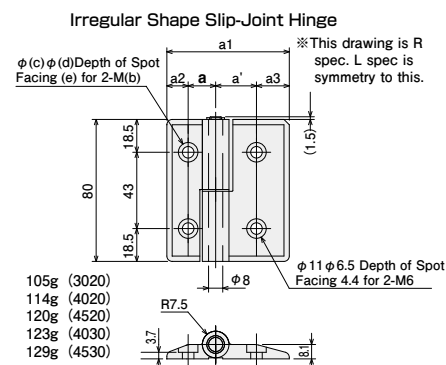
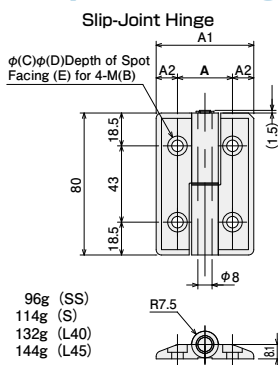


Parts
 How to order
 Item No. Quantity (pcs)
SFA-211

Slip-Joint Hinge / Irregular Shape Slip-Joint Hinge



Electroless nickel plating
 ■ Environment **RoHS** Compliant **Green** Procurement
 ■ Material Aluminum Die-Casting (ADC12) Acrylic Paint



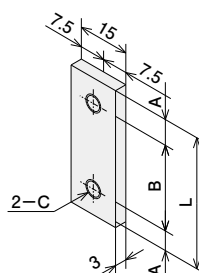
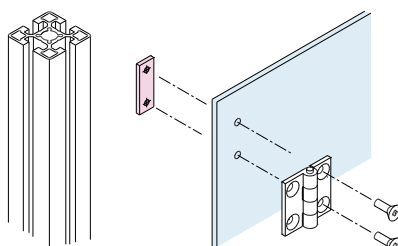
Name	Item No.				A	A1	A2	(B)	(C)	(D)	(E)	Indication of the Load (N/Piece)
	Single Item		(Bolt · Nut Kit (Stainless))									
	Electroless Nickel Plating	Acrylic Paint	Electroless Nickel Plating	Acrylic Paint								
Slip-Joint Hinge SS-L	SFA-2N2	SFA-2N2P	(SFK-2N2S)	(SFK-2N2P)	26	41	7.5	5	5.5	9.5	4.1	73
Slip-Joint Hinge SS-R	SFA-2N1	SFA-2N1P	(SFK-2N1S)	(SFK-2N1P)								
Slip-Joint Hinge S-L	SFA-2N4	SFA-2N4P	(SFK-2N4S)	(SFK-2N4P)								
Slip-Joint Hinge S-R	SFA-2N3	SFA-2N3P	(SFK-2N3S)	(SFK-2N3P)	31	55	12	6	6.5	11	4.4	98
Slip-Joint Hinge L40-L	SFA-2N6	SFA-2N6P	(SFK-2N6S)	(SFK-2N6P)								
Slip-Joint Hinge L40-R	SFA-2N5	SFA-2N5P	(SFK-2N5S)	(SFK-2N5P)								
Slip-Joint Hinge L45-L	SFA-2N8	SFA-2N8P	(SFK-2N8S)	(SFK-2N8P)	41	73	16	46	83	18.5		
Slip-Joint Hinge L45-R	SFA-2N7	SFA-2N7P	(SFK-2N7S)	(SFK-2N7P)								

- | | | | |
|--|---|---|---|
| Kit
Contents
● Slip-Joint Hinge SS-L(R)Kit
● Hexagon Socket Low Head Bolt(M5x8)Stainlessx4
● ST Nut SS(M5)x4 | (Slip-Joint Hinge S-L(R)Kit)
● Slip-Joint Hinge S-L(R)x1
● Hexagon Socket Low Head Bolt(M6x12)Stainlessx4
● ST Nut S(M6)x4 | (Slip-Joint Hinge L40-L(R)Kit)
● Slip-Joint Hinge L40-L(R)x1
● Hexagon Socket Low Head Bolt(M6x15)Stainlessx4
● ST Nut L(M6)x4 | (Slip-Joint Hinge L45-L(R)Kit)
● Slip-Joint Hinge L45-L(R)x1
● Hexagon Socket Low Head Bolt(M6x15)Stainlessx4
● ST Nut L(M6)x4 |
|--|---|---|---|

Name	Item No.				a	a'	a1	a2	a3	(b)	(c)	(d)	(e)	Indication of the Load (N/Piece)
	Single Item		(Bolt · Nut Kit (Stainless))											
	Electroless Nickel Plating	Acrylic Paint	Electroless Nickel Plating	Acrylic Paint										
Slip-Joint Hinge 3020-L	SFA-2D2	SFA-2D2P	(SFK-2D2S)	(SFK-2D2P)	13	15.5	48	12	16	5	5.5	9.5	4.1	73
Slip-Joint Hinge 3020-R	SFA-2D1	SFA-2D1P	(SFK-2D1S)	(SFK-2D1P)										
Slip-Joint Hinge 4020-L	SFA-2D4	SFA-2D4P	(SFK-2D4S)	(SFK-2D4P)										
Slip-Joint Hinge 4020-R	SFA-2D3	SFA-2D3P	(SFK-2D3S)	(SFK-2D3P)	20.5	57	7.5	16	18.5	6	6.5	11	4.4	98
Slip-Joint Hinge 4520-L	SFA-2D6	SFA-2D6P	(SFK-2D6S)	(SFK-2D6P)										
Slip-Joint Hinge 4520-R	SFA-2D5	SFA-2D5P	(SFK-2D5S)	(SFK-2D5P)										
Slip-Joint Hinge 4030-L	SFA-2E2	SFA-2E2P	(SFK-2E2S)	(SFK-2E2P)	15.5	20.5	64	12	16	6	6.5	11	4.4	98
Slip-Joint Hinge 4030-R	SFA-2E1	SFA-2E1P	(SFK-2E1S)	(SFK-2E1P)										
Slip-Joint Hinge 4530-L	SFA-2E4	SFA-2E4P	(SFK-2E4S)	(SFK-2E4P)										
Slip-Joint Hinge 4530-R	SFA-2E3	SFA-2E3P	(SFK-2E3S)	(SFK-2E3P)	23	69	18.5							

- | | | | | |
|--|---|---|---|---|
| Kit
Contents
● Slip-Joint Hinge 3020-L(R)Kit
● Hexagon Socket Low Head Bolt(M5x8)Stainlessx2
● Hexagon Socket Low Head Bolt(M6x12)Stainlessx2
● ST Nut SS(M5)x2
● ST Nut S(M6)x2 | (Slip-Joint Hinge 4020-L(R)Kit)
● Slip-Joint Hinge 4020-L(R)x1
● Hexagon Socket Low Head Bolt(M6x8)Stainlessx2
● Hexagon Socket Low Head Bolt(M6x15)Stainlessx2
● ST Nut SS(M5)x2
● ST Nut L(M6)x2 | (Slip-Joint Hinge 4520-L(R)Kit)
● Slip-Joint Hinge 4520-L(R)x1
● Hexagon Socket Low Head Bolt(M6x8)Stainlessx2
● Hexagon Socket Low Head Bolt(M6x15)Stainlessx2
● ST Nut SS(M5)x2
● ST Nut L(M6)x2 | (Slip-Joint Hinge 4030-L(R)Kit)
● Slip-Joint Hinge 4030-L(R)x1
● Hexagon Socket Low Head Bolt(M6x12)Stainlessx2
● Hexagon Socket Low Head Bolt(M6x15)Stainlessx2
● ST Nut S(M6)x2
● ST Nut L(M6)x2 | (Slip-Joint Hinge 4530-L(R)Kit)
● Slip-Joint Hinge 4530-L(R)x1
● Hexagon Socket Low Head Bolt(M6x12)Stainlessx2
● Hexagon Socket Low Head Bolt(M6x15)Stainlessx2
● ST Nut S(M6)x2
● ST Nut L(M6)x2 |
|--|---|---|---|---|

Plate Nut for Fixed Hinge



- Material/Technical Data
- Material** Stainless
Weight 13g(SS)
 16g(S)
 20g(L40)
 22g(L45)
Environment **RoHS** Compliant **Green** Procurement

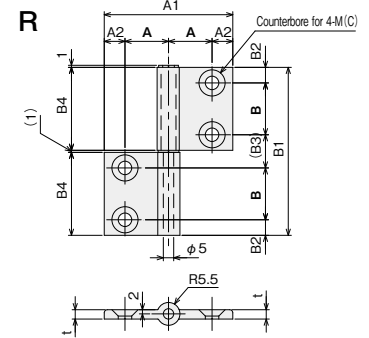
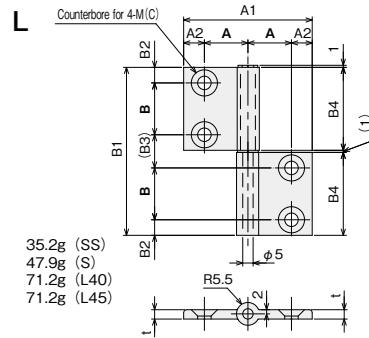
Name	Item No.	A	B	L	C
Plate Nut for SS Hinge	SFB-303	7.5	25	40	M5
Plate Nut for S Hinge	SFB-304		30	45	
Plate Nut for L40 Hinge	SFB-305	9	37	55	M6
Plate Nut for L45 Hinge	SFB-306	10	43	63	

Door Panel Parts Free Hinge

Free Hinge L and R * Separatable



Material/Aluminium Alloy Alumite Treatment
 Environment RoHS Compliant Green Procurement



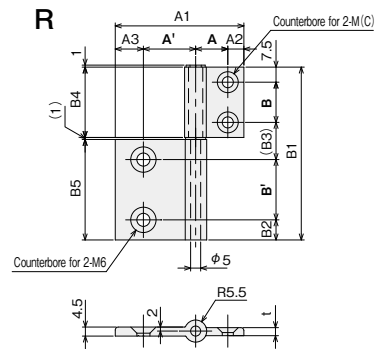
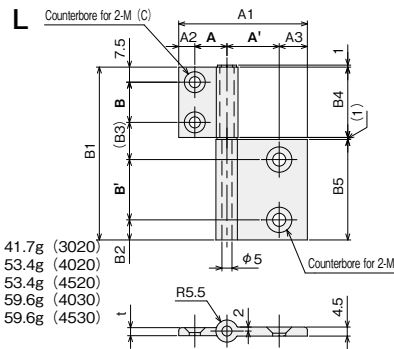
Name	Item No.			A	B	A1	A2	B1	B2	B3	B4	(C)	t	Indication of the Load (N/Piece)
	Single Item	Bolt · Nut Kit	Bolt-Nut(Stainless)Kit											
Free Hinge SS-L	SFA-21L	(SFK-21L)	(SFK-21LS)	16	20	48	8	71	7.5	16	35	5	4	49
Free Hinge SS-R	SFA-21R	(SFK-21R)	(SFK-21RS)											
Free Hinge S-L	SFA-22L	(SFK-22L)	(SFK-22LS)	21	25	62	10	81			40			
Free Hinge S-R	SFA-22R	(SFK-22R)	(SFK-22RS)											
Free Hinge L40(M6)-L	SFA-23L	(SFK-23L)	(SFK-23LS)	26	30	80	14	101	10	21	50	6	4.5	73
Free Hinge L40(M6)-R	SFA-23R	(SFK-23R)	(SFK-23RS)											
Free Hinge L45(M6)-L	SFA-24L	(SFK-24L)	(SFK-24LS)	28.5			11.5							
Free Hinge L45(M6)-R	SFA-24R	(SFK-24R)	(SFK-24RS)											

- | | | | |
|--|---|---|---|
| Kit
●Free Hinge SS-L(R)×1
●Cross-Recessed Small Flat Screw(M5×8)×4
●T Nut SS(M5)×4 | Kit
●Free Hinge S-L(R)×1
●Cross-Recessed Small Flat Screw(M6×12)×4
●T Nut S(M6)×4 | Kit
●Free Hinge L40(M6)-L(R)×1
●Cross-Recessed Small Flat Screw(M6×15)×4
●T Nut L(M6)×4 | Kit
●Free Hinge L45(M6)-L(R)×1
●Cross-Recessed Small Flat Screw(M6×15)×4
●T Nut L(M6)×4 |
|--|---|---|---|
- ※Bolt and Nut for [Bolt·Nut (Stainless) Kit] is stainless.

Irregular Shape Free Hinge L and R * Separatable



Environment RoHS Compliant Green Procurement



Name	Item No.			A	A'	B	B'	A1	A2	A3	B1	B2	B3	B4	B5	(C)	t	Indication of the Load (N/Piece)
	Single Item	Bolt·Nut Kit	Bolt-Nut(Stainless)Kit															
Free Hinge 3020-L	SFA-25L	(SFK-25L)	(SFK-25LS)	16	21	20	25	55	10	76	7.5	16	35	40	5	4	49	
Free Hinge 3020-R	SFA-25R	(SFK-25R)	(SFK-25RS)															
Free Hinge 4020-L	SFA-26L	(SFK-26L)	(SFK-26LS)	16	26	20	30	64	8	14	86	10	18.5	50	5	4	49	
Free Hinge 4020-R	SFA-26R	(SFK-26R)	(SFK-26RS)															
Free Hinge 4520-L	SFA-27L	(SFK-27L)	(SFK-27LS)	21	26	25	71	10	14	91	10	18.5	40	50	6	4.5	73	
Free Hinge 4520-R	SFA-27R	(SFK-27R)	(SFK-27RS)															
Free Hinge 4030-L	SFA-28L	(SFK-28L)	(SFK-28LS)	21	28.5			11.5										
Free Hinge 4030-R	SFA-28R	(SFK-28R)	(SFK-28RS)															
Free Hinge 4530-L	SFA-29L	(SFK-29L)	(SFK-29LS)	21	28.5			11.5										
Free Hinge 4530-R	SFA-29R	(SFK-29R)	(SFK-29RS)															

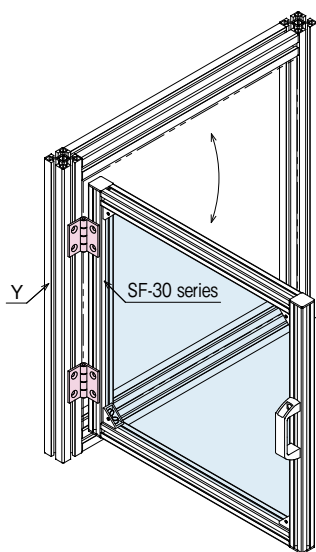
- | | | | | |
|---|---|---|---|---|
| Kit
●Free Hinge 3020-L(R)×1
●Cross-Recessed Small Flat Screw(M6×12)×2
●Cross-Recessed Small Flat Screw(M5×8)×2
●T Nut S(M6)×2
●T Nut SS(M5)×2 | Kit
●Free Hinge 4020-L(R)×1
●Cross-Recessed Small Flat Screw(M6×15)×2
●Cross-Recessed Small Flat Screw(M5×8)×2
●T Nut L(M6)×2
●T Nut SS(M5)×2 | Kit
●Free Hinge 4520-L(R)×1
●Cross-Recessed Small Flat Screw(M6×15)×2
●Cross-Recessed Small Flat Screw(M5×8)×2
●T Nut L(M6)×2
●T Nut SS(M5)×2 | Kit
●Free Hinge 4030-L(R)×1
●Cross-Recessed Small Flat Screw(M6×15)×2
●Cross-Recessed Small Flat Screw(M6×12)×2
●T Nut L(M6)×2
●T Nut S(M6)×2 | Kit
●Free Hinge 4530-L(R)×1
●Cross-Recessed Small Flat Screw(M6×15)×2
●Cross-Recessed Small Flat Screw(M6×12)×2
●T Nut L(M6)×2
●T Nut S(M6)×2 |
|---|---|---|---|---|
- ※Bolt and Nut for [Bolt·Nut (Stainless) Kit] is stainless.



Parts
 How to order
 Item No. Quantity (pcs)
 SFA-21L □□

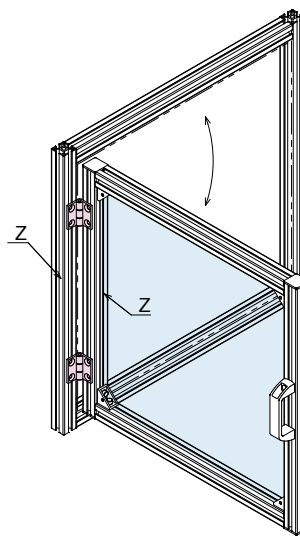
Choice of Fixed Hinge

In case door-side frame is SF30 series and the body frame is SF40 or 45 series.



Y	Fixed Hinge Name	Item No.
SF-40 series	Fixed Hinge L40-S	SFA-281
SF-45 series	Fixed Hinge L45-S	SFA-291

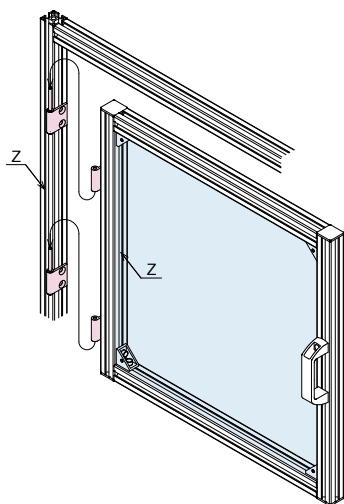
In case frames at door and body are the same series.



Z	Fixed Hinge Name	Item No.
SF-20 series	Fixed Hinge SS	SFA-211
SF-30 series	Fixed Hinge S	SFA-221
SF-40 series	Fixed Hinge L40 (M6)	SFA-231
SF-45 series	Fixed Hinge L45 (M6)	SFA-241

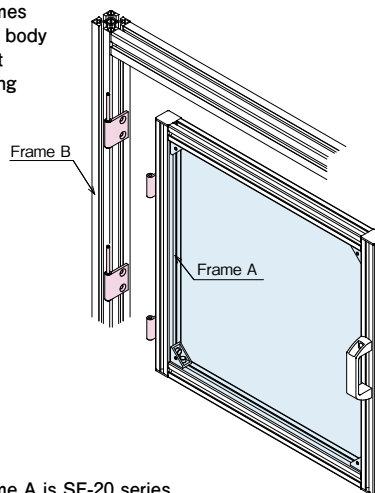
Choice of Free Hinge and Slip-Joint Hinge

In case frames at door and body are the same series. (This drawing is L type)



Z	Hinge Name	Item No.
SF-20 series	Free Hinge SS-L(R)	SFA-21L (SFA-21R)
	Slip-Joint Hinge SS-L(R)	SFA-2N2 (SFA-2N1)
SF-30 series	Free Hinge S-L(R)	SFA-22L (SFA-22R)
	Slip-Joint Hinge S-L(R)	SFA-2N4 (SFA-2N3)
SF-40 series	Free Hinge L40 (M6)-L(R)	SFA-23L (SFA-23R)
	Slip-Joint Hinge L40-L(R)	SFA-2N6 (SFA-2N5)
SF-45 series	Free Hinge L45 (M6)-L(R)	SFA-24L (SFA-24R)
	Slip-Joint Hinge L45-L(R)	SFA-2N8 (SFA-2N7)

In case frames at door and body are different (This drawing is L type)



In case frame A is SF-20 series.

Frame B	Hinge Name	Item No.
SF-30 series	Free Hinge 3020-L(R)	SFA-25L (SFA-25R)
	Slip-Joint Hinge 3020-L(R)	SFA-2D2 (SFA-2D1)
SF-40 series	Free Hinge 4020-L(R)	SFA-26L (SFA-26R)
	Slip-Joint Hinge 4020-L(R)	SFA-2D4 (SFA-2D3)
SF-45 series	Free Hinge 4520-L(R)	SFA-27L (SFA-27R)
	Slip-Joint Hinge 4520-L(R)	SFA-2D6 (SFA-2D5)

In case frame A is SF-30 series.

Frame B	Hinge Name	Item No.
SF-40 series	Free Hinge 4030-L(R)	SFA-28L (SFA-28R)
	Slip-Joint Hinge 4030-L(R)	SFA-2E2 (SFA-2E1)
SF-45 series	Free Hinge 4530-L(R)	SFA-29L (SFA-29R)
	Slip-Joint Hinge 4530-L(R)	SFA-2E4 (SFA-2E3)

SF20

SS Size

SF30

S Size

SF40-45

L Size

Complex Parts

Door Panel
Clean Equipment

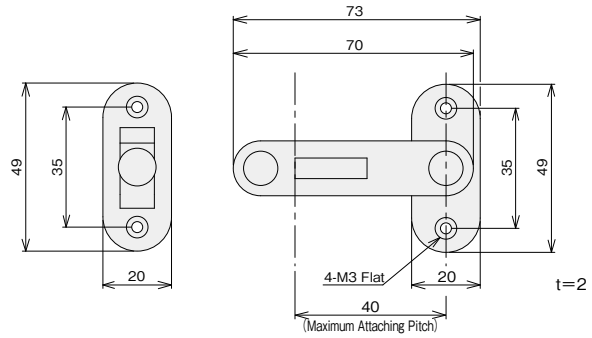
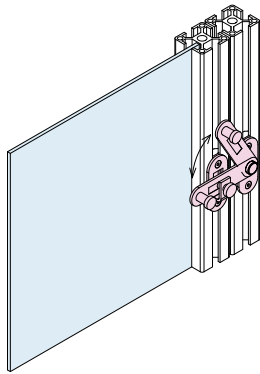
Technical Data

Door·Panel Parts Free Size Hinge

Door Lock



- **Material** Stainless SUS304
- **Weight** 54.9g
- **Environment** RoHS Compliant Green Procurement



Name	Stainless Door Lock
Item No.	SFA-3A1

Example of mounting

Frame	Screw Length(mm)
<input type="checkbox"/> For 20	6
<input type="checkbox"/> For 30	8

※Please select by the Frame Shape. It's usable with Lock Nut as well.

SF20
SS Size

SF30
S Size

SF40-45
L Size

Complex Parts

Door·Panel
Clean Equipment

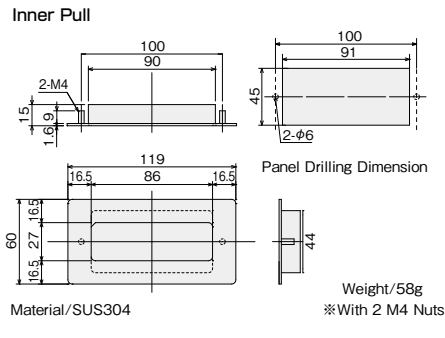
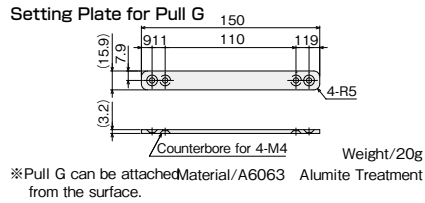
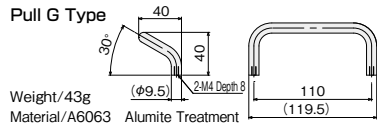
Technical Data



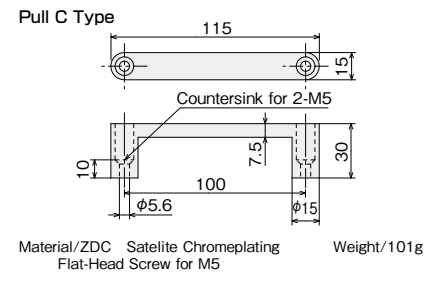
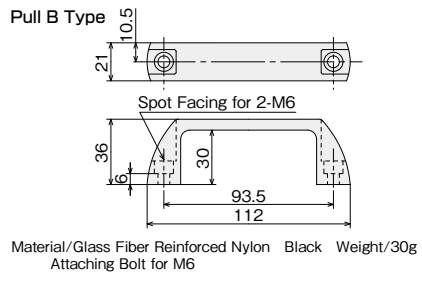
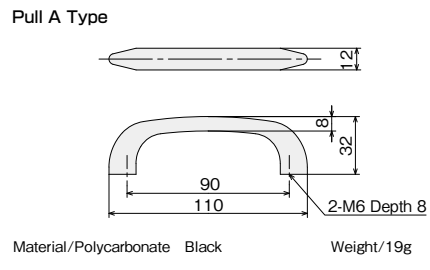
Pull



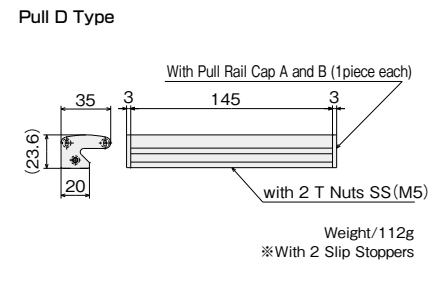
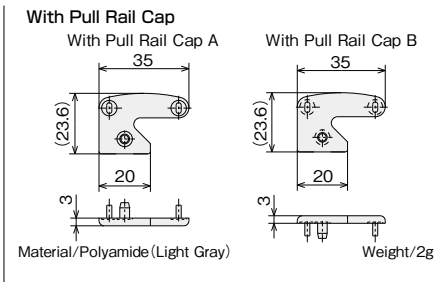
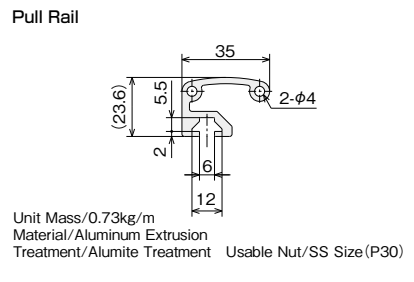
■ Weight Refer Drawing
 ■ Environment ★RoHS Compliant
 ■ Green Procurement



Name	Pull G Type	Setting Plate for Pull G	Inner Pull
Item No.	★SFA-305	★SFA-306	★SFA-307

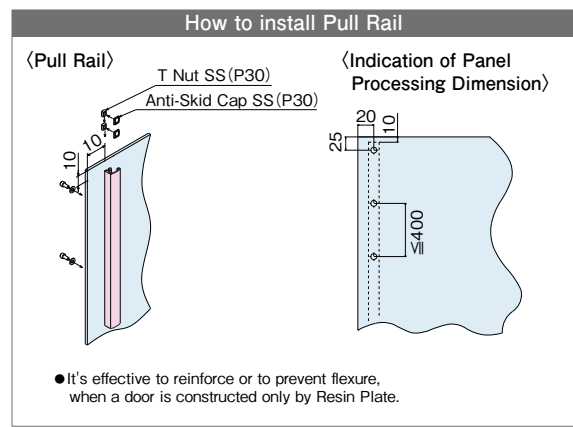
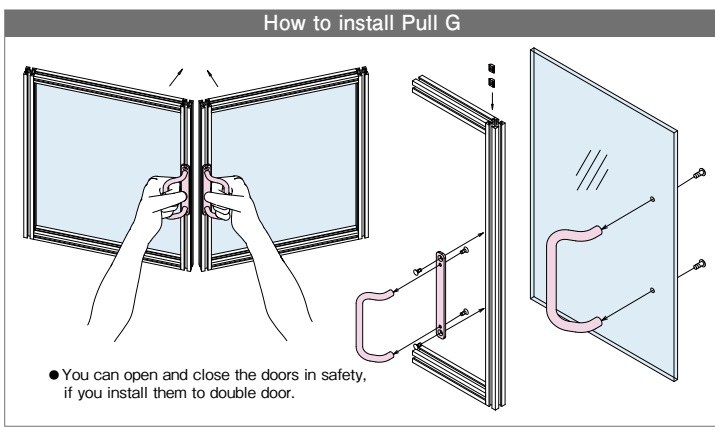


Name	Pull A Type	Pull B Type	Pull C Type
Item No.	★SFA-301	★SFA-302	SFA-304



Name	Pull Rail (ℓ=4000) (4M)	Pull Rail (ℓ=50~4000) (2M)	Pull Rail Cap A	Pull Rail Cap B	Pull D Type	
Item No.	★SFF-T05	★SFF-T02	★SFF-T04	★SFA-390	★SFA-391	★SFK-701

● Handle Rail Cut Length 4M: ℓ=(4030mm)
 It's material to be cut by customer
 Effective use area ℓ=4000mm

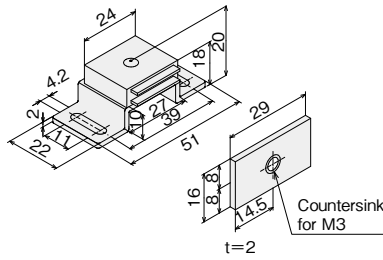


SF20 SS Size
 SF30 S Size
 SF40-45 L Size
 Complex Parts
 Door Panel Clean Equipment
 Technical Data

Magnet Catch N (For Frame Rim Door)



Magnet Catch N (Adsorbability:29.4N)



Name	Magnet Catch N		
Item No.	SFA-40A		
Material/Technical Data			
	Magnet Catch Housing	Magnet	MG Bracket
Material	Stainless	Ferrite	Aluminum
	Dark Brown Painting		
Weight	35g (Magnet Catch N)		

In case of Door Frame □20mm (Include Panel Frame)

Door Frame □20mm · Body Frame □20mm
(MG Bracket SS Kit)

Weight 91.7g/set

Kit Contents

- ① Magnet Catch N×1
- ② MG Bracket SS×1
- ③ Truss Screw (M4×5)×2
- ④ Flat-Head Screw (M3×6)×1
- ⑤ T Nut SS M3×1
- ⑥ T Nut SS M5×2
- ⑦ Hexagon Socket Bolt (M5×25)×2

Name	MG Bracket SS Kit
Item No.	SFK-4AA

Door Frame □20mm · Body Frame □30mm
(MG Bracket S Kit)

Weight 119.7g/set

Kit Contents

- ① Magnet Catch N×1
- ② MG Bracket S×1
- ③ Truss Screw (M4×5)×2
- ④ Flat-Head Screw (M3×6)×1
- ⑤ T Nut SS M3×1
- ⑥ T Nut S M5×2
- ⑦ Hexagon Socket Bolt (M5×22)×2

Name	MG Bracket S Kit
Item No.	SFK-4AB

Door Frame □20mm · Body Frame □40mm · □45mm
(MG Bracket L Kit)

Weight 96g/set

Kit Contents

- ① Magnet Catch N×1
- ② MG Bracket L×1
- ③ Truss Screw (M4×5)×2
- ④ Flat-Head Screw (M3×6)×1
- ⑤ T Nut SS M3×1
- ⑥ T Nut L M5×2
- ⑦ Hexagon Socket Bolt (M5×15)×2

Name	MG Bracket L Kit
Item No.	SFK-4AC

Door Frame □20mm · Body Frame □80mm (2 lines of grooves) · □90mm
(MG Bracket L80-90 Kit)

Weight 105g/set

Kit Contents

- ① Magnet Catch N×1
- ② MG Bracket L80-90×1
- ③ Truss Screw (M4×5)×2
- ④ Flat-Head Screw (M3×6)×1
- ⑤ T Nut SS M3×1
- ⑥ T Nut L M5×2
- ⑦ Hexagon Socket Bolt (M5×14)×2

Name	MG Bracket L80-90 Kit
Item No.	SFK-4AK

In case of Door Frame □30mm

Door Frame □30mm · Body Frame □30mm
(MG Bracket S-S Kit)

Weight 93.3g/set

Kit Contents

- ① Magnet Catch N×1
- ② MG Bracket S-S×1
- ③ Truss Screw (M4×5)×2
- ④ Flat-Head Screw (M3×8)×1
- ⑤ T Nut S M3×1
- ⑥ T Nut S M5×2
- ⑦ Hexagon Socket Bolt (M5×10)×2

Name	MG Bracket S-S Kit
Item No.	SFK-4AH

Door Frame □30mm · Body Frame □40mm · □45mm
(MG Bracket L-S Kit)

Weight 101.9g/set

Kit Contents

- ① Magnet Catch N×1
- ② MG Bracket L-S×1
- ③ Truss Screw (M4×5)×2
- ④ Flat-Head Screw (M3×8)×1
- ⑤ T Nut S M3×1
- ⑥ T Nut L M5×2
- ⑦ Hexagon Socket Bolt (M5×12)×2

Name	MG Bracket L-S Kit
Item No.	SFK-4AE



Parts

How to order

Item No.

Quantity (pcs)

SFA-40A

□ □

Door Frame □30mm · Body Frame □60mm (2 lines of grooves)
(MG Bracket S60-S Kit)

Weight 63g/set

Name	MG Bracket S60-S Kit
Item No.	SFK-4AN

Kit Contents

- ① Magnet Catch Nx1
- ② Truss Screw (M4×10)×2
- ③ Flat-Head Screw (M3×8)×1
- ④ T Nut S M3×1
- ⑤ T Nut S M4×2

Door Frame □30mm · Body Frame □80mm (2 lines of grooves) · □90mm
(MG Bracket L80-90-S Kit)

Weight 111g/set

Name	MG Bracket L80-90-S Kit
Item No.	SFK-4AL

Kit Contents

- ① Magnet Catch Nx1
- ② MG Bracket L80-90×1
- ③ Truss Screw (M4×5)×2
- ④ Flat-Head Screw (M3×8)×1
- ⑤ T Nut S M3×1
- ⑥ T Nut L M5×2
- ⑦ Hexagon Socket Bolt (M5×14)×2

■ In case of Door Frame □40mm

Door Frame □40mm · Body Frame □40mm
(MG Bracket L-L40 Kit)

Weight 97g/set

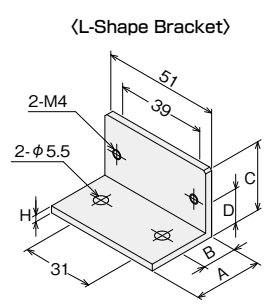
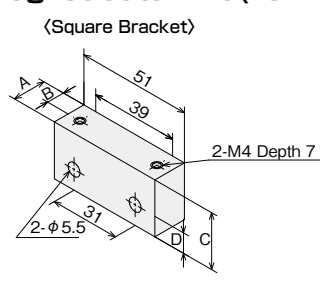
Name	MG Bracket L-L40 Kit
Item No.	SFK-4AM

Kit Contents

- ① Magnet Catch Nx1
- ② MG Bracket Lx1
- ③ Truss Screw (M4×5)×2
- ④ Flat-Head Screw (M3×10)×1
- ⑤ Accessory Nut L M3×1
- ⑥ T Nut L M5×2
- ⑦ Hexagon Socket Bolt (M5×15)×2

(Body Frame □45mm)

■ Bracket for Magnet Catch Kit (For Frame Door)



(Square Bracket) Material : A6063 Alumite Treatment

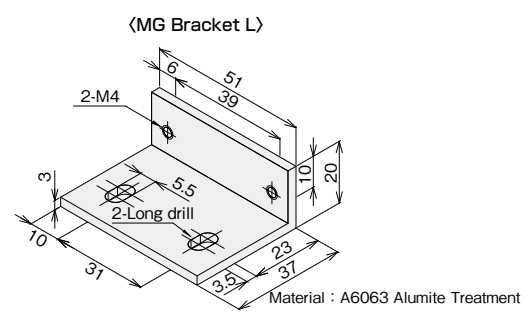
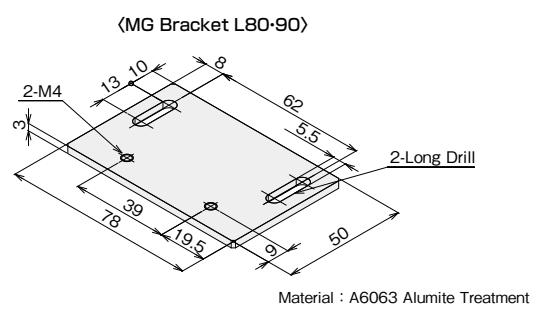
Item No.	Kit Name	Bracket Name	A	B	C	D
SFK-4AA	MG Bracket SS Kit	MG Bracket SS	20	15	15	5
SFK-4AB	MG Bracket S Kit	MG Bracket S	15	8	25	9

(Unit : mm)

(L-Shape Bracket) Material : A6063 Alumite Treatment

Item No.	Kit Name	Bracket Name	A	B	C	D	H
SFK-4AH	MG Bracket S-S Kit	MG Bracket S-S	25	15	25	15	3
SFK-4AE	MG Bracket L-S Kit	MG Bracket L-S	35	22.5	13	5.5	2.5

(Unit : mm)

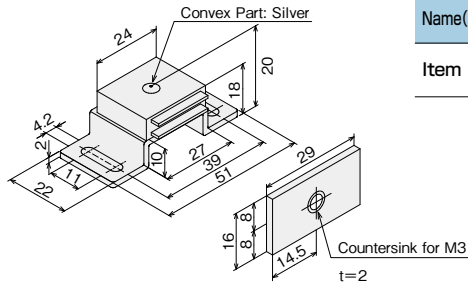


Door·Panel Parts Magnet Catch

Magnet Catch J (For Resin Panel Door)

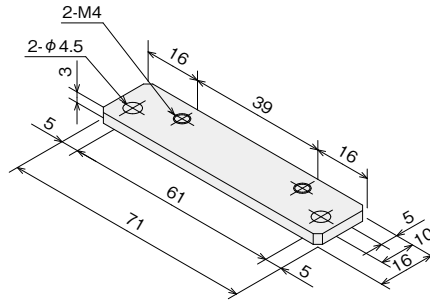
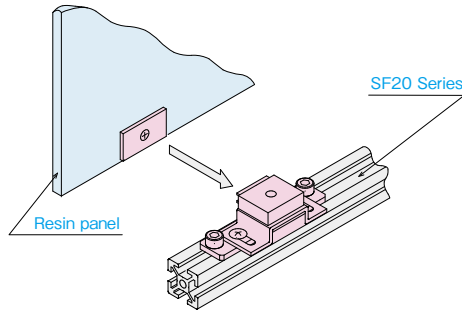


Magnet Catch J (Adsorbability: 14.7N)



Name (Single Item)	Magnet Catch J
Item	SFA-40B

MG20P Bracket Kit



Name (Bolt and Nut Kit)	MG20P Bracket Kit
Item No.	SFK-4AD

■Kit Contents

- Magnet Catch J x1
- MG20P Bracket x1
- Truss Screw (M4x5) x2
- Flat-Head Screw (M3x10) x1
- Hexagon Socket Bolt (M4x8) x2
- Cap Nut (M3) x1
- T Nut SS (M4) x2

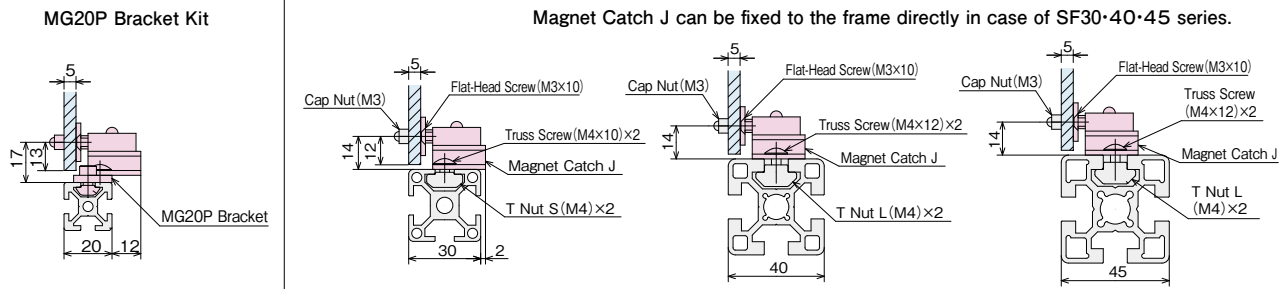
■Material/Technical Data

Material Stainless (Magnet Catch Housing/MP20P Bracket)
 Ferrite (Magnet)
 Dark Brown Painting
 Weight 38g (Magnet Catch J)
 24g (MG20P Bracket)

Use Example of Magnet Catch Installation

(Dimension when using Resin Door)

Magnet Catch J can be fixed to the frame directly in case of SF30·40·45 series.



※Please order by single item regarding screws for Magnet Catch in case of SF30·40·45.



Parts

How to order

Item No. Quantity (pcs)

SFA-40B

Magnet Catch G (For Resin Panel Door)

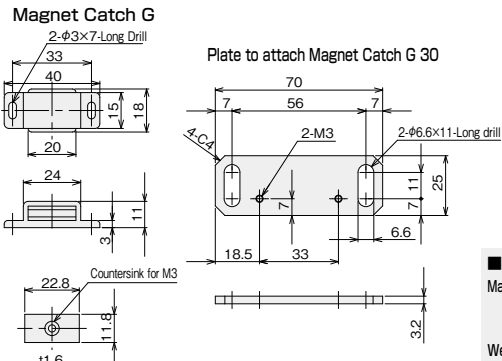
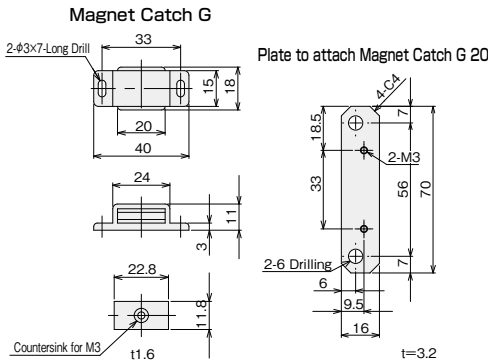


Magnet Catch G (Adsorbability : 10N)

Name (Single Item)	Magnet Catch G
Item No.	SFA-498

Magnet Catch G-SS Kit

Magnet Catch G-S/L Kit (Common)



Material/Technical Data

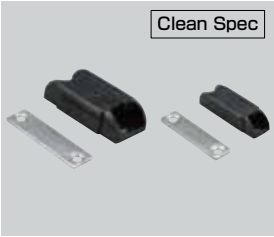
Material ABS (Magnet Catch)
SPCC Uni-Chrome
(Door Side-Setting Plate)

Weight 1.4g (Magnet Catch G)

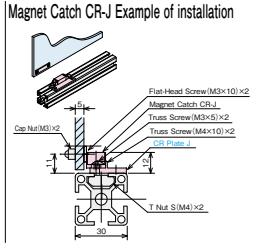
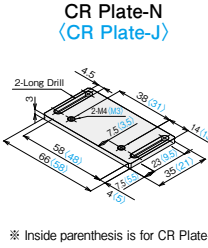
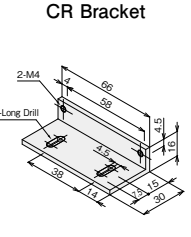
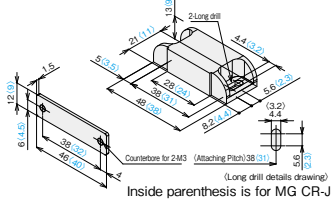
Attaching Frame	SF20 Series	SF30 Series	SF40-45 Series
Name (Bolt and Nut Kit)	Magnet Catch G-SS Kit	Magnet Catch G-S Kit	Magnet Catch G-L Kit
Item No.	SFK-4X4	SFK-4X5	SFK-4X6

Kit Contents	<p>(Magnet Catch G-SS Kit)</p> <ul style="list-style-type: none"> ● Magnet Catch Gx1 ● Plate to attach Magnet Catch G 20x1 ● Cap Nut (M3)x2 ● Truss Screw (M3x6)x2 ● Hexagon Socket Bolt (M5x8)x2 ● T Nut SS (M5)x2 ● Flat-Head Screw (M3x8)x2 	<p>(Magnet Catch G-S Kit)</p> <ul style="list-style-type: none"> ● Magnet Catch Gx1 ● Plate to attach Magnet Catch G 30x1 ● Cap Nut (M3)x2 ● Truss Screw (M3x6)x2 ● Hexagon Socket Bolt (M6x10)x2 ● T Nut S (M6)x2 ● Flat-Head Screw (M3x10)x2 	<p>(Magnet Catch G-L Kit)</p> <ul style="list-style-type: none"> ● Magnet Catch Gx1 ● Plate to attach Magnet Catch G 30x1 ● Cap Nut (M3)x2 ● Truss Screw (M3x6)x2 ● Hexagon Socket Bolt (M6x15)x2 ● T Nut L (M6)x2 ● Flat-Head Screw (M3x10)x2
--------------	---	---	---

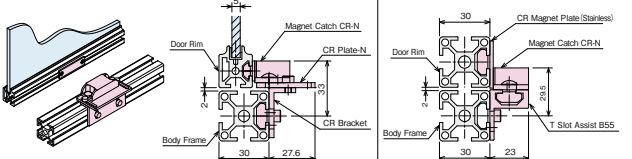
Magnet Catch CR-N (For Frame Rim Door)/J (For Resin Panel Door)



Magnet Catch CR-N (Adsorbability:23N)
Magnet Catch CR-J (Adsorbability:13N)



Installing Example of Magnet Catch CR-N Kit



Name	Magnet Catch CR		Magnet Catch CR-N				CR Plate-N		
	N	J	S Kit	S-S Kit	L Kit	L-S Kit	L40-L40 Kit	L45-L Kit	(CR Plate-J)
Item No.	SFA-44A	SFA-44B	SFK-4EA	SFK-4EC	SFK-4EB	SFK-4ED	SFK-4EE	SFK-4EF	SFA-4EA (SFA-4EB)

Kit contents

Door Rim	S Kit	S-S Kit	L Kit	L-S Kit	L40-L40 Kit	L45-L Kit
	□20mm	□30mm	□20mm	□30mm	□40mm	□40mm
Body Frame	□30mm	□30mm	□40-45mm	□40-45mm	□40mm	□40-45mm
	<ul style="list-style-type: none"> ● Magnet Catch CR-Nx1 ● CR Plate-Nx1 ● CR Bracketx1 ● Cross-Recessed Small Flat Screw M3x6 (Stainless)x2 ● ST Nut SS (M3)x2 ● Truss Screw M4x6 (Stainless)x4 ● Truss Screw M4x10 (Stainless)x2 ● ST Nut S (M4)x2 	<ul style="list-style-type: none"> ● Magnet Catch CR-Nx1 ● CR Plate-Nx1 ● CR Bracketx1 ● Cross-Recessed Small Flat Screw M3x8 (Stainless)x2 ● ST Nut S (M3)x2 ● Truss Screw M4x6 (Stainless)x4 ● Truss Screw M4x12 (Stainless)x2 ● ST Nut L (M4)x2 	<ul style="list-style-type: none"> ● Magnet Catch CR-Nx1 ● CR Plate-Nx1 ● CR Bracketx1 ● Cross-Recessed Small Flat Screw M3x10 (Stainless)x2 ● Accessory Nut L-M3x2 ● Truss Screw M4x10 (Stainless)x2 ● ST Nut S (M4)x2 ● Truss Screw M4x12 (Stainless)x2 ● ST Nut L (M4)x2 	<ul style="list-style-type: none"> ● Magnet Catch CR-Nx1 ● CR Plate-Nx1 ● CR Bracketx1 ● Cross-Recessed Small Flat Screw M3x10 (Stainless)x2 ● Accessory Nut L-M3x2 ● Truss Screw M4x10 (Stainless)x2 ● Truss Screw M4x12 (Stainless)x2 ● ST Nut L (M4)x2 	<ul style="list-style-type: none"> ● Magnet Catch CR-Nx1 ● CR Plate-Nx1 ● CR Bracketx1 ● Cross-Recessed Small Flat Screw M3x10 (Stainless)x2 ● Accessory Nut L-M3x2 ● Truss Screw M4x10 (Stainless)x2 ● Truss Screw M4x12 (Stainless)x2 ● ST Nut L (M4)x2 	<ul style="list-style-type: none"> ● Magnet Catch CR-Nx1 ● CR Plate-Nx1 ● CR Bracketx1 ● Cross-Recessed Small Flat Screw M3x10 (Stainless)x2 ● Accessory Nut L-M3x2 ● Truss Screw M4x10 (Stainless)x2 ● Truss Screw M4x12 (Stainless)x2 ● ST Nut L (M4)x2

Material/Technical Data

Material A6063 (CR Plate-CR Bracket)
Resin (Housing)
Neodymium (Magnet)
Stainless (Fixing Disc-CR Magnet Plate)

Weight 16.7g (Magnet Catch CR-N (Single Item))
8.9g (Magnet Catch CR-J (Single Item))

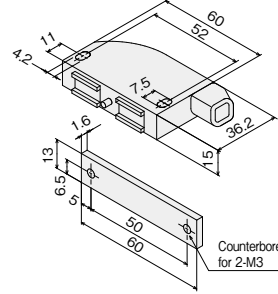
Environment RoHS Compliant

Door-Panel Parts Magnet Catch with Limit Switch

Magnet Catch with Limit Switch



Magnet Catch with Limit Switch (Adsorbability:29.4N)



Name	Magnet Catch with Limit Switch
Item No.	SFA-42A

Material/Technical Data	
Material	PBT (Case) Ferrite (Magnet)
Weight	52.5g (Magnet Catch with Limit Switch)

Switch Spec: ON when door is closed. 1 ○ — ○ 2			
Rated Voltage [V]	Resistant Load [A]	Lumped Load [A]	Induction Load [A]
AC125	5	1.5	3
AC250	5	—	3
DC30	5	—	1.5

Purpose Example		
Name	Door	Component
ML Bracket SS Kit	SF-20-20 or Panel Frame SS	SF-20-20 Series
ML Bracket S Kit		SF-30-30 Series
ML Bracket L Kit		SF-40-45 Series
ML Bracket S-S Kit		SF-30-30 Series
ML Bracket L-S Kit	SF-30-30	SF-40-45 Series
		SF-20-20 Series
ML Plate	Resin Panel	SF-30-30 Series
		SF-40-45 Series

※Bolt and Nut isn't included to ML Plate.

■In case of Door Frame □20mm (Include Panel Frame)

Door Frame □20mm · Body Frame □20mm
(ML Bracket SS Kit)

Weight 181g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Bracket SS×1
- ③ ML Plate×1
- ④ Flat-Head Screw (M3×6)×2
- ⑤ For Flat Washer M4×2
- ⑥ T Nut SS M3×2
- ⑦ T Nut SS M5×2
- ⑧ Hexagon Socket Bolt (M4×18)×2
- ⑨ Hexagon Socket Bolt (M5×15)×4

Name	ML Bracket SS Kit
Item No.	SFK-4CA

Door Frame □20mm · Body Frame □30mm
(ML Bracket S Kit)

Weight 221g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Bracket S×1
- ③ ML Plate×1
- ④ Flat-Head Screw (M3×6)×2
- ⑤ For Flat Washer M4×2
- ⑥ T Nut SS M3×2
- ⑦ T Nut S M5×2
- ⑧ Hexagon Socket Bolt (M4×18)×2
- ⑨ Hexagon Socket Bolt (M5×15)×2
- ⑩ Hexagon Socket Bolt (M5×18)×2

Name	ML Bracket S Kit
Item No.	SFK-4CB

Door Frame □20mm · Body Frame □40mm·□45mm
(ML Bracket L Kit)

Weight 217.5g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Bracket L×1
- ③ ML Plate×1
- ④ Flat-Head Screw (M3×6)×2
- ⑤ For Flat Washer M4×2
- ⑥ T Nut SS M3×2
- ⑦ T Nut L M5×2
- ⑧ Hexagon Socket Bolt (M4×18)×2
- ⑨ Hexagon Socket Bolt (M5×15)×2
- ⑩ Hexagon Socket Bolt (M5×22)×2

Name	ML Bracket L Kit
Item No.	SFK-4CC

Door Frame □20mm · Body Frame □80mm (2 lines of grooves)·□90mm
(ML Bracket L80-90 Kit)

Weight 125g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Bracket L80-90×1
- ③ T Nut SS M3×2
- ④ T Nut L M5×2
- ⑤ For Flat Washer M4×2
- ⑥ Hexagon Socket Bolt (M4×18)×2
- ⑦ Hexagon Socket Bolt (M5×14)×2
- ⑧ Flat-Head Screw (M3×6)×2

Name	ML Bracket L80-90 Kit
Item No.	SFK-4CJ

■In case of Door Frame □30mm

Door Frame □30mm · Body Frame □30mm
(ML Bracket S-S Kit)

Weight 145.2g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Bracket S-S×1
- ③ ML Magnet Plate×1
- ④ Flat-Head Screw (M3×8)×2
- ⑤ For Flat Washer M4×2
- ⑥ T Nut S M3×2
- ⑦ T Nut S M5×2
- ⑧ Hexagon Socket Bolt (M4×20)×2
- ⑨ Hexagon Socket Bolt (M5×10)×2

Name	ML Bracket S-S Kit
Item No.	SFK-4CD

Door Frame □30 · Body Frame □40mm·□45mm
(ML Bracket L-S Kit)

Weight 284.7g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Bracket L-S×1
- ③ ML Plate×1
- ④ Flat-Head Screw (M3×8)×2
- ⑤ For Flat Washer M4×2
- ⑥ T Nut S M3×2
- ⑦ T Nut L M5×2
- ⑧ Hexagon Socket Bolt (M4×18)×2
- ⑨ Hexagon Socket Bolt (M5×15)×2
- ⑩ Hexagon Socket Bolt (M5×22)×2

Name	ML Bracket L-S Kit
Item No.	SFK-4CF

Door Frame 30mm · Body Frame 60mm (2 lines of grooves)
(ML Bracket S60-S Kit)

SF-30-30
SF-60-60-2S (SF-60-90, SF-60-120)

Weight 179g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Magnet Plate 1×1
- ③ ML Plate×1
- ④ Flat-Head Screw (M3×8)×2
- ⑤ T Nut S M3×2
- ⑥ T Nut S M5×2
- ⑦ Hexagon Socket Bolt (M5×10)×2
- ⑧ For Flat Washer M4×2
- ⑨ Hexagon Socket Bolt (M4×18)×2

Name	ML Bracket S60-S Kit
Item No.	SFK-4CN

Door Frame 30mm · Body Frame 80mm (2 lines of grooves) · 90mm
(ML Bracket L80-90-S Kit)

SF-30-30
SF-80-80 (SF-80-160) SF-90-90 (SF-90-180)

Weight 162g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Bracket L80-90×1
- ③ ML Magnet Plate 1×1
- ④ For Flat Washer M4×2
- ⑤ T Nut S M3×2
- ⑥ T Nut L M5×2
- ⑦ Hexagon Socket Bolt (M4×18)×2
- ⑧ Hexagon Socket Bolt (M5×14)×2
- ⑨ Cross-Recessed Small Flat Screw (M3×8)×2

Name	ML Bracket L80-90-S Kit
Item No.	SFK-4CK

■ In case of Door Frame 40mm

Door Frame 40mm · Body Frame 40mm
(ML Bracket L40-L40 Kit)

SF-40-40
SF-40 series

Weight 266g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Plate×1
- ③ Flat-Head Screw (M3×10)×2
- ④ For Flat Washer M4×2
- ⑤ ML Bracket×1
- ⑥ T Nut L M5×2
- ⑦ ML Magnet Plate 1×1
- ⑧ Hexagon Socket Bolt (M4×18)×2
- ⑨ Accessory Nut L (M3)×2
- ⑩ Hexagon Socket Bolt (M5×22)×2

Name	ML Bracket L40-L40 Kit
Item No.	SFK-4CL

Door Frame 40mm · Body Frame 45mm
(ML Bracket L45-L40 Kit)

SF-40 series
SF-45 series

Weight 293g/set

Kit Contents

- ① Magnet Catch with Limit Switch×1
- ② ML Bracket L-S×1
- ③ ML Plate×1
- ④ ML Magnet Plate 1×1
- ⑤ Flat-Head Screw (M3×10)×2
- ⑥ Accessory Nut L (M3)×2
- ⑦ Hexagon Socket Bolt (M4×18)×2
- ⑧ For Flat Washer M4×2
- ⑨ T Nut L (M5)×2
- ⑩ Hexagon Socket Bolt (M5×22)×2

Name	ML Bracket L45-L40 Kit
Item No.	SFK-4CM

■ Bracket for Magnet Catch with Limit Switch Kit (For Frame Rim Door)

(ML Bracket SS)

Material/A6063 Alumite Treatment

(ML Bracket S)

Material/A6063 Alumite Treatment

(ML Bracket)

Material/A6063 Alumite Treatment

(ML Bracket S-S)

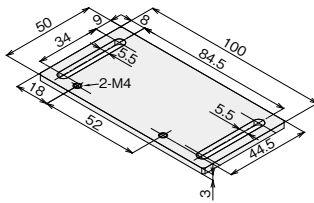
Material/A6063 Alumite Treatment

(ML Bracket L-S)

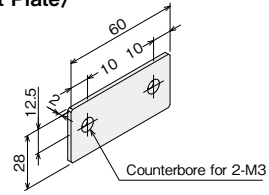
Material/A6063 Alumite Treatment

Door Panel Parts Magnet Catch with Limit Switch

<ML Bracket L80·90>



★ <ML Magnet Plate 1> ★ <CR Magnet Plate>



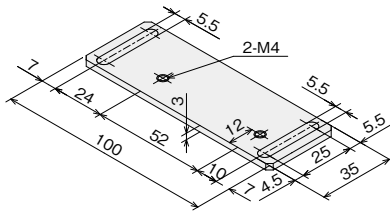
Material/Technical Data

Material Aluminium Alloy
Alumite Treatment
Weight 36.4g
Environment **RoHS** Compliant
Green Procurement

Material/Technical Data

	ML Magnet Plate1	CR Magnet Plate
Material	SPCC	Stainless (SUS430)
Weight	25.2g	25.6g
Environment	★RoHS Compliant	★Green Procurement

<ML Plate>

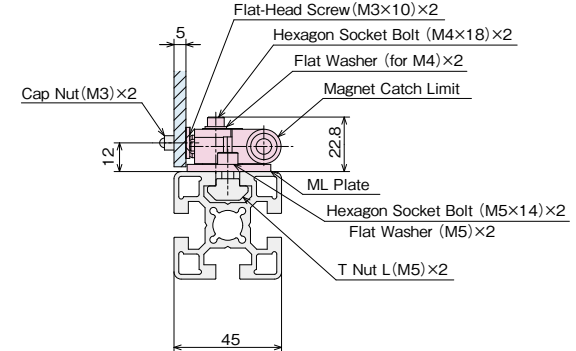
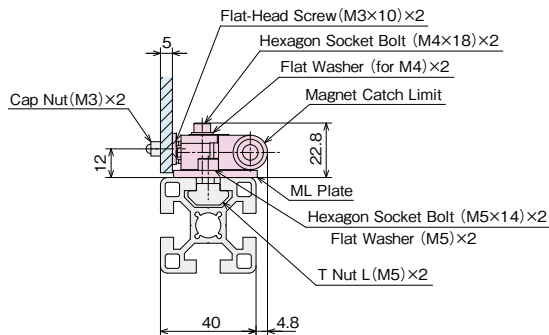
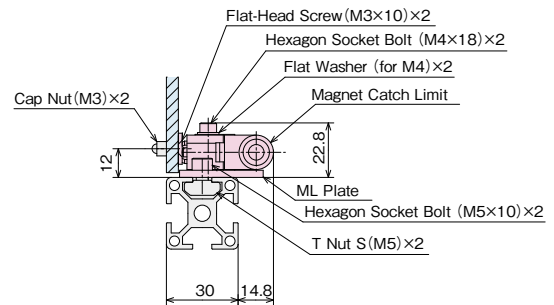
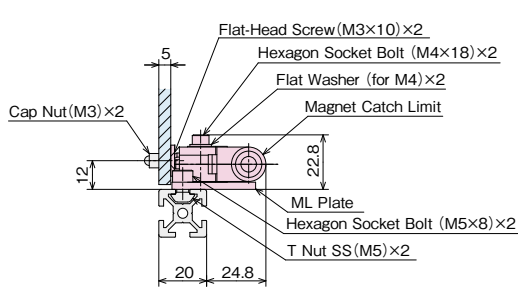


Name	ML Plate
Item No.	SFA-42E

Material/Technical Data

Material SUS304
Weight 70.9g
Environment **RoHS** Compliant
Green Procurement

Dimension Indication when using Resin Panel t5 Door



※Bolt and Nut aren't included.



Parts

How to order

Item No. Quantity (pcs)

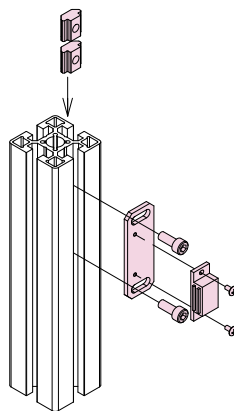
SFA-42E



Magnet Catch G with Limit Switch

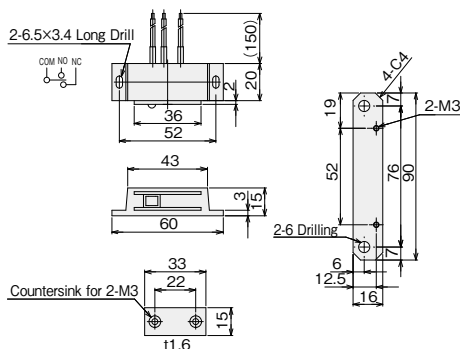


Magnet Catch G with Limit Switch
(Adsorbability: 19N)

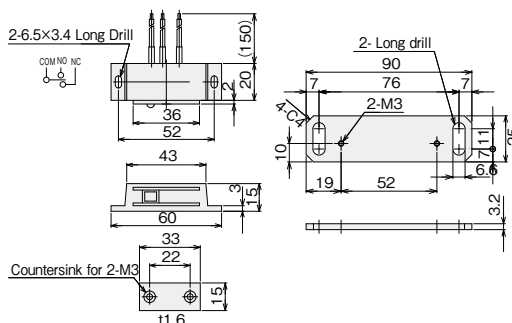


Name(Single Item)	Magnet Catch G with Limit Switch
Item No.	SFA-499

MG-G Limit SS Kit



MG-G Limit S/L Kit(Common)



Material/Technical Data
Material ABS (Magnet Catch with G Limit Switch)
 SPCC Uni-chrome (Door Side-Installing Plate)
Weight 40g (Magnet Catch with G Limit Switch)
 Retentivity 3

Attaching Frame	SF20 Series	SF30 Series	SF40-45 Series
Name(Bolt and Nut Kit)	MG-G Limit SS Kit	MG-G Limit S Kit	MG-G Limit L Kit
Item No.	SFK-4X1	SFK-4X2	SFK-4X3

Kit Contents	<MG-G Limit SS Kit> ● Magnet Catch G with Limit Switch×1 ● T Nut SS (M5)×2 ● MG-G Limit Installing Plate 20×1 ● Truss Screw (M3×6)×2 ● Flat-Head Screw (M3×8)×2 ● Hexagon Socket Bolt (M5×8)×2 ● Cap Nut (M3)×2	<MG-G Limit S Kit> ● Magnet Catch G with Limit Switch×1 ● T Nut S (M6)×2 ● MG-G Limit Installing Plate 30×1 ● Truss Screw (M3×6)×2 ● Flat-Head Screw (M3×10)×2 ● Hexagon Socket Bolt (M6×10)×2 ● Cap Nut (M3)×2	<MG-G Limit L Kit> ● Magnet Catch G with Limit Switch×1 ● T Nut L (M6)×2 ● MG-G Limit Installing Plate 30×1 ● Truss Screw (M3×6)×2 ● Flat-Head Screw (M3×10)×2 ● Hexagon Socket Bolt (M6×15)×2 ● Cap Nut (M3)×2
--------------	---	---	---

SF20
SS Size

SF30
S Size

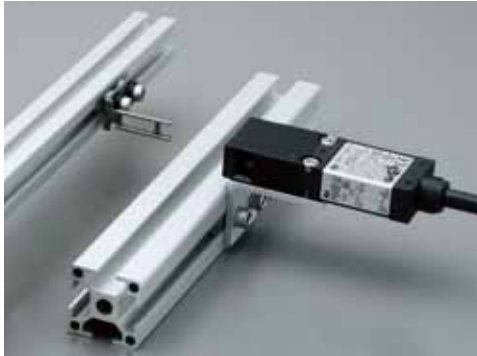
SF40-45
L Size

Complex Parts

Door Panel
Clean Equipment

Technical Data

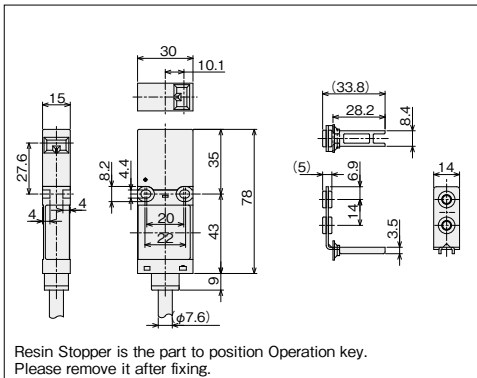
Safty Door Switch Kit A



Kit selection

Combination of Rim and Door		Name	Item No.
Frame at Rim-side	Door Side		
□20 Series	Resin panel Door t=5	Safty Switch Kit SS-PA	SFK-471A
□30 Series		Safty Switch Kit S-PA	SFK-472A
□40-45 Series		Safty Switch Kit L-PA	SFK-473A
□20 Series	□20 Series Frame Door	Safty Switch Kit SS-SSA	SFK-HE4A
□30 Series		Safty Switch Kit S-SSA	SFK-HE5A
□40 Series		Safty Switch Kit L40-SSA	SFK-HE6A
□45 Series		Safty Switch Kit L45-SSA	SFK-HE7A
□30 Series	□30 Series Frame Door	Safty Switch Kit S-SA	SFK-HE8A
□40 Series		Safty Switch Kit L40-SA	SFK-HE9A
□45 Series		Safty Switch Kit L45-SA	SFK-HF1A

Safety Switch Dimensional Outline Drawing



We also sell Safty Switch as a Single Item.

Name	Item No.
HS6B Safty Switch(with Operation Key)	SFK-HS6B

Spec

IEC Model[HS6B-03B01] Safty Switch
 [HS9Z-A62] Operation Key
 Environment **RoHS** Compliant

Operation Characteristics

Direct Circuit Operation Power ^{**}	60N and up
Direct Circuit Operation Stroke ^{**}	8mm and up

^{**} Power and stroke to separate when assuming the case which contact-point deposits with the power of 10N per 1 contact point.

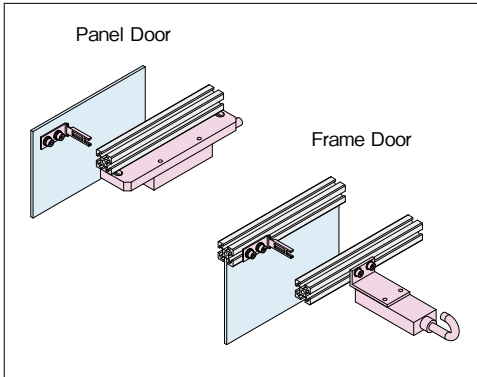
Safety Standard

ISO14119
 EN1088
 IEC60947-5-1
 EN60947-5-1 (DEMKO Approval)
 GS-ET-15 (BG Approval)
 UL508 (UL Listing Approval)
 CSA C22.2 No.14 (c-UL Listing Approval)

Operation Characteristics

Contact Point	Contact Symbol	Operation Characteristics		
3NC		(Completion of inserting Operation Key)	(Completion of pulling out Operation Key)	
		Stroke		<input type="checkbox"/> Contact Point ON (Close) <input type="checkbox"/> Contact Point OFF (Open)
		11-12 21-22 31-32	[Shaded box] [White box]	

Example of Use



Kit Contents

^{**}Please refer the next page regarding part's shape detail and installing position.

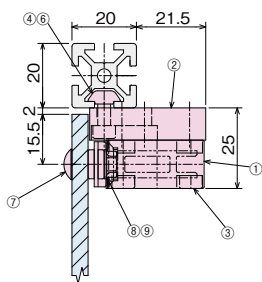
		Kit Component																		
		Install at Rim-side					Install at door side													
		①	②	Dimension of Part Drawing						③	④	⑤	⑥	⑦	⑧	⑨				
		A	B	C	D	E	F													
Resin panel Door	Safty Switch Kit SS-PA	SDP Plate×1						Hexagon Socket Bolt (M4×10) Stainless×2				ST Nut SS (M4)×2	Truss Screw (M4×15) Stainless×2			Hexagon Nut (M4) Stainless Kind 1×2				
	Safty Switch Kit S-PA											ST Nut S (M4)×2								
	Safty Switch Kit L-PA											ST Nut L (M4)×2								
Frame Door	Safty Switch Kit SS-SSA	Safty Switch Bracket SS-SS×1	50	42.2	18.5	14	0	3	Hexagon Socket Bolt (M4×18) Stainless×2	Hexagon Socket Bolt (M4×8) Stainless×2	Flat Washer M4 Stainless×2	ST Nut SS (M4)×2	Hexagon Socket Bolt (M4×10) Stainless×2	Flat Washer M4 Stainless×2		ST Nut SS (M4)×2				
	Safty Switch Kit S-SSA	Safty Switch Bracket S-SS×1	50	32.2	27	17.5	3	Hexagon Socket Bolt (M5×12) Stainless×2				ST Nut S (M5)×2					ST Nut SS (M4)×2			
	Safty Switch Kit L40-SSA	Safty Switch Bracket L40-SS×1	40	22.2	36	21.5	5	5				Hexagon Socket Bolt (M5×15) Stainless×2					ST Nut L (M5)×2	ST Nut L (M4)×2		
	Safty Switch Kit L45-SSA	Safty Switch Bracket L45-SS×1	40	17.2	40	24	5	5				Hexagon Socket Bolt (M5×12) Stainless×2					ST Nut L (M5)×2	ST Nut L (M4)×2		
	Safty Switch Kit S-SA	Safty Switch Bracket S-S×1	50	43	32	22.5	3	3				Hexagon Socket Bolt (M5×12) Stainless×2					ST Nut S (M5)×2	ST Nut S (M4)×2		
	Safty Switch Kit L40-SA	Safty Switch Bracket L40-S×1	40	33	40	26.5	5	5				Hexagon Socket Bolt (M5×15) Stainless×2					ST Nut L (M5)×2	Hexagon Socket Bolt (M4×12) Stainless×2	Key Spacer ×1	ST Nut S (M4)×2
	Safty Switch Kit L45-SA	Safty Switch Bracket L45-S×1	40	28	40	30	3	3				Hexagon Socket Bolt (M5×15) Stainless×2					ST Nut L (M5)×2	Hexagon Socket Bolt (M4×12) Stainless×2	Key Spacer ×1	ST Nut S (M4)×2



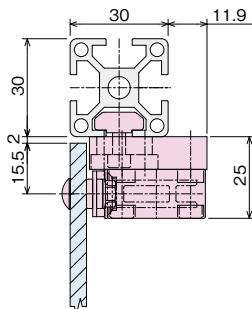
Parts
 How to order
 Item No. Quantity (pcs)
SFK-471A □□

Safety Switch Kit A Installation Drawing

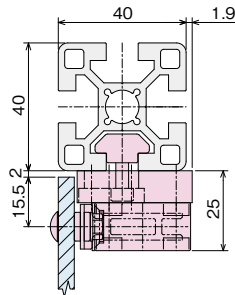
(Resin Panel Door t=5)



Safty Switch Kit SS-PA

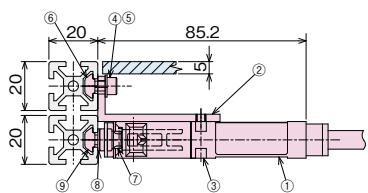


Safty Switch Kit S-PA

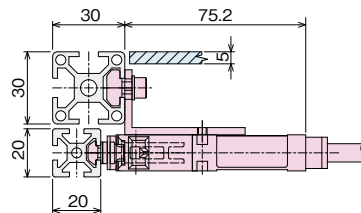


Safty Switch Kit L-PA

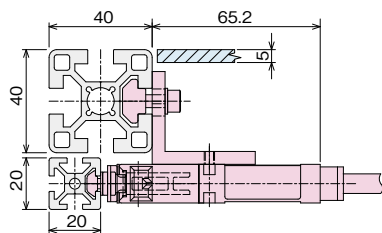
(□20 Series Frame Door)



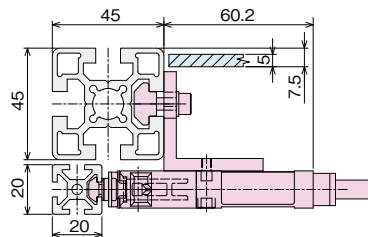
Safty Switch Kit SS-SSA



Safty Switch Kit S-SSA

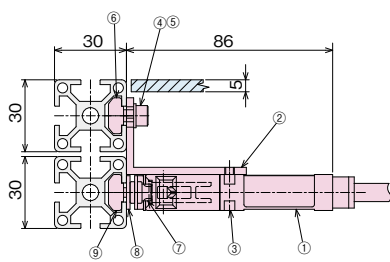


Safty Switch Kit L40-SSA

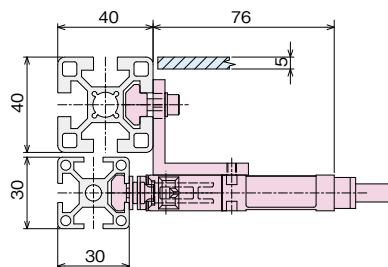


Safty Switch Kit L45-SSA

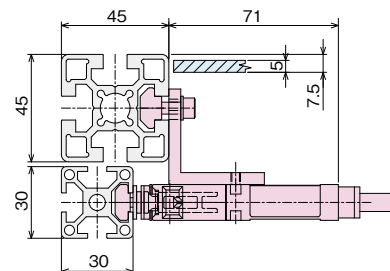
(□30 Series Frame Door)



Safty Switch Kit S-SA



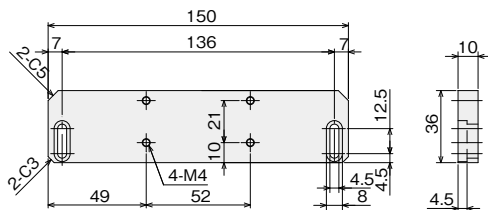
Safty Switch Kit L40-SA



Safty Switch Kit L45-SA

Part Drawing

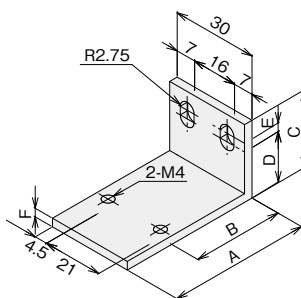
②SDP Plate
(Use for Resin Panel t5 Door)



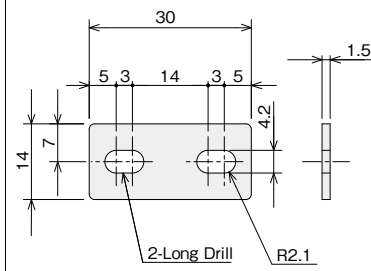
Name	SDP Plate
Item No.	SFA-470

- Material Aluminium Alloy Alumite Treatment
- Weight 138g
- Environment RoHS Compliant
- Green Procurement

②Safty Switch Bracket
(Use for Frame Door)



⑧Key Spacer
(Use for SF-30·30 Frame Door)



SF20

SS Size

SF30

S Size

SF40-45

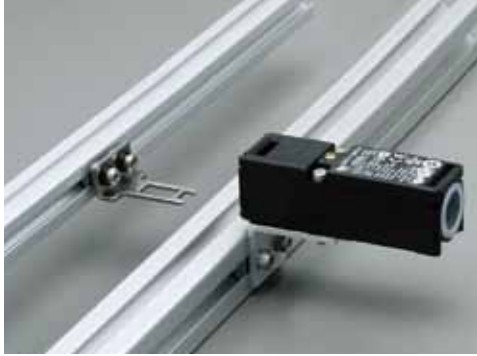
L Size

Complex Parts

Door · Panel
Clean Equipment

Technical Data

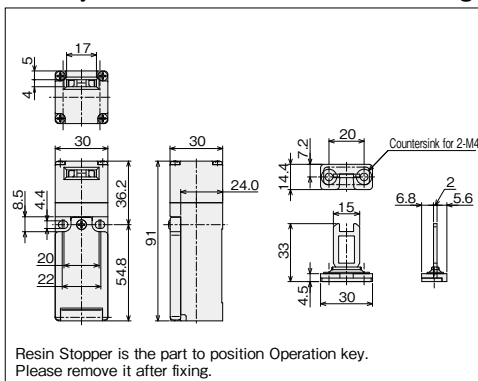
Safty Switch Kit B



Kit selection

Combination of Rim and Door		Name	Item No.
Frame at Rim-side	Door Side		
□20 Series	Resin panel Door t=5	Safty Switch Kit SS-PB	SFK-HFAB
□30 Series		Safty Switch Kit S-PB	SFK-HFBB
□40-45 series		Safty Switch Kit L-PB	SFK-HFCB
□20 Series	□20 Series Frame Door	Safty Switch Kit SS-SSB	SFK-HE4B
□30 Series		Safty Switch Kit S-SSB	SFK-HE5B
□40 Series		Safty Switch Kit L40-SSB	SFK-HE6B
□45 Series		Safty Switch Kit L45-SSB	SFK-HE7B
□30 Series	□30 Series Frame Door	Safty Switch Kit S-SB	SFK-HE8B
□40 Series		Safty Switch Kit L40-SB	SFK-HE9B
□45 Series		Safty Switch Kit L45-SB	SFK-HF1B

Safty Switch Dimensional Outline Drawing



We also sell Safty Switch as a Single Item.

Name	Item No.
HS5B Safty Switch(with Operation Key)	SFK-HS5B

Spec

IEC Model [HS5B-02B] Safty Switch
 [HS9Z-A52] Operation Key
 Environment **RoHS** Compliant

Operation Characteristics

Direct Circuit Operation Power [※]	60N and up
Direct Circuit Operation Stroke [※]	8mm and up

※ Power and stroke to separate when assuming the case which contact-point deposits with the power of 10N per 1 contact point.

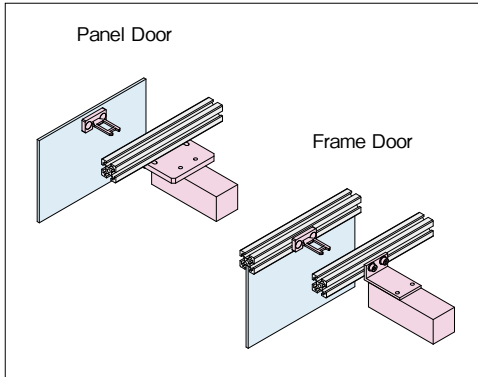
Safty Standard

ISO14119 / EN1088/
 IEC60947-5-1 / EN60947-5-1 (TÜV Approval)
 GS-ET-15 (BG Approval) / UL508 (UL Listing Approval) /
 CSA C22.2No.14 (c-UL Listing Approval)

Operation Characteristics

Contact Point	Contact Symbol	Operation Characteristics	
2NC		(Completion of inserting Operation Key)	(Completion of pulling out Operation Key)

Example of use



Kit Contents

※Please refer the next page regarding part's shape detail and installing position.

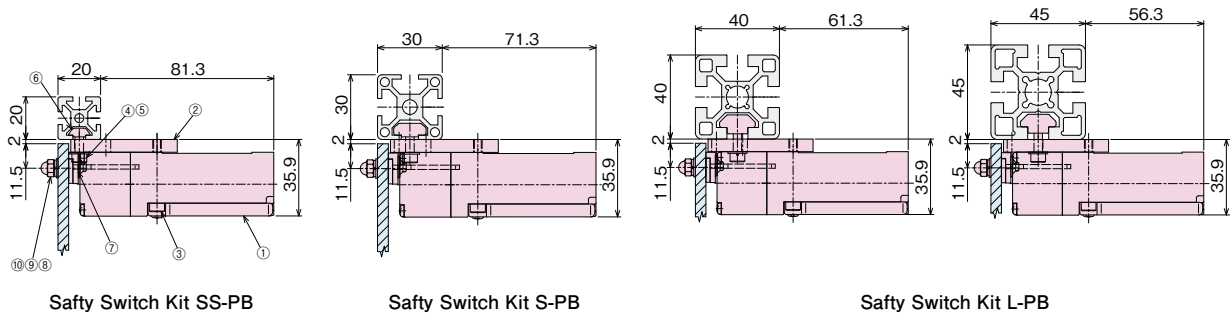
		Kit Component														
		Install at Rim-side					Install at door side									
		①	②	Dimension of Part Drawing				③	④	⑤	⑥	⑦	⑧	⑨	⑩	
		A	B	C	D	E	F									
Resin panel Door	Safty Switch Kit SS-PB	SDP Plate B×1						Hexagon Socket Bolt (M4×12) Stainless×2	Flat Washer M4 Stainless×2	ST Nut SS (M4)×2	Flat-Head Screw (M4×15) Stainless×2	Spring Washer M4 Stainless×2	Cap Nut (M4) Stainless×2			
	Safty Switch Kit S-PB							Hexagon Socket Bolt (M4×15) Stainless×2		ST Nut S (M4)×2						
	Safty Switch Kit L-PB							Hexagon Socket Bolt (M4×8) Stainless×2	ST Nut L (M4)×2							
Frame Door	Safty Switch Kit SS-SSB	Safty Switch Bracket SS-SS×1	50	42.2	18.5	14	0	3	Hexagon Socket Bolt (M4×30) Stainless×2	Flat Washer M4 Stainless×2	ST Nut SS (M4)×2	Flat Washer M4 Stainless×2	ST Nut SS (M4)×2			
	Safty Switch Kit S-SSB	Safty Switch Bracket S-SS×1	50	32.2	27	17.5	3	Hexagon Socket Bolt (M5×12) Stainless×2	Flat Washer M5 Stainless×2	ST Nut S (M5)×2	Flat-Head Screw (M4×10) Stainless×2			ST Nut SS (M4)×2		
	Safty Switch Kit L40-SSB	Safty Switch Bracket L40-SS×1	40	22.2	36	21.5	5	Hexagon Socket Bolt (M5×15) Stainless×2		ST Nut L (M5)×2						
	Safty Switch Kit L45-SSB	Safty Switch Bracket L45-SS×1	40	17.2	40	24	5	Hexagon Socket Bolt (M5×15) Stainless×2	Flat Washer M5 Stainless×2	ST Nut S (M5)×2		Key Spacer ×1	ST Nut S (M4)×2			
	Safty Switch Kit S-SB	Safty Switch Bracket S-S×1	50	43	32	22.5	3	Hexagon Socket Bolt (M5×12) Stainless×2		ST Nut S (M5)×2						
	Safty Switch Kit L40-SB	Safty Switch Bracket L40-S×1	40	33	40	26.5	5	Hexagon Socket Bolt (M5×15) Stainless×2	Flat Washer M5 Stainless×2	ST Nut L (M5)×2	Flat-Head Screw (M4×12) Stainless×2			Key Spacer ×1	ST Nut S (M4)×2	
	Safty Switch Kit L45-SB	Safty Switch Bracket L45-S×1	40	28	30	3	5	Hexagon Socket Bolt (M5×15) Stainless×2		ST Nut L (M5)×2						



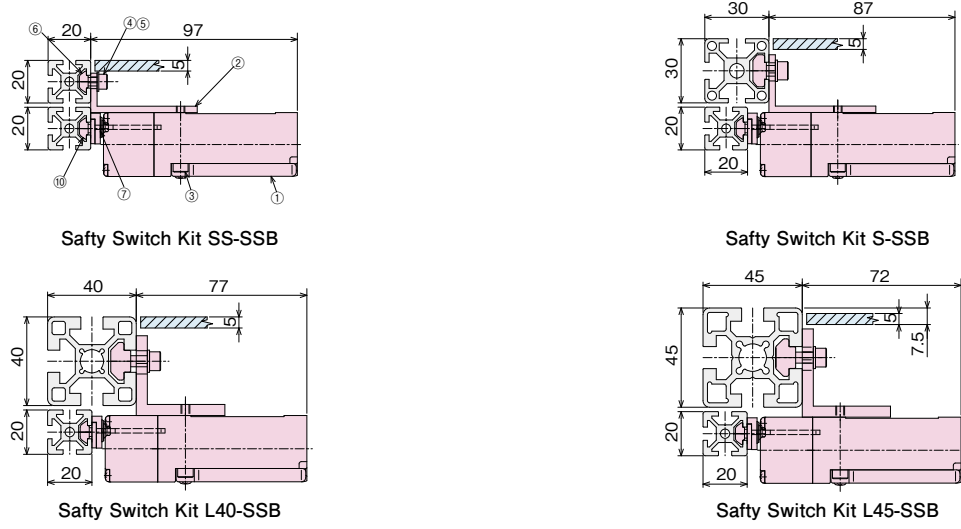
Parts
 How to order
 Item No. Quantity (pcs)
SFK-HFAB □ □

Safety Switch Kit B Installation Drawing

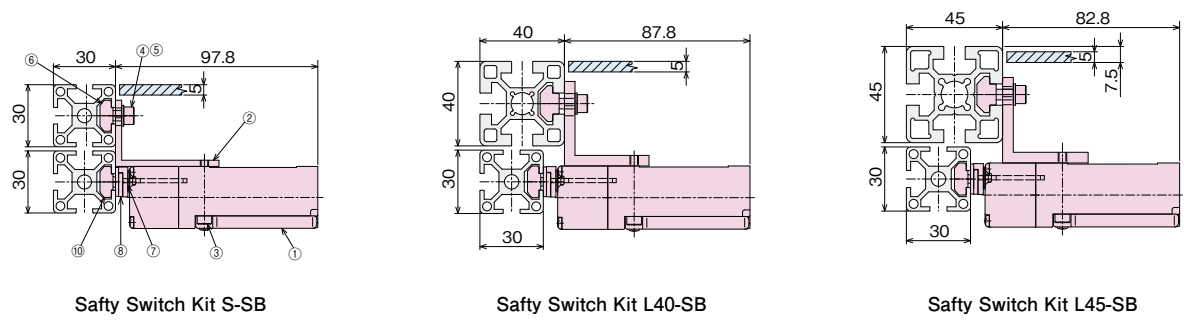
(Resin Panel Door t=5)



(□20 Series Frame Door)

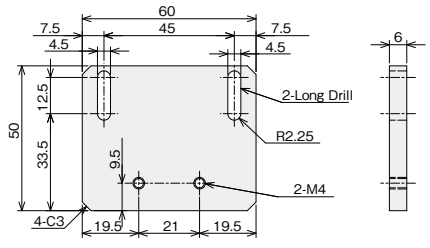


(□30 Series Frame Door)



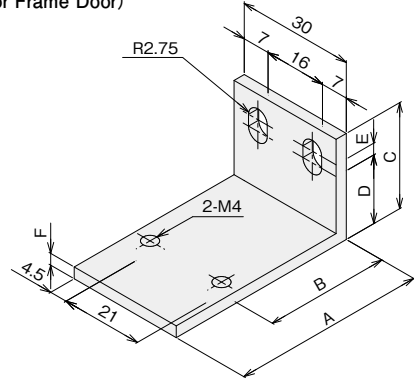
Part Drawing

②SDP Plate B
(Use for Resin Panel t5 Door)



Name	SDP Plate B	Material	Aluminium Alloy Alumite Treatment
Item No.	SFA-4HF3	Weight	45g
		Environment	RoHS Compliant Green Procurement

②Safety Switch Bracket
(Use for Frame Door)



Door-Panel Parts Safty Door Switch Kit

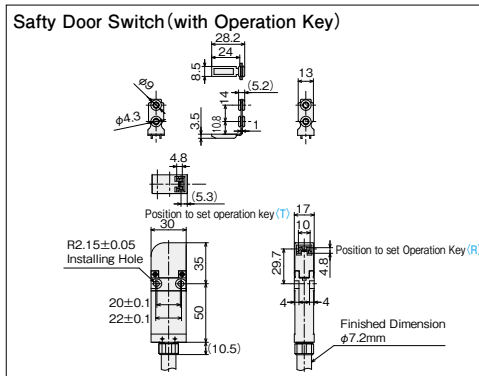
Safty Switch Kit C



Kit selection

Combination of Rim and Door		Name	Item No.
Frame at Rim-side	Door Side		
□20 Series	Resin panel Door t=5	Safty Switch Kit SS-PC	SFK-471C
□30 Series		Safty Switch Kit S-PC	SFK-472C
□40-45 Series		Safty Switch Kit L-PC	SFK-473C
□20 Series	□20 Series Frame Door	Safty Switch Kit SS-SSC	SFK-HE4C
□30 Series		Safty Switch Kit S-SSC	SFK-HE5C
□40 Series		Safty Switch Kit L40-SSC	SFK-HE6C
□45 Series		Safty Switch Kit L45-SSC	SFK-HE7C
□30 Series	□30 Series Frame Door	Safty Switch Kit S-SC	SFK-HE8C
□40 Series		Safty Switch Kit L40-SC	SFK-HE9C
□45 Series		Safty Switch Kit L45-SC	SFK-HF1C

Safty Switch Dimensional Outline Drawing



We also sell Safty Switch as a single item. (with Operation Key)

Name	Item No.
Safty Door Switch (R)	SFA-43A
Safty Door Switch (T)	SFA-43B

Spec

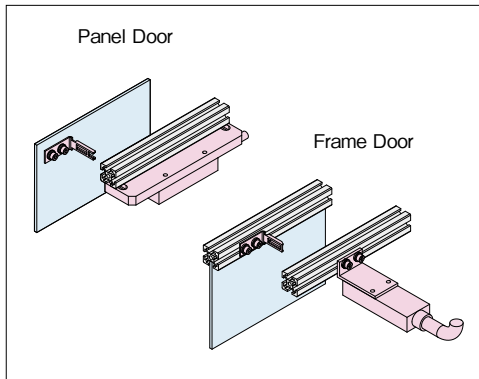
OMRON Model [D4GS-N2R] Safty Door Switch (R)
 [D4GS-N2T] Safty Door Switch (T)
 [D4GS-NK2] Operation key

Environment **RoHS** Compliant

Operation Characteristics

Inserting Power of Operation Key MAX	15N
Pulling-Out Power of Operation Key MAX	30N
Whole movement	(22mm)
Forced separation power MIN	60N
Forced separation stroke MIN	10mm

Example of use



Safety Standard

EN (TÜV) Standard to comply with CE Marking. NC contact is Positive Break authorized. Authorized by various overseas standard UL, CSA, etc.

Operation Characteristics

Contact Point	Contact Symbol	Operation Characteristics	
		(Completion of inserting Operation Key)	(Completion of pulling out Operation Key)
2NC			
		11-12	31-32
		Stroke →	
		■ Contact Point ON (Close)	□ Contact Point OFF (Open)

Kit Contents

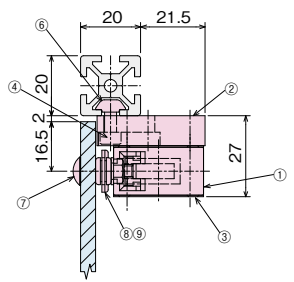
※Please refer the next page regarding part's shape detail and installing position.

		Kit Component																	
		Install at Rim-side					Install at door side												
		①	②	Dimension of Part Drawing				③	④	⑤	⑥	⑦	⑧	⑨					
		A	B	C	D	E	F												
Resin panel Door	Safty Switch Kit SS-PC	Safty Door Switch (R) (with Operation Key) x1	SDP Plate x1					Hexagon Socket Bolt (M4x20) Stainless x2	Hexagon Socket Bolt (M4x10) Stainless x2			ST Nut SS (M4) x2							
	Safty Switch Kit S-PC			Hexagon Socket Bolt (M4x12) Stainless x2			ST Nut S (M4) x2		Truss Screw (M4x15) Stainless x2	Hexagon Nut (M4) Stainless Kind 1 x2									
	Safty Switch Kit L-PC			Hexagon Socket Bolt (M4x15) Stainless x2			ST Nut L (M4) x2												
Frame Door	Safty Switch Kit SS-SSC	Safty Door Switch (T) (with Operation Key) x1	Safty Switch Bracket SS-SS x1	50	42.2	18.5	14	0	3	Hexagon Socket Bolt (M4x18) Stainless x2	Hexagon Socket Bolt (M4x8) Stainless x2	Flat Washer M4 Stainless x2	ST Nut SS (M4) x2	Hexagon Socket Bolt (M4x10) Stainless x2	Flat Washer M4 Stainless x2	ST Nut SS (M4) x2			
	Safty Switch Kit S-SSC		Safty Switch Bracket S-SS x1	50	32.2	27	17	5	3		Hexagon Socket Bolt (M5x12) Stainless x2		ST Nut S (M5) x2						
	Safty Switch Kit L40-SSC		Safty Switch Bracket L40-SS x1	40	22.2	36	21.5		5		5	Hexagon Socket Bolt (M5x15) Stainless x2			ST Nut L (M5) x2				
	Safty Switch Kit L45-SSC		Safty Switch Bracket L45-SS x1	40	17.2	40	24		5		5	Hexagon Socket Bolt (M5x12) Stainless x2	Flat Washer M5 Stainless x2		ST Nut S (M5) x2				
	Safty Switch Kit S-SC		Safty Switch Bracket S-S x1	50	43	32	22.5	3	3			Hexagon Socket Bolt (M5x12) Stainless x2			ST Nut S (M5) x2				
	Safty Switch Kit L40-SC		Safty Switch Bracket L40-S x1	40	33		26.5	5	5			Hexagon Socket Bolt (M5x15) Stainless x2			ST Nut L (M5) x2		Hexagon Socket Bolt (M4x12) Stainless x2	Key Spacer x1	ST Nut S (M4) x2
	Safty Switch Kit L45-SC		Safty Switch Bracket L45-S x1	40	28	40	30	3	3										

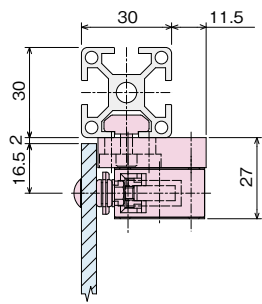


Safety Switch Kit C Installation Drawing

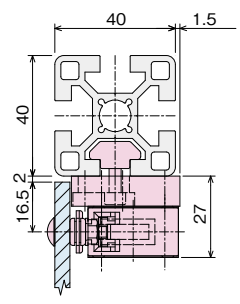
(Resin Panel Door t=5)



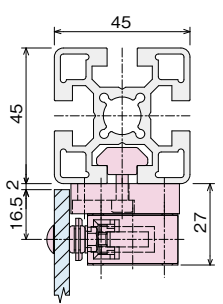
Safty Switch Kit SS-PC



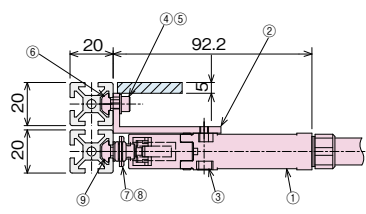
Safty Switch Kit S-PC



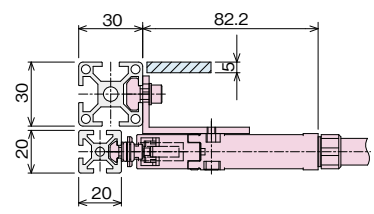
Safty Switch Kit L-PC



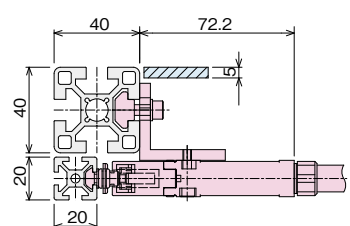
(□20 Series Frame Door)



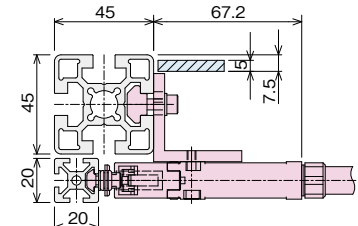
Safty Switch Kit SS-SSC



Safty Switch Kit S-SSC

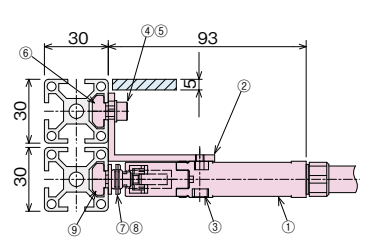


Safty Switch Kit L40-SSC

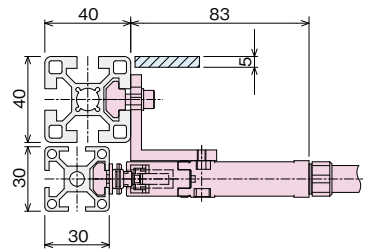


Safty Switch Kit L45-SSC

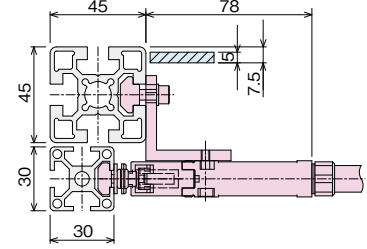
(□30 Series Frame Door)



Safty Switch Kit S-SC



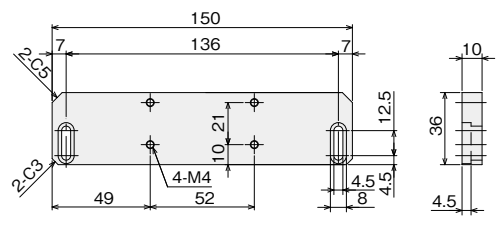
Safty Switch Kit L40-SC



Safty Switch Kit L45-SC

Part Drawing

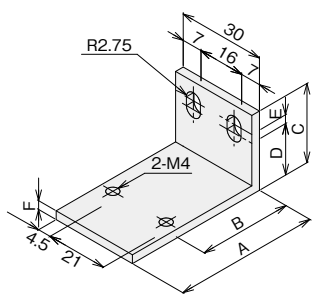
②SDP Plate
(Use for Resin Panel t5 Door)



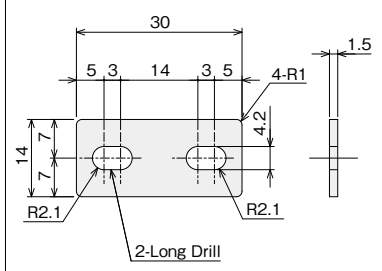
Name	SDP Plate
Item No.	SFA-470

- Material Aluminium Alloy
Alumite Treatment
- Weight 1.38g
- Environment RoHS Compliant
Green Procurement

②Safty Switch Bracket
(Use for Frame Door)



⑧Key Spacer
(Use for SF-30·30 Frame Door)

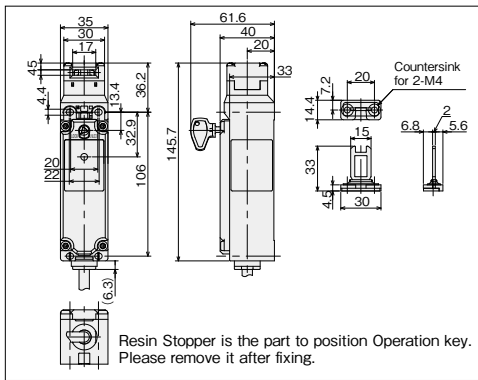


Solenoid Switch Kit

* Small Solenoid Switch with built-in 4 Contact Points.



Safety Switch Dimensional Outline Drawing



Kit selection

Combination of Rim and Door		Name	Item No.
Frame at Rim-side	Door Side		
□20 Series	□20 Series Frame Door	Solenoid Switch Kit SS-SS	SFK-HF4A
□30 Series		Solenoid Switch Kit S-SS	SFK-HF4B
□40·45 Series		Solenoid Switch Kit L-SS	SFK-HF4C
□30 Series	□30 Series Frame Door	Solenoid Switch Kit S-S	SFK-HF4D
□40·45 Series		Solenoid Switch Kit L-S	SFK-HF4E

■ We also sell Safty Switch as a single item.

Name	Item No.
HS5E Solenoid Safty Switch(with Operation Key)	SFK-HS5E

Spec

IEEC Model[HS5E-D4401-G]Solenoid Safty Switch
[HS9Z-A52]Operation Key
Environment **RoHS** Correspondence

Operation Characteristics

Direct Circuit Operation Power*	80N and up
Direct Circuit Operation Stroke*	12mm and up

* Power and stroke to separate, assuming the case which contact-point deposits with the power of 10N per 1 contact point when it's not locked.

Safety Standard

ISO14119
IEC60947-5-1
EN60947-5-1 (TÜV Approval)
EN1088
GS-ET-19 (BG Approval)
UL508 (UL Recognition Approval)
CSA C22.2 No.14 (c-UL Recognition Approval)

Types of Contact Point

■:Contact point ON(Close)
□:Contact point OFF (Open)

Condition of Safety Switch	Condition 1	Condition 2	Condition 3	Condition 4	When unlocked by manual lock release key
	<ul style="list-style-type: none"> •Door is closed. •Machine is operatable. •Solenoid is no excitation. 	<ul style="list-style-type: none"> •Door is closed. •Machine is inoperatable. •Solenoid is excitation. 	<ul style="list-style-type: none"> •Door is open. •Machine is inoperatable. •Solenoid is excitation. 	<ul style="list-style-type: none"> •Door is open. •Machine is inoperatable. •Solenoid is no excitation. 	
Picture of Door Condition					
Circuit Drawing					
Door	•Close (LOCKED)	•Close (UNLOCKED)	•Open	•Open	•Close
 HS5E-D4 Main circuit: 11-12, 41-42 Monitor circuit: 21-22, 51-52	2NC	Main circuit Between 11 and 42			
	1NC	Monitor circuit (Door is close) Between 21 and 22			
	1NC	Monitor circuit (Lock) Between 51 and 52			
Solenoid Power Source Between A1 and A2 (Common for all systems)	•OFF (non-excitation)	•ON (excitation)	•ON (excitation)	•OFF (non-excitation)	•OFF (non-excitation)

- Main circuit: It sends out protective door's interlock signal, connecting to control circuit etc of machine's driving part.
- Monitor circuit: It sends out signal which monitors opening and closing protective door, or excitation/non-excitation of Solenoid.



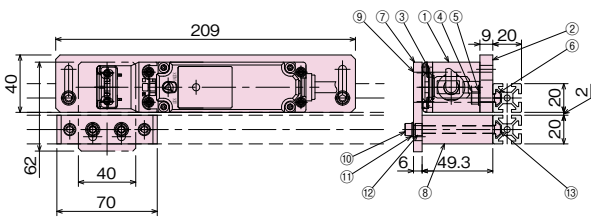
Parts
How to order
Item No. Quantity (pcs)
SFK-HF4A □ □

Kit Contents

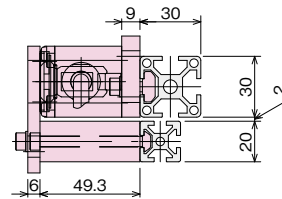
	Kit Component												
	Rim-Side Installment						Door-Side Installment						
	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬
Solenoid Switch Kit SS-SS	HS5E Solenoid Safty Switch (with Operation Key) ×1	Solenoid Switch Plate ×1	Hexagon Socket Bolt (M4×40) Stainless×4	Hexagon Socket Bolt (M5×15) Stainless×2	Flat Washer M5 Stainless×2	ST Nut SS (M5)×2	Key Plate ×1	Key Block ×1	Flat-Head Screw (M4×10) Stainless×2	Hexagon Socket Bolt (M5×20) Stainless×2	Flat Washer M5 Stainless×2	Hexagon Socket Bolt (M5×55) Stainless×2	ST Nut SS (M5)×2
Solenoid Switch Kit S-SS				Hexagon Socket Bolt (M5×18) Stainless×2		ST Nut S (M5)×2							
Solenoid Switch Kit L-SS				Hexagon Socket Bolt (M5×20) Stainless×2		ST Nut L (M5)×2							
Solenoid Switch Kit S-S				Hexagon Socket Bolt (M5×18) Stainless×2		ST Nut S (M5)×2							
Solenoid Switch Kit L-S				Hexagon Socket Bolt (M5×20) Stainless×2		ST Nut L (M5)×2							

Solenoid Switch Kit Installing Drawing

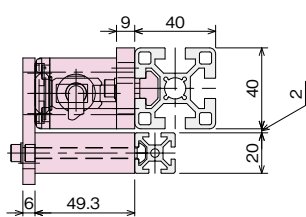
(□20 Series Frame Door)



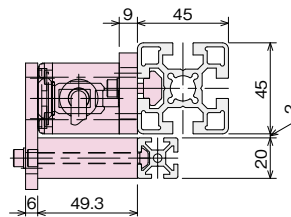
Solenoid Switch Kit SS-SS



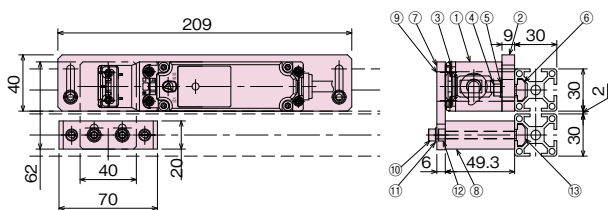
Solenoid Switch Kit S-SS



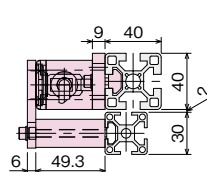
Solenoid Switch Kit L-SS



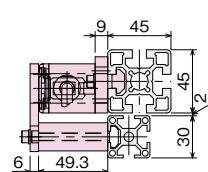
(□30 Series Frame Door)



Solenoid Switch Kit S-S

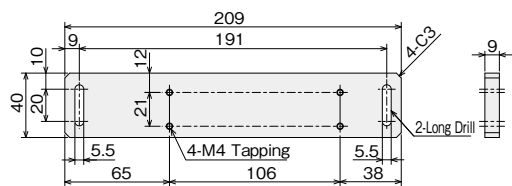


Solenoid Switch Kit L-S



Part Drawing

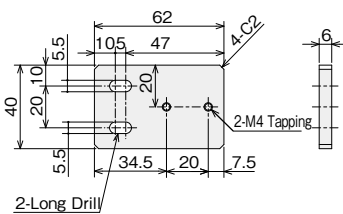
② Solenoid Switch Plate



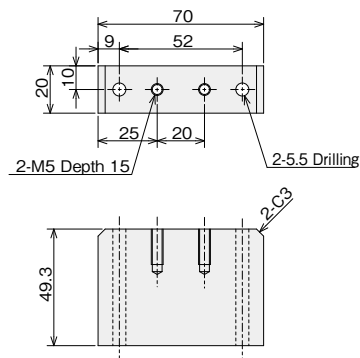
Name	Solenoid Switch Plate
Item No.	SFA-4HF4

- Material Aluminium Alloy Alumite Treatment
- Weight 195g
- Environment RoHS Compliant Green Procurement

⑦ Key Plate



⑧ Key Block



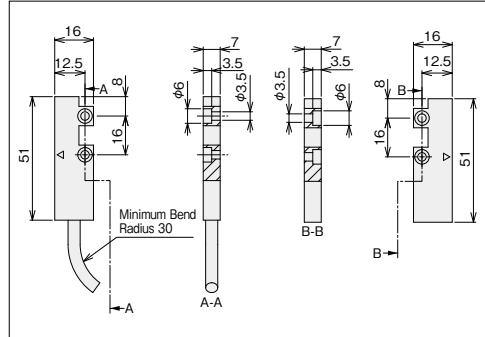
Door·Panel Parts Safty Door Switch Kit

Noncontact Safety Switch Kit

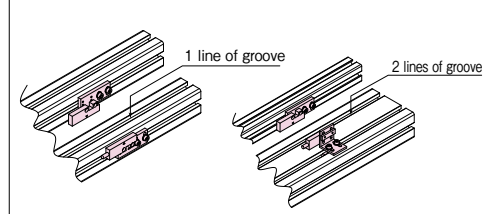
It hardly gets dust and is easy to align.
It resounds to safety category 4 (EN954-1) by the combination with exclusive relay module.



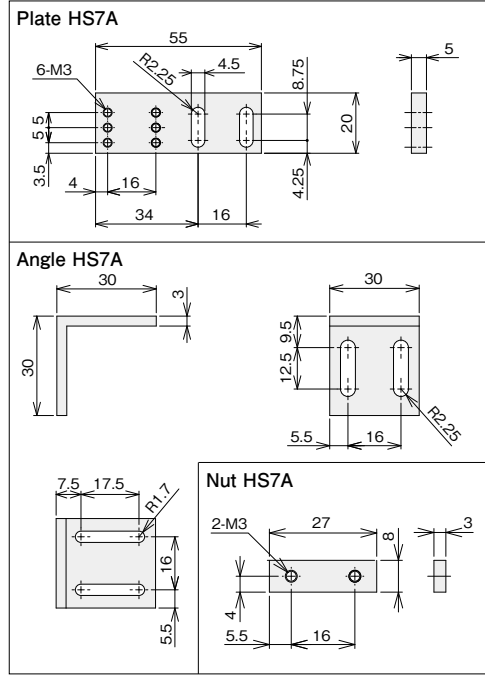
■ Safty Switch Dimensional Outline Drawing



■ Example of use



■ Drawing of Installing Parts



■ Kit Contents

Frame at Door Side	Frame at Rim-side		Name	Item No.
	Frame Series	Line of groove		
□20 Series	□20 Series	1	HS7A2020 Kit	SFK-HS7A
	□30 Series	1	HS7A2030 Kit	SFK-HS7B
		2	HS7A2060 Kit	SFK-HS7C
	□40 Series	1	HS7A2040 Kit	SFK-HS7D
		2		
□45 Series	1	HS7A2045 Kit	SFK-HS7E	
	2			
□30 Series	□30 Series	1	HS7A3030 Kit	SFK-HS7F
		2	HS7A3060 Kit	SFK-HS7G
	□40 Series	1	HS7A3040 Kit	SFK-HS7H
		2		
	□40 Series	2	HS7A3080 Kit	SFK-HS7J
□40 Series	□40 Series	1	HS7A4040 Kit	SFK-HS7K
□45 Series	□45 Series	1		
□40 Series	□45 Series	1	HS7A4045 Kit	SFK-HS7L

■ We also sell Noncontact Safety Switch as a single item.

Name	Item No.
Noncontact Safety Switch	SFA-HS7A

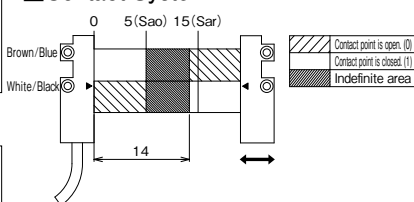
■ Spec

IEC Model [HS7A-DMC5912]

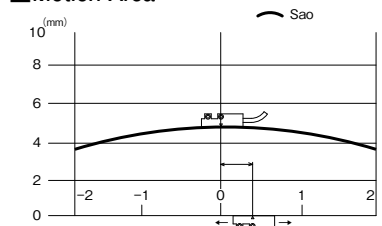
■ Safty Standard

IEC60947-5-1/EN60947-5-1
IEC60947-5-2/EN60947-5-2
IEC60947-5-3/EN60947-5-3
UL508 (UL Listing Approval) / CSA C22.2 No.14

■ Contact System



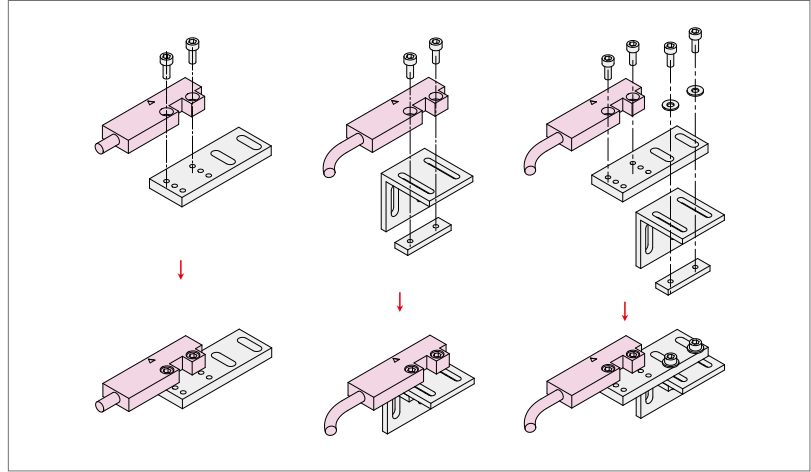
■ Motion Area



Sao: Minimum movable distance when safety output is ON.
Sar: Maximum movable distance when safety output is OFF.
Note) If actuator's time to move between Sar from Sao goes over 500ms, conflict will be detected and get error.

● Installing position can be decided depending on the purpose by various kinds of parts' combinations.

Example of Combination



Parts
How to order
Item No. Quantity (pcs)
SFK-HS7A □□

Noncontact Safty Switch Kit Installation Drawing

SF20
SS Size

SF30
S Size

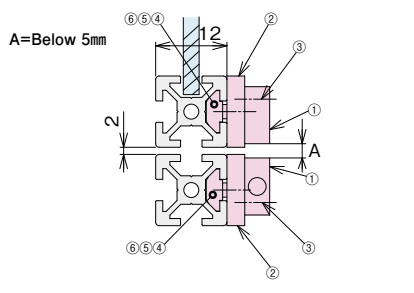
SF40
L Size

Complex Parts

Door Panel
Clean Equipment

Technical Data

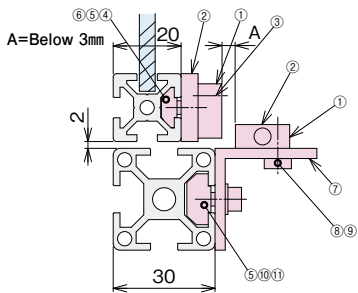
(□20 Series Frame Door)



HS7A2020 Kit

Item No.	Contents-Component	Qty.
①	HS7A	1
②	Plate HS7A	2
③	Hexagon Socket Bolt M3x8 (Stainless)	4
④	Hexagon Socket Bolt M4x10 (Stainless)	4
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut SS (M4)	4

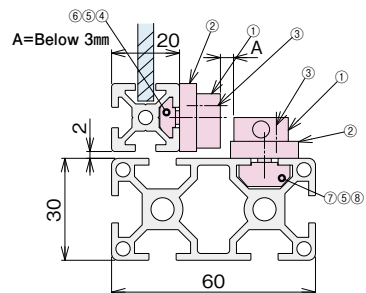
SFK-HS7A



HS7A2030 Kit

Item No.	Contents-Component	Qty.
①	HS7A	1
②	Plate HS7A	1
③	Hexagon Socket Bolt M3x8 (Stainless)	2
④	Hexagon Socket Bolt M4x10 (Stainless)	2
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut SS (M4)	2
⑦	Angle HS7A	1
⑧	Hexagon Socket Bolt M3x12 (Stainless)	2
⑨	Nut HS7A	1
⑩	Hexagon Socket Bolt M4x12 (Stainless)	2
⑪	ST Nut S (M4)	2

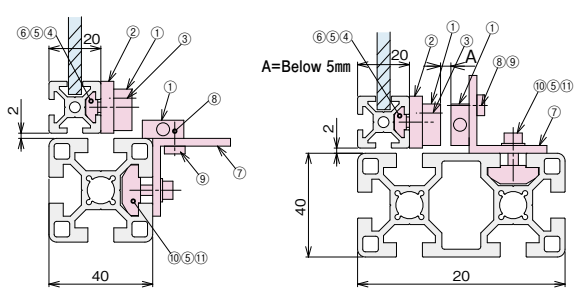
SFK-HS7B



HS7A2060 Kit

Item No.	Contents-Component	Qty.
①	HS7A	1
②	Plate HS7A	2
③	Hexagon Socket Bolt M3x8 (Stainless)	4
④	Hexagon Socket Bolt M4x10 (Stainless)	2
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut SS (M4)	2
⑦	Hexagon Socket Bolt M4x12 (Stainless)	2
⑧	ST Nut S (M4)	2

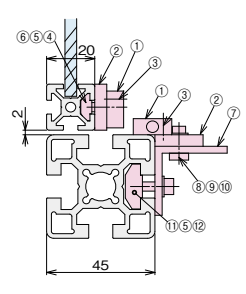
SFK-HS7C



HS7A2040 Kit
HS7A3040 Kit

Item No.	Contents-Component	Qty.
①	HS7A	1
②	Plate HS7A	1
③	Hexagon Socket Bolt M3x8 (Stainless)	2
④	Hexagon Socket Bolt M4x10 (Stainless)	2
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut SS (M4)	2
⑦	Angle HS7A	1
⑧	Hexagon Socket Bolt M3x12 (Stainless)	2
⑨	Nut HS7A	1
⑩	Hexagon Socket Bolt M4x15 (Stainless)	2
⑪	ST Nut L (M4)	2

SFK-HS7D

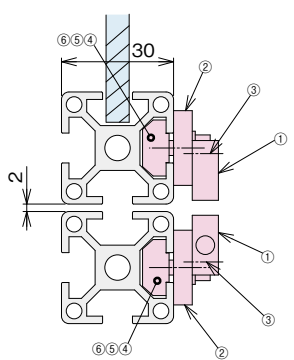


HS7A2045 Kit

Item No.	Contents-Component	Qty.
①	HS7A	1
②	Plate HS7A	2
③	Hexagon Socket Bolt M3x8 (Stainless)	4
④	Hexagon Socket Bolt M4x10 (Stainless)	2
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut SS (M4)	2
⑦	Angle HS7A	1
⑧	Hexagon Socket Bolt M3x15 (Stainless)	2
⑨	Flat Washer M3 (Stainless)	2
⑩	Nut HS7A	1
⑪	Hexagon Socket Bolt M4x15 (Stainless)	2
⑫	ST Nut L (M4)	2

SFK-HS7E

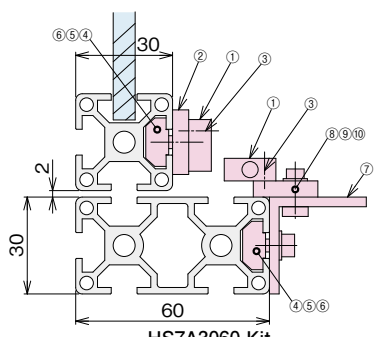
(□30 Series Frame Door ①)



HS7A3030 Kit

Item No.	Contents-Component	Qty.
①	HS7A	1
②	Plate HS7A	2
③	Hexagon Socket Bolt M3x8 (Stainless)	4
④	Hexagon Socket Bolt M4x12 (Stainless)	4
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut S (M4)	4

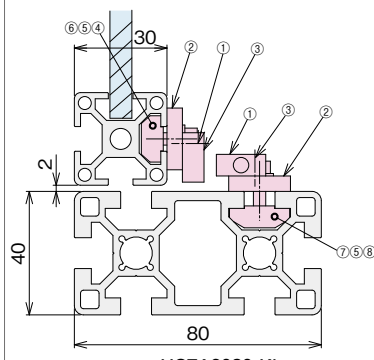
SFK-HS7F



HS7A3060 Kit

Item No.	Contents-Component	Qty.
①	HS7A	1
②	Plate HS7A	2
③	Hexagon Socket Bolt M3x8 (Stainless)	4
④	Hexagon Socket Bolt M4x12 (Stainless)	4
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut S (M4)	4
⑦	Angle HS7A	1
⑧	Hexagon Socket Bolt M3x15 (Stainless)	2
⑨	Flat Washer M3 (Stainless)	2
⑩	Nut HS7A	1

SFK-HS7G



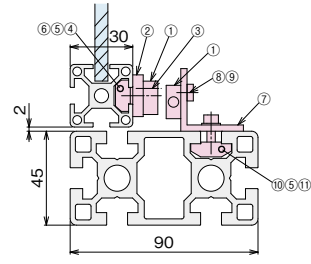
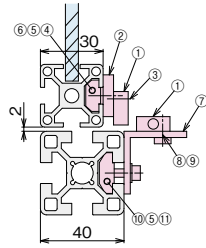
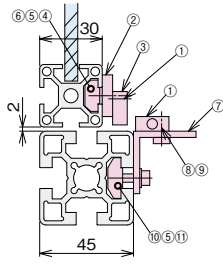
HS7A3080 Kit

Item No.	Contents-Component	Qty.
①	HS7A	1
②	Plate HS7A	2
③	Hexagon Socket Bolt M3x8 (Stainless)	4
④	Hexagon Socket Bolt M4x12 (Stainless)	2
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut S (M4)	2
⑦	Hexagon Socket Bolt M4x18 (Stainless)	2
⑧	ST Nut L (M4)	2

SFK-HS7J

Door·Panel Parts Noncontact Switch Kit

<□30 Series Frame Door>

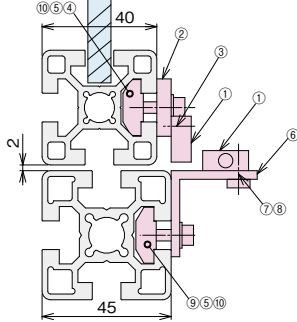


HS7A3040 Kit

Item No.	Contents·Component	Qty.
①	HS7A	1
②	Plate HS7A	1
③	Hexagon Socket Bolt M3×8 (Stainless)	2
④	Hexagon Socket Bolt M4×12 (Stainless)	2
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut S (M4)	2
⑦	Angle HS7A	1
⑧	Hexagon Socket Bolt M3×12 (Stainless)	2
⑨	Nut HS7A	1
⑩	Hexagon Socket Bolt M4×15 (Stainless)	2
⑪	ST Nut L (M4)	2

SFK-HS7H

<□40 Series Frame Door>

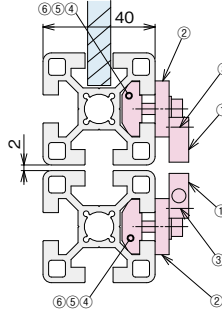


HS7A4045 Kit

Item No.	Contents·Component	Qty.
①	HS7A	1
②	Plate HS7A	1
③	Hexagon Socket Bolt M3×8 (Stainless)	2
④	Hexagon Socket Bolt M4×18 (Stainless)	2
⑤	Flat Washer M4 (Stainless)	4
⑥	Angle HS7A	1
⑦	Hexagon Socket Bolt M3×12 (Stainless)	2
⑧	Nut HS7A	1
⑨	Hexagon Socket Bolt M4×15 (Stainless)	2
⑩	ST Nut L (M4)	4

SFK-HS7L

<□40·□45 Series Frame Door>



HS7A4040 Kit

Item No.	Contents·Component	Qty.
①	HS7A	1
②	Plate HS7A	2
③	Hexagon Socket Bolt M3×8 (Stainless)	4
④	Hexagon Socket Bolt M4×18 (Stainless)	4
⑤	Flat Washer M4 (Stainless)	4
⑥	ST Nut L (M4)	4

SFK-HS7K



Parts

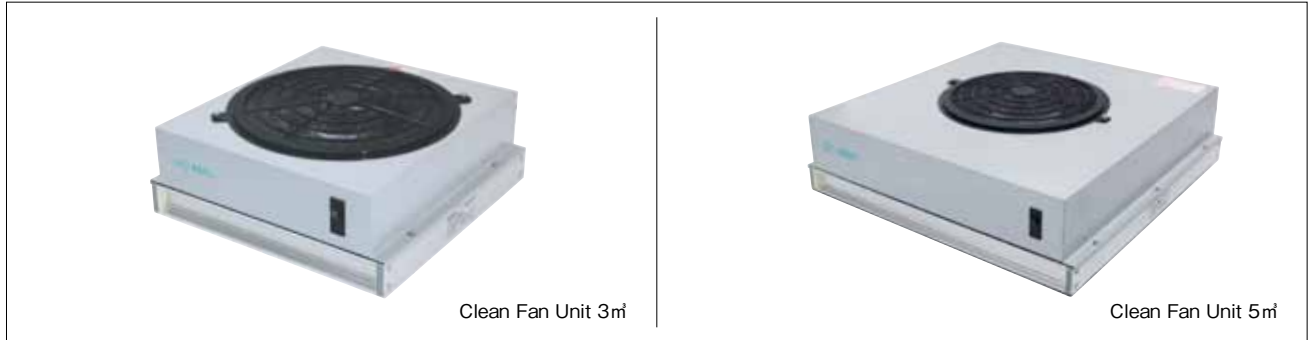
How to order

Item No. Quantity (pcs)

SFK-HS7H



Clean Fan Unit



Spec

Name	Clean Fan Unit 3m³ (HEPA:100V)	Clean Fan Unit 3m³ (ULPA:100V)	Clean Fan Unit 5m³ (HEPA:100V)	Clean Fan Unit 5m³ (HEPA:200V)	Clean Fan Unit 5m³ (ULPA:100V)	Clean Fan Unit 5m³ (ULPA:200V)
Item No.	SFA-H031	SFA-U031	SFA-H051	SFA-H052	SFA-U051	SFA-U052
Dust Collection Efficiency (By dust in the air)	More than 99.99% (Particle more than 0.3µm)		More than 99.99% (Particle more than 0.3µm)		More than 99.99% (Particle more than 0.1~0.2µm)	
Main Filter	Low pressure loss HEPA Filter		Low pressure loss HEPA Filter		Low pressure loss ULPA Filter	
Main Filter Item No.	SFA-HF03		SFA-HF05		SFA-UF05	
Air Volume (m³/min)	3.0(3.5)		5.0(5.0)		4.0(4.0)	
Blowout Speed (m/sec)	0.38 (0.44)		0.39 (0.39)		0.31 (0.31)	
Noise (dBA)	53(54)		55(56)		53(56)	
Consumed Electricity (W)	28(36)		43(46)		50(52)	
Power	AC100V1φ50/60Hz		AC100V1φ50/60Hz		AC200V1φ50/60Hz	
Dimension (mm)	W400×D400×H165		W500×D500×H185		W500×D500×H200	
Weight (kg)	6.5		11.5		53(56)	
Standard Equipment	Power code with ground plug 5m		Power code with ground plug 5m		Terminal Box Connection	
	Saran net · with Pre-Filter					
	Attachment:Packing for installing to air outlet , Installing Screw					

Name	Clean Fan Unit 10m³ (HEPA:100V)	Clean Fan Unit 10m³ (HEPA:200V)	Clean Fan Unit 10m³ (ULPA:100V)	Clean Fan Unit 10m³ (ULPA:200V)	Clean Fan Unit 15m³ (HEPA:100V)	Clean Fan Unit 15m³ (HEPA:200V)	Clean Fan Unit 15m³ (ULPA:100V)	Clean Fan Unit 15m³ (ULPA:200V)
ItemNo.	SFA-H101	SFA-H102	SFA-U101	SFA-U102	SFA-H151	SFA-H152	SFA-U151	SFA-U152
Dust Collection Efficiency (By dust in the air)	More than 99.99% (Particle more than 0.3µm)		More than 99.99% (Particle more than 0.1~0.2µm)		More than 99.99% (Particle more than 0.3µm)		More than 99.99% (Particle more than 0.1~0.2µm)	
Main Filter	Low pressure loss HEPA Filter		Low pressure loss ULPA Filter		Low pressure loss HEPA Filter		Low pressure loss ULPA Filter	
Main Filter Item No.	SFA-HF10		SFA-UF10		SFA-HF15		SFA-UF15	
Air Volume (m³/min)	10.0(10.0)		7.0(7.0)		15.0(15.0)		13.0(13.0)	
Blowout Speed (m/sec)	0.51 (51.0)		0.35(0.35)		0.37(0.37)		0.32(0.32)	
Noise (dBA)	98(114)		103(117)		141(157)		140(156)	
Consumed Electricity (W)	100(118)		141(158)		141(158)		141(158)	
Power	AC100V1φ50/60Hz	AC200V1φ50/60Hz	AC100V1φ50/60Hz	AC200V1φ50/60Hz	AC100V1φ50/60Hz	AC200V1φ50/60Hz	AC100V1φ50/60Hz	AC200V1φ50/60Hz
Dimension (mm)	W610×D610×H185	W610×D610×H200	W610×D610×H185	W610×D610×H200	W610×D1220×H200	W610×D1220×H215	W610×D1220×H200	W610×D1220×H215
Weight (kg)	14.5		22.0		56(57)		22.0	
Standard Equipment	Power code with ground plug 5m	Terminal Box Connection	Power code with ground plug 5m	Terminal Box Connection	Power code with ground plug 5m	Terminal Box Connection	Power code with ground plug 5m	Terminal Box Connection
	With Saran Net and Pre-Filter							
	Accessory:Packing for installing to air outlet , Installing Screw							

● Number in () is for 60Hz spec. Noise is measured at 1m from air outlet in anechoic room. ● The size of 200V spec's H includes terminal box.

Characteristics

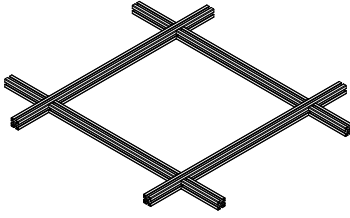
	<ul style="list-style-type: none"> ● Metallic Silver Body Simple appearance with the similar color with stainless frame. 		<ul style="list-style-type: none"> ● Easy Installation With the hole or nut (M4) on the blower and exclusive plate enabled easy installation.
	<ul style="list-style-type: none"> ● LED Operation Indicator Operation condition can be confirmed easily. 		<ul style="list-style-type: none"> ● 200V Specification Single Phase 200V is lined up. (Only 100V spec for Green Fan Unit 3m³)
	<ul style="list-style-type: none"> ● Overcurrent Protection Circuit-protector built-in switch on the body protects air blower from burnout by insulating overcurrent. 		<ul style="list-style-type: none"> ● Long Life With the pre-filter to collect the dust, the main filter extends the life time and the blower is protected.



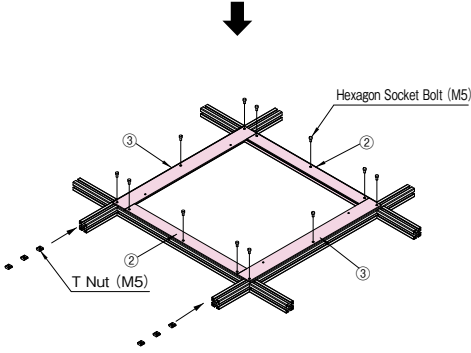
Type	Dimensional Outline Drawing ● Terminal Box is provided with 200V Spec.(Height+15)	Wiring Drawing																				
Clean Fan Unit 3m ²	<p style="text-align: center;">Dimension of installing part</p>	<p style="text-align: center;">AC100V, 1φ, 50/60Hz</p> <table border="1"> <thead> <tr> <th>Symbol</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>SW</td> <td>Switch with Circuit Protector (1A)</td> </tr> <tr> <td>FM</td> <td>Fan Motor</td> </tr> <tr> <td>C</td> <td>Condensor</td> </tr> <tr> <td>DC</td> <td>DC Power Source Board (HD4077613)</td> </tr> <tr> <td>LED</td> <td>High-Intensity LED (red)</td> </tr> <tr> <td>CN1</td> <td>Connector for Fan</td> </tr> <tr> <td>CN2</td> <td>Connector for Display Lamp</td> </tr> <tr> <td>CN3, 4</td> <td>Connector for Bimetal Thermometer</td> </tr> <tr> <td>BS</td> <td>Bimetal Thermometer (90°C)</td> </tr> </tbody> </table>	Symbol	Name	SW	Switch with Circuit Protector (1A)	FM	Fan Motor	C	Condensor	DC	DC Power Source Board (HD4077613)	LED	High-Intensity LED (red)	CN1	Connector for Fan	CN2	Connector for Display Lamp	CN3, 4	Connector for Bimetal Thermometer	BS	Bimetal Thermometer (90°C)
Symbol	Name																					
SW	Switch with Circuit Protector (1A)																					
FM	Fan Motor																					
C	Condensor																					
DC	DC Power Source Board (HD4077613)																					
LED	High-Intensity LED (red)																					
CN1	Connector for Fan																					
CN2	Connector for Display Lamp																					
CN3, 4	Connector for Bimetal Thermometer																					
BS	Bimetal Thermometer (90°C)																					
Clean Fan Unit 5m ²	<p style="text-align: center;">Dimension of installing part</p>	<p style="text-align: center;">AC100V, 1φ, 50/60Hz Inside parenthesis and dashed line is 200V spec.</p> <table border="1"> <thead> <tr> <th>Symbol</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>SW</td> <td>Switch with Circuit Protector (100V:2A) (200V:1A)</td> </tr> <tr> <td>FM</td> <td>Fan Motor</td> </tr> <tr> <td>C</td> <td>Condensor</td> </tr> <tr> <td>DC</td> <td>DC Power Source Board (HD4077613)</td> </tr> <tr> <td>LED</td> <td>High-Intensity LED (red)</td> </tr> <tr> <td>CN1</td> <td>Connector for Fan</td> </tr> <tr> <td>CN2</td> <td>Connector for Display Lamp</td> </tr> <tr> <td>CN3</td> <td>Connector for Earthing</td> </tr> </tbody> </table>	Symbol	Name	SW	Switch with Circuit Protector (100V:2A) (200V:1A)	FM	Fan Motor	C	Condensor	DC	DC Power Source Board (HD4077613)	LED	High-Intensity LED (red)	CN1	Connector for Fan	CN2	Connector for Display Lamp	CN3	Connector for Earthing		
Symbol	Name																					
SW	Switch with Circuit Protector (100V:2A) (200V:1A)																					
FM	Fan Motor																					
C	Condensor																					
DC	DC Power Source Board (HD4077613)																					
LED	High-Intensity LED (red)																					
CN1	Connector for Fan																					
CN2	Connector for Display Lamp																					
CN3	Connector for Earthing																					
Clean Fan Unit 10m ²	<p style="text-align: center;">Dimension of installing part</p>	<p style="text-align: center;">AC100V, 1φ, 50/60Hz Inside parenthesis and dashed line is 200V spec.</p> <table border="1"> <thead> <tr> <th>Symbol</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>SW</td> <td>Switch with Circuit Protector (100V:3A) (200V:2A)</td> </tr> <tr> <td>FM</td> <td>Fan Motor</td> </tr> <tr> <td>C</td> <td>Condensor</td> </tr> <tr> <td>DC</td> <td>DC Power Source Board (HD4077613)</td> </tr> <tr> <td>LED</td> <td>High-Intensity LED (red)</td> </tr> <tr> <td>CN1</td> <td>Connector for Fan</td> </tr> <tr> <td>CN2</td> <td>Connector for Display Lamp</td> </tr> <tr> <td>CN3</td> <td>Connector for Earthing</td> </tr> </tbody> </table>	Symbol	Name	SW	Switch with Circuit Protector (100V:3A) (200V:2A)	FM	Fan Motor	C	Condensor	DC	DC Power Source Board (HD4077613)	LED	High-Intensity LED (red)	CN1	Connector for Fan	CN2	Connector for Display Lamp	CN3	Connector for Earthing		
Symbol	Name																					
SW	Switch with Circuit Protector (100V:3A) (200V:2A)																					
FM	Fan Motor																					
C	Condensor																					
DC	DC Power Source Board (HD4077613)																					
LED	High-Intensity LED (red)																					
CN1	Connector for Fan																					
CN2	Connector for Display Lamp																					
CN3	Connector for Earthing																					
Clean Fan Unit 15m ²	<p style="text-align: center;">Dimension of installing part</p>	<p style="text-align: center;">AC100V, 1φ, 50/60Hz Inside parenthesis and dashed line is 200V spec.</p> <table border="1"> <thead> <tr> <th>Symbol</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>SW</td> <td>Switch with Circuit Protector (100V:3A) (200V:2A)</td> </tr> <tr> <td>FM</td> <td>Fan Motor</td> </tr> <tr> <td>C</td> <td>Condensor</td> </tr> <tr> <td>DC</td> <td>DC Power Source Board (HD4077613)</td> </tr> <tr> <td>LED</td> <td>High-Intensity LED (red)</td> </tr> <tr> <td>CN1</td> <td>Connector for Fan</td> </tr> <tr> <td>CN2</td> <td>Connector for Display Lamp</td> </tr> <tr> <td>CN3</td> <td>Connector for Earthing</td> </tr> </tbody> </table>	Symbol	Name	SW	Switch with Circuit Protector (100V:3A) (200V:2A)	FM	Fan Motor	C	Condensor	DC	DC Power Source Board (HD4077613)	LED	High-Intensity LED (red)	CN1	Connector for Fan	CN2	Connector for Display Lamp	CN3	Connector for Earthing		
Symbol	Name																					
SW	Switch with Circuit Protector (100V:3A) (200V:2A)																					
FM	Fan Motor																					
C	Condensor																					
DC	DC Power Source Board (HD4077613)																					
LED	High-Intensity LED (red)																					
CN1	Connector for Fan																					
CN2	Connector for Display Lamp																					
CN3	Connector for Earthing																					

How to install to Aluminum Frame Fixed by four exclusive plates

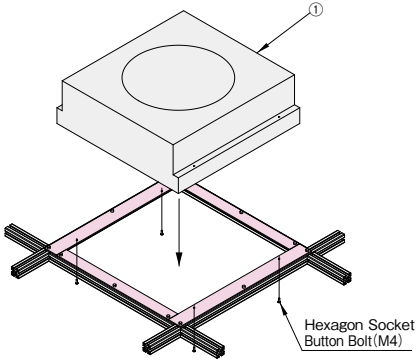
Attaching Procedure



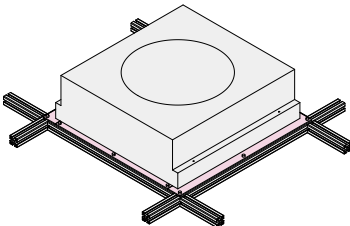
① **Preparation of the attaching part**
Please refer "Size indication of attaching part" and set up.



② **Fixing the exclusive attaching plate**
Please determine the parts referring the "Plate selection table".

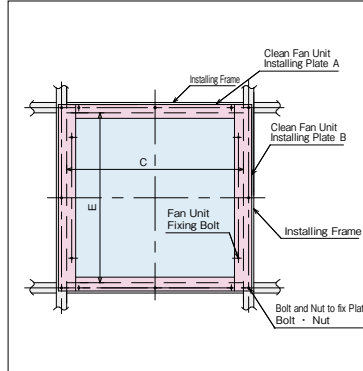


③ **Fixing the Clean Fan Unit**



④ **Completion**

Dimension Indication at Attaching Part



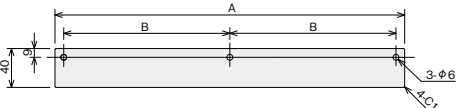
Clean Fan Type	Frame at Installing Part	Size of opening part (mm)	
		C	E
Clean Fan Unit 3m ²	SF30 Series	412	392
	SF40 Series	402	382
	SF45 Series	397	377
Clean Fan Unit 5m ²	SF30 Series	512	492
	SF40 Series	502	482
	SF45 Series	497	477
Clean Fan Unit 10m ²	SF30 Series	622	602
	SF40 Series	612	592
	SF45 Series	607	587
Clean Fan Unit 15m ²	SF30 Series	622	1,212
	SF40 Series	612	1,202
	SF45 Series	607	1,197

Table to select Plate

Clean Fan Type ①	Installing Parts	
	②	③
Clean Fan Unit 3m ²	Clean Fan Unit 3m ² Installing Plate A×2	Clean Fan Unit 3m ² Installing Plate B×2
Clean Fan Unit 5m ²	Clean Fan Unit 5m ² Installing Plate A×2	Clean Fan Unit 5m ² Installing Plate B×2
Clean Fan Unit 10m ²	Clean Fan Unit 10-15m ² Installing Plate A×2	Clean Fan Unit 10m ² Installing Plate B×2
Clean Fan Unit 15m ²		Clean Fan Unit 15m ² Installing Plate B×2

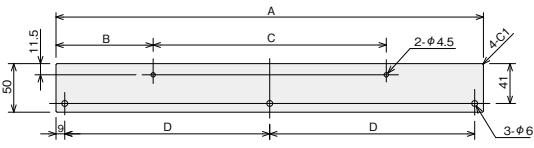
Dimensional Outline Drawing of Attaching Plate (mm)

Clean Fan Unit 3 · 5 · 10 · 15m² Installing Plate A Size · Thickness : Refer Table Below



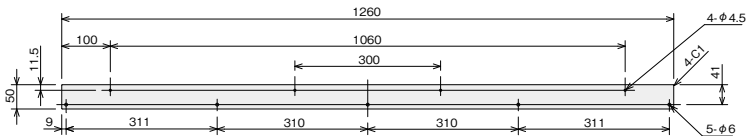
■ Material A6063

Clean Fan Unit 3 · 5 · 10m² Installing Plate B Size · Thickness : Table Below



■ Material A6063

Clean Fan Unit 15m² Installing Plate B Size · Thickness (mm) t=5



■ Material A6063

Size

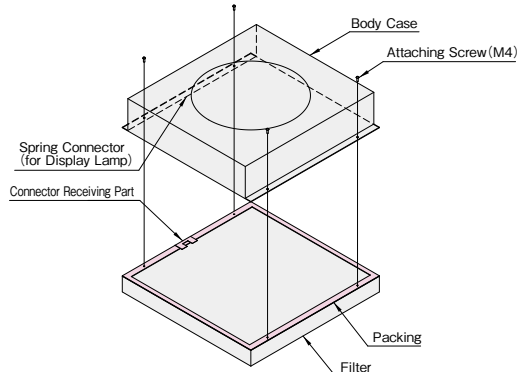
Name	Item No.	Drawing Dimension (mm)				Thickness (mm)	Weight (g)
		A	B	C	D		
Clean Fan Unit 3m ² Installing Plate A	SFA-H03A	360	171			3	115.5
Clean Fan Unit 5m ² Installing Plate A	SFA-H05A	460	221			3	147.8
Clean Fan Unit 10 · 15m ² Installing Plate A	SFA-H10A	570	276			5	305.5
Clean Fan Unit 3m ² Installing Plate B	SFA-H03B	440	100	240	211	3	176.6
Clean Fan Unit 5m ² Installing Plate B	SFA-H05B	540	95	350	261	3	216.9
Clean Fan Unit 10m ² Installing Plate B	SFA-H10B	650	100	450	316	5	435.5
Clean Fan Unit 15m ² Installing Plate B	SFA-H15B	Refer Drawing					844.6



Parts
How to order
Item No. Quantity (pcs)
SFA-H03A

Main Filter for exchange

Filter exchange drawing



- * Please exchange filters after taking the screw out by driver.
- * Please position the connector for indication light.

Table to select Main Filter for Exchange

Clean Fan Unit Body	Main Filter		
	Name	Item No.	Weight(kg)
Clean Fan Unit Body 3m ³ (HEPA:100V)	HEPA Filter for Exchange 3m ³	SFA-HF03	1.1
Clean Fan Unit Body 3m ³ (ULPA:100V)	ULPA Filter for Exchange 3m ³	SFA-UF03	
Clean Fan Unit Body 5m ³ (HEPA:100V)	HEPA Filter for Exchange 5m ³	SFA-HF05	1.5
Clean Fan Unit Body 5m ³ (HEPA:200V)			
Clean Fan Unit Body 5m ³ (ULPA:100V)	ULPA Filter for Exchange 5m ³	SFA-UF05	2.4
Clean Fan Unit Body 5m ³ (ULPA:200V)			
Clean Fan Unit Body 10m ³ (HEPA:100V)	HEPA Filter for Exchange 10m ³	SFA-HF10	6.0
Clean Fan Unit Body 10m ³ (HEPA:200V)			
Clean Fan Unit Body 10m ³ (ULPA:100V)	ULPA Filter for Exchange 10m ³	SFA-UF10	
Clean Fan Unit Body 10m ³ (ULPA:200V)			
Clean Fan Unit Body 15m ³ (HEPA:100V)	HEPA Filter for Exchange 15m ³	SFA-HF15	6.0
Clean Fan Unit Body 15m ³ (HEPA:200V)			
Clean Fan Unit Body 15m ³ (ULPA:100V)	ULPA Filter for Exchange 15m ³	SFA-UF15	
Clean Fan Unit Body 15m ³ (ULPA:200V)			

If dust accumulated to the Main Filter, air would hardly pass it, and wind speed and air volume decreases. Generally, the condition that they become 1/2 corresponds the life time. Indication of exchanging Main Filters is about 1 year inside general room, and about 5 years inside the room with ISO class 7 (Class 10,000), in case of continuous operation.

Please see P166 for the types of main filter by machine types.

Packing seal for exchange (With two-sided tape on one side only.)

If you want to increase the adhesion, please use two-sided tape on both sides.)

Main Filter	Name	Item No.	Weight(g)
Filter for Exchange 3m ³ (HEPA:ULPA common)	Packing seal for exchange 3m ³	SFA-HP03	17.0
Filter for Exchange 5m ³ (HEPA:ULPA common)	Packing seal for exchange 5m ³	SFA-HP05	22.5
Filter for Exchange 10m ³ (HEPA:ULPA common)	Packing seal for exchange 10m ³	SFA-HP10	25.0
Filter for Exchange 15m ³ (HEPA:ULPA common)	Packing seal for exchange 15m ³	SFA-HP15	41.0

Indication of Clean Space

What is the standard of cleanness?

Generally, cleanness inside booth is expressed like Class100 or Class1000, etc. The fewer the number, the better the cleanness level. Although we wish to get better cleanness level, we need to consider about cost and the balance with outside cleanness.

Standard of cleanness (clean room)

As the idiomatically used standards, there is FED standard (Federal standard FED-STD-209E) and it's defined by the amount of particle included in 1cf (cubic feet). It is the standard which expresses how much small dust which has the diameter of 0.5μm can exist in a space of 1cf. The cleanness level becomes higher if the number of particle is fewer.

Clean Room Class	Amount of Particle (More than 0.5μm)
100,000	100,000
10,000	10,000
1,000	1,000
100	100

Approximate value of ventilation frequency

The following table shows the approximate value of ventilation frequency by classes. It is the standard that indicates how many times ventilation must be done per 1 hour. The cleanness level becomes higher if the ventilation frequency increases.

Clean Room class	General Numeric Value
100,000	20~30 times/h
10,000	30~70 times/h
1,000	100~200 times/h
100	200~600 times/h

Formula for ventilation frequency in clean booth can be indicated as follows.

$$\text{Number of ventilation per 1 hour (times/h)} = \frac{\text{Air volume (m}^3/\text{min)} \times 60\text{min}}{\text{Space capacity (m}^3)}$$

$$\text{Or } \frac{\text{Average speed of airflow (m/sec)} \times \text{Ventilating area (m}^2) \times 3600\text{cc}}{\text{Space capacity (m}^3)}$$

* Please take this just as indications because it differs according to conditions of Surrounding cleanliness and Ventilating wind speed.

Example of Use

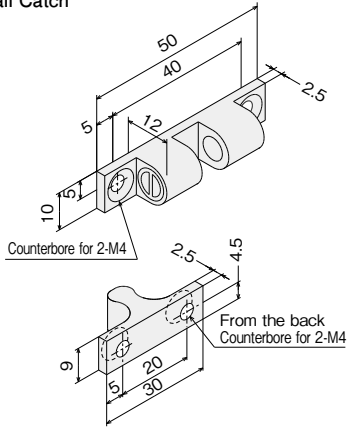


Door Panel Parts Ball Catch

Ball Catch Exclusive Bracket



Ball Catch

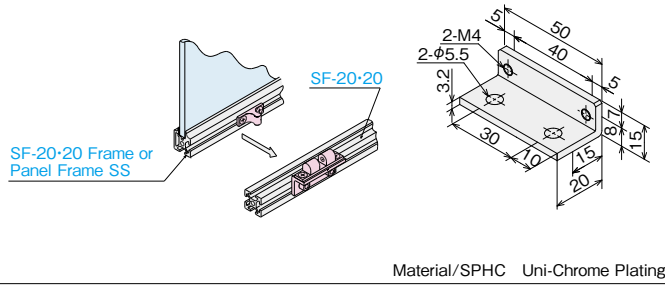


Material/Technical Data

Material Zinc Alloy (ZDC) (Ball Catch)
 Chrome Plating Treatment
 Weight 24g (Ball Catch)
 Pulling Load (Reference Value): 18.6N
 Inserting Load (Reference Value): 27.5N

Name (Single Item)	Ball Catch
Item No.	SFA-41A

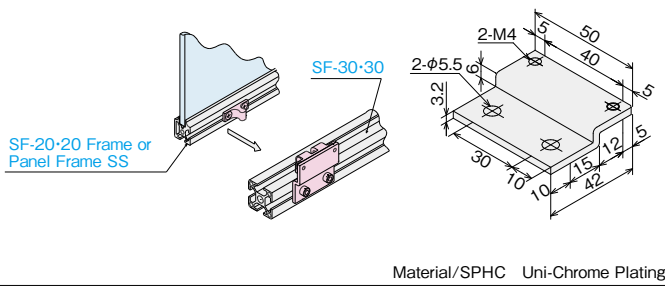
BW Bracket SS Kit



Kit Contents

- Ball Catch×1
- BW Bracket SS×1
- Flat-Head Screw (M4×6)×2
- Flat-Head Screw (M4×8)×2
- T Nut SS M4×2
- T Nut SS M5×2
- Hexagon Socket Bolt (M5×8)×2

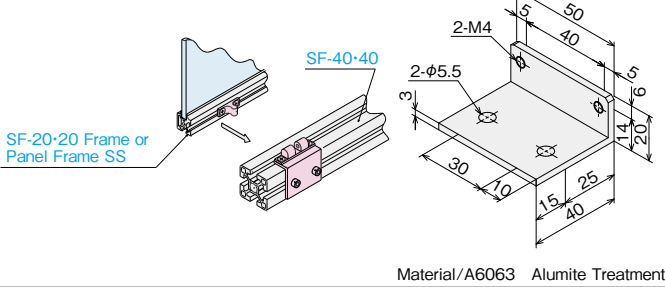
BW Bracket S Kit



Kit Contents

- Ball Catch×1
- BW Bracket S×1
- Flat-Head Screw (M4×6)×2
- Flat-Head Screw (M4×8)×2
- T Nut SS M4×2
- T Nut SS M5×2
- Hexagon Socket Bolt (M5×10)×2

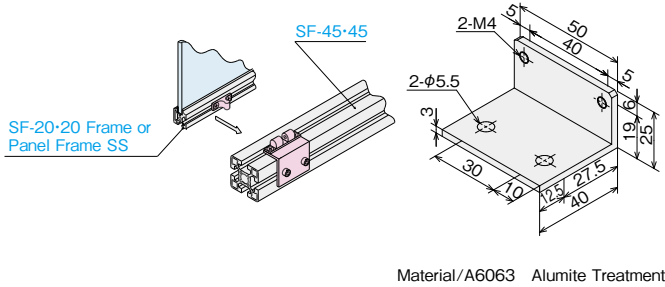
BW Bracket L40 Kit



Kit Contents

- Ball Catch×1
- BW Bracket L40×1
- Flat-Head Screw (M4×6)×2
- Flat-Head Screw (M4×8)×2
- T Nut SS M4×2
- T Nut L M5×2
- Hexagon Socket Bolt (M5×12)×2

BW Bracket L45 Kit



Kit Contents

- Ball Catch×1
- BW Bracket L45×1
- Flat-Head Screw (M4×6)×2
- Flat-Head Screw (M4×8)×2
- T Nut SS M4×2
- T Nut L M5×2
- Hexagon Socket Bolt (M5×15)×2

Name (Bolt and Nut Kit)	BW Bracket SS Kit	BW Bracket S Kit	BW Bracket L40 Kit	BW Bracket L45 Kit
Item No.	SFK-4BA	SFK-4BB	SFK-4BC	SFK-4BD



Parts

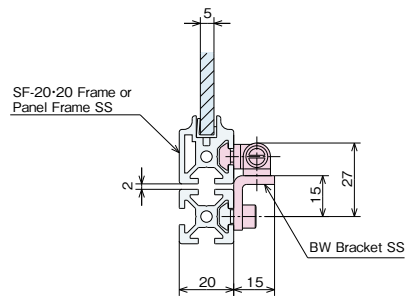
How to order

Item No. Quantity (pcs)

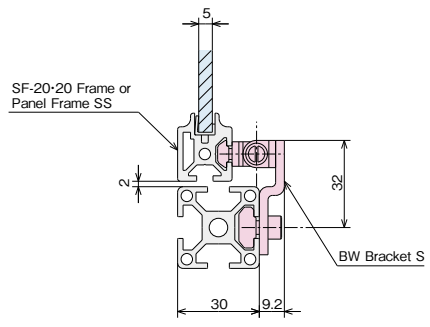
SFA-41A

Use Example when using Ball Catch

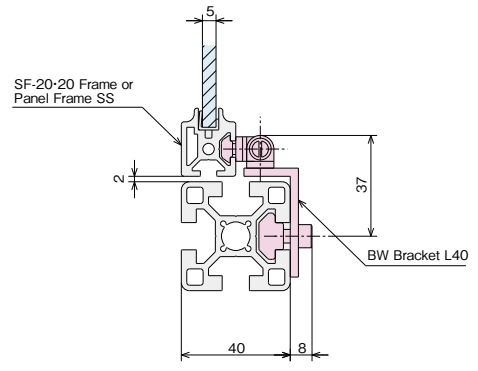
<Dimension Indication when using SF-20·20 Frame or Panel Frame SS Door>



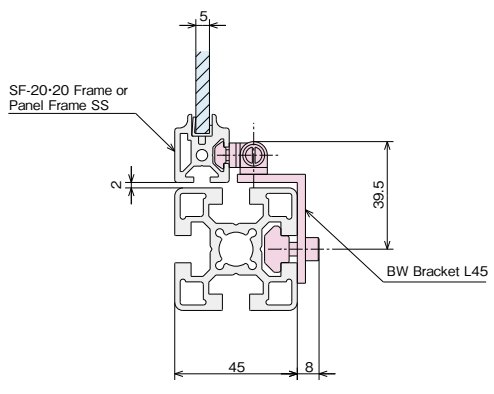
BW Bracket SS Kit



BW Bracket S Kit



BW Bracket L40 Kit



BW Bracket L45 Kit

SF20
SS Size

SF30
S Size

SF40
L Size

Complex Parts

Door · Panel
Clean Equipment

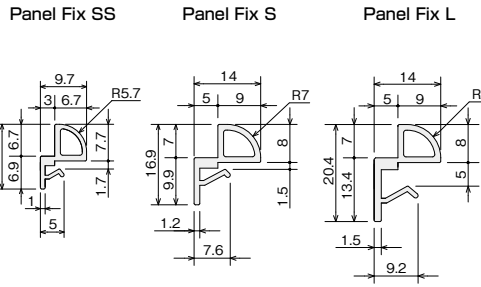
Technical Data

Door·Panel Parts

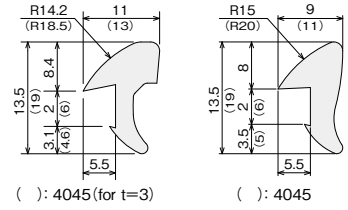
Panel Fix (Resin) / Panel Fix Rubber



Material/Technical Data
 Material (Panel Fix) PP/Light Gray
 (Rubber) CSM60±5*(Synthetic Rubber)/Light Gray
 Unit Mass Panel Fix 37.5g/m(SS) 51g/m(S) 60g/m(L)
 Panel Fix Rubber (for t=3) (ℓ=5000mm) 525g(30) 805g(4045)
 Panel Fix Rubber (ℓ=5000mm) 638g(2030) 742g(4045)
 Environment **RoHS** Compliant **Green** Procurement



Panel Fix Rubber 30(for t=3) Panel Fix Rubber 2030
Panel Fix Rubber 4045(for t=3) Panel Fix Rubber 4045



■Plate Thickness Mapping

Name	30 (for t=3)	4045 (for t=3)	2030	4045
Thickness	○	○	○	○
3	○	○	○	○
5	×	×	×	○
Frame Series	SF-30	SF-40-45	SF-20	SF-30

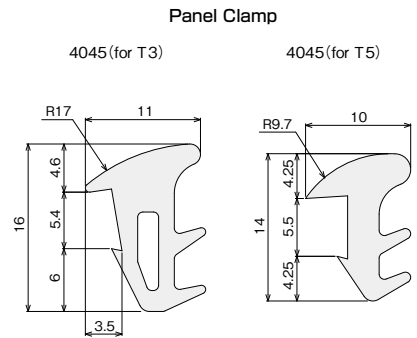
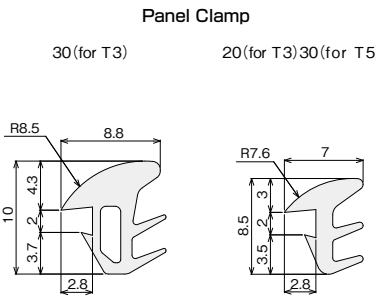
●Standard Length Products (L=2000) are to be cut by customer.

Name	Panel Fix SS (ℓ=2000) (ℓ=50~2000)	Panel Fix S (ℓ=2000) (ℓ=50~2000)	Panel Fix L (ℓ=2000) (ℓ=50~2000)	Panel Fix Rubber (ℓ=5000mm) 30 (for t=3) 4045 (for t=3) 2030 4045
Item No.	SFA-P11 SFA-P14	SFA-P21 SFA-P24	SFA-P31 SFA-P34	SFA-142 SFA-144 SFA-141 SFA-143

Panel Clamp



Material/Technical Data
 Material CSM60±5*(Synthetic Rubber)/Light Gray
 Weight 51.4g(30(for T3)) 111g(for 4045T3)
 216g(20(for T3)30(for T5)) 528g(for 4045T5)
 Environment **RoHS** Compliant **Green** Procurement

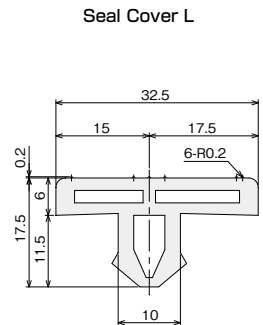
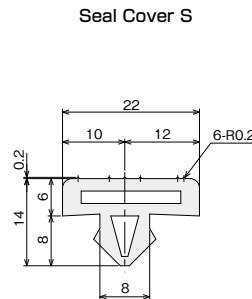
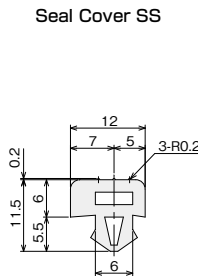


Name	Panel Clamp (ℓ=5000mm) 30 (for T3) 20 (for T3) 30 (for T5)	Panel Clamp (ℓ=5000mm) 4045 (for T3) 4045 (for T5)
Item No.	SFA-125 SFA-121	SFA-126 SFA-123

Seal Cover



Material/Technical Data
 Material CSM60±5*(Synthetic Rubber) Light Gray
 Weight 327g(SS) 516g(S) 801g(L)
 Environment **RoHS** Compliant **Green** Procurement



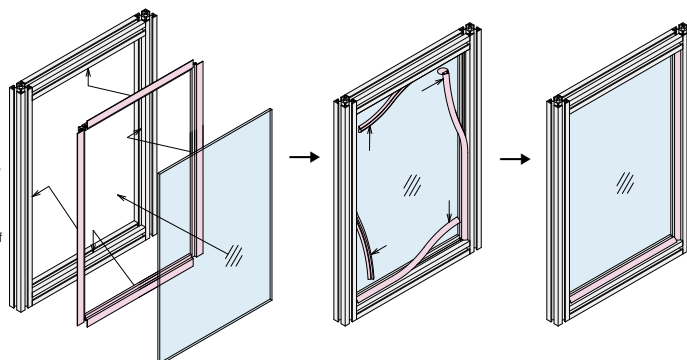
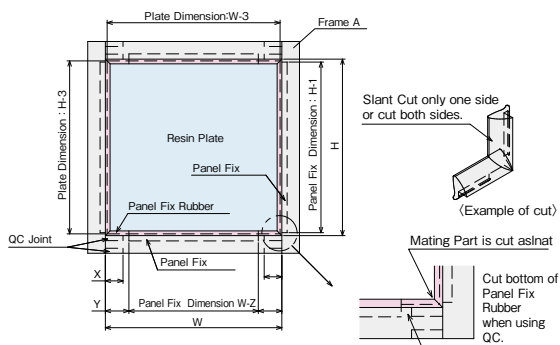
Name	Seal Cover SS (ℓ=2500mm)	Seal Cover S (ℓ=2500mm)	Seal Cover L (ℓ=2500mm)
Item No.	SFA-131	SFA-133	SFA-135



Parts How to order
 Item No. Quantity (pcs)
 SFA-P11

How to install Panel Fix and Panel Fix Rubber

(Indication of Installation Size and Parts Selection)

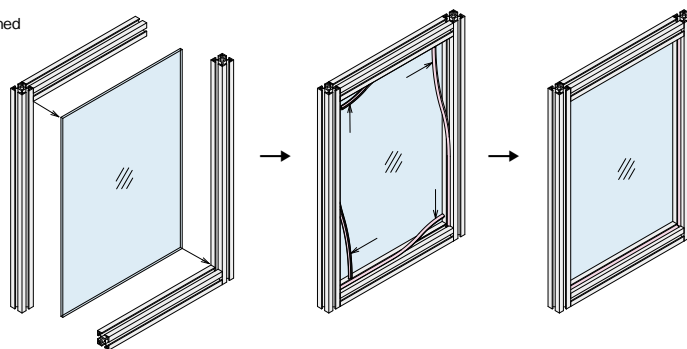
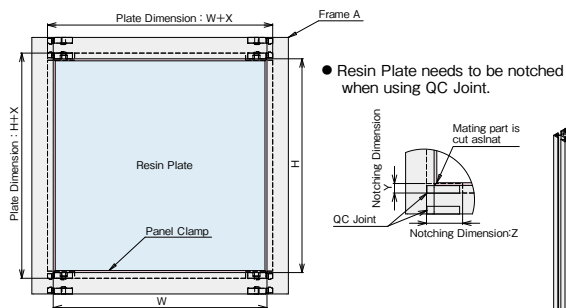


Frame A	Panel Fix (Resin)	Panel Fix Rubber	Resin Plate Thickness	QC Joint	X	Y	Z
SF20 Series	Panel Fix SS	Panel Fix Rubber 2030	3mm	QC Joint SS	19.5	25	50
SF30 Series	Panel Fix S	Panel Fix Rubber 2030	3mm or 5mm	QC Joint S	27	30	60
SF40-45 Series	Panel Fix L	Panel Fix Rubber 4045	3mm or 5mm	QC Joint L	35	40	80

- Cut aslant only one side or both sides. <Example of cutting>
- Cut aslant mating part.
- Cut bottom of Panel Fix Rubber when using QC.

How to install Panel Clamp

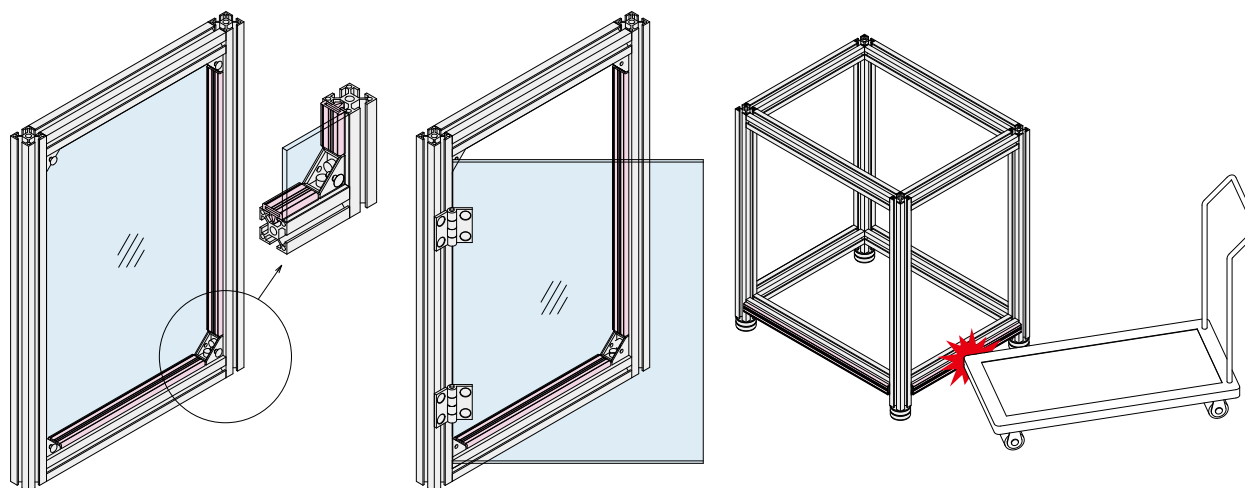
(Indication of Installation Size and Parts Selection)



Frame A	Panel Clamp	Resin Plate Thickness	QC Joint	X	Y	Z
SF-20 Series	Panel Clamp 2030	3mm	QC Joint SS	10	6	25.5
SF-30 Series	Panel Clamp 2030	3mm or 5mm	QC Joint S	16	9	36
SF-40 Series	Panel Clamp 4045	3mm or 5mm	QC Joint L	23	12	47.5
SF-45 Series	Panel Clamp 4045	3mm or 5mm	QC Joint L	24	13	

- Insert Resin Panel into the groove before assembling the frames.
- Push Panel Clamp into the gap between Resin Panel and Frame's groove.
- Cover can be fixed with the simple appearance and Resin Panel won't jolt.

How to use Seal Cover

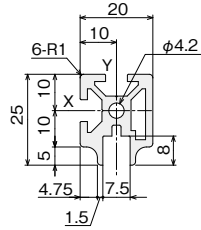


- It can fill a gap between Resin Panel and frame.
- As a stopper when making a resin door.
- To protect Aluminum Frame.

Panel Frame SS / Panel Hold T5 / TC Block SS

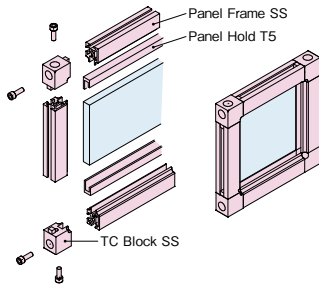
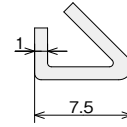


Panel Frame SS



* Based on a groove shape SF20.

Panel Hold T5



※M5 Tapping is needed to the cut surface of Panel Frame.
(Refer P209~ for details)

Material/Technical Data

Material Aluminium Alloy(Panel Frame)
Alumite Treatment
Ethylene Vinyl Acetate(Panel Hold T5)
ZDC2(TC Block SS)

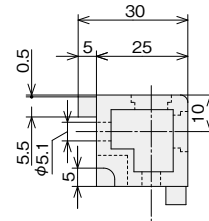
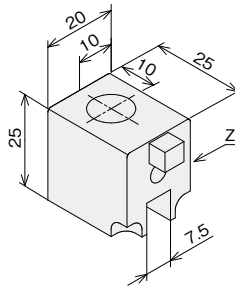
Weight 0.6/m(Panel Frame)-Frame $l=4030\text{mm}$
14g/m ($l=2000\text{mm}/\text{pcs}$) (Panel Hold T5)
45g(TC Block SS)※

Environment **RoHS** Compliant **Green** Procurement

※Hexagon Socket Bolt M5×15 with 2 pcs

Name	Panel Frame SS $l=4000$	Panel Frame SS $l=50\sim 4000$	Panel Hold T5
Item No.	SFF-T62	SFF-T64	SFA-108

TC Block SS

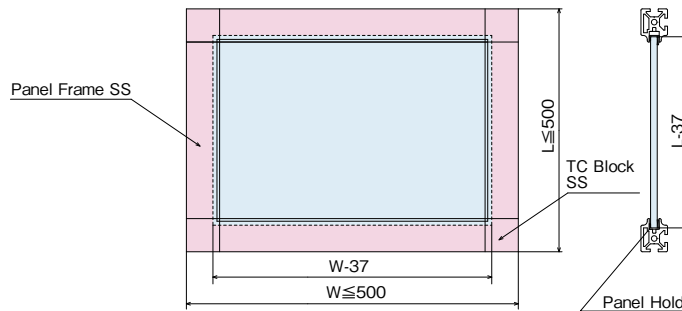


View Z

Name	TC Block SS
Item No.	SFK-Q01

Size indication for Panel Frame

(Size indication for Panel Frame, Resin Plate)



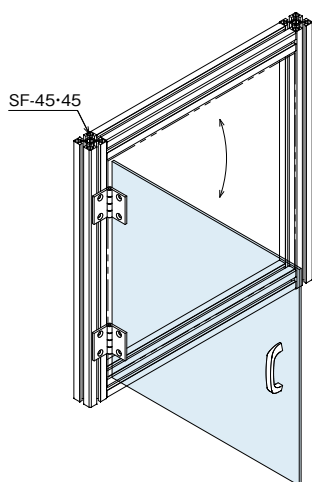
There is a risk that the Panel Frame sags if cover size becomes more than 500 × 500. We recommend that you use SF20 or SF30 series to build the frame.



Parts
How to order

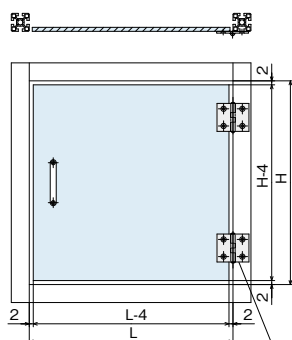
Item No. Quantity (pcs)
SFF-T62

Installment Indication for Resin Panel Door (Small door)

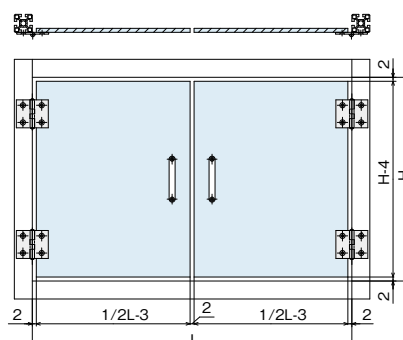


● This drawing is example of using Fixed Hinge (M6).

(In case of Single Swing Door)



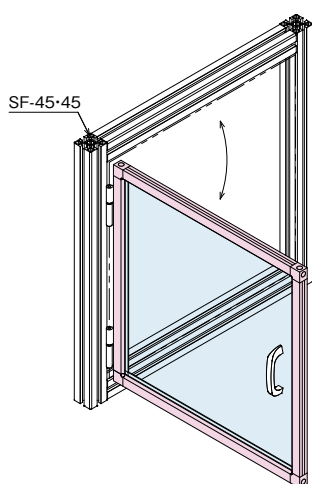
(In case of Hinged Double Door)



Fixed Hinge (P140)

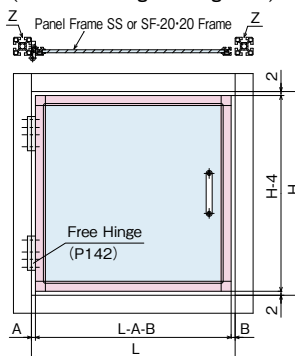
※Refer from P140 for Hinge and Magnet Catch.

Installment Indication for Panel Frame Door (Small and Medium Door)

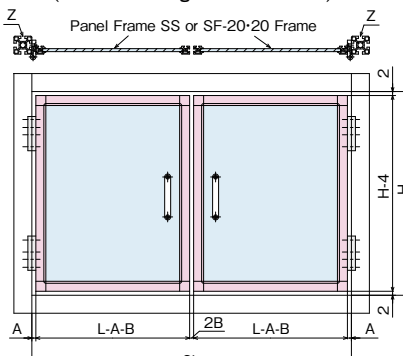


● This drawing is example of using Free Hinge 4520L.

(In case of Single Swing Door)



(In case of Hinged Double Door)

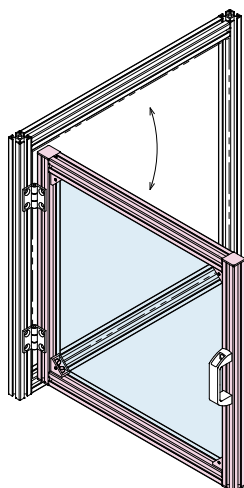


[Dimension Indication when creating Panel Frame Door]

Z	SF20 or SF30		SF40 or SF45	SF20 or SF30		SF40 or SF45
Lmm	200	330	700	200	330	700
	s	s	and up	s	s	and up
Amm	329	699		329	699	
Bmm	3	2.5	2	3	2.5	2

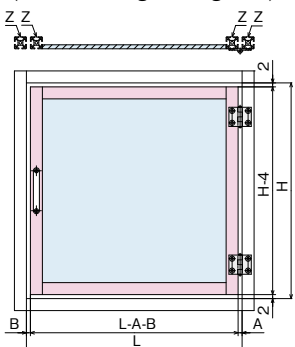
※Refer from P140 for Hinge and Magnet Catch.

Installment Indication for Frame Door (Medium and Large Door)

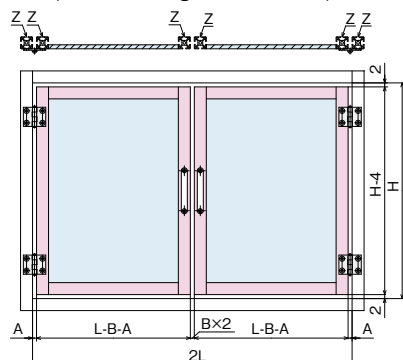


● This drawing is example of using Fixed Hinge S.

(In case of Single Swing Door)



(In case of Hinged Double Door)



[Dimension Indication when creating Frame Door] When using Fixed Hinge

Z	SF20	SF30	SF40 or SF45			
Lmm	250	440	215	400	700	1000
	s	s	s	s	s	s
		and up				and up
Bmm	2	3	2	5	4	3
Amm	1	2			2	

※Refer from P140 for Hinge and Magnet Catch.

SF20
SS Size

SF30
S Size

SF40-45
L Size

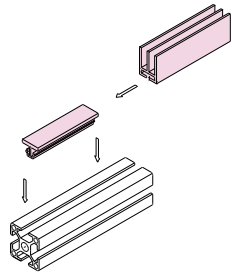
Complex Parts

Door - Panel
Clean Equipment

Technical Data

Door·Panel Parts Rail [For Small Sliding Door]

Sliding Door Rail (Resin)



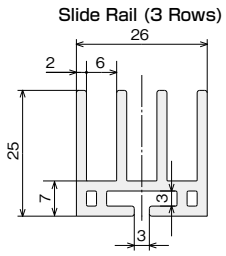
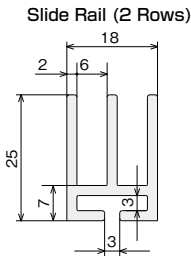
Material/Technical Data

Slide Rail		Slot Connector	
Material	ABS	Polypropylene	
	Light Gray	Light Gray	
Unit Mass	0.18kg/m (2 Rows) 0.28kg/m (3 Rows)	0.06kg/m (SS)	0.07kg/m (S) 0.08kg/m (L)
Environment	RoHS Compliant	Green Procurement	

Usable Frame

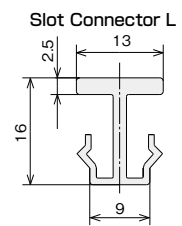
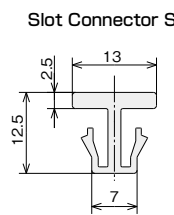
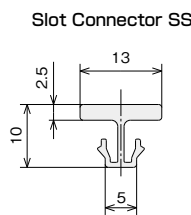


Sliding Rail..... Joint to each Slot Connector
 Slot Connector SS..... For SF20 series (Groove Width 6mm)
 Slot Connector S..... For SF30 series (Groove Width 8mm)
 Slot Connector L..... For SF40-50 series (Groove Width 10mm)



● Standard Length Products (ℓ=2000) are to be cut by customer.

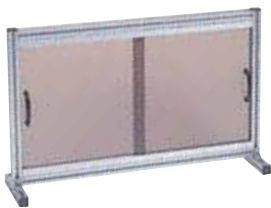
Name	Slide Rail (2 Rows) (ℓ=2000)	Slide Rail (2 Rows) (ℓ=50~2000)	Slide Rail (3 Rows) (ℓ=2000)	Slide Rail (3 Rows) (ℓ=50~2000)
Item No.	SFA-R01	SFA-R04	SFA-R11	SFA-R14



● Standard Length Products (ℓ=2000) are to be cut by customer.

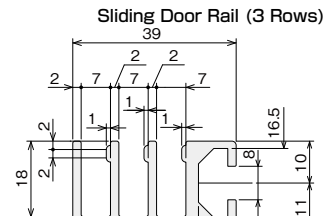
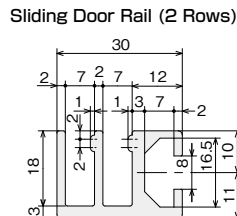
Name	Slot Connector SS (ℓ=2000) (ℓ=50~2000)		Slot Connector S (ℓ=2000) (ℓ=50~2000)		Slot Connector L (ℓ=2000) (ℓ=50~2000)	
Item No.	SFA-R51	SFA-R54	SFA-R61	SFA-R64	SFA-R71	SFA-R74

Sliding Door Rail (2 Rows) / 3 Rows (Aluminum)



Material/Technical Data

Sliding Door Rail		Attaching Plate		Slide Spacer	
Material	Aluminium Alloy SPCC (2 Rows) Alumite Treatment SPHC (3 Rows)	Polyethylene Black Uni-chrome Plating		Polyethylene	
Weight	0.72kg/m (2 Rows) 0.90kg/m (3 Rows)	28g (2 Rows) 35g (3 Rows)	60g (ℓ=2000mm/pcs)		
Environment	RoHS Compliant	Green Procurement			



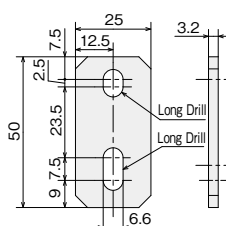
※ For T Nut S

※ For T Nut S

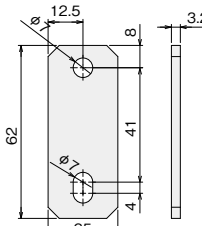
● Standard Length Products (ℓ=4000) are to be cut by customer.

Name	Sliding Door Rail (2 Rows) (ℓ=4000)	Sliding Door Rail (2 Rows) (ℓ=50~4000)	Sliding Door Rail (3 Rows) (ℓ=4000)	Sliding Door Rail (3 Rows) (ℓ=50~4000)
Item No.	*SFF-R02-T	*SFF-R04-T	*SFF-R12-T	*SFF-R14-T

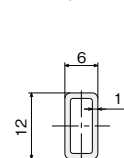
Attaching Plate (2 Rows)



Attaching Plate (3 Rows)



Slide Spacer



※ Attaching Plate can connect Frames together as well.

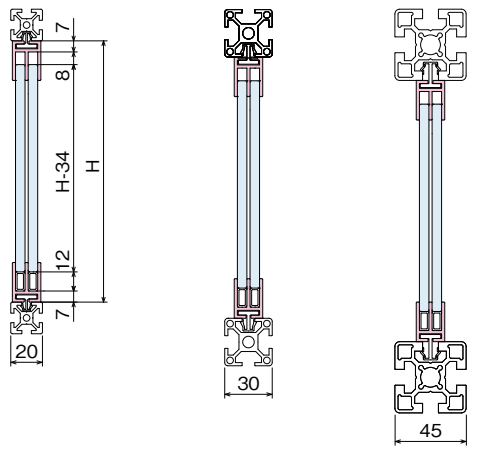
Name	Attaching Plate (For 2 Rows)	Attaching Plate (For 3 Rows)	Slide Spacer (ℓ=2000)
Item No.	*SFA-502	*SFA-512	*SFA-107



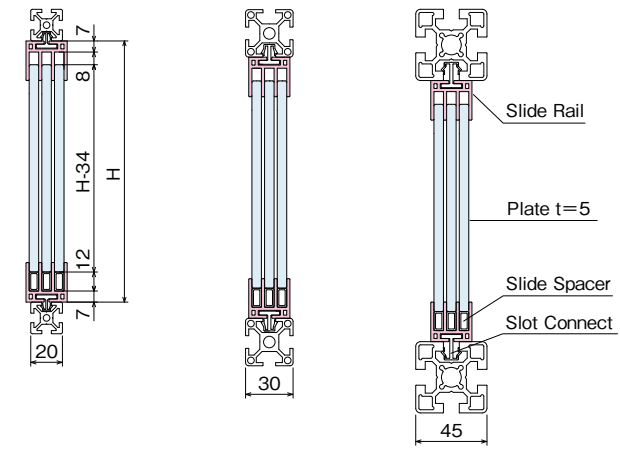
Dimensional Indication of Installing Slide Rail and Slide Door Rail

<Slide Rail>

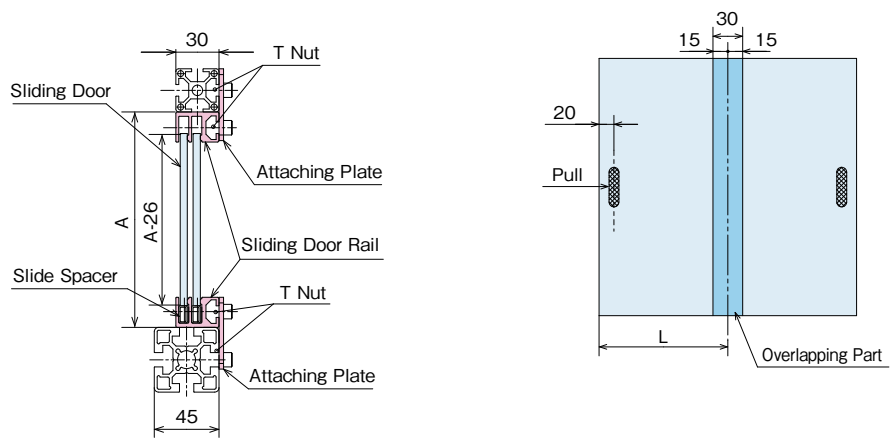
●2 Directions Type



●3 Directions Type



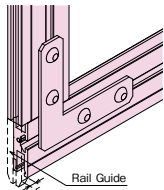
<Sliding Door Rail>



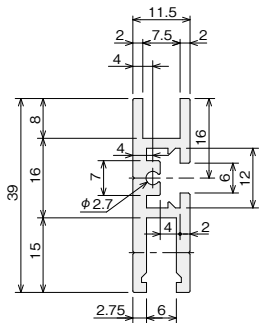
- Plate size
- * Plate Thickness... t = 5
 - * Lateral: L+15
(In case overlapping 30mm)
 - * longitudinal:
 - Slide Rail: H-34
 - Sliding Door Rail: A-26

Door·Panel Parts Sliding Door Frame [For Medium Size Sliding Door]

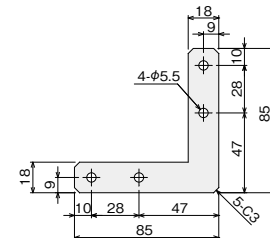
Sliding Door Frame/Panel Joint Kit



Frame for Sliding Door's Rim



Panel Joint Kit



t=2

Material/Technical Data

Material	Aluminium Alloy (Frame) SUS304 (Panel Joint) Alumite Treatment
Environment	★RoHS Compliant ★Green Procurement
Geometrical Moment of Inertia	$I_x=2.47 \times 10^4 \text{mm}^4$ $I_y=0.357 \times 10^4 \text{mm}^4$
Section Modulus	$Z_x=1.247 \times 10^3 \text{mm}^3$ $Z_y=0.602 \times 10^3 \text{mm}^3$
Weight	0.58kg/m (Frame) 54g (Plate Bracket)

Name	Sliding Door Frame ℓ=4000	Sliding Door Frame ℓ=50~4000
Item No.	★SFF-D02	★SFF-D04

Name	Panel Joint Kit
Item No.	SFK-130

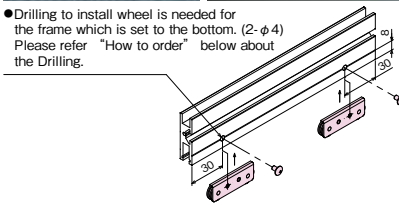
● Cut length is the material to be cut by customer.
Effective range of use ℓ = 4000

Kit Contents
● S Plate Bracket SS-LX1
● T Nut SS(M5)×4
● Hexagon Socket Button Bolt(M5×6)×4

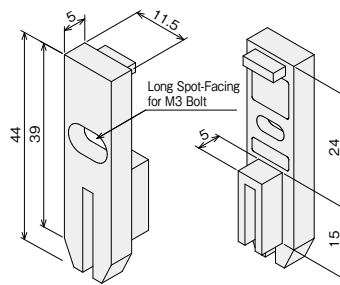
Rail Guide Kit/Sliding Door Wheel



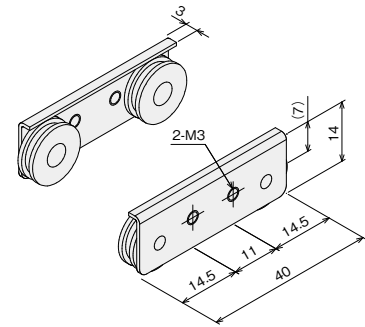
● Drilling to install wheel is needed for the frame which is set to the bottom. (2-φ4)
Please refer "How to order" below about the Drilling.



Rail Guide Kit



Sliding Door Wheel



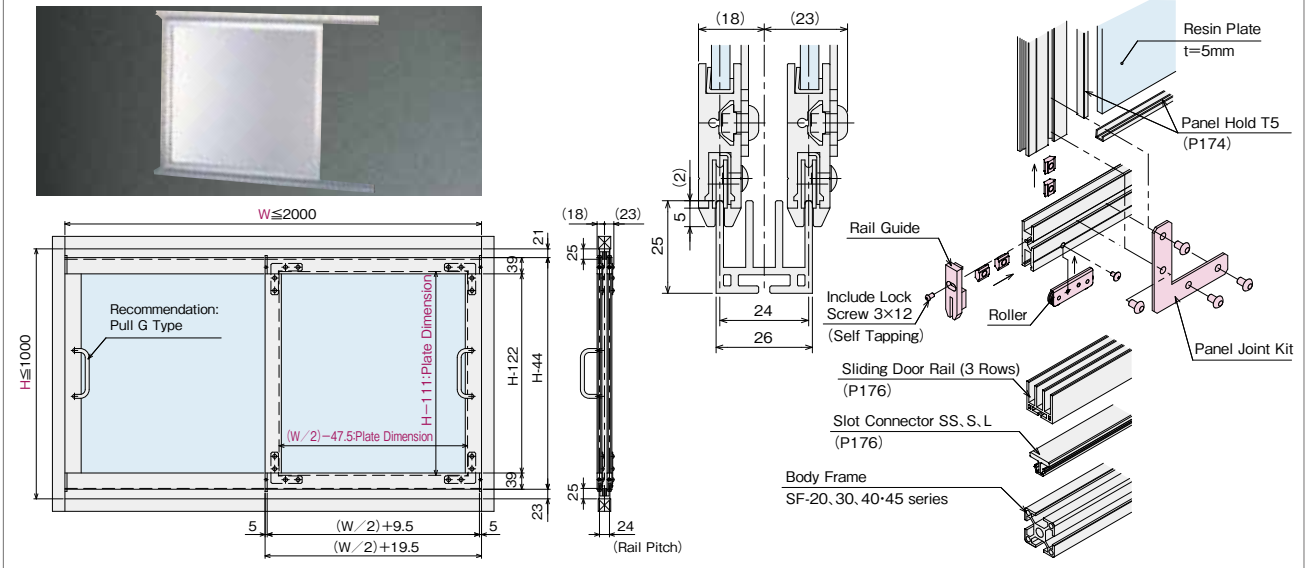
Material/Technical Data

	Rail Guide	Wheel
Material	Polyacetal	Polyacetal
Weight	2.8g	6.4g
	Include Lock Screw(M3x12)×1	Truss Screw(M3x5)×1
Environment	RoHS Compliant	

Name	Rail Guide Kit
Item No.	SFK-5A3

Name	Sliding Door Wheel
Item No.	SFA-504

Unit Construction



SF Frame

Standard Length (Cut be Customer)

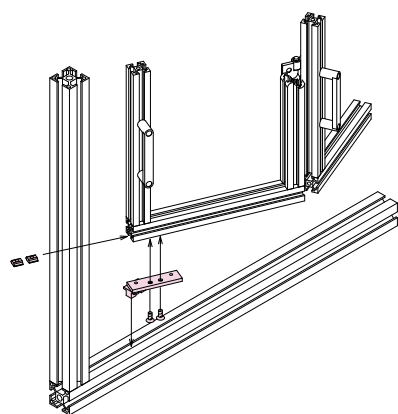
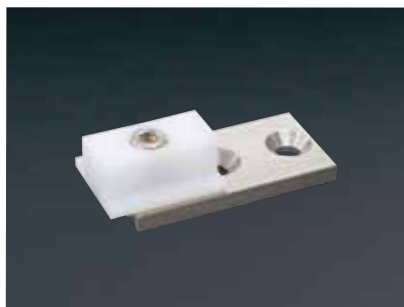
Item No.	Length (mm)	Drilling No. to install Coroco	Quantity (pcs)
SFA-41A	ℓ = 800	CH	□□

Parts

How to order

Item No.	Quantity (pcs)
SFK-130	□□

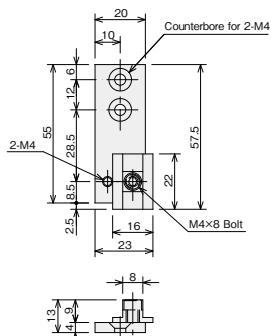
Folding Door Slider



Material/Technical Data

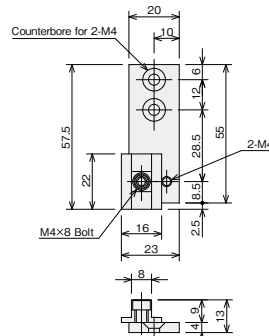
Material	Polyacetal(Slide) Stainless(Attaching Plate)
Weight	45g(S-SSA/B) 65g(S) 63g(L-S)
Environment	RoHS Compliant Green Procurement

Folding Door Slider S-SSA



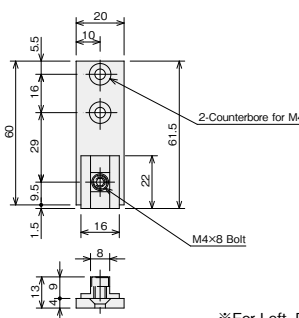
Down when Door opens to right
Up when Door opens to left

Folding Door Slider S-SSB



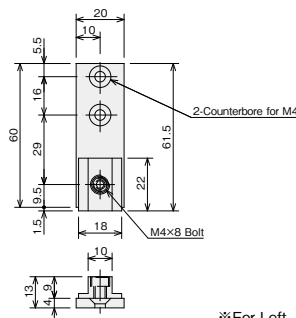
Down when Door opens to right
Up when Door opens to left

Folding Door Slider S



※For Left, Right, Up and Down

Folding Door Slider L-S



※For Left, Right, Up and Down

Kit Contents

- Folding Door Slider Block Sx1
- Folding Door Slider Plate SSx1
- ST Nut SS(M4)x2
- Hexagon Socket Bolt(M4x8) Stainlessx1
- Flat Screw(M4x8) Stainlessx2
- Spacerx1

Usable Frame

<Structural Member>
SF-30 Series
<Door>
SF-20-20

Kit Contents

- Folding Door Slider Block Sx1
- Folding Door Slider Plate Sx1
- ST Nut S(M4)x2
- Hexagon Socket Bolt(M4x8) Stainlessx1
- Flat Screw(M4x12) Stainlessx2
- Spacerx1

Usable Frame

<Structural Member>
SF-30 Series
<Door>
SF-30-30

Kit Contents

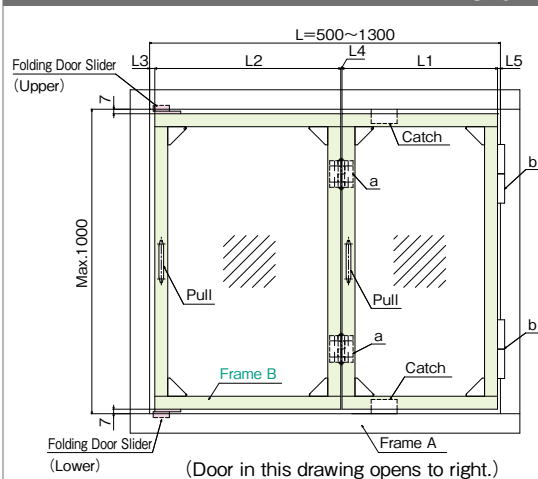
- Folding Door Slider Block Lx1
- Folding Door Slider Plate Sx1
- ST Nut S(M4)x2
- Hexagon Socket Bolt(M4x8) Stainlessx1
- Flat Screw(M4x12) Stainlessx2
- Spacerx1

Usable Frame

<Structural Member>
SF-40-45 Series
<Door>
SF-30-30

Name	Folding Door Slider S-SSA	Folding Door Slider S-SSB	Folding Door Slider S	Folding Door Slider L-S
Item No.	SFK-801A	SFK-802A	SFK-803A	SFK-804A

Size Indication for Folding Door Slider



Indication of Parts Choice

Frame A	Frame B	Folding Door Slider Up	Folding Door Slider Down	Hinge a	Hinge b
SF30 Series	SF20 Series	Folding Door Slider S-SSB Note) (SFK-802A)	Folding Door Slider S-SSA Note) (SFK-801A)	Fixed Hinge SS (SFA-211)	Free Hinge 3020R (SFA-253)
SF30 Series	SF30 Series	Folding Door Slider S (SFK-803A)	Folding Door Slider S (SFK-803A)	Fixed Hinge S (SFA-221)	Free Hinge S-R (SFA-223)
SF40 Series	SF30 Series	Folding Door Slider L-S (SFK-804A)	Folding Door Slider L-S (SFK-804A)	Fixed Hinge S (SFA-221)	Free Hinge L40-R (SFA-233)
SF45 Series	SF30 Series	Folding Door Slider L-S (SFK-804A)	Folding Door Slider L-S (SFK-804A)	Fixed Hinge S (SFA-221)	Free Hinge L45-R (SFA-243)

Note) When the folding door opens to left, Folding Door Slider S-SS is up-side-down.

Dimension Indication

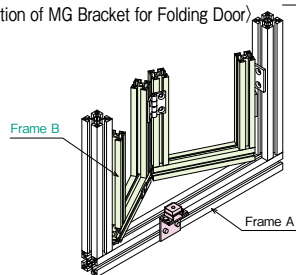
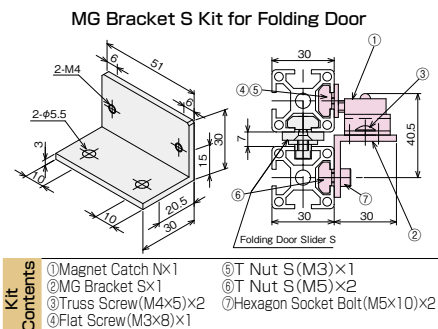
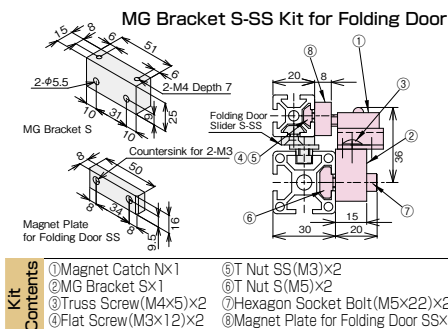
Frame A	Frame B	L1	L2	L3	L4	L5
SF30 Series	SF20 Series	(L-L3-L4-L5-35)/2	L1+35	L=Less than 500-700 ...9.5 L=Less than 700-1000 ...7.5 L=1000-1300 ...5.5	1	3.5
SF30 Series	SF30 Series	(L-L3-L4-L5-36)/2	L1+36	L=Less than 500-700 ...9.5 L=Less than 700-1000 ...7.5 L=1000-1300 ...5.5	2	3.5
SF40 Series	SF30 Series	(L-L3-L4-L5-41)/2	L1+41	L=Less than 500-700 ...9.5 L=Less than 700-1000 ...7.5 L=1000-1300 ...5.5	2	4.5
SF45 Series	SF30 Series	(L-L3-L4-L5-44)/2	L1+44	L=Less than 500-700 ...9.5 L=Less than 700-1000 ...7.5 L=1000-1300 ...5.5	2	4.5

Door Panel Parts Magnet Catch [for Folding Door]

Magnet Catch Kit for Folding Door

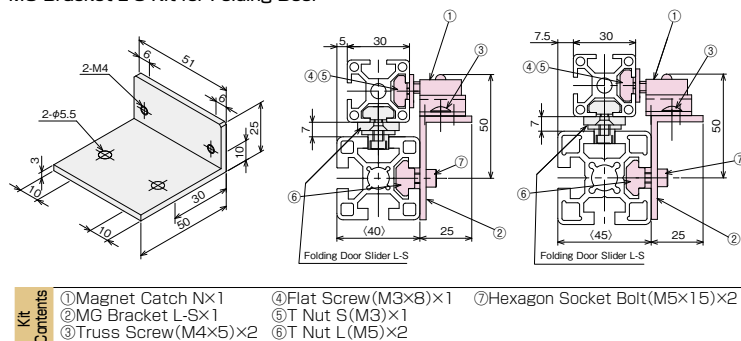


※Refer from P146 for details of Magnet Catch as Single Item.
(Choice Indiction of MG Bracket for Folding Door)



Frame A	Frame B	MG Bracket for Folding Door
SF-30 series	SF-20 series	MG Bracket S-SS Kit for Folding Door
SF-30 series	SF-30 series	MG Bracket S Kit for Folding Door
SF-40-45 series	SF-30 series	MG Bracket L-S Kit for Folding Door

MG Bracket L-S Kit for Folding Door



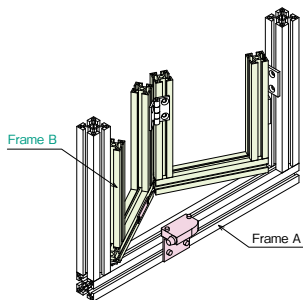
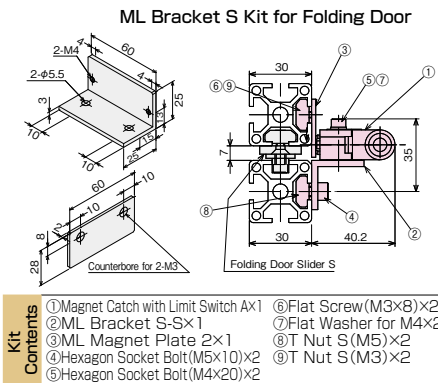
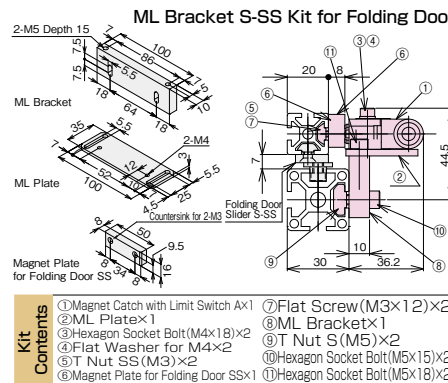
Name	MG Bracket S-SS Kit for Folding Door	MG Bracket S Kit for Folding Door	MG Bracket L-S Kit for Folding Door
Item No.	SFK-4AJ	SFK-4AF	SFK-4AG

※Please refer from P146 to use for other purpose than Folding Door

Magnet Catch with Limit Switch Kit for Folding Door

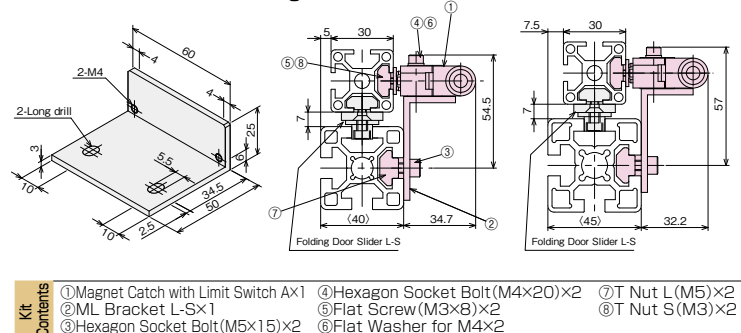


※Refer from P150 for details of Magnet Catch as Single Item.
(Choice Indiction of ML Bracket for Folding Door)



Frame A	Frame B	ML Bracket for Folding Door
SF-30 series	SF-20 series	ML Bracket S-SS Kit for Folding Door
SF-30 series	SF-30 series	ML Bracket S Kit for Folding Door
SF-40-45 series	SF-30 series	ML Bracket L-S Kit for Folding Door

ML Bracket L-S Kit for Folding Door



Name	ML Bracket S-SS Kit for Folding Door	ML Bracket S Kit for Folding Door	ML Bracket L-S Kit for Folding Door
Item No.	SFK-4CH	SFK-4CG	SFK-4CE

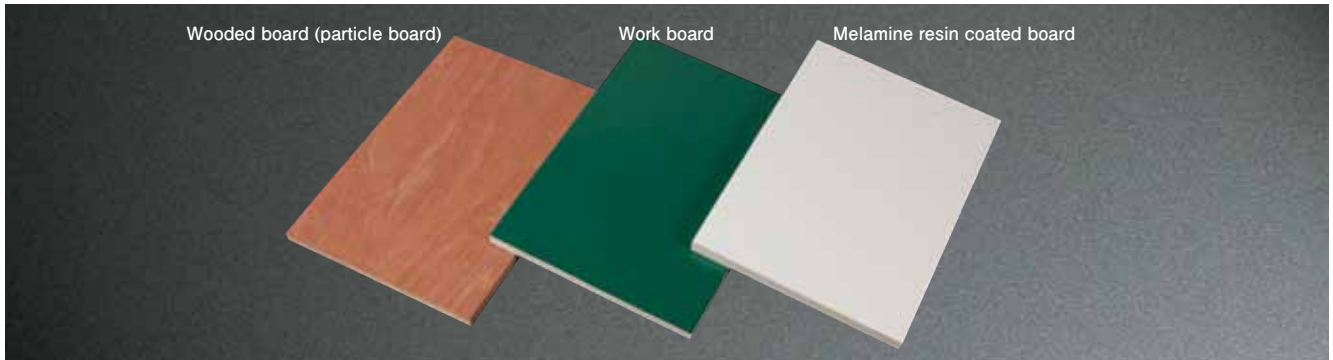
※Please refer from P146 to use for other purpose than Folding Door





Panel·Sheet

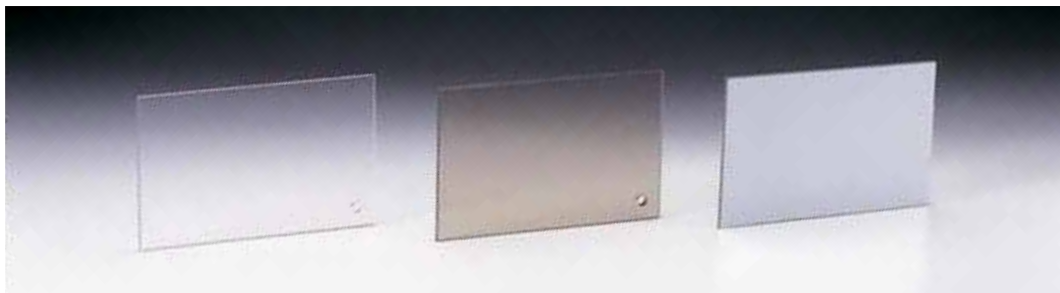
Wooden Board



Products/Options

Material	Board thickness (mm)	Surface mat	Color	Maximum size (mm)
Wooded Board (Particle Board)	9, 12, or 15	—	(White end face)	900×1800
Work Board	16.5 (including mat)	Rubber mat (1.5)	Green (white end face)	
	17 (including mat)	Antistatic mat (2.0) Conductive mat (2.0) *with ground cable		
Melamine Resin Coated Board	17 (including mat)	Melamine resin (1)	White Gray	

Resin Panel



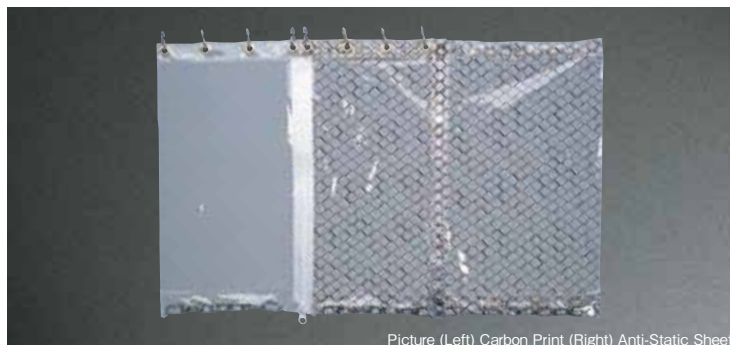
Products/Options

Name	Standard color	Panel thickness (mm)	Density	Atmospheric temperature	Maximum size
Polyvinyl Chloride (PVC)	Transparent	3 or 5	1.40	Up to 60 °C	1000×2000
Polyethylene Terephthalate (PET)	Transparent	3 or 5	1.27	Up to 70 °C	1000×2000
Acryl (PMMA)	Transparent	3 or 5	1.19	Up to 80 °C	1000×2000
Polycarbonate (PC)	Transparent	3 or 5	1.20	Up to 130 °C	1000×2000

* If you require antistatic processing for panels, notify when requesting for quotation.

Note : Regarding Panel·Sheet products on this catalogue only describe JPN SPEC.
Please contact in detail to Each Sales Branch.

Anti-Static Sheet・Partition Sheet



Picture (Left) Carbon Print (Right) Anti-Static Sheet



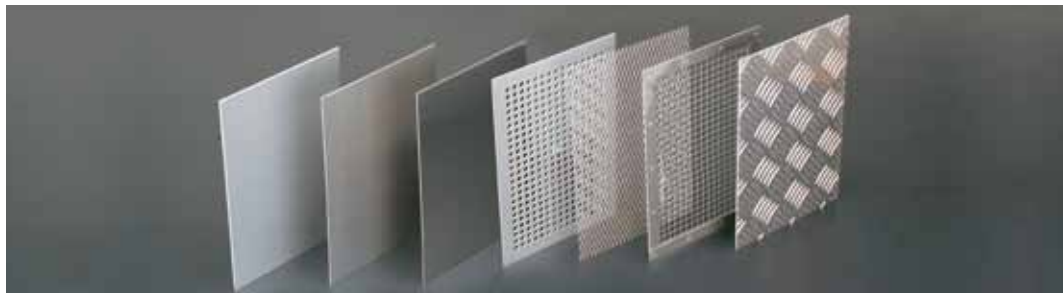
Handling Items and Rough Indication for Selection

Name	Thickness (mm)	Standard Color	Surface Specific Resistivity ^{*1}	Gravity (g/cm ³)	Flame Proofing Grade ^{*2}	Maximum Size (mm)
Anti-Static Sheet	0.3	Transparent	10 ¹⁰ Ω	1.35	Flameproof 2nd Grade	5400×3100
Anti-Static Sheet	0.5					
Anti-Static Sheet (Carbon Print)	0.3	Transparent (Carbon Print) ^{*3}	10 ⁶ Ω	1.35	Flameproof 2nd Grade	5400×3100
Anti-Static Sheet (Carbon Print)	0.5					
Partition Sheet	0.3	Transparent	10 ¹² Ω	1.35	—	5400×3100
Partition Sheet	0.5					

○SUS meets the thickness other than those above, too. Please contact us.

※ Carbon Print is treated on one side. When you use, printed surface becomes outside. Please earth the carbon print.

Steel Plate Panel



■Environment RoHS Compliant Green Procurement

Handling Items and Rough Indication for Selection

Material	With Frame	Material	Thickness (mm)	Mesh size	Gravity	Maximum Size (mm)	Surface Treatment
Aluminum Panel	—	A5052	2	—	2.68	1000×2000	Alumite Treatment
Stainless Panel NO2B	—	SUS304	1.5	—	7.93	1000×2000	—
Stainless Panel #400	—			—			One side polish
Aluminum Punching Panel	Standard	A5052	2	φ12×P18	2.68	1000×2000	Alumite Treatment
Stainless Expand Panel (S Type)	Option	SUS304	—	T=1.2 W=1.4 SW=12 LW=30.5	7.93	1000×2000	—
Stainless Expand Panel (M Type)				T=1.5 W=1.7 SW=22 LW=50.8			
Stainless Net (S Type)	Option	SUS304	—	Line Diameter φ1.6 P=12.7	7.93	1000×2000	—
Stainless Net (M Type)				Line Diameter φ2.6 P=30.0			
Aluminum Checkered Steel Plate	—	A5052	3	—	2.68	1000×2000	—

○SUS meets the thickness other than those above, too. Please contact us.

SF20
SS Size

SF30
S Size

SF40-45
L Size

Complex Parts

Door・Panel
Clean Equipment

Technical Data

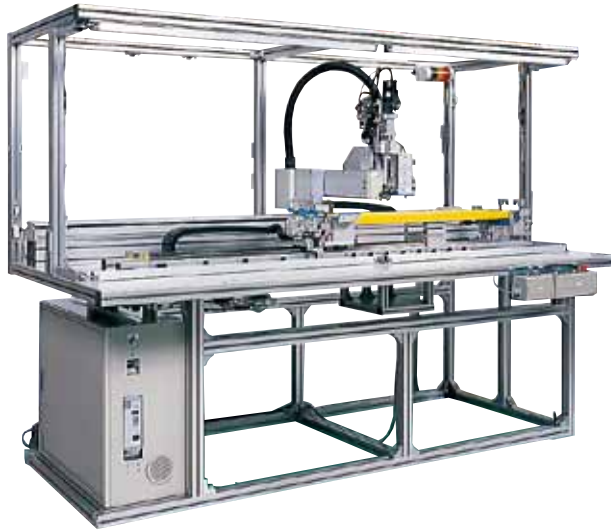


STANDARD FRAME

Technical Data

Technical Data *Free Unit*

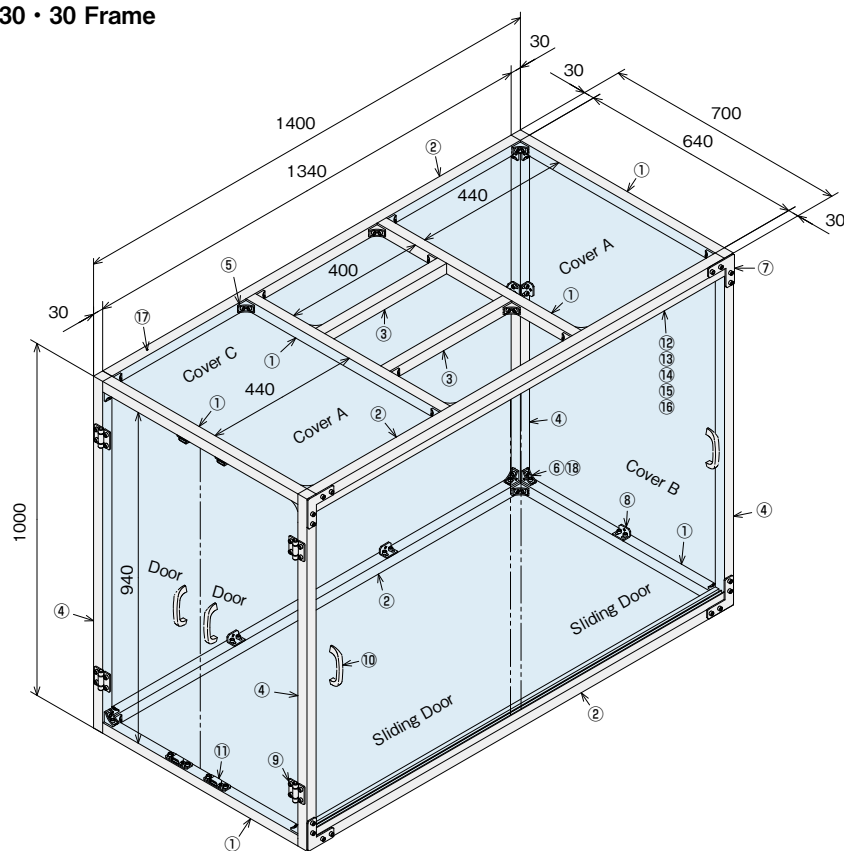
EASY To Check, EASY To Order, EASY To Assemble.



Please contact to SUS
in order to make your own image.

Reference Example of Free Unit

SF-30 · 30 Frame



No.	Name	Quantity
1	SF2-30·30 640L	6
2	SF2-30·30 1340L	4
3	SF2-30·30 400L	2
4	SF2-30·30 1000L	4
5	D Bracket S Kit	22
6	D Bracket S Kit with Tap	8
7	Plate Bracket S-L Kit	4
8	Cover Support S Kit	10
9	Fixed Hinge S Kit	4
10	Pull A	4
11	Magnet Catch N	4
12	Sliding Door's Rail 1340L	2
13	Slide Spacer	2
14	Plate	6
15	T Nut S M6	12
16	Hexagon Socket Bolt M6×10	12
17	T Nut S M5	10
18	Truss Screw	18
19	Sliding Door Aclyc t = 5 Clear	2
20	Door Aclyc t = 5 Clear	2
21	Cover A Aclyc t = 5 Clear	2
22	Cover B Aclyc t = 5 Clear	1
23	Cover C Aclyc t = 5 Clear	1

No.	Item No.	Name	Quantity	Note
1	SFF-324	SF-30 · 30 L = 640	6	
2	SFF-324	SF-30 · 30 L = 1340	4	
3	SFF-324	SF-30 · 30 L = 400	2	
4	SFF-324	SF-30 · 30 L = 1000	4	
5	SFK-018	D Bracket S Kit	22	
6	SFK-019	D Bracket S Kit with Tap	8	
7	SFK-104	Plate Braket S-L Kit	4	
8	SFK-K02	Cover Support S Kit	10	
9	SFK-221	Fixed Hinge S Kit	4	
10	SFA-301	Pull A	4	
11	SFA-40A	Magnet Catch J	4	
12	SFF-R04	Sliding Door's Rail L = 1340	2	
13	SFA-107	Slide Spacer L = 2000	2	
14	SFA-502	Plate (For Sliding Door's Rail)	6	
15	SFB-002	T Nut S (M6)	12	
16	SFB-561	Hexagon Socket Bolt (Uni-Chrome) M6×10	12	
17	SFB-001	T Nut S (M5)	10	
18	SFB-558	Truss Screw M5×10	18	
19		Sliding Door 914×685 (Drilling included)	2	Aclyc t = 5 Clear
20		Door 938×317 (Drilling included)	2	Aclyc t = 5 Clear
21		Cover A 694×494 (Drilling included)	2	Aclyc t = 5 Clear
22		Cover B 998×638 (Drilling included)	1	Aclyc t = 5 Clear
23		Cover C 1338×998 (Drilling included)	1	Aclyc t = 5 Clear

SF20

SS Size

SF30

S Size

SF40-45

L Size

Complex Parts

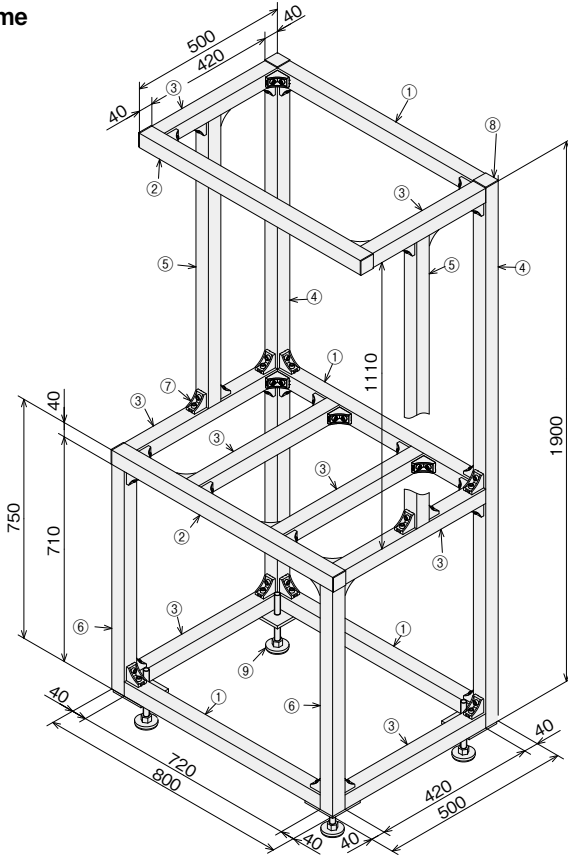
Door / Panel
Clean Equipment

Technical Data

Technical Data Free Unit

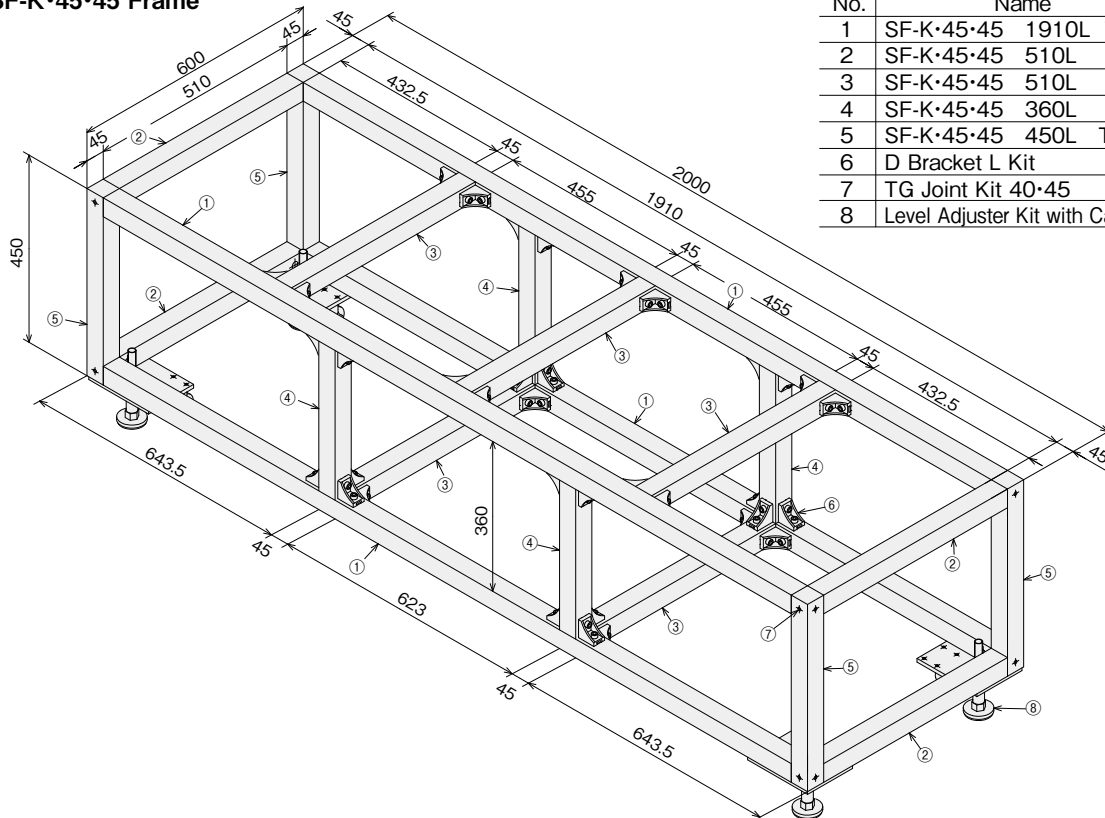
Reference Example of Free Unit

SF2-40•40 Frame



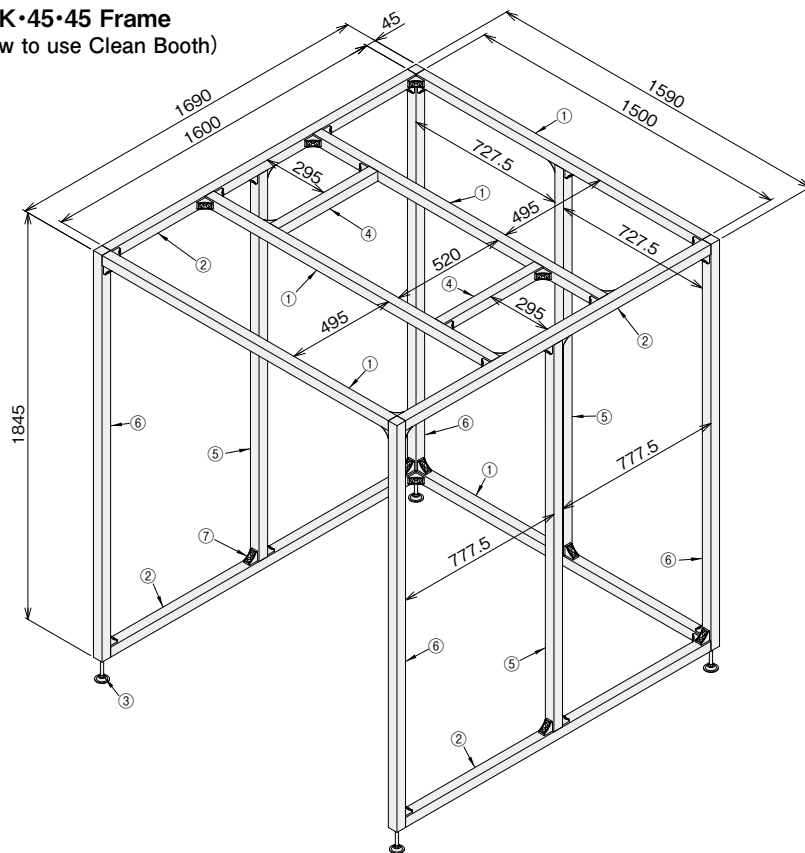
No.	Name	Quantity
1	SF2-40•40 720L	4
2	SF2-40•40 800L	2
3	SF2-40•40 420L	8
4	SF2-40•40 1900L	2
5	SF2-40•40 1110L	2
6	SF2-40•40 710L	2
7	D Bracket L Kit	48
8	Frame Cap 4040	6
9	Level Adjuster Kit L	4

SF-K•45•45 Frame



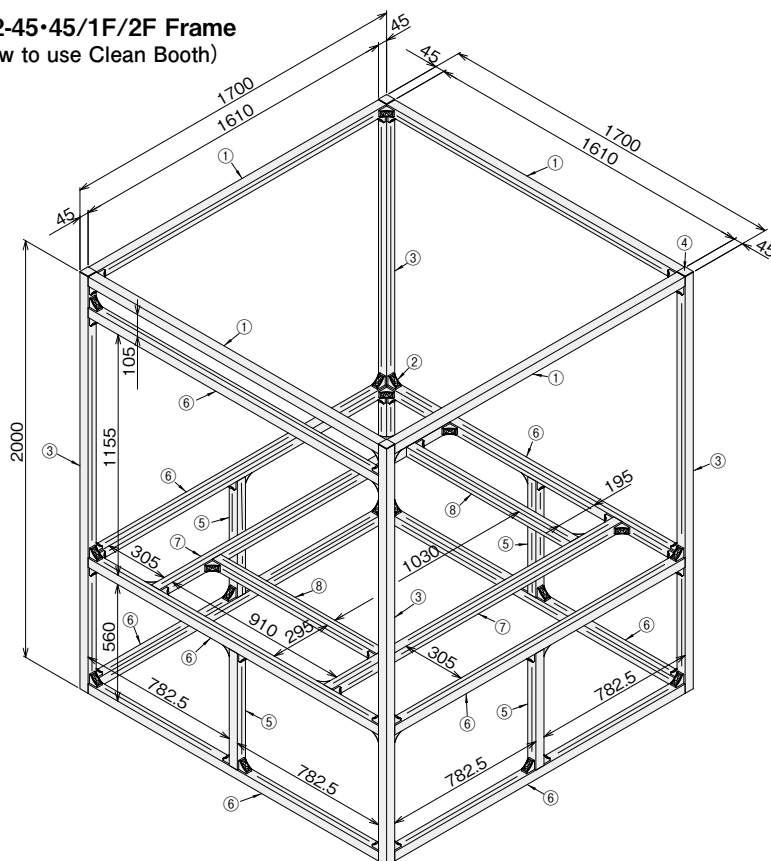
No.	Name	Quantity
1	SF-K•45•45 1910L TW	4
2	SF-K•45•45 510L TW	4
3	SF-K•45•45 510L	5
4	SF-K•45•45 360L	4
5	SF-K•45•45 450L TGM	4
6	D Bracket L Kit	40
7	TG Joint Kit 40•45	16
8	Level Adjuster Kit with Caster L	4

SF-K·45·45 Frame
(How to use Clean Booth)



No.	Name	Quantity
1	SF-K·45·45 1500L	5
2	SF-K·45·45 1600L	4
3	Adjuster M12	4
4	SF-K·45·45 520L	2
5	SF-K·45·45 1755L	3
6	SF-K·45·45 1845L TR	4
7	D Bracket L Kit	42

SF2-45·45/1F/2F Frame
(How to use Clean Booth)



No.	Name	Quantity
1	SF2-45·45·2F 1610L	4
2	D Bracket L Kit	72
3	SF2-45·45·2F 2000L	4
4	Frame Cap 45·45(Black)	4
5	SF2-45·45·1F 560L	4
6	SF2-45·45·1F 1610L	9
7	SF2-45·45 1610L	2
8	SF2-45·45 910L	2

SF20

SS Size

SF30

S Size

SF40

L Size

Complex Parts

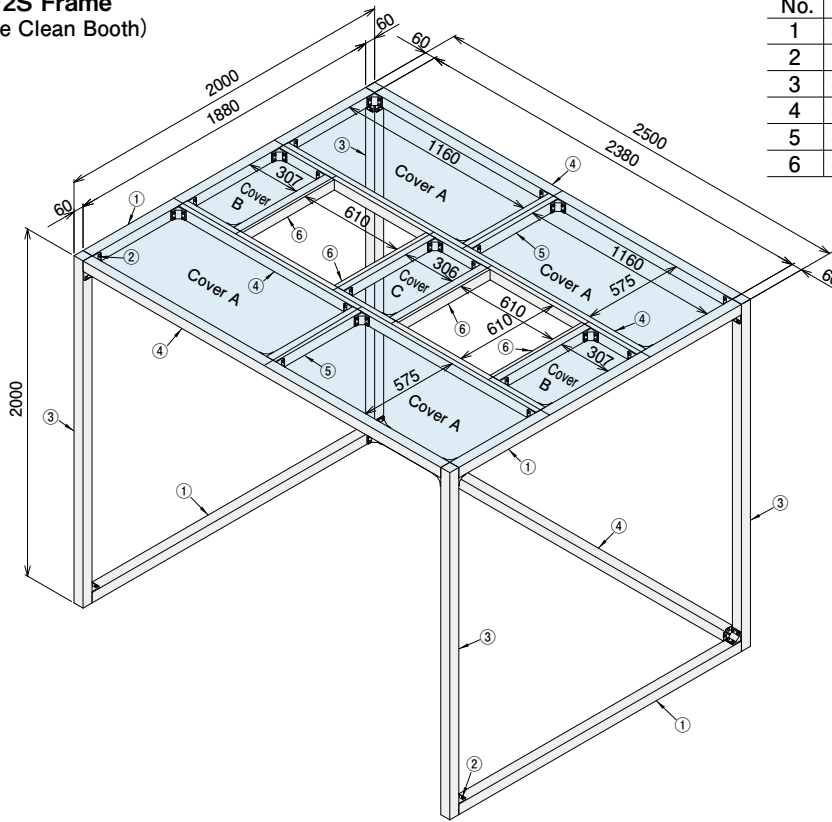
Door - Panel
Clean Equipment

Technical Data

Technical Data Free Unit

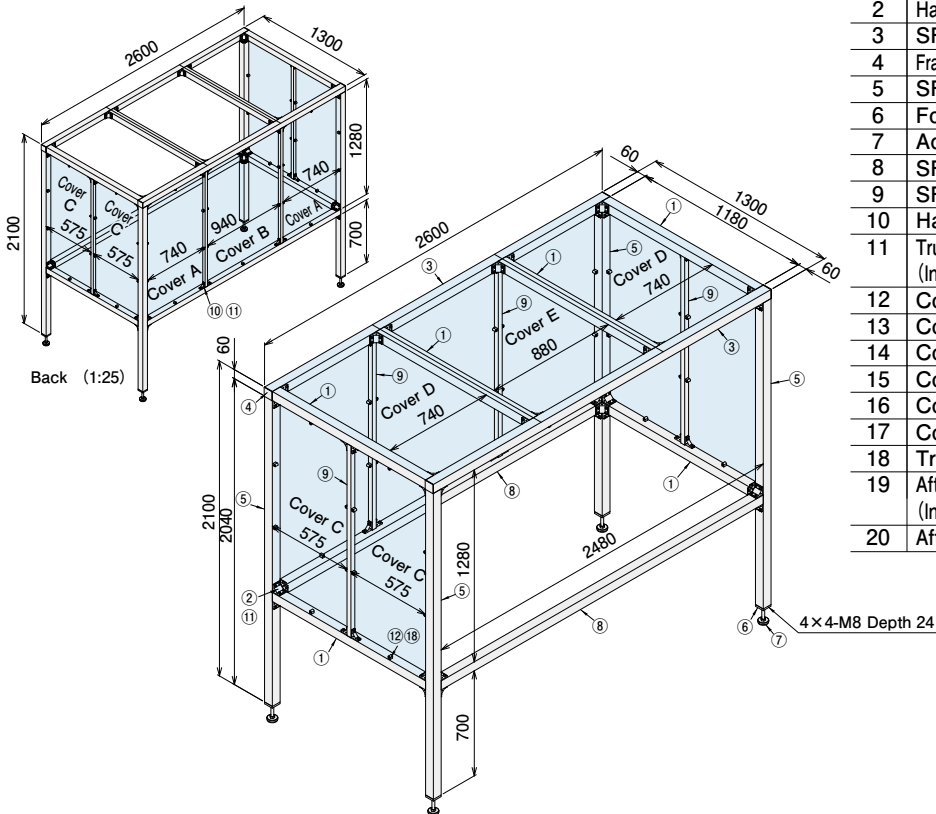
Reference Example of Free Unit

SF-60•60•2S Frame
(How to use Clean Booth)



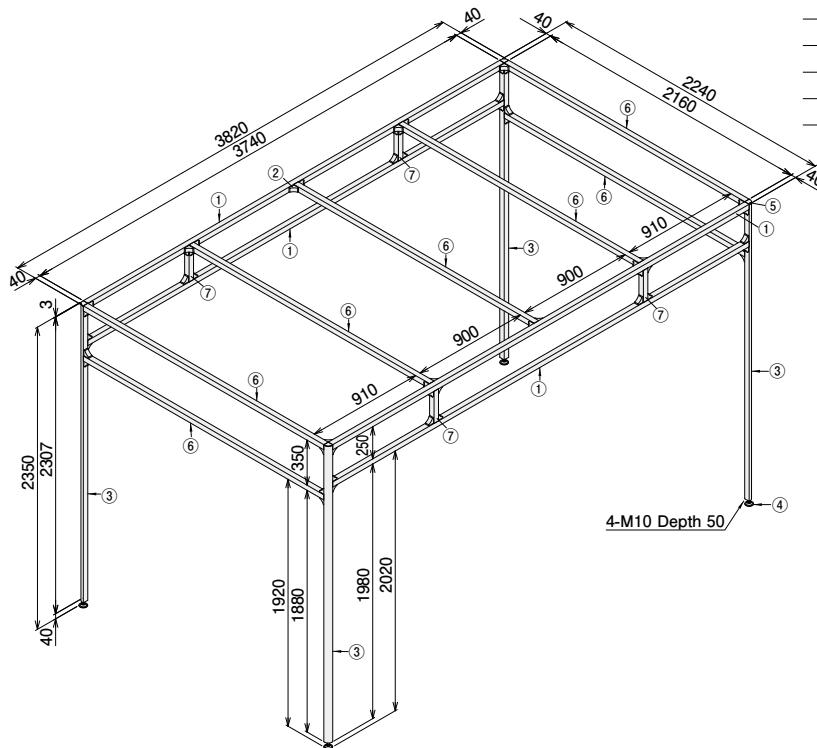
No.	Name	Quantity
1	SF-60•60•2S 1880L	4
2	Hard Bracket S3060 Kit	44
3	SF-60•60•2S 2000L	4
4	SF-60•60•2S 2380L	5
5	SF-60•60•2S 575L	2
6	SF-60•60•2S 610L	4

SF-60•60•2S Frame
(How to use Clean Booth)



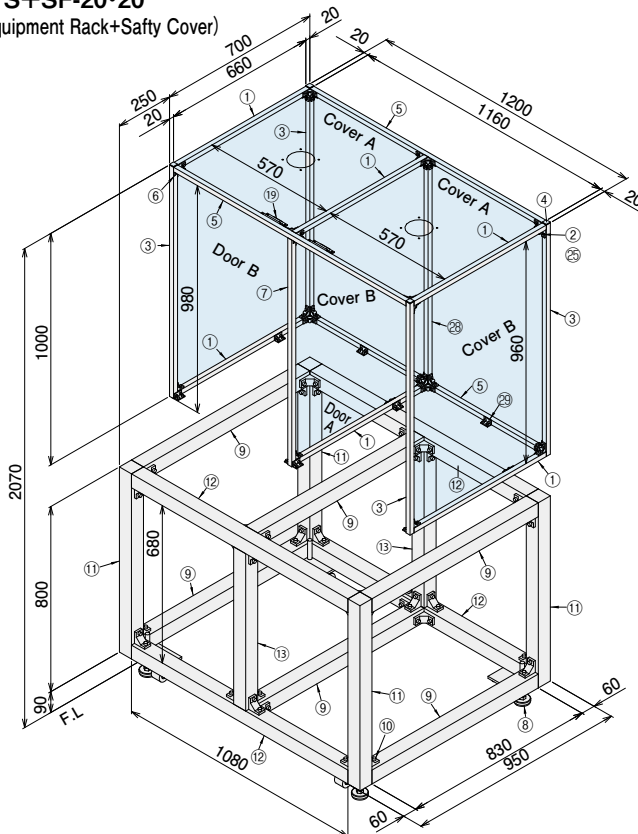
No.	Name	Quantity
1	SF-60•60•2S 1180L	6
2	Hard Bracket S3060 Kit with Tap	40
3	SF-60•60•2S 2600L	2
4	Frame Cap 60•60•2S (Light Gray)	4
5	SF-60•60•2S 2040L TL	4
6	Foot Base 60602S	4
7	Adjuster M16	4
8	SF-60•60•2S 2480L	2
9	SF2-30•30 1280L	4
10	Hard Bracket S Kit with Tap	16
11	Truss Screw M5×10 (Include to install Cover D and E)	52
12	Cover Holder S	42
13	Cover A	2
14	Cover B	1
15	Cover C	4
16	Cover D	2
17	Cover E	1
18	Truss Screw M5×15 (Include to install Cover D and E)	42
19	After Nut S M5	24
20	After Nut Support S (50 pieces)	1

SF2-40•40
(How to use Clean Booth)



No.	Name	Quantity
1	SF2-40•40 3740L	4
2	D Bracket L Kit	60
3	SF-40•40•R 2307L TL50	4
4	Level Adjuster (KC-280-4: Takigen)	4
5	Frame Cap 40•40•R (Black)	4
6	SF2-40•40 2160L	7
7	SF2-40•40 250L	4

SF-60•60•1S+SF-20•20
(How to use Equipment Rack+Safty Cover)



No.	Name	Quantity
1	SF-20•20 660L	6
2	Hard Bracket SS Kit with Tap	40
3	SF-20•20 1000L	4
4	Frame Cap 20•20 (Black)	12
5	SF-20•20 1160L	3
6	Blind Bracket SS	4
7	SF-20•20 980L	1
8	Level Adjuster Kit with Caster L	4
9	SF-60•60•1S 830L	6
10	Hard Bracket L Kit	40
11	SF-60•60•1S 800L	4
12	SF-60•60•1S 1080L	4
13	SF-60•60•1S 680L	2
14	SF-20•20 524L	4
15	SF-20•20 572L	4
16	Pull A Type	2
17	Flag Hinge SS-R Kit	2
18	Flag Hinge SS-L Kit	2
19	ML Bracket SS Kit	2
20	Truss Screw M6×10	4
21	Cover A	2
22	Cover B	3
23	Cover C	2
24	Cover D	2
25	Truss Screw M5×10	36
26	Cover Holder SS (To install Cover)	66
27	Truss Screw M5×15 (To install Cover)	66
28	SF-20•20 960L	1
29	Angle Bracket SS2040 Kit	10

SF20

SS Size

SF30

S Size

SF40-45

L Size

Complex Parts

Door Panel
Clean Equipment

Technical Data

Material Property

6061: Heat-treated type corrosive-resistant alloy. It's used for bolt and rivet component because the welded joint's strength is low, though it has pretty high bearing value by T6 treatment.

SF
series

6N01: Alloy with moderate strength for extrusion. With the intermediate strength between 6061 and 6063, it has good property for extrusion and press-hardening heat treatment. Therefore, big and thin material with complicated sectional shape can be produced. It's also good in corrosive-resistance and weldability.

6063: Representative alloy for extrusion. Although the strength is lower than 6061, it has good property for extrusion. Complicated sectional shape can be produced and it's good in corrosive-resistance and for surface treatment.

Aluminum Material Data

Material	SUS will use both materials depending on Usage	
	A6N01SS-T5	A6063S-T5
Tensile Strength	270N/mm ²	187N/mm ²
Bearing Force	225N/mm ²	147N/mm ²
Longitudinal Elastic Modulus	69972N/mm ²	68600N/mm ²
Hardness	Brinell Hardness 88HB	Brinell Hardness 60HB
Treatment	Anodizing	Thickness: More than 9 μm

Frame Material Data

● Technical Data Table

Aluminum Frame	Geometrical Moment of Inertia ×10 ⁴ mm ⁴		Section Modulus×10 ³ mm ³		I _x × E ×10 ³ N·mm ²	I _y × E ×10 ³ N·mm ²	Cross Section mm ²	Unit Mass kg/m	Frame Slot Width mm
	I _x	I _y	Z _x	Z _y					
SF-20·20	0.74	0.74	0.74	0.74	0.52	0.52	182	0.49	6
SF-20·20·1F	0.83	0.75	0.78	0.75	0.58	0.52	194	0.52	6
SF-20·20·2F	0.81	0.81	0.79	0.79	0.57	0.57	195	0.53	6
SF-20·20·3F	0.81	0.89	0.78	0.89	0.57	0.62	208	0.56	6
SF-20·20·2H	0.74	0.89	0.74	0.89	0.52	0.62	200	0.54	6
SF-20·40	5.12	1.36	2.56	1.36	3.58	0.95	324	0.88	6
SF-20·40·1F	5.40	1.53	2.70	1.44	3.78	1.07	344	0.93	6
SF-20·60	15.97	1.97	5.30	1.97	11.17	1.38	465	1.26	6
SF-20·80	36.13	2.58	9.03	2.58	25.28	1.81	607	1.64	6
SF-40·40·2S	8.89	8.89	4.45	4.45	6.22	6.22	478	1.29	6
SF-40·40·2S·1F	9.78	9.32	5.08	4.66	6.84	6.52	522	1.41	6
SF-40·40·2S·2F	9.60	9.60	4.89	4.89	6.72	6.72	497	1.35	6
SF-40·60·SS	27.03	12.63	9.01	6.31	18.91	8.84	665	1.80	6
SF-40·80·SS	63.52	18.39	15.88	9.20	44.45	12.87	994	2.70	6
SF-20·40·40	6.61	6.61	3.82	3.82	4.63	4.63	429	1.16	6
SF-20·20·R	0.55	0.55	0.48	0.48	0.38	0.38	150	0.40	6
SF-20·DE30	0.80	0.98	0.60	0.77	0.56	0.69	228	0.61	6
SF-20·DE45	0.82	0.92	0.59	0.69	0.57	0.64	221	0.59	6
SF-20·DE60	0.86	0.92	0.63	0.73	0.60	0.64	227	0.61	6
SF-25·25	1.64	1.64	1.31	1.31	1.15	1.15	288	0.78	6
SF2-30·30	2.84	2.84	1.89	1.89	1.99	1.99	332	0.90	8
SF2-30·30·1F	3.03	2.76	1.98	1.84	2.12	1.93	339	0.92	8
SF2-30·30·2F	3.05	3.05	1.96	1.96	2.13	2.13	351	0.95	8
SF2-30·30·3F	2.99	3.24	1.91	2.16	2.09	2.27	361	0.98	8
SF2-30·30·2H	2.69	3.23	1.79	2.15	1.88	2.26	345	0.93	8
SF2-30·60	20.56	5.33	6.85	3.56	14.39	3.73	592	1.60	8
SF2-30·60·1F	20.92	5.81	6.97	3.75	14.64	4.07	615	1.66	8
SF-30·90	66.26	8.44	14.72	5.62	46.36	5.91	905	2.44	8
SF-30·120	152.58	11.24	25.43	7.49	106.76	7.86	1191	3.22	8
SF-30·60·2H	21.23	6.23	7.08	4.21	14.86	4.36	631	1.70	8
SF-K·30·30	2.38	2.38	1.59	1.59	1.67	1.67	270	0.73	8
SF-K·30·60	16.68	4.63	5.56	3.09	11.67	3.24	483	1.30	8
SF-50·50·2S	21.67	21.67	8.67	8.67	15.16	15.16	859	2.32	8
SF-50·50·2S·1F	22.23	21.40	8.87	8.56	15.55	14.97	862	2.33	8
SF-50·50·2S·2F	22.26	22.26	8.77	8.77	15.58	15.58	874	2.36	8
SF-50·100·2S	153.40	42.48	30.68	16.99	107.34	29.72	1614	4.36	8

● Technical Data Table

Aluminum Frame	Geometrical Moment of Inertia ×10 ⁴ mm ⁴		Section Modulus×10 ³ mm ³		I _x × E ×10 ⁹ N·mm ²	I _y × E ×10 ⁹ N·mm ²	Cross Section mm ²	Unit Mass kg/m	Frame Slot Width mm
	I _x	I _y	Z _x	Z _y					
SF-35-35	5.12	5.12	2.93	2.93	3.58	3.58	412	1.11	8
SF-35-35-1F	4.98	5.17	2.84	2.92	3.48	3.62	394	1.06	8
SF-35-35-2F	5.37	5.37	2.98	2.98	3.76	3.76	405	1.09	8
SF-35-35-2H	4.83	5.23	2.76	2.99	3.38	3.66	376	1.02	8
SF-35-70	35.09	9.04	10.03	5.16	24.55	6.33	667	1.80	8
SF-35-70-1F	33.94	9.47	9.70	5.36	23.75	6.63	659	1.78	8
SF-35-70-2F	34.26	9.42	9.79	5.27	23.97	6.59	656	1.77	8
SF-60-60-2S	41.38	41.38	13.79	13.79	28.95	28.95	971	2.62	8
SF-60-60-2S-1F	45.34	43.31	14.65	14.44	31.73	30.30	1071	2.89	8
SF-60-60-2S-2F	43.75	43.75	14.66	14.66	30.61	30.61	1011	2.73	8
SF-60-90	111.61	52.65	24.80	17.56	78.10	36.84	1156	3.12	8
SF-60-120	242.90	65.97	40.48	21.99	169.96	46.16	1526	4.12	8
SF-30-60-60	27.28	27.28	7.88	7.88	19.09	19.09	863	2.33	8
SF-30-30-R	2.42	2.42	1.53	1.53	1.69	1.69	305	0.82	8
SF-30-DE30	3.15	3.86	1.58	2.00	2.20	2.70	412	1.11	8
SF-30-DE45	3.21	3.72	1.56	1.86	2.25	2.60	401	1.08	8
SF-30-DE60	3.33	3.70	1.67	1.89	2.33	2.59	410	1.10	8
SF2-40-40	10.48	10.48	5.24	5.24	7.33	7.33	643	1.74	10
SF2-40-40-1F	9.76	10.08	4.69	5.04	6.83	7.05	704	1.90	10
SF2-40-40-2F	9.66	9.66	4.74	4.74	6.76	6.76	589	1.59	10
SF2-40-40-3F	9.97	10.51	4.94	5.25	6.98	7.35	618	1.67	10
SF2-40-40-2H	9.74	10.44	4.87	5.22	6.82	7.31	612	1.65	10
SF2-40-80	72.30	19.92	18.07	9.96	50.59	13.94	1114	3.01	10
SF2-40-80-1F	70.50	20.32	17.62	10.14	49.33	14.22	1105	3.11	10
SF-40-160	498.81	38.58	62.35	19.29	349.03	27.00	2049	5.54	10
SF-K-40-40	7.50	7.50	3.75	3.75	5.25	5.25	492	1.33	10
SF-K-40-80	55.37	14.44	13.84	7.22	38.74	10.10	856	2.31	10
SF-80-80	129.84	129.84	32.46	32.46	90.85	90.85	1703	4.60	10
SF-80-160	1000.9	295.39	125.11	73.84	700.35	206.69	3891	10.51	10
SF-80-80-H	182.84	182.84	45.71	45.71	127.94	127.94	2616	7.06	10
SF-90-90-H	303.40	303.40	67.42	67.42	212.30	212.30	3270	8.83	10
SF-40-80-80	94.15	94.15	27.56	27.56	65.88	65.88	1550	4.19	10
SF-40-40-R	7.82	7.82	3.53	3.53	5.47	5.47	566	1.53	10
SF-40-DE30	9.89	10.64	3.73	4.20	6.92	7.45	694	1.88	10
SF-40-DE45	9.87	10.37	3.59	3.99	6.91	7.26	676	1.83	10
SF-40-DE60	9.99	10.53	3.74	4.14	6.99	7.37	679	1.84	10
SF2-45-45	15.24	15.24	6.78	6.78	10.66	10.66	783	2.10	10
SF2-45-45-1F	13.91	14.65	5.90	6.51	9.73	10.25	732	1.98	10
SF2-45-45-2F	14.09	14.09	6.14	6.14	9.86	9.86	717	1.94	10
SF2-45-45-3F	14.41	15.02	6.39	6.67	10.08	10.51	736	1.99	10
SF2-45-45-2H	14.3	14.71	6.35	6.53	10.01	10.29	731	1.98	10
SF2-45-90	125.54	32.50	27.90	14.44	87.84	22.74	1543	4.17	10
SF2-45-90-1F	117.42	32.07	26.09	14.10	82.16	22.44	1438	3.88	10
SF-45-180	804.81	60.75	89.42	27	563.14	42.51	2636	7.12	10
SF-K-45-45	11.74	11.74	5.22	5.22	8.21	8.21	628	1.70	10
SF-K-45-45-1F	10.88	11.33	5.04	5.03	7.61	7.93	590	1.60	10
SF-K-45-45-2F	11.13	11.13	4.99	4.91	7.79	7.79	585	1.58	10
SF-K-45-90	87.17	22.87	19.37	10.17	60.99	16.00	1102	2.98	10
SF-90-90	204.97	204.97	45.55	45.55	143.42	143.42	2143	5.79	10
SF-90-180	2136.6	598.51	237.4	133	1495.02	418.79	6320	17.07	10
SF-45-90-90	149.53	149.53	28.83	28.83	104.63	104.63	2052	5.54	10
SF-45-45-R	11.33	11.33	4.52	4.52	7.93	7.93	664	1.79	10
SF-45-DE30	14.91	15.95	4.95	5.7	10.43	11.16	851	2.30	10
SF-45-DE45	14.73	15.49	4.72	5.36	10.31	10.84	821	2.22	10
SF-45-DE60	14.94	15.93	4.86	5.73	10.45	11.15	834	2.26	10
SF-60-60-1S	49.32	49.32	16.44	16.44	34.51	34.51	1380	3.73	10
SF-80-80-1S (L=4000)	90.46	90.46	16.35	16.35	63.30	63.30	1461	3.94	10

SF20
S Size
SF30
S Size
SF45
L Size
Complex Parts
Door Panel
Clean Equipment
Technical Data

Steel Frame	I × E ×10 ⁹ N·mm ²	Unit Mass kg/m
Equal Angle Iron	L30×30×t3	2.92
	L40×40×t5	11.15
	L50×50×t6	22.84
	L65×65×t6	60.51
	L75×75×t6	94.87
Square Iron	□50×50×t2.3	32.72
	□50×50×t3.2	41.98
	□60×60×t2.3	58.24
	□75×75×t2.3	11.75

I × E = Geometrical Moment of Inertia mm⁴ × Longitudinal Elastic Modulus N/mm²

● Indication of Frame Selection

- I_x × E (Aluminum Frame) ≥ I_x × E (Steel Frame)
- I_y × E (Aluminum Frame) ≥ I_y × E (Steel Frame)

Technical Data Indication of Allowable Load

Indication of Frame's Allowable Load

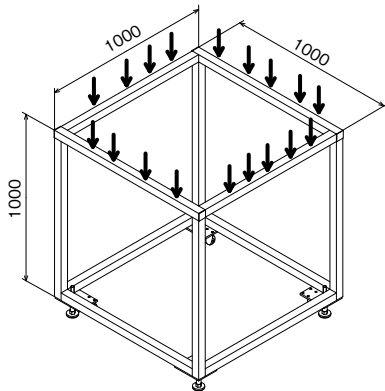
- Calculated as center-concentrated load by both ends supported beam.
- Assumed the load when flexure volume reaches 1/1000mm of the frame's length as the allowable load.

Name	Both Ends Supported Allowable Load	
	L=1000 Centralized Flexure 1mm Allowable Load (N)	L=500 Centralized Flexure 0.5mm Allowable Load (N)
SF-2020	25	99
SF-2040 (Width)	45	181
SF-2040 (Height)	172	688
SF-2060 (Width)	66	265
SF-2060 (Height)	537	2147
SF-2080 (Width)	86	344
SF-2080 (Height)	1208	4832
SF-40402S	299	1194
SF-4060SS (Width)	424	1697
SF-4060SS (Height)	908	3631
SF-4080SS (Width)	614	2457
SF-4080SS (Height)	2125	8499
SF-204040	222	888
SF-2020R	18	74
SF-2525	55	221
SF2-3030	95	380
SF2-3060 (Width)	179	715
SF2-3060 (Height)	678	2714
SF-K3030	80	320
SF-K3060 (Width)	156	622
SF-K3060 (Height)	560	2241
SF-3090 (Width)	283	1134
SF-3090 (Height)	2226	8904
SF-30120 (Width)	376	1503
SF-30120 (Height)	5111	20442
SF-60602S	1390	5562
SF-6090 (Width)	1767	7067
SF-6090 (Height)	3728	14912
SF-60120 (Width)	2217	8867
SF-60120 (Height)	8162	32646
SF-306060	917	3666
SF-3030R	81	325
SF-50502S	725	2902
SF-501002S (Width)	1389	5555
SF-501002S (Height)	5048	20192

Name	Both Ends Supported Allowable Load	
	L=1000 Centralized Flexure 1mm Allowable Load (N)	L=500 Centralized Flexure 0.5mm Allowable Load (N)
SF-3535	172	688
SF-3570 (Width)	304	1214
SF-3570 (Height)	1179	4714
SF2-4040	349	1397
SF2-4080 (Width)	665	2660
SF2-4080 (Height)	2415	9659
SF-40160 (Width)	1296	5183
SF-40160 (Height)	16753	67013
SF-K4040	252	1008
SF-K4080 (Width)	485	1940
SF-K4080 (Height)	1860	7439
SF-8080	4336	17344
SF-8080H	6130	24518
SF-9090H	10190	40761
SF-80160 (Width)	9921	39685
SF-80160 (Height)	33617	134467
SF-408080	3162	12649
SF-4040R	262	1049
SF2-4545	508	2033
SF2-4590 (Width)	1085	4338
SF2-4590 (Height)	4188	16753
SF-45180 (Width)	2040	8162
SF-45180 (Height)	27031	108123
SF-K4545	394	1576
SF-K4590 (Width)	768	3072
SF-K4590 (Height)	2927	11710
SF-9090	7026	28105
SF-90180 (Width)	20102	80408
SF-90180 (Height)	71761	287044
SF-459090	5024	20094
SF-4545R	381	1522
SF-60601S	1655	6619
SF-80801S	3038	12153

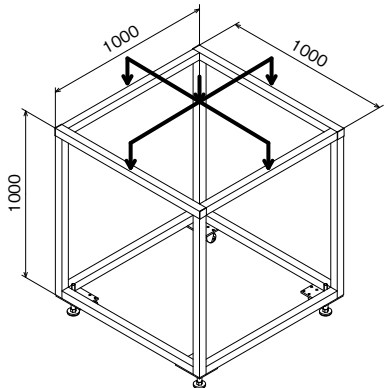
Indication of Unit's Allowable Load

Uniformly-Distributed Load Loaded evenly to the frame



Condition: Calculated based on that each frame's flexure volume is 1mm at the center of the frame in the flat surface of 1000mm×1000mm.

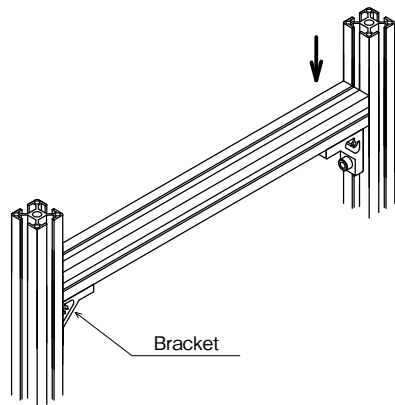
Concentrated Load Loaded to the center of the frame



Name	Unit's Allowable Load L=1000	
	Uniformly-Distributed Load	Concentrated Load
	Allowable Load (N)	Allowable Load (N)
SF-2020	180	112
SF-2040 (Width)	279	174
SF-2040 (Height)	1079	674
SF-2060 (Width)	398	249
SF-2060 (Height)	3366	2104
SF-2080 (Width)	506	316
SF-2080 (Height)	7577	4736
SF-40402S	1835	1147
SF-4060SS (Width)	2552	1595
SF-4060SS (Height)	5578	3486
SF-4080SS (Width)	3617	2261
SF-4080SS (Height)	13054	8159
SF-204040	1364	853
SF-2020R	116	72
SF-2525	344	215
SF2-3030	590	369
SF2-3060 (Width)	1075	672
SF2-3060 (Height)	4212	2632
SF-K3030	512	320
SF-K3060 (Width)	995	622
SF-K3060 (Height)	3585	2241
SF-3090 (Width)	1651	1032
SF-3090 (Height)	13820	8637
SF-30120 (Width)	2117	1323
SF-30120 (Height)	31726	19829
SF-60602S	8365	5228
SF-6090 (Width)	10289	6431
SF-6090 (Height)	22428	14018
SF-60120 (Width)	12485	7803
SF-60120 (Height)	49100	30687
SF-306060	5514	3446
SF-3030R	505	315
SF-50502S	4411	2757
SF-501002S (Width)	8000	5000
SF-501002S (Height)	30692	19183

Name	Unit's Allowable Load L=1000	
	Uniformly-Distributed Load	Concentrated Load
	Allowable Load (N)	Allowable Load (N)
SF-3535	1101	688
SF-3570 (Width)	1943	1214
SF-3570 (Height)	7543	4714
SF2-4040	2146	1341
SF2-4080 (Width)	3916	2447
SF2-4080 (Height)	14837	9273
SF-40160 (Width)	6966	4354
SF-40160 (Height)	102932	64333
SF-K4040	1548	967
SF-K4080 (Width)	2856	1785
SF-K4080 (Height)	11426	7141
SF-8080	25531	15957
SF-8080H	36091	22557
SF-9090H	65217	40761
SF-80160 (Width)	53336	33335
SF-80160 (Height)	180724	112952
SF-408080	18619	11637
SF-4040R	1612	1007
SF2-4545	3106	1941
SF2-4590 (Width)	6316	3948
SF2-4590 (Height)	25599	15999
SF-45180 (Width)	10708	6692
SF-45180 (Height)	165212	103258
SF-K4545	2408	1505
SF-K4590 (Width)	4474	2796
SF-K4590 (Height)	17892	11183
SF-9090	40921	25576
SF-90180 (Width)	105495	65934
SF-90180 (Height)	417936	261210
SF-459090	29257	18286
SF-4545R	2326	1454
SF-60601S	9955	6222
SF-80801S	19445	12153

Indication of Bracket's Allowable Load (Slip)



Size	Bracket Name	Allowable Load (N)	
SS	D Bracket SS	833	
	D Bracket 2040	1887	
	Hard Bracket SS	833	
	Hard Bracket SSG	833	
	Hard Bracket SSW 2020	1290	
	Hard Bracket SS 2040	1470	
	Hard Bracket SSG 2040	1470	
	Hard Bracket SSW 2040	2233	
	Hard Bracket SS 2060	1960	
	Hard Bracket SSG 2060	1960	
	Hard Bracket SSW2060	4360	
	Angle Bracket SS	686	
	Angle Bracket Hard SS	686	
	Angle Bracket SS 2040	1176	
	Angle Bracket SS 2060	1617	
	QC Joint SS	345	
	S Blind Bracket SS	196	
	S	D Bracket S	1176
		D Bracket 3060	2825
		Hard Bracket S	1176
Hard Bracket SG		1176	
Hard Bracket SW 3030		3035	
Hard Bracket S 3060		1960	
Hard Bracket SG 3060		1960	
Hard Bracket SW 3060		4307	
Hard Bracket S 3090		2744	
Hard Bracket SG 3090		2744	
Hard Bracket S 50		1960	
Hard Bracket SG 50		1960	
Hard Bracket SW 3090		5737	
Angle Bracket S		980	
Angle Bracket Hard S		980	
Angle Bracket S 3060		1568	
Angle Bracket S 3090		2352	
Angle Bracket S 50		1568	
S Blind Bracket S		686	
QC Joint S		395	
TG Joint 30		945	
S Double Joint 30		1200	
KF Joint		535	

Size	Bracket Name	Allowable Load (N)
L	D Bracket L	2058
	D Bracket 4080	5055
	D Bracket 4590	5055
	Hard Bracket L	2058
	Hard Bracket LG	2058
	Hard Bracket LW	5422
	Hard Bracket L 4080	2940
	Hard Bracket G 80	3920
	Hard Bracket G 80160	7056
	Hard Bracket LW4080	8542
	Hard Bracket GW80	8542
	Hard Bracket L 4590	2940
	Hard Bracket G 90	3920
	Hard Bracket G 90180	7056
	Hard Bracket LW4590	8542
	Hard Bracket GW90	8542
	Angle Bracket L 40	1666
	Angle Bracket Hard L40	1666
	Angle Bracket L 4080	2352
	Angle Bracket L 45	1666
	Angle Bracket Hard L45	1666
	Angle Bracket L 4590	2352
	Offset Angle L4080	2352
	Offset Angle L4590	2352
	S Blind Bracket L	1274
	QC Joint L	800
	TG Joint 4045	1560
	TG Joint 60	1560
TG Joint 80 Kit (When using □80 Frame)	7687	
S Double Joint 40	1200	
S Double Joint 45	1200	
S Double Joint 60	1200	
S Double Joint 80	1200	

SF20

SS Size

SF30

S Size

SF40-45

L Size

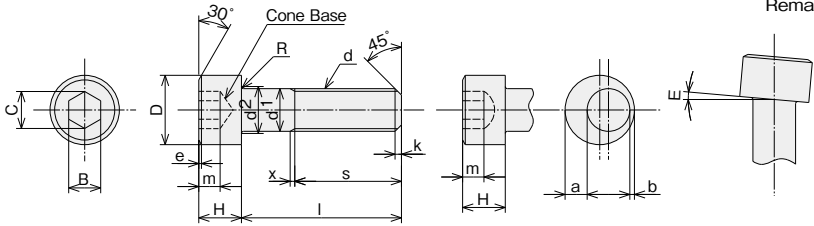
Complex Parts

Door Panel
Clean Equipment

Technical Data

Technical Data Hexagon Socket Bolt, SI Unit List

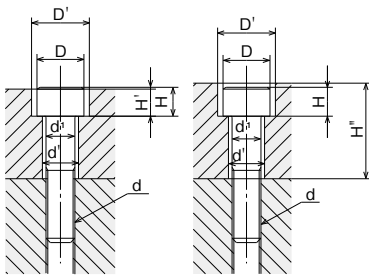
Hexagon Socket Bolt Excerpt from JISB1176 (1988)



- Remarks
1. Don't use the staff which the name is in parenthesis as possible as you can.
 2. Developed length (l), length of thread part (s) and length of incomplete thread is by appendix table 2.
 3. Base shape of hexagonal hole can be circular cone or circle.
 4. There must not have significant eccentric to the hexagonal hole.
 5. Inner chamfering can be done to the hexagonal hole.
 6. Put parallel or slash knurling to the side of the head. However, knurling is not needed by specification. In this case, allowable difference of D is h13 according to JIS B 0401 (Dimensional tolerance and engaging).
 7. Spanner for this bolt is JIS B 4648 (Hexagonal bar spanner).

Size of Screw (d)		M3×0.5	M4×0.7	M5×0.8	M6	M8	M10	M12	(M14)	M16	(M18)	M20	(M22)	M24	(M27)	M30
Pitch P		0.5	0.7	0.8	1	1.25	1.5	1.75	2	2	2.5	2.5	2.5	3	3	3.5
d ₁	Basic Dimension	3	4	5	6	8	10	12	14	16	18	20	22	24	27	30
	Allowable Tolerance			-0.1				-0.15						-0.2		
D	Basic Dimension	5.5	7	8.5	10	13	16	18	21	24	27	30	33	36	40	45
	Allowable Tolerance	-0.3		-0.36			-0.43			-0.52				-0.62		
H	Basic Dimension	3	4	5	6	8	10	12	14	16	18	20	22	24	27	30
	Allowable Tolerance	-0.25		-0.3		-0.36		-0.43		-0.52				-0.62		
e	About	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.8	1	1	1	1	1	1.5	1.5
B	Basic Dimension	2.5	3	4	5	6	8	10	12	14	14	17	17	19	19	22
	Allowable Tolerance	+0.080 +0.020			+0.105 +0.030			+0.130 +0.040			+0.230 +0.050				+0.275 +0.065	
C	About	2.9	3.6	4.7	5.9	7	9.4	11.7	14	16.3	16.3	19.8	19.8	22.1	22.1	25.6
m	MIN	1.6	2.2	2.5	3	4	5	6	7	8	9	10	11	12	13.5	15
R	MIN	0.1	0.2	0.2	0.25	0.4	0.4	0.6	0.6	0.6	0.6	0.8	0.8	0.8	1	1
da	MAX	3.6	4.7	5.7	6.8	9.2	11.2	14.2	16.2	18.2	20.2	22.4	24.4	26.4	30.4	33.4
k	About	0.6	0.8	0.9	1	1.2	1.5	2	2	2	2.5	25	25	3	3	3.5
a-b	MAX	0.2	0.2	0.3	0.3	0.4	0.5	0.7	0.7	0.8	0.9	0.9	1.1	1.2	1.3	1.5
E	MAX	1°														

Hexagon Socket Bolt Drilling Dimension (Reference Value)



Size of Screw (d)	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30
d ₁	3	4	5	6	8	10	12	14	16	18	20	22	24	27	30
d'	3.4	4.5	5.5	6.6	9	11	14	16	18	20	22	24	26	30	33
D	5.5	7	8.5	10	13	16	18	21	24	27	30	33	36	40	45
D'	6.5	8	9.5	11	14	17.5	20	23	26	29	32	35	39	43	48
H	3	4	5	6	8	10	12	14	16	18	20	22	24	27	30
H'	2.7	3.6	4.6	5.5	7.4	9.2	11	12.8	14.5	16.5	18.5	20.5	22.5	25	28
H''	3.3	4.4	5.4	6.5	8.6	10.8	13	15.2	17.5	19.5	21.5	23.5	25.5	29	32

Remarks Bolt Hole Dimension (d') above is according to JIS B 1001.

List of SI Unit for Main Amount

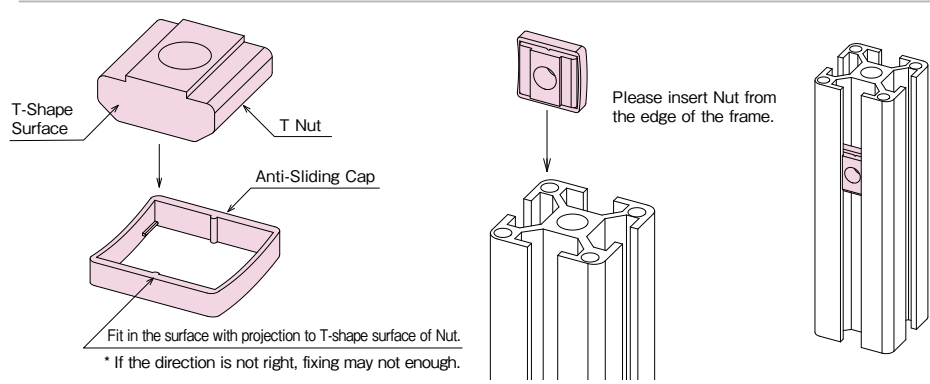
Name of Amount	Existing Unit	SI Unit	Equivalent
Length	μ	μm	1 μ = 1 μm
	Å	m (Å can be used together)	1 Å = 10 ⁻¹⁰ m
	ft		1 ft = 3.048 × 10 ⁻¹ m
	in		1 in = 2.54 × 10 ⁻² m
	mile		1 mile = 1.60934 × 10 ³ m
Area	a	m ² (a can be used together)	1 a = 10 ² m ²
	yd ²		1 yd ² = 2.01168 × 10 ² m ²
	ft ²		1 ft ² = 9.29030 × 10 ⁻² m ²
	in ²		1 in ² = 6.4516 × 10 ⁻⁴ m ²
	acre		1 acre = 4.04686 × 10 ³ m ²
	mile ²		1 mile ² = 2.58999 × 10 ⁶ m ²
Volume	cc	cm ³	1 cc = 1 cm ³
	L, l	dm ³ (L, l can be used together)	1 L = 1 dm ³
	gal	m ³	1 gal = 4.54609 × 10 ⁻³
	gal		1 gal = 3.78541 × 10 ⁻³
	barrel		1 barrel = 1.590 × 10 ⁻¹

Name of Amount	Existing Unit	SI Unit	Equivalent
Weight	t	kg(t can be used together)	1 t = 10 ³ kg
	car	mg	1 car = 200mg
Density · Concentration	kgf·s ² /m ⁴	kg/m ³	1 kgf·s ² /m ⁴ = 9.80665 kg/m ³
Momentum	kgf·s	kg·m/s	1 kgf·s = 9.80665 kg·m/s
Moment of Inertia	kgf·m·s ²	kg·m ²	1 kgf·m·s ² = 9.80665 kg·m ²
Power	kgf	N	1 kgf = 9.80665 N
	dyn		1 dyn = 10 ⁻⁵ N
Moment of Power	kgf·m	N·m	1 kgf·m = 9.80665 N·m
	kgf/cm ²		1 kgf/cm ² = 9.80665 × 10 ⁴ Pa
Pressure	bar	Pa (bar can be used together)	1 kgf/cm ² = 9.80665 × 10 ⁻¹ bar
	at(Technical Atmosphere)		1 bar = 10 ⁵ Pa
	atm(Presure)		1 at = 9.80665 × 10 ⁴ Pa
	mH ₂ O, mAg		1 atm = 101325 Pa
	mmHg		1 mmHg = 9.80665 × 10 ³ Pa
Torr		1 Torr = 133.322 Pa	

Technical Data *How to use Nut*

How to use Nut

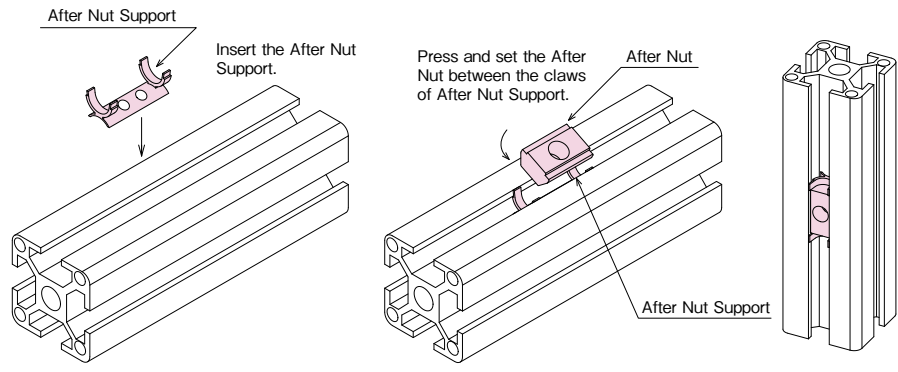
T Nut + Anti-Sliding Cap



for SF-20 Series	T Nut SS Anti-Sliding Cap SS	P30
for SF-30 Series	T Nut S Anti-Sliding Cap S	P60
for SF-40 Series	T Nut L Anti-Sliding Cap L40	P98
for SF-45 Series	T Nut L Anti-Sliding Cap L45	P98

It's hardly slide with Anti-sliding Cap.

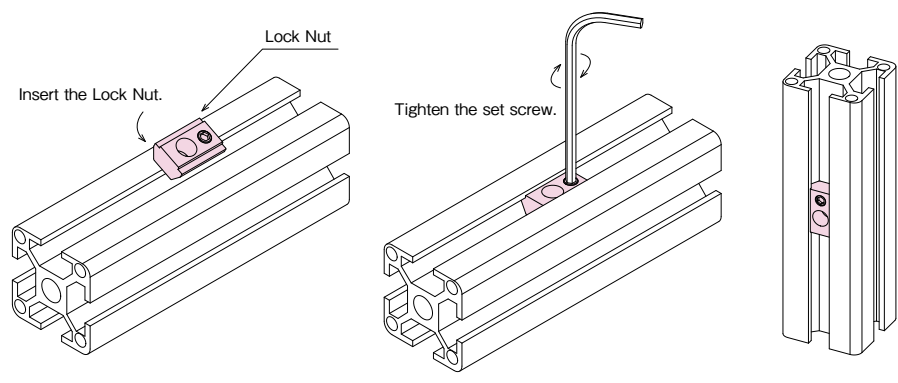
After Nut + After Nut Support



for SF-20 Series	After Nut SS After Nut Support SS	P30
for SF-30 Series	After Nut S After Nut Support S	P61
for SF-40-45 Series	After Nut L After Nut Support L	P99

Nut can be positioned in the right place by After Nut Support, and it hardly displace because of the convenient lock function.

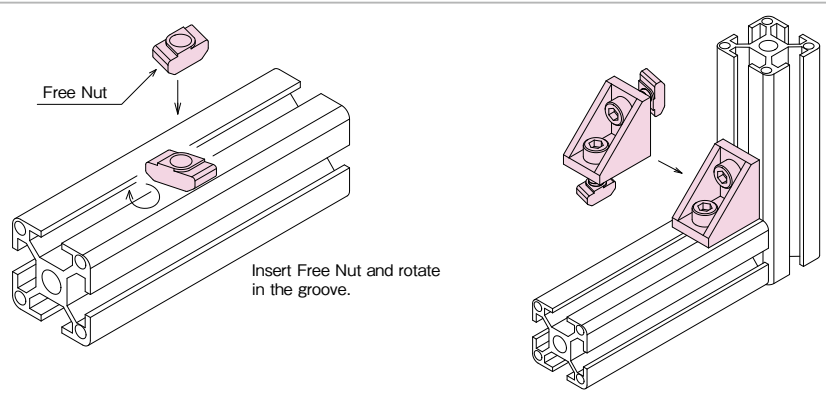
Lock Nut



for SF-20 Series	Lock Nut SS	P30
for SF-30 Series	Lock Nut S	P61
for SF-40-45 Series	Lock Nut L	P99

By tightening the set screw, position of the Nut is fixed and hardly moves. After Nut Support can also be used and hardly moves as a temporary setting.

Free Nut



for SF-20 Series	Free Nut SS	P30
for SF-30 Series	Free Nut S	P61
for SF-40-45 Series	Free Nut L	P100

Nut can be inserted in the condition that is remained in bracket, etc.

SF20 SS Size

SF30 S Size

SF40-45 L Size

Complex Parts

Door Panel Clean Equipment

Technical Data

Technical Data How to joint Bracket

QC Joint Kit

<p>1</p> <p>QC Round Metal Tool</p> <p>Drill-Processed Frame for QC Joint</p> <p>QC Joint</p> <p>QC Joint (with Tap)</p> <p>Hexagon Socket Bolt</p> <p>• Drill-processing for QC Joint is needed on one of the frames.</p>	<p>2</p> <p>QC-processed frame</p> <p>Insert QC Joint.</p>
<p>4</p> <p>Tighten QC Joint and Bolt with Hexagonal Wrench.</p>	<p>3</p> <p>Rotate QC Joint 90°, and connect to the QC-Processed Frame.</p>

TG Joint Kit

<p>1</p> <p>Drilling</p> <p>Tapping</p> <p>Bolt for TG</p> <p>TG Plate</p> <p>• Tapping for bolt tightening is needed to one frame, and wrench hole processing is needed to another frame.</p>	<p>2</p> <p>Put the Bolt for TG through the TG Plate, and fix temporary with spacing.</p>
<p>4</p> <p>Tighten with Hexagonal Wrench and fix it.</p>	<p>3</p> <p>Set the head of the bolt and TG Plate to another frame, and slide to the specific position.</p>

Instruction for use of TG Joint

Set the rotation stopper to the top.

Adjuster Plate S (Adjuster Caster Plate S)

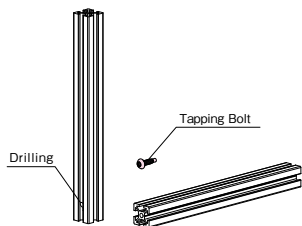
When using TG Joint Kit 30 with Adjuster Plate S and Adjuster Caster Plate S together, please pay attention to the direction of TG Plate.

Double Joint Kit

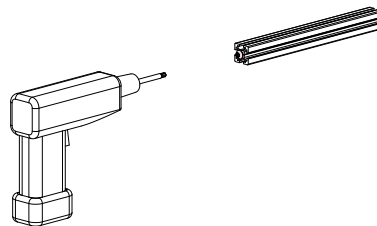
<p>1</p> <p>Drilling</p> <p>Hexagon Socket Bolt</p> <p>Double Joint</p> <p>T Nut</p> <p>• Drilling is needed to one of the frames.</p>	<p>2</p> <p>Insert T Nut and Bolt first.</p> <p>Insert Double Joint to the drilled frame.</p> <p>Frame ①</p> <p>Frame ②</p>
<p>4</p> <p>Tighten with Hexagonal Wrench with adjusting the position.</p>	<p>3</p> <p>Fix up Frame 2 to Frame 1, and slide T Nut and Bolt from both sides to connect to Double Joint.</p> <p>Frame ②</p> <p>Frame ①</p>

Tapping Bolt

1 Drilling is needed to the frame which fixes with Tapping Bolt.

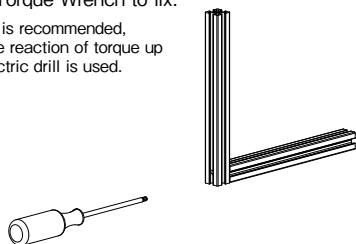


2 Fix Tapping Bolt temporary by Electric Driver.

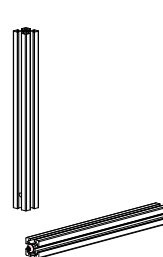


4 Tighten by Torque Wrench to fix.

* Manual tool is recommended, because the reaction of torque up is big if electric drill is used.

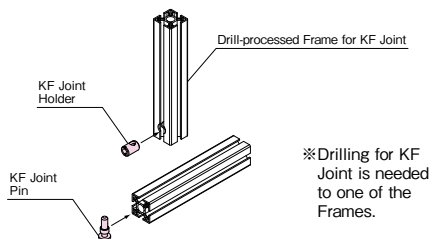


3 Insert the head of the bolt to another frame's groove, and slide to the specified position.

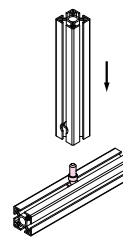


How to assemble KF Joint

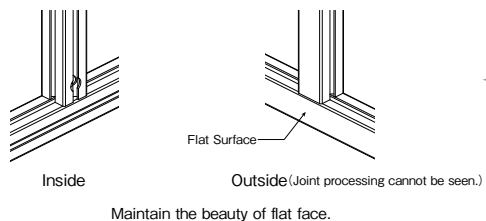
1 Drilling for KF Joint is needed to one of the frames.



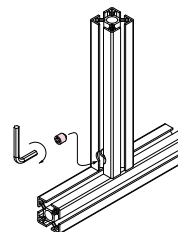
2 Put the frame to KF Joint pin.



4 Appearance from the opposite side is clear because the drilling for KF Joint is not penetrated.



3 Tighten set screw (sharp edge) by Hexagonal Wrench.



SF20
SS Size

SF30
S Size

SF40-45
L Size

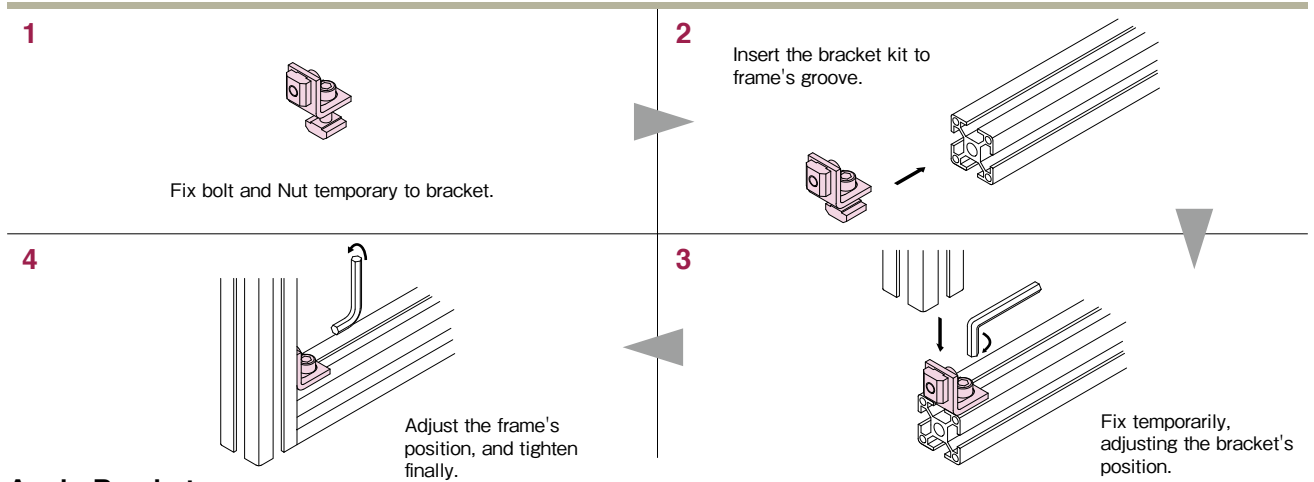
Complex Parts

Door Panel
Clean Equipment

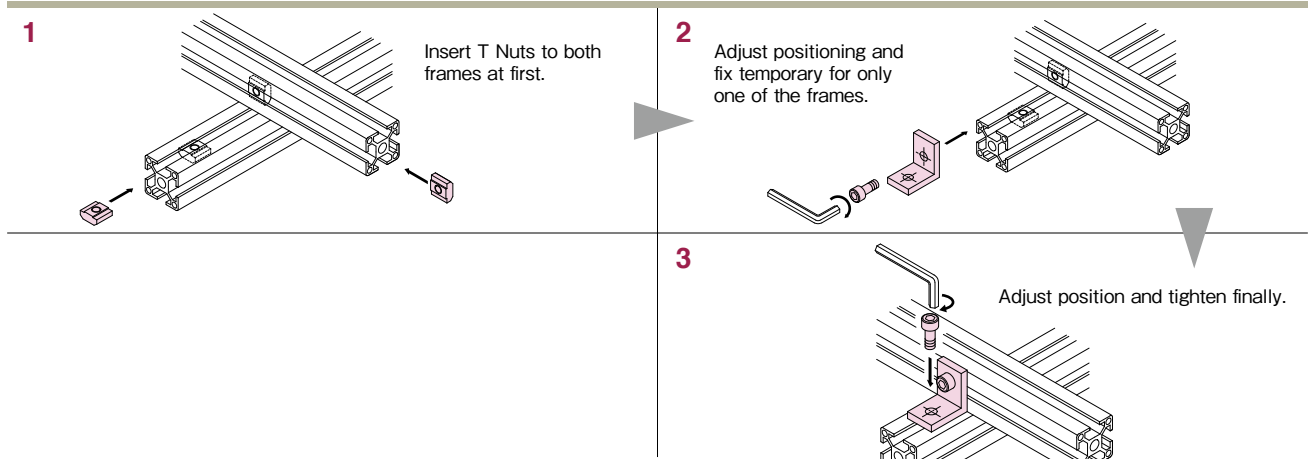
Technical Data

Technical Data Free Unit

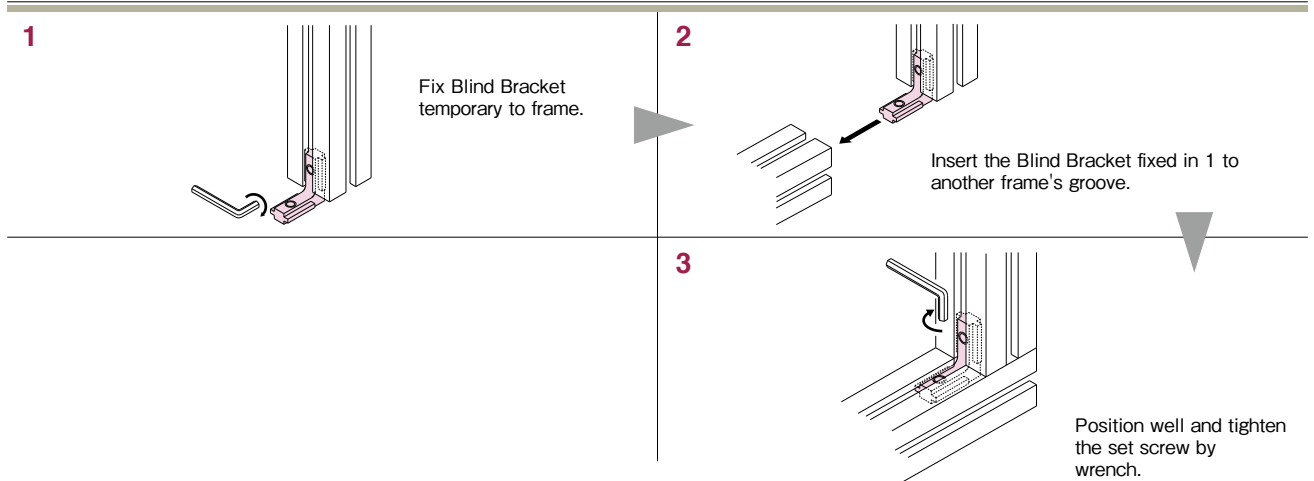
Each L-Shape Bracket



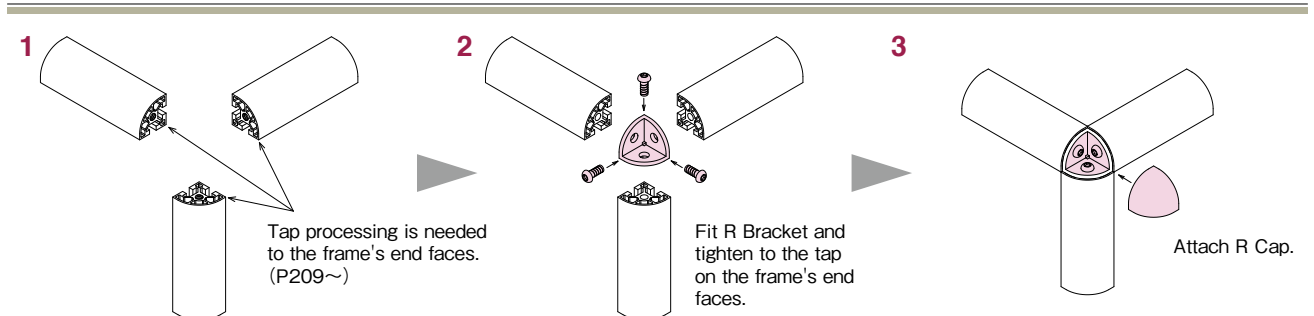
Angle Bracket



Blind Bracket



R Bracket (Block Bracket)





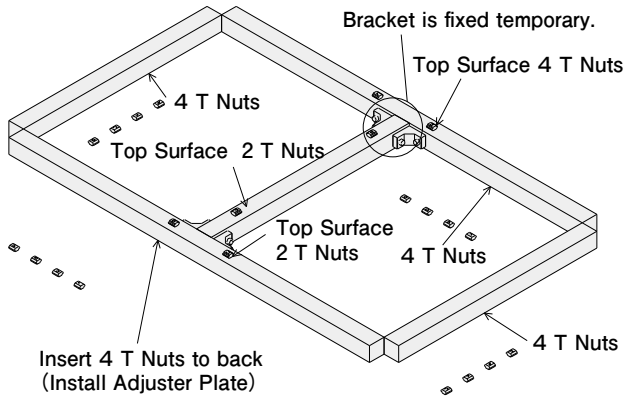
Technical Data How to Assemble SF Unit

How to Assemble SF Unit

Before Assembly | 1. Please assemble in wide space on flat floor. 2. Classify the Frames by dimensions and parts.

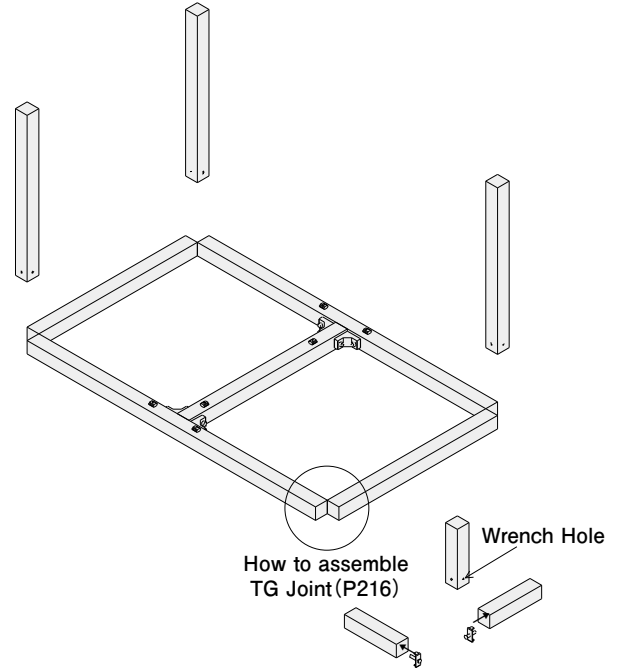
* Example of using TG Joint Kit and Hard Bracket

1 Base Assembly



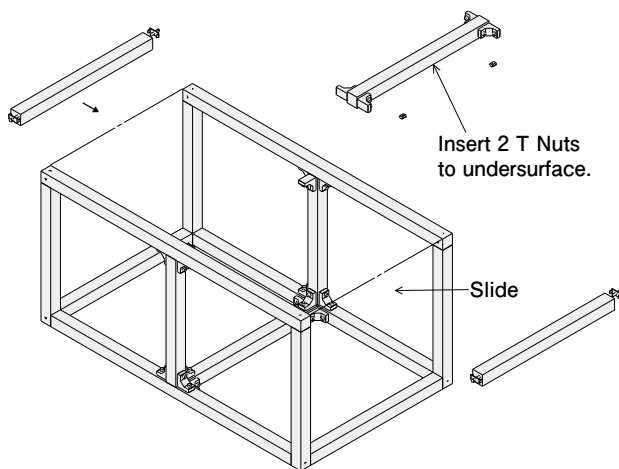
* Please don't forget to insert Nuts.

2 Put up poles

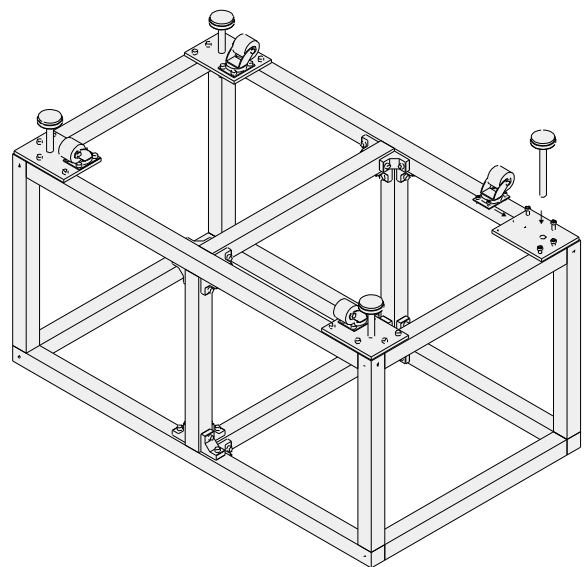


* Please confirm the directions.

5 Assemble top surface (2)



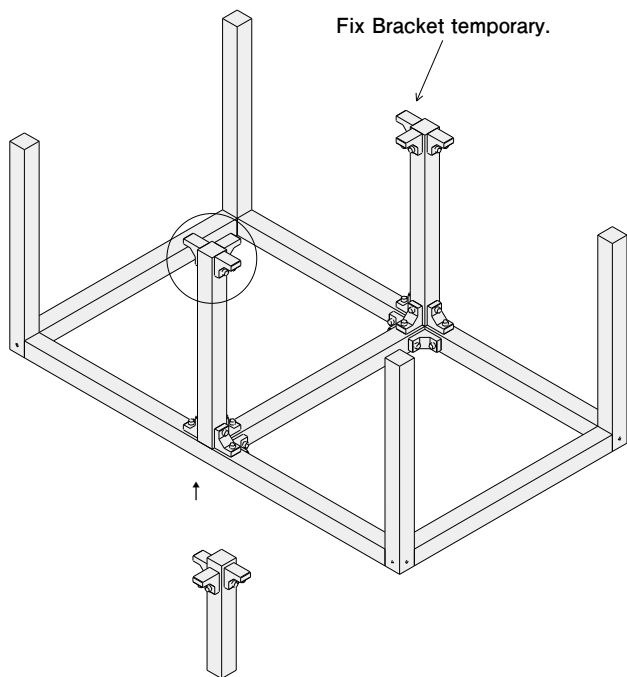
6 Turn unit upside-down, and install Adjuster and Caster



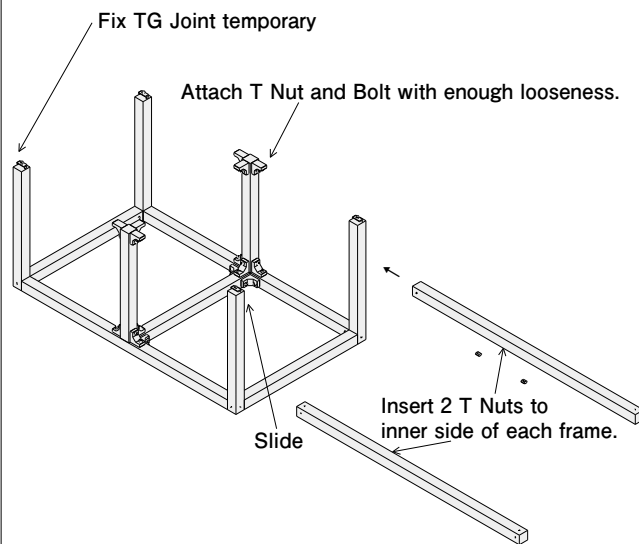
* Don't forget to prepare T Nut and Free Nut to install Top Plate and Cover.

3. Scratch marking-off on Frame 4. Confirm the quantity of Nuts to insert before assembly.

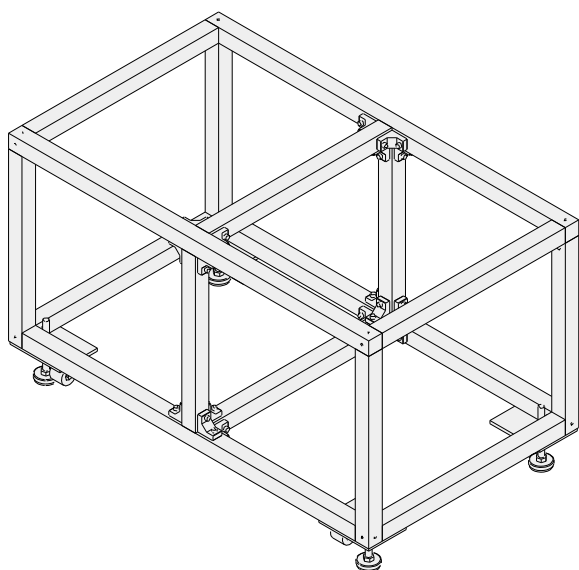
3 Put up intermediate poles



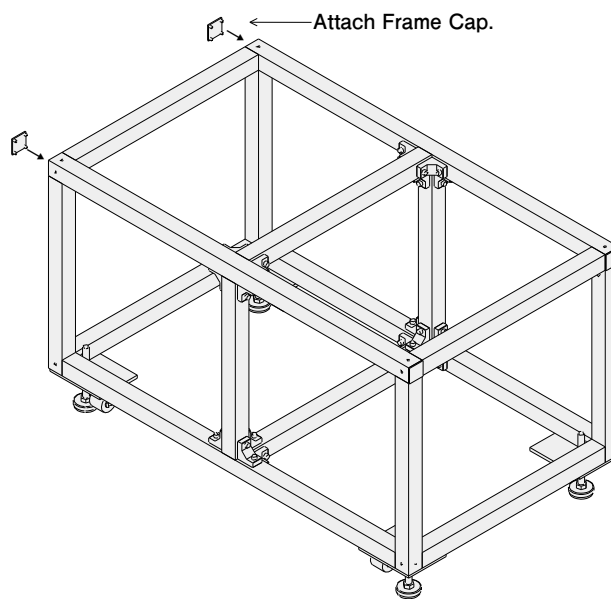
4 Assemble top surface (1)



7 Tighten finally with adjusting the Frame's position.



8 Completion



* Please clean the surface with alcohol, etc after assembly.

SF20
SS Size

SF30
S Size

SF40-45
L Size

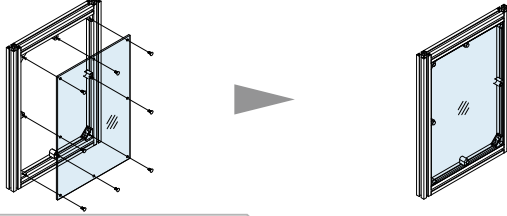
Complex Parts

Door Panel
Clean Equipment

Technical Data

How to install Panel

How to fix by Bracket's Tap



(How to install)

- Fasten Resin Panel to the tap of D Bracket or Hard Bracket by bis.

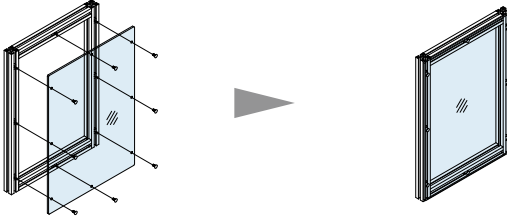
(Selection Indication)

- Panel installation is easy even after assembling frame, and the Panel's surface becomes as same as Frame's surface.

(For details)
Bracket with Tap

SF-20 series	P32~
SF-30 series	P63~
SF-40・45 series	P101~

How to fix from outer Frame



(How to install)

- Insert After Nut in frame's groove, and fasten Resin Panel by bis.

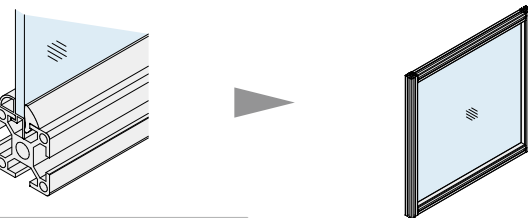
(Selection Indication)

- High-airtightness component with lessen the gap with frame.

(For details)
After Nut to fix Resin Panel.

After Nut SS	P23~
After Nut S	P61~
After Nut L	P99~

How to fix by Panel Fix



(How to install)

- Fix Resin Panel in to the frame's groove, using Panel Fix.

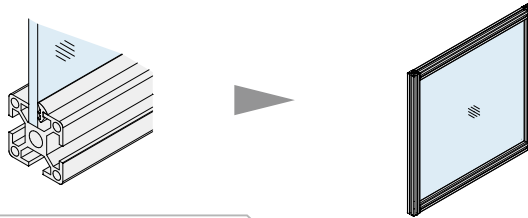
(Selection Indication)

- Beautiful appearance without bis. Displacing is possible after assembly.

(For details)

Panel Fix	
Panel Fix Rubber	P172

How to fix by Panel Clamp



(How to install)

- Fit Resin Panel into the frame's groove before assembling the frame, and fix by Panel Clamp completely.

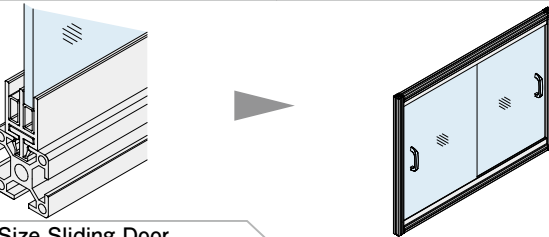
(Selection Indication)

- Appearance is clear.
- Frame assembly and inserting Panel is done at the same time, so it's suitable for unit in face.

(For details)

Panel Clamp	P172
-------------	------

Resin Panel Sliding Door



(How to install)

- Resin Panels become a Sliding Door, using Slide Rail and Slide Spacer.

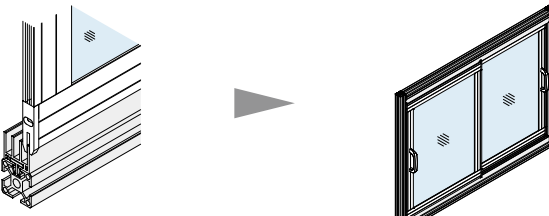
(Selection Indication)

- Sliding Door Structure at low cost.

(For details)

Slide Rail	
Slot Connector	P176
Slide Spacer	

Medium Size Sliding Door



(How to install)

- Sliding Door's rim frame is used as a Sliding Door with installing rollers to the convex part of the slide rail.

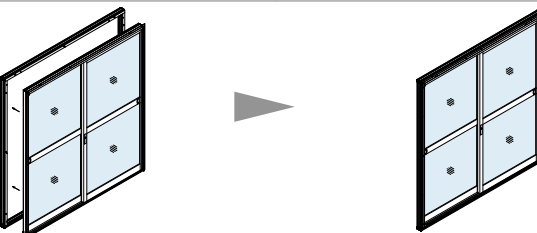
(Selection Indication)

- Suitable for medium size.

(For details)

Slide Rail	
Slot Connector	P176
Frame for Sliding Door's Rim	
Panel Joint Kit	P178
Rail Guide	
Sliding Door Wheel	
Panel Guard	P130

Large size Sash Sliding Door



(How to install)

- Fasten Aluminum Sash Kit to Aluminum Frame by bis to install.

(Selection Indication)

- Suitable for large size.

Resin Door



(How to install)

- Attach hinges to Resin Panel and use as a door.

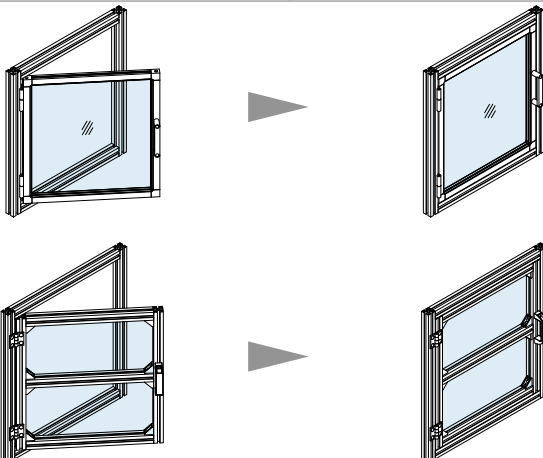
(Selection Indication)

- Door structure at low cost.

(For details)

Installation size	P175
Fixed Hinges	P140~

Panel Frame Door, Frame Door



(How to install)

- Make a rim by various kinds of Frame to use as a door.

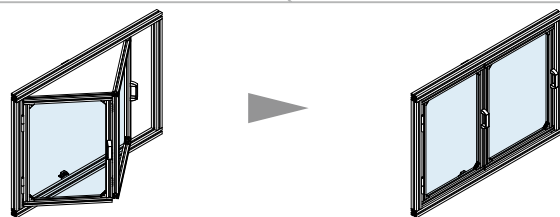
(Selection Indication)

- Medium to large size door structure.

(For details)

Installation size	P75
Panel Frame	P174
TC Block	P140~
Fixed Hinges	P140~

Folding Door



(How to install)

- Make a rim by Frames, and attach Folding Door Slider to slide the frame's groove.

(Selection Indication)

- You can use the covering's outer space effectively when opening and closing.

(For details)

Folding Door Slider	P179
---------------------	------

Large Size Sash Door



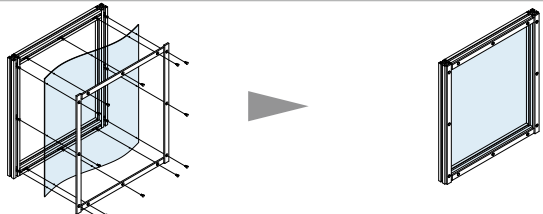
(How to install)

- Fasten Aluminum Sash Kit to Aluminum Frame.

(Selection Indication)

- To construct large size door. Handles are standard adoption.

Fixing Vinyl Sheet



(How to install)

- Fix Vinyl Sheet to Aluminum Frame's groove by Sheet Fixing Plate or drilled Flat Bar.

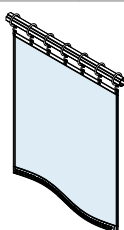
(Selection Indication)

- Covering structure at lower cost than Hard Resin Panel.

(For details)

Vinyl Sheet	P182
Flat Bar	P128

Vinyl Sheet Curtain



(How to install)

- Vinyl Sheet becomes a curtain using Green Frame and Ring Runner.

(Selection Indication)

- Door structure at lower cost than Hard Resin Panel.

(For details)

Vinyl Sheet	P182
-------------	------

SF20
SS Size

SF30
S Size

SF40-45
L Size

Complex Parts

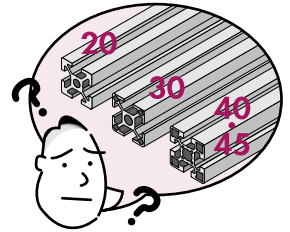
Door Panel
Clean Equipment

Technical Data

Technical Data Q & A

Q What is the indication of selecting aluminum frame?

A SF series is composed of 3 series as follows.
SF20 series (groove width 6mm). For small size covering, rack for small parts, etc.
SF30 series (groove width 8mm). For medium size covering, conveyer frame, etc.
SF40·45 series (groove width 10mm). For large size clean booth, equipment table, component material, etc.
 Please solve the mass of the products at first, and select the frame referring Indication of allowable load (P194).

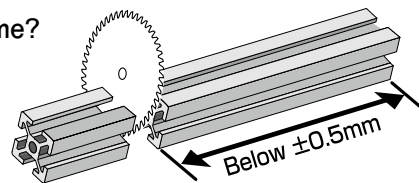


Q What is the indication of selecting bracket?

A Usable bracket is written separately by each series. Please refer Indication of bracket's allowable load (P195).
 · In case that L-shaped bracket interferes product or panel, please select QC Joint, TG Joint, KF Joint, S Double Joint, Tapping Bolt, S Blind Bracket or Plate Bracket.
 · In case that aluminum frame overhangs to cantilever, please use Truss Joint, Turn Bracket or Hard bracket DE135/45 and construct large size stay.

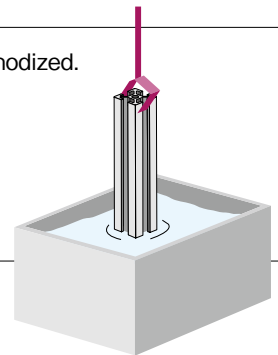
Q How much is the cutting tolerance of aluminum frame?

A $\pm 0.5\text{mm}$ less than specified size.



Q How is aluminum frame finished?

A A. In SF series, frame's surface is anodized to finish (more than $9\mu\text{m}$). Cut surface is not anodized.
 * Black anodizing is also available. Black anodizing cost will be added to our price list.
 * Please refer the standard black anodized Frame and Bracket in the series page.
 * Frame without anodizing for conduction measure can also be ordered specially.

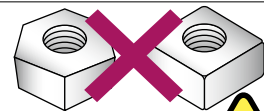


Q How is aluminum frame cut?

A It's cut by tip saw for mild steel. Please cover the cut surface by Frame Cap after assembling frame.

Q Can JIS standard hexagonal nut and square nut be used for SF series?

A No. The area of pressure by sitting is cordoned by using the exclusive nut, and SUS is manufacturing the nut to prevent aluminum material from buckling.
 * Exclude SF Light series.



Q Does Nut fall down when frame is stood vertically?

A Please attach "Anti-Skid Cap" to T Nut and insert to the frame's groove. Or in case of inserting later, please use "Easy Nut", "After Nut Support" and "Lock Nut". "Anti-Skid Cap" and "After Nut Support" is provided as 50pieces/pack.

Q What is appropriate tightening force in using Nut or Hexagon Socket Bolt?

A

Size of screw	Appropriate tightening force	(Appropriate tightening torque-reference)
M3	3.2KN	(1.9N·m)
M4	5.1KN	(4.1N·m)
M5	7.4KN	(7.4N·m)
M6	9.0KN	(10.8N·m)
M8	15.5KN	(24.9N·m)

Aluminum may buckle or Nut may break if you tighten harder than the appropriate tightening force. We recommend using T Nut to the tightening part which intensity applies.

Q How can we fix Resin Panel to Aluminum Frame?

A

Please select fixing method according to your purpose.

In case you stick Panel to outer frame ... Please insert T Nut (with Anti-Skid Cap) to frame's groove at first, and fix by Truss Screw.

In case you fasten Panel to inner frame by bis ... Fixing method is in P47, 82 and 125. With this method, the appearance is good and removing Panel is easy, so it's suitable for Safety Cover, etc.

In case you fit into inner frame. ... Fixing method is in P214 and 215. With this method, drill-processing or fastening with bis aren't necessary, so it's suitable for the purpose of emphasizing design.

Q How can we install doors to Aluminum Frame?

A

Please select the installing method according to your purpose.

Resin Panel Door...Please refer Resin Panel (P182) and Hinge·Pull, etc (P140 ~).

Frame Rim Door...Please select Panel Frame (P174) or SF20 series (P24 ~) and create the door.

* Please construct frame rim with SF30 series for large size door.

Q How can we fix Adjuster or Caster?

A

Usable adjuster and caster are provided by each frame size.

SF20 series	(P43,44)
SF30 series	(P77,78)
SF40·45 series	(P119)

Q What are the precautions for assembly?

A

- Please assemble frames in wide space on flat floor.
- Regarding squaring and surface matching in assembling frame, it's convenient to fit Chamfering Jig from outside.
- Purchasing Lock Nut at the beginning is recommended as reserve parts.
- Please check whether you forgot to tighten all bolts or not after assembly.
- SUS also responds Unit Assembly Service.

Technical Data Frame Processing

Frame Processing List

Please specify by processing No. (P208~219) or in the drawing when you want the frame processing below.

Item No. Length(mm) ProcessingNo. Specify by drawing in case of no Processing No.

Processing Name	Processing Contents	Note	Category																
Drilling 	In case A=8/11.1/13.1/15.1	Please refer the processing number list in P214~219 for drilling TG Joint, S Double Joint, Tapping Bolt and KF Joint.	SFZ-002																
	In case A<20 and other than above		Specify by drawing.	SFZ-003															
	In case A≥20		Specify by drawing.	SFZ-009															
Counterbore 	<table border="1"> <tr> <td>SF30 series (for M6 Hexagon Socket Bolt)</td> <td>6.6</td> <td>11</td> <td>9</td> </tr> <tr> <td>SF40 (45) series (for M6 Hexagon Socket Bolt)</td> <td>9</td> <td>14</td> <td>12.5 (13)</td> </tr> <tr> <td>SF20 series (for M5 Hexagon Socket Bolt)</td> <td>5.5</td> <td>9.5</td> <td>6</td> </tr> <tr> <td>(for M12 Hexagon Socket Bolt)</td> <td>14</td> <td>20</td> <td>specify</td> </tr> </table>	SF30 series (for M6 Hexagon Socket Bolt)	6.6	11	9	SF40 (45) series (for M6 Hexagon Socket Bolt)	9	14	12.5 (13)	SF20 series (for M5 Hexagon Socket Bolt)	5.5	9.5	6	(for M12 Hexagon Socket Bolt)	14	20	specify	Specify by drawing. (Refer P196)	SFZ-004
	SF30 series (for M6 Hexagon Socket Bolt)	6.6	11	9															
	SF40 (45) series (for M6 Hexagon Socket Bolt)	9	14	12.5 (13)															
	SF20 series (for M5 Hexagon Socket Bolt)	5.5	9.5	6															
(for M12 Hexagon Socket Bolt)	14	20	specify																
Spot Facing other than above		SFZ-009																	
M5 Depth 15	Refer P209~211 Drilled to the depth of 50 Specify by drawing.	SFZ-005																	
<ul style="list-style-type: none"> M8 Depth 24※ M12 Depth 36※ 		SFZ-008																	
End Face Tapping 	M12 Helisert 1.5D	Specify by drawing.	SFZ-006																
	M14 Depth 42		SFZ-007																
Side Tapping 	Taping on Frame Side	Specify by drawing.	SFZ-009																
QC Joint Processing 	Drilling for QC Joint	Refer P212~213	SFZ-002																
High Accuracy Cut (HC) 	A=0.5	Standard Cutting Size Tolerance																	
	A=0.2~0.4 (l ≤ 1000mm)		Specify by drawing.	SFZ-015															
Slant Cut 	X=45°	Specify by Processing No. below. Specify by drawing for others.	SFZ-016																
	45° < X < 90° (0.5° Unit)		Specify by drawing.	SFZ-013															
	X < 45°		Specify by drawing.	SFZ-014															
Cost to cut nonstandard size 	Cut the dimension of 30mm ≤ A ≤ 50mm	It's adapted when receiving the specification to cut more than 30mm and below 50mm.	SFZ-009																
Notching 	A × B ≤ 900mm [㎡]	Specify by drawing.																	
	900mm [㎡] < A × B ≤ 2700mm [㎡]																		
	2700mm [㎡] < A × B																		
C-Chamfering 	C Below 0.5	Specify by drawing.																	
	C 0.6 ~ C 5																		
	C 5.1 ~ C 10																		
	C 10.1 and up																		

45° Slant Cut Frame Processing Number List

Please specify Processing No. below to the Frame when using Hard Bracket DE135/45 in P41·74·109

Item No. Length(mm) Processing No. ※ Specify by drawing in case of no Processing No.
 ※ Specify in drawing other than intended Frames.

Processing No.	45° Slant Cut Shape	Intended Frame	Processing No.	45° Slant Cut Shape	Intended Frame
DSS		SF-20-20 (or Black) SF-25-25 (or Black) SF-40-40-2S (or Black) SF-30-30 (or Black) SF-K-30-30 SF-35-35 SF-50-50-2S SF-60-60-2S (or Black)	DHW		SF-30-60-2H SF-K-30-60 SF-30-90 SF-30-120 SF-60-90 SF-50-100-2S SF-60-120
DSW		SF-40-40 (or Black) SF-80-80 (or Black/H) SF-K-40-40 SF-K-45-45 SF-90-90 (or Black/H) SF-60-60-1S SF-80-80-1S	DVS		SF-40-80 (or Black) SF-40-160 SF-45-90 (or Black) SF-K-40-80 SF-K-45-90 SF-80-160 SF-90-180 SF-45-180
DHS		SF-20-40 (or Black) SF-20-60 SF-20-80 SF-40-60 SF-40-80-SS SF-30-60 (or Black)	DVW		Panel Guard T3 (SFF-K34) ※ Panel Guard T5 (SFF-K54) ※ SF-35-70 ※

※ Only DVS-DVW

Tapping on Frame's Cut Surface

- * You can order in your drawing, too.
- * Please inquire regarding the nonstandard depth.
- * Only when YG Joint, S Double Joint and KF Joint will be drilled together with tapping, please specify L or R.

SF20 Series

<p>SF-20·20(1F·2F·3F·Black·2H Included)</p> <p>Item No. SF-20·20 Length(mm) $\ell=800$ Tapping TL or TR(In case of both sides TW)</p>	<p>SF-20·40(1F·Black Included)</p> <p>Item No. SF-20·40 Length(mm) $\ell=800$ Tapping TL or TR(In case of both sides TW)</p>
<p>SF-20·60</p>	<p>SF-40·40·2S(1F·2F·Black Included)</p>
<p>SF-20·80</p>	<p>SF-40·80·SS</p>
<p>SF-20·40·40</p>	<p>SF-40·60·SS</p>
<p>SF-20·20·R</p>	<p>SF-20·DE45(DE30·DE60 Included)</p>
<p>SF-25·25(Black Included)</p>	

SF30 Series

<p>SF2-30·60(1F·2H Included)</p>	<p>SF2-30·30(1F·2F·3F·2H Included)</p>
<p>SF-K·30·60</p>	<p>SF-K·30·30</p>
<p>SF-30·120</p>	<p>SF-30·90</p>
<p>SF-60·90</p>	<p>SF-60·60·2S(1F·2F·Black Included)</p>

SF20
SS Size

SF30
S Size

SF40-45
L Size

Complex Parts

Door Panel
Clean Equipment

Technical Data

Technical Data Frame Processing

Tapping on Frame's Cut Surface

SF30 Series

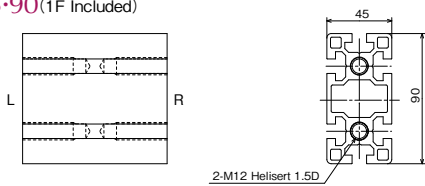
<p>SF-30-60-60</p>	<p>SF-50-50 (1F-2F Included)</p>
<p>SF-50-100</p>	<p>SF-30-DE45 (DE30-DE60 Included)</p>
<p>SF-30-30-R</p>	<p>SF-35-35 (1F-2F-2H Included)</p>
<p>SF-60-120</p>	<p>SF-35-70 (1F-2F Included)</p>

SF40 Series

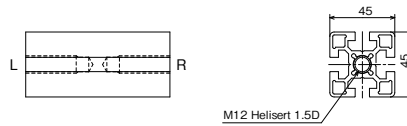
<p>SF2-40-80 (1F)</p>	<p>SF2-40-40 (1F-2F-3F-2H Included)</p>
<p>SF-80-80 (Black-H Included)</p>	<p>SF-40-160</p>
<p>SF-K-40-40</p>	<p>SF-80-160</p>
<p>SF-40-80-80</p>	<p>SF-K-40-80</p>
<p>SF-40-40-R</p>	<p>SF-40-DE45 (DE30-DE60 Included)</p>

SF45 Series

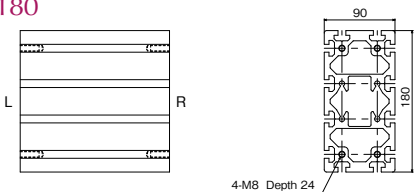
SF2-45-90(1F Included)



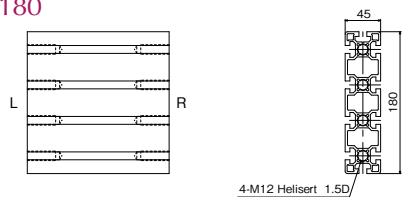
SF2-45-45(1F-2F-3F-2H Included)



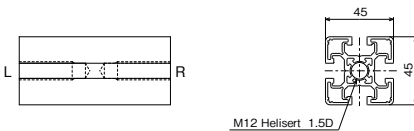
SF-90-180



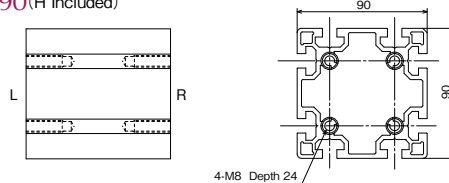
SF-45-180



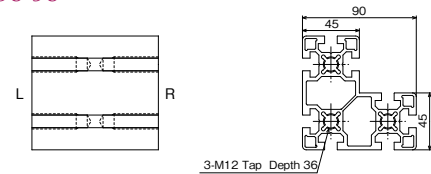
SF-K-45-45(1F-2F Included)



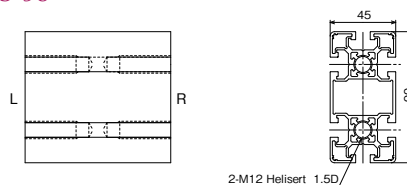
SF-90-90(H Included)



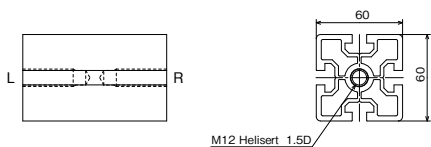
SF-45-90-90



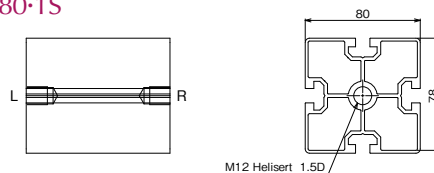
SF-K-45-90



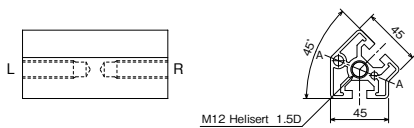
SF-60-60-1S



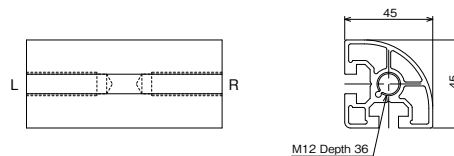
SF-80-80-1S



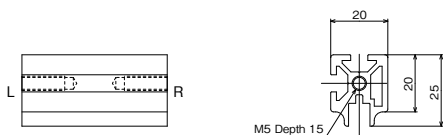
SF-45-DE45(DE30-DE60 Included)



SF-45-45-R



Panel Frame



SF20
SS Size

SF30
S Size

SF45
L Size

Complex Parts

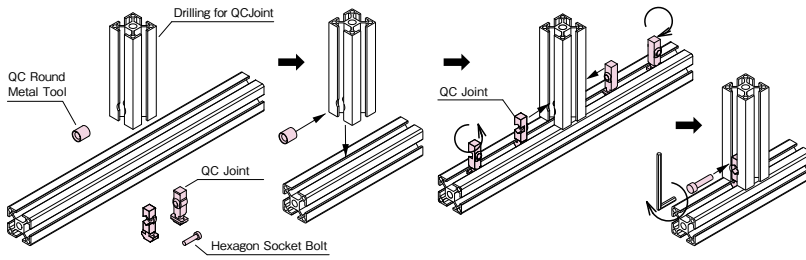
Door - Panel
Clean Equipment

Technical Data

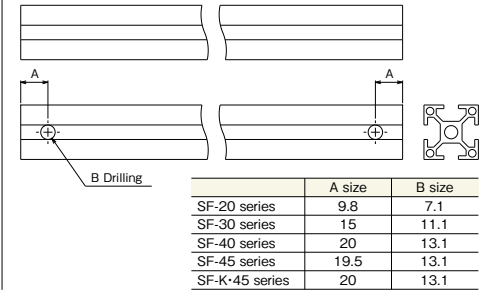
Technical Data Drilling Symbol for QC Joint

Drilling Symbol for QC Joint

< QC Joint Assembly Contents >



<Position and size of the hole to insert round metal for QC Joint>



◆QC Joint…… Insert QC Joint to frame's groove (last-in is possible), and fit another frame with QC round metal installed to combine by tightening bolt. It's easily squared and hardly makes gap because 2 frames pull each other. Appearance is clear without outer joint part's overhang. Also, assembly process is shortened because there's no need to set Nuts to frame before.

- Please specify by QC Joint processing number when you use each QC Joint in P37,69,113.
- Please mind the direction because QC Joint cannot be inserted to the surface without groove.

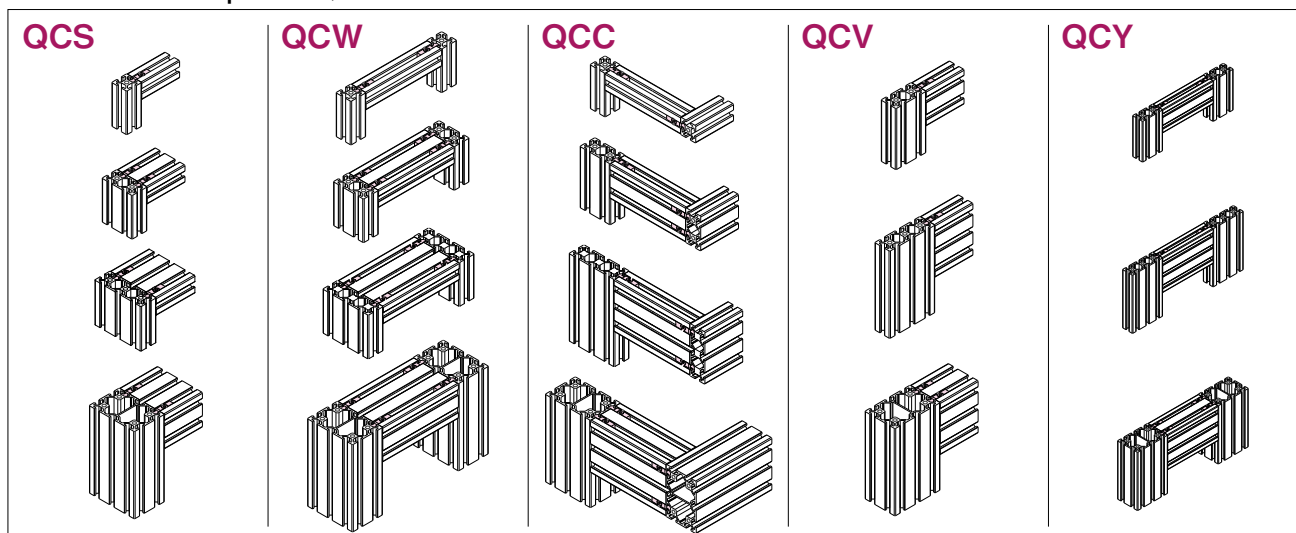
Item No. Length(mm) Processing No.

SFF-324 **ℓ=800** **QCS**

QC Joint Processing List

Groove Type	1 Row × 1 Row	1 Row × 2 Rows	1 Row × 3 Rows	1 Row × 4 Rows	2 Rows × 2 Rows	2 Rows × 3 Rows	2 Rows × 4 Rows					
Frame Name	SF-20-20 SF2-30-30 SF-K-30-30 SF2-40-40 SF-K-40-40 SF2-45-45 SF-K-45-45 SF-60-60-1S SF-80-80-1S	SF-20-20-1F SF-20-20-2H SF2-30-30-1F SF2-30-30-2H SF2-40-40-1F SF2-40-40-2H SF2-45-45-1F SF2-45-45-2H SF-K-45-90	SF-20-40 SF2-30-60 SF-K-30-60 SF2-40-80 SF-K-40-80 SF2-45-90 SF-K-45-90	SF-20-40-1F SF2-30-60-1F SF2-30-60-2H SF2-40-80-1F SF2-45-90-1F	SF-20-60 SF-30-90	SF-30-120	SF-20-80 SF-40-160 SF-45-180	SF-40-40-2S SF-50-50-2S SF-60-60-2S SF-80-80 SF-80-80-H SF-90-90 SF-90-90-H	SF-40-40-2S-1F SF-50-50-2S-1F SF-60-60-2S-1F	SF-40-60-SS SF-60-90	SF-60-120 SF-50-100-2S	SF-40-80-2S SF-80-160 SF-90-180
Processing No.												
QCS												
QCW												
QCC												
QCV												
QCY												

Reference Example of QC Joint

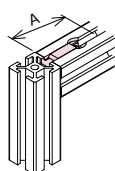


QC Joint Kit Table

Groove Type	Frame Name	QCS	QCW	QCC	QCV	QCY
1 Row x 1 Row	SF-20-20 SF-20-20-1F SF-20-20-2H	SS Kitx1	SS Kitx2	SS Kitx2		
	SF2-30-30 SF-K-30-30 SF2-30-30-1F SF2-30-30-2H	S Kitx1	S Kitx2	S Kitx2		
	SF2-40-40 SF-K-40-40 SF2-40-40-1F SF2-40-40-2H	L40 Kitx1	L40 Kitx2	L40 Kitx2		
	SF2-45-45 SF-K-45-45 SF2-45-45-1F SF2-45-45-2H SF-K-45-45-1F	L45 Kitx1	L45 Kitx2	L45 Kitx2		
	SF-60-60-1S SF-80-80-1S	L60 Kitx1 L80 Kitx1	L60 Kitx2 L80 Kitx2	L60 Kitx2 L80 Kitx2		
	SF-20-40 SF-20-40-1F	SS Kitx2	SS Kitx4	SS Kitx2/SS40 Kitx1	SS40 Kitx1	SS40 Kitx2
	SF2-30-60 SF-K-30-60 SF2-30-60-1F SF-30-60-2H	S Kitx2	S Kitx4	S Kitx2/S60 Kitx1	S60 Kitx1	S60 Kitx2
	SF2-40-80 SF-K-40-80 SF2-40-80-1F	L40 Kitx2	L40 Kitx4	L40 Kitx2/L80 Kitx1	L80 Kitx1	L80 Kitx2
	SF2-45-90 SF-K-45-90 SF2-45-90-1F	L45 Kitx2	L45 Kitx4	L45 Kitx2/L90 Kitx1	L90 Kitx1	L90 Kitx2
	1 Row x 2 Rows	SF-20-60 SF-30-90	SS Kitx2 S Kitx2	SS Kitx4 S Kitx4	SS Kitx2/SS60 Kitx1 S Kitx2/S90 Kitx1	SS60 Kitx1 S90 Kitx1
SF-20-80 SF-30-120		SS Kitx4 S Kitx4	SS Kitx8 S Kitx8	S Kitx4/S120 Kitx1	S120 Kitx1	S120 Kitx2
SF-40-160 SF-45-180		L40 Kitx4 L45 Kitx4	L40 Kitx8 L45 Kitx8			
2 Rows x 2 Rows	SF-40-40-2S SF-40-40-2S-1F SF-50-50-2S SF-50-50-2S-1F	SS40 Kitx2	SS40 Kitx4	SS40 Kitx4		
	SF-60-60-2S SF-60-60-2S-1F	S50 Kitx2 S60 Kitx2	S50 Kitx4 S60 Kitx4	S50 Kitx4 S60 Kitx4		
	SF-80-80 SF-80-80(H) SF-90-90(H)	L80 Kitx2 L90 Kitx2	L80 Kitx4 L90 Kitx4	L80 Kitx4 L90 Kitx4		
	SF-40-60-SS SF-60-90	SS40 Kitx2 S60 Kitx2	SS40 Kitx4 S60 Kitx4	SS40 Kitx2/SS60 Kitx2 S60 Kitx2/S90 Kitx2	SS60 Kitx2 S90 Kitx2	SS60 Kitx4 S90 Kitx4
	SF-40-80-2S SF-50-100-2S	SS40 Kitx4 S50 Kitx4	SS40 Kitx8 S50 Kitx8	S50 Kitx4/S100 Kitx2	S100 Kitx2	S100 Kitx4
	SF-60-120 SF-80-160 SF-90-180	S60 Kitx4 L80 Kitx4 L90 Kitx4	S60 Kitx8 L80 Kitx8 L90 Kitx8	S60 Kitx4/S120 Kitx2	S120 Kitx2	S120 Kitx4

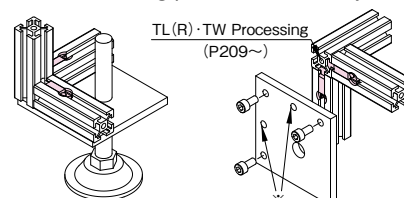
Precautions for using QC Joint

* There is a part which cannot use on frame's groove after QC Joint processing.



Series	A Size(mm)
SF20 Series	19.5
SF30 Series	27
SF40-45 Series	35

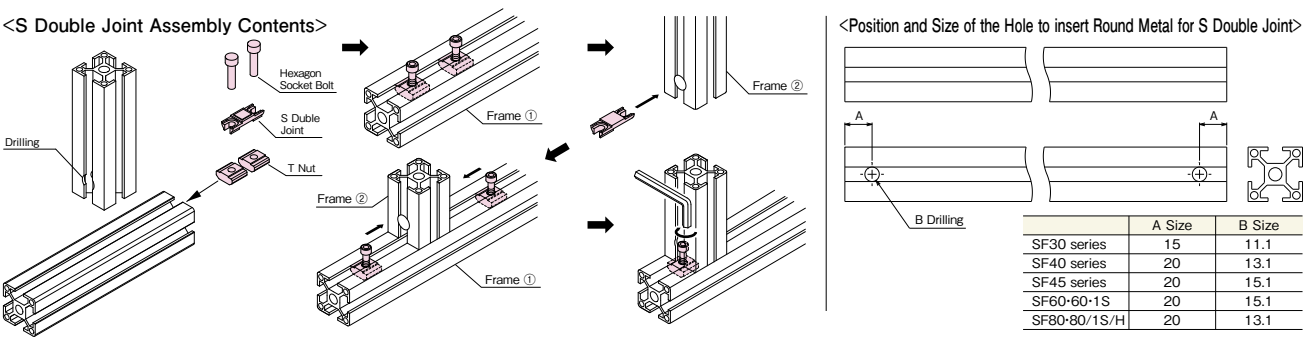
* In case of using plate like Level Adjuster Kit, etc together



Please do the Tapping on vertical frame, and fix the plate at 3 points, because QC Joint and the holes with * mark overlap.

Technical Data Drilling Symbol for S Double Joint

Drilling Symbol for S Double Joint



◆ S Double Joint…… Drill a hole to insert S Double Joint metal on frame ② and insert nuts to frame ①, then fix from the both sides of metal for joint by bolt. It's easily squared and hardly makes gap because 2 frames pull each other. Appearance is clear without outer joint part's overhang.

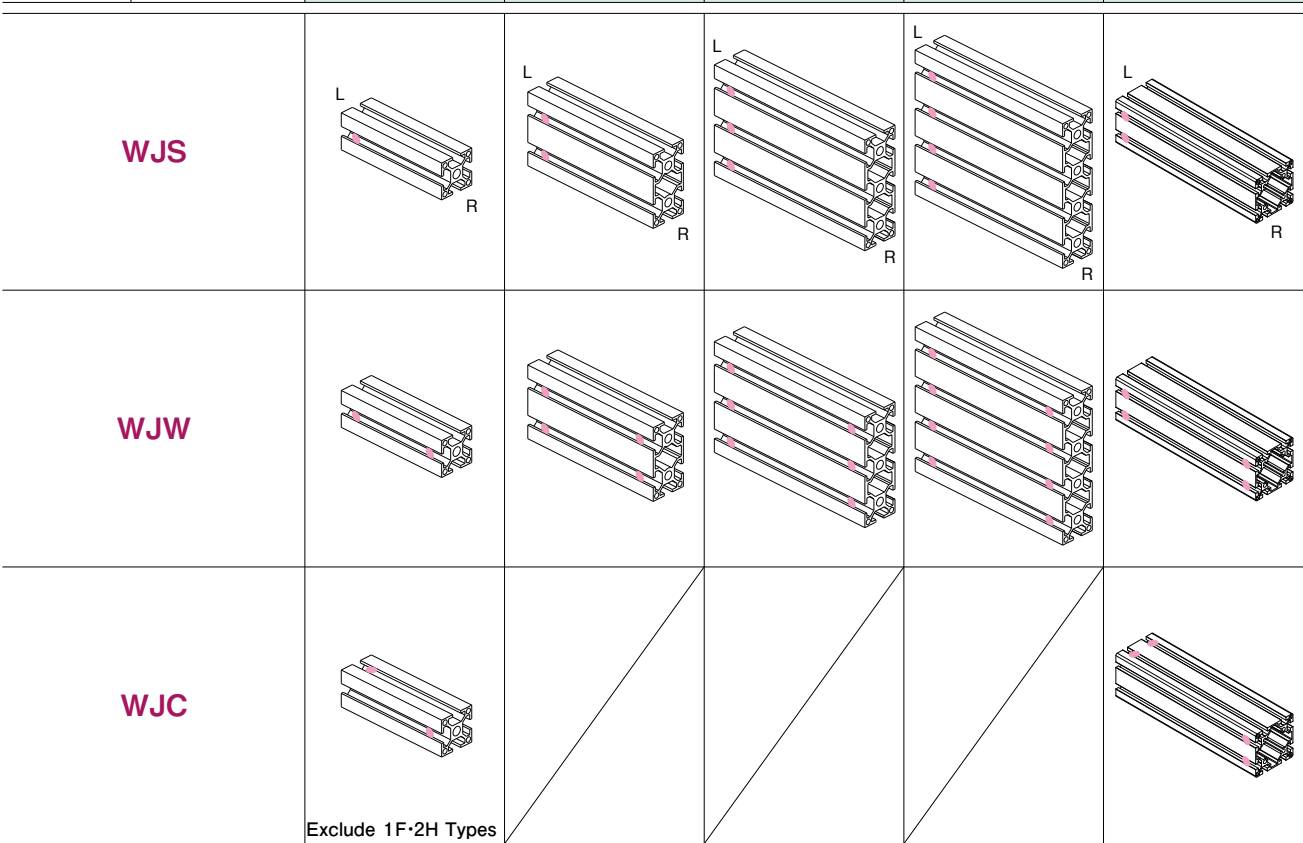
Please specify S Double Joint Drilling No, below to the Frame when using S Double Joints in P70-114.

Item No. Length(mm) Processing No.

Example of order: **SFF-324** $\ell=800$ **WJS**

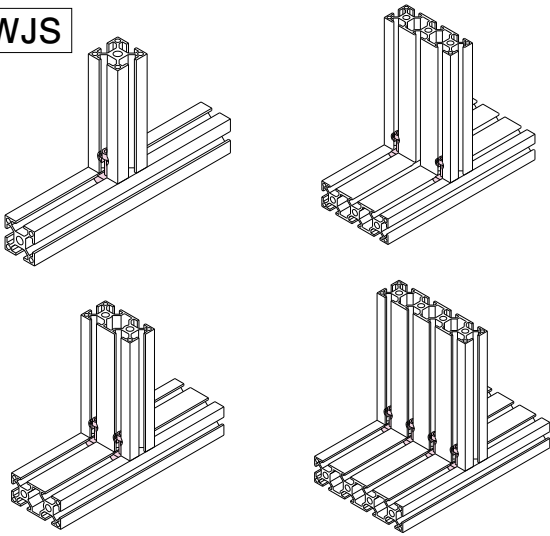
S Double Joint Processing List

Groove Type		1 Row X 1 Row Type (Include 1F·2H Types)	1 Row X 2 Rows Type	1 Row X 3 Rows Type	1 Row X 4 Rows Type	2 Rows X 2 Rows Type
SF30 Series	S Double Joint Kit 30	SF2-30-30	SF2-30-60 SF-K-30-60	SF-30-90	SF-30-120	
		SF2-30-30-1F				
		SF2-30-30-2H				
		SF-K-30-30				
SF40 Series	S Double Joint Kit 40	SF2-40-40	SF2-40-80 SF-K-40-80		SF-40-160	
		SF-K-40-40				
		SF2-40-40-1F				
		SF2-40-40-2H				
SF45 Series	S Double Joint Kit 45	SF2-45-45	SF2-45-90 SF-K-45-90		SF-45-180	
		SF-K-45-45				
		SF2-45-45-1F				
		SF2-45-45-2H				
	S Double Joint Kit 60	SF-60-60-1S				
	S Double Joint Kit 80	SF-80-80-1S				SF-80-80(H)

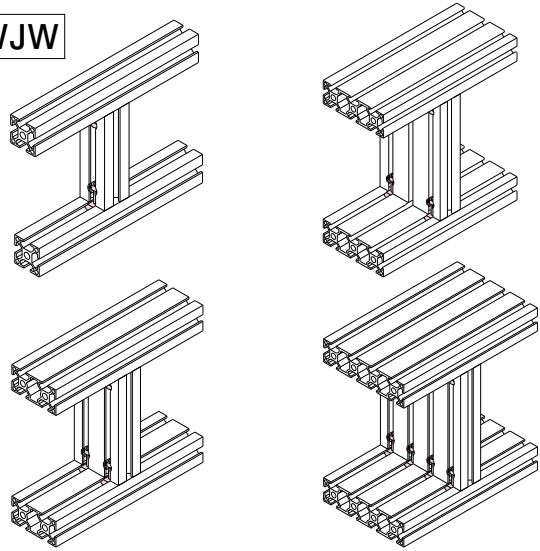


Reference Example of S Double Joint

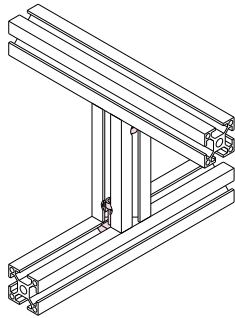
WJS



WJW



WJC



SF20
SS Size

SF30
S Size

SF40
L Size

Complex Parts

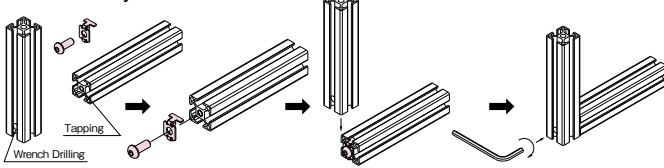
Door - Panel
Clean Equipment

Technical Data

Technical Data Drilling Symbol for TG Joint and Tapping Bolt

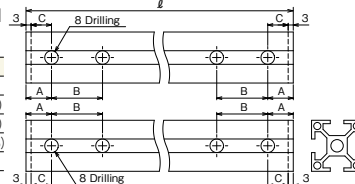
Drilling Symbol for TG Joint and Tapping Bolt

<TG Assembly Contents>



<Position and Size of the Hole to insert Round Metal for TG Joint and Tapping Bolt>

	A Size	B Size	C Size
*1 SF20 Series	10	20	A-3(7)
SF30 Series	15	30	A-3(12)
SF40 Series	20	40	A-3(17)
*2 SF45 Series	22.5	45	A-3(19.5)
*2 SF60-60-1S	30	—	—



- ◆TG Joint..... After Tap processing on the end face of one frame, fix metal for TG Joint temporary to tighten from wrench hole of another frame to combine. It's easily squared and hardly makes gap because 2 frames pull each other. Appearance is clear without outer joint part's overhang.
- ◆Tapping Bolt... Joint as same as TG is possible without tap-processing or metals for TG Joint.

Please specify TG processing number below for frame to be drilled wrench hole, when you use any TG Joint or Tapping Bolt.

Item No. Length(mm) ProcessingNo.
SFF-324 $l=800$ **TGS**

◆<Optional Specification for Frame Cap> Within Outer Size

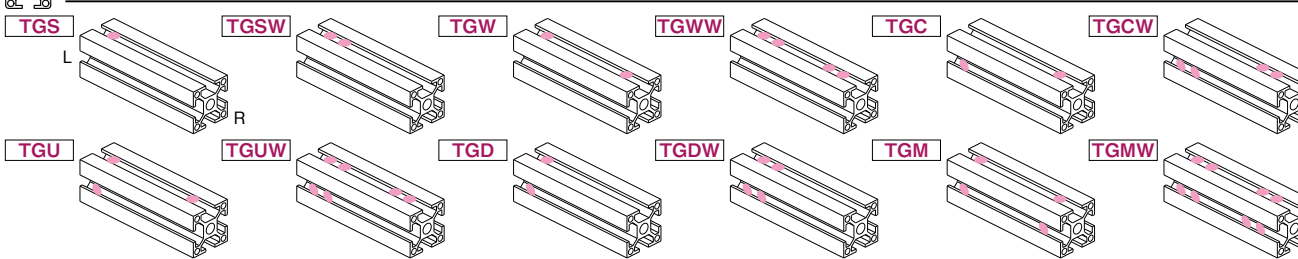
If you want to make Frame Cap within outer size, please use options.

Item No. Length(mm) Processing No.
SFF-324 $l=800$ **TGS**

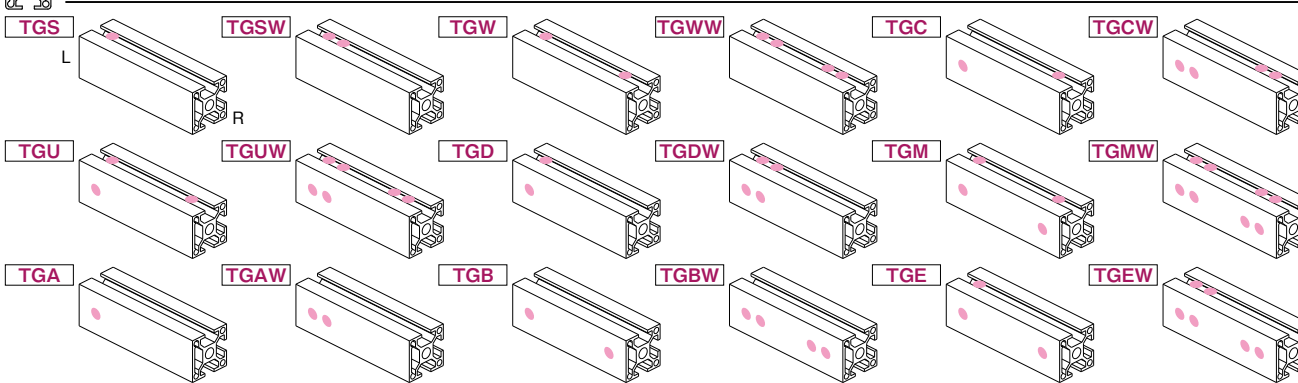
- 3 (A Size-3:Both end surfaces)
- 3R (A Size-3:Only right side)
- 3L (A Size-3:Only left side)

TG Joint · Tapping Bolt Processing List *1 Only Tapping Bolt *2 Only TG Joint

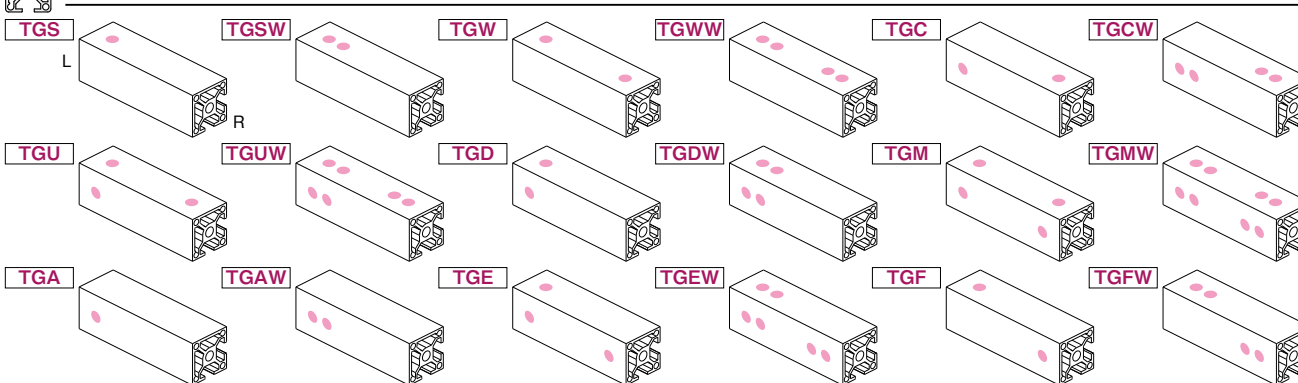
Groove Type 1Row×1Row ◆Object Frame... **SF-20·20** **SF2-30·30/SF-K·30·30** **SF2-40·40/SF-K·40·40** **SF2-45·45** **SF-60·60-1S**



Groove Type 1Row×1Row(1 Flat Surface) ◆Object Frame... **SF-20·20-1F** **SF2-30·30-1F** **SF2-40·40-1F/SF-K·40·40-1F** **SF2-45·45-1F**

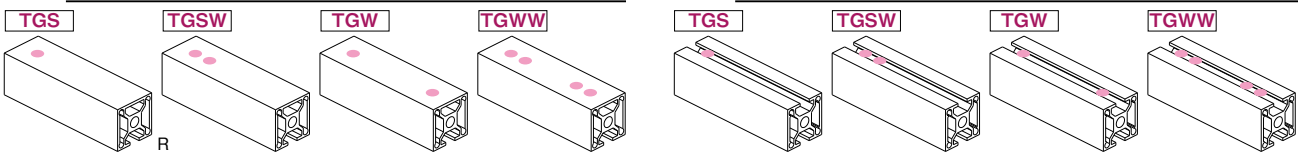


Groove Type 1Row×1Row(2 Flat Surfaces) ◆Object Frame... **SF-20·20-2F** **SF2-30·30-2F** **SF2-40·40-2F/SF-K·40·40-2F** **SF2-45·45-2F**



Groove Type 1Row×1Row(3 Flat Surfaces) ◆Object Frame... **SF-20·20-3F** **SF2-30·30-3F** **SF2-40·40-3F** **SF2-45·45-3F**

Groove Type 1Row×1Row(2H) ◆Object Frame... **SF-20·20-2H** **SF2-30·30-2H** **SF2-40·40-2H** **SF2-45·45-2H**



Groove Type 2Rows×2Rows ◆Object Frame... ^{※1}SF-40-40-2S SF-60-60-2S

TGS	TGSW	TGW	TGWW	TGC	TGCW
TGU	TGUW	TGD	TGDW	TGM	TGMW

Groove Type 2Rows×2Rows (1 Flat Surface) ◆Object Frame... ^{※1}SF-40-40-2S-1F SF-60-60-2S-1F

TGS	TGSW	TGW	TGWW	TGC	TGCW
TGU	TGUW	TGD	TGDW	TGM	TGMW
TGA	TGAW	TGB	TGBW	TGE	TGEW

Groove Type 2Rows×2Rows (2 Flat Surfaces) ◆Object Frame... ^{※1}SF-40-40-2F SF-60-60-2S-2F

TGS	TGSW	TGW	TGWW	TGC	TGCW
TGU	TGUW	TGD	TGDW	TGM	TGMW
TGA	TGAW	TGE	TGEW	TGF	TGFW

Groove Type 1Row×2Rows ◆Object Frame... ^{※1}SF-20-40 SF2-30-60 SF-K-30-60 SF2-40-80/SF-K-40-80 SF2-45-90

TGS	TGSW (Only SF-30-60)	TGW	TGWW (Only SF-30-60)	TGC	TGCW (Only SF-30-60)
TGU	TGUW (Only SF-30-60)	TGD	TGDW (Only SF-30-60)	TGM	TGMW (Only SF-30-60)
TGV	TGVW	TGY	TGYW	TGG	TGGW

Groove Type 1Row×2Rows (1 Flat Surface) ◆Object Frame... ^{※1}SF-20-40-1F SF2-30-60-1F SF2-40-80-1F SF2-45-90-1F

TGS	TGSW (Only SF-30-60)	TGW	TGWW (Only SF-30-60)	TGC	TGCW (Only SF-30-60)
TGU	TGUW (Only SF-30-60)	TGD	TGDW (Only SF-30-60)	TGM	TGMW (Only SF-30-60)
TGV	TGVW	TGY	TGYW	TGG	TGGW (Only SF-30-60)

Groove Type 1Row×3Rows ◆Object Frame... ^{※1}SF-20-60 SF-30-90

TGS	TGSW	TGW	TGWW
-----	------	-----	------

Groove Type 1Row×4Rows ◆Object Frame... ^{※1}SF-20-80 SF-30-120 SF-40-160 SF-45-180

TGS	TGSW	TGW	TGWW
-----	------	-----	------

SF20
SS Size

SF30
S Size

SF40-45
L Size

Complex Parts

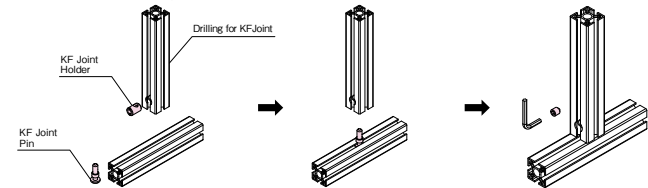
Door Panel
Clean Equipment

Technical Data

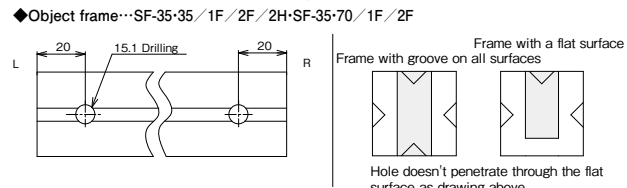
Technical Data Drilling Symbol for KF Joint

Drilling Symbol for KF Joint

<KF Joint Assembly Contents>



<Drawing of Position, Size and Depth of the Hole for KF Joint>



◆KF Joint..... After KF Joint processing on one of the frame, insert KF Joint Holder. Insert KF Joint Pin to another frame and inset to KF Joint Holder, and tighten by set screw to combine. Tightening is easier from one side as drawing above. Frame with a flat surface doesn't disturb the appearance to joint.

Please specify KF Processing No. below to the Frame to drill a hole for KF Joint in case using KF Joint in P70.

Item No. Length(mm) Processing No.

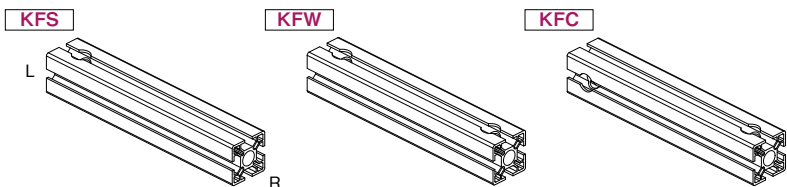
SFF-3A4 **ℓ=800** **KFS**

Joint Processing List



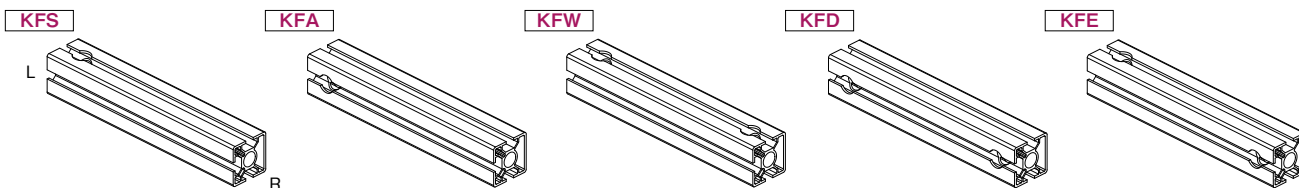
Groove Type 1Row×1Row

◆Object Frame... SF-35-35



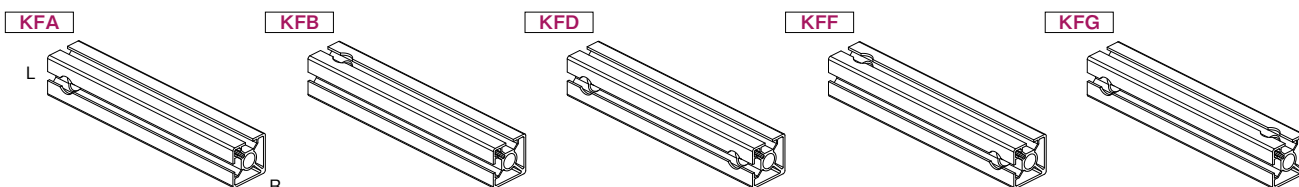
Groove Type 1Row×1Row<1 Flat Surface>

◆Object Frame... SF-35-35-1F



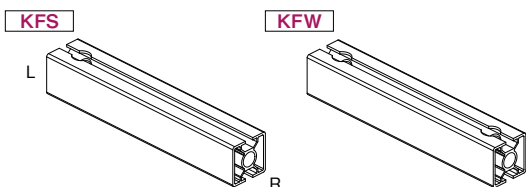
Groove Type 1Row×1Row<2 Flat Surfaces>

◆Object Frame... SF-35-35-2F



Groove Type 1Row×1Row<Opposite Faces Flat>

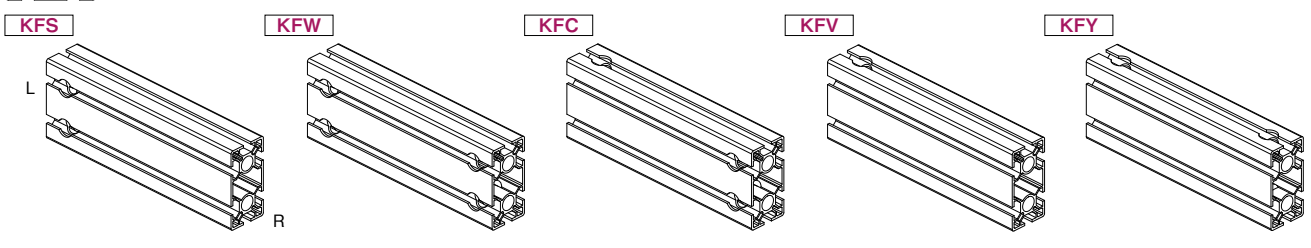
◆Object Frame... SF-35-35-2H





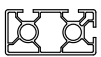
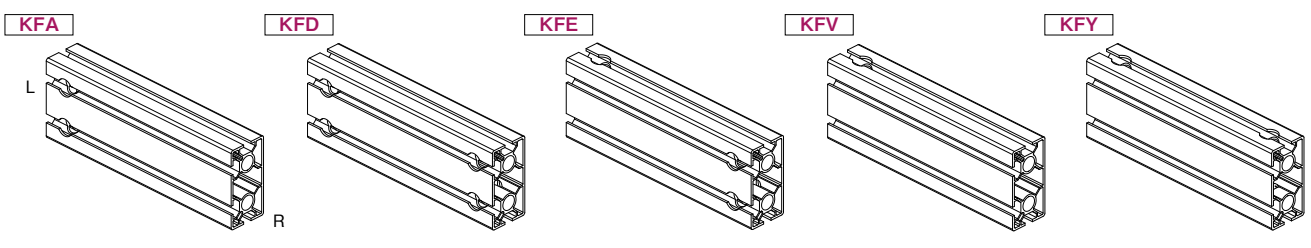
Groove Type 1 Row x 2 Rows

◆Object Frame... SF-35-70



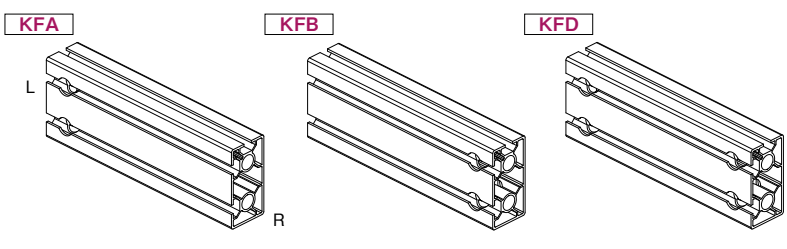
Groove Type 1 Row x 2 Rows (1 Flat Surface)

◆Object Frame... SF-35-70-1F

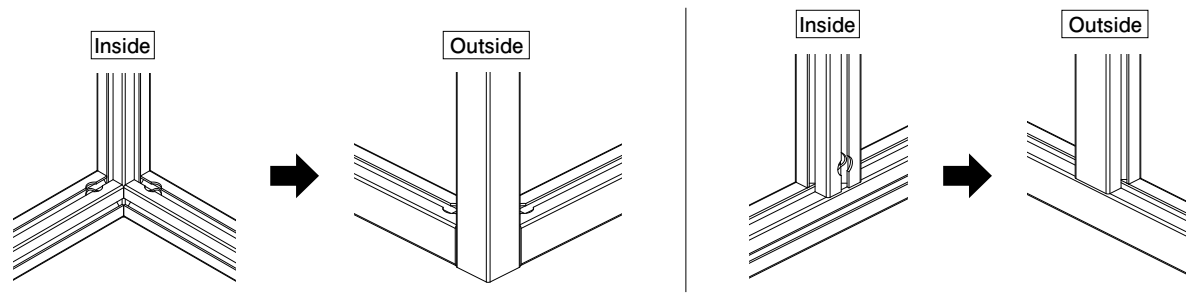


Groove Type 1 Row x 2 Rows (2 Flat Surfaces)

◆Object Frame... SF-35-70-2F



■Simple looking by using KF Joint because drilled hole cannot be seen externally.



SF20
SS Size

SF30
S Size

SF40-45
L Size

Complex Parts

Door Panel
Clean Equipment

Technical Data

