

SUS

Gf
Green Frame

English

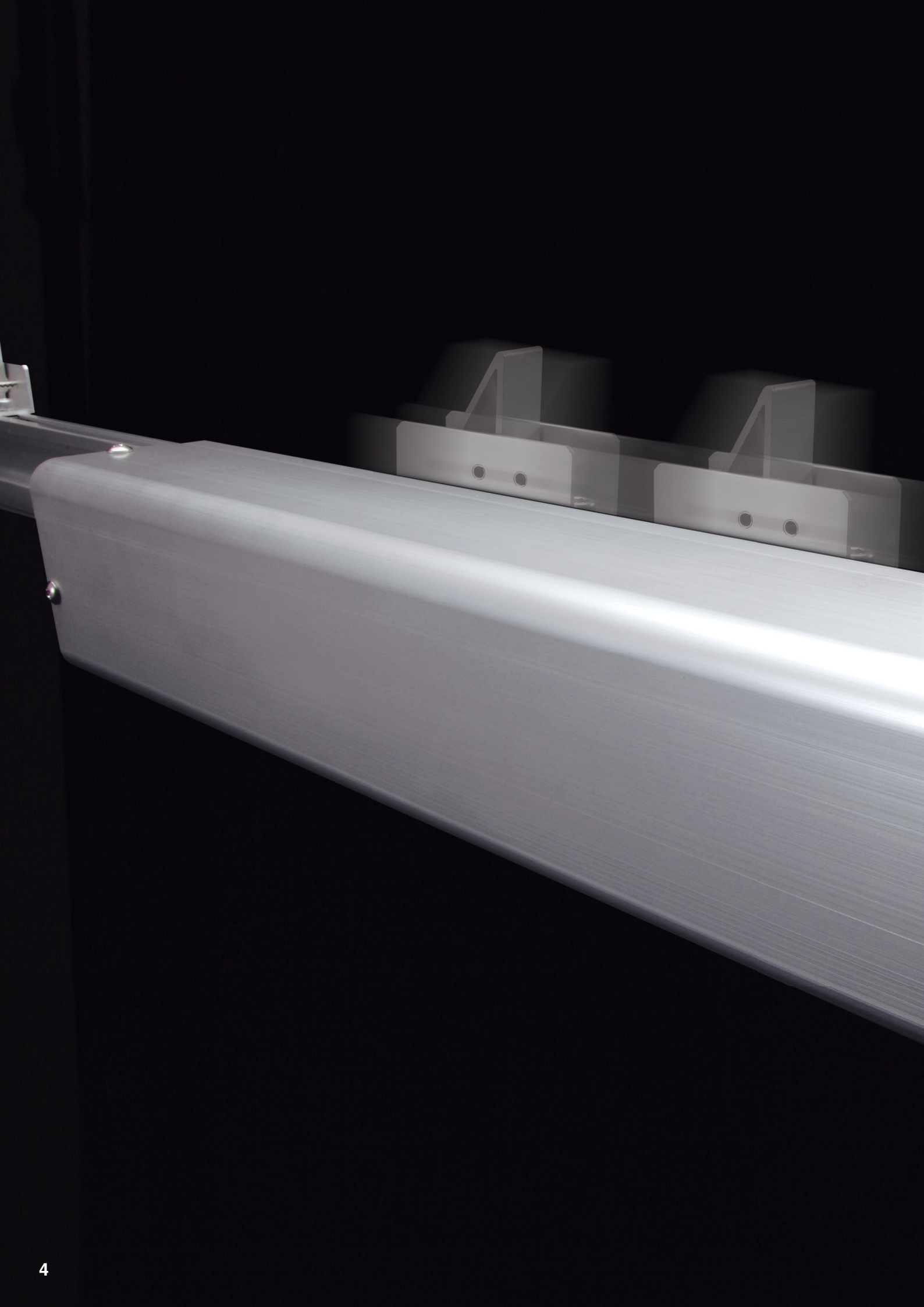


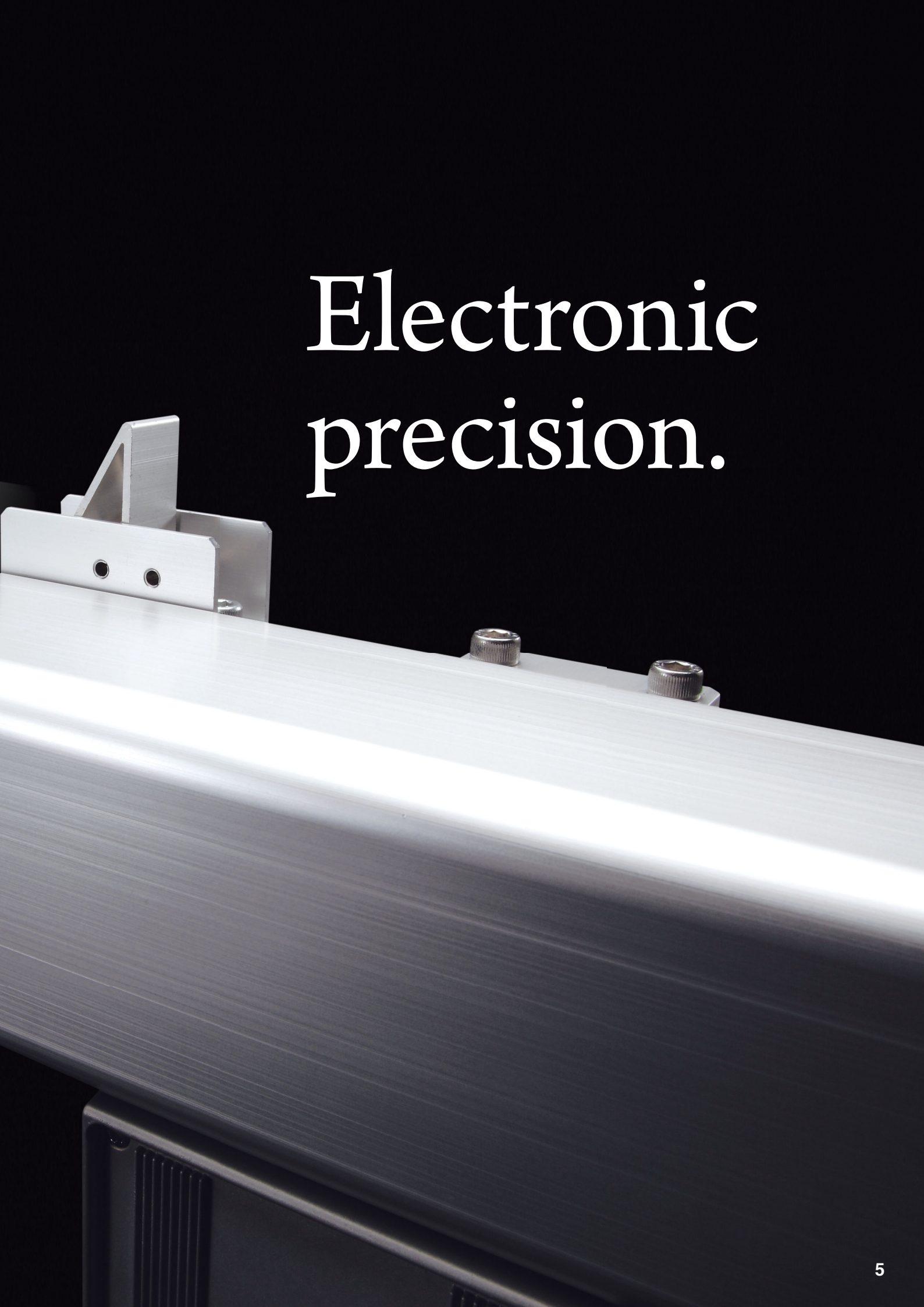
GF...
endless
evolution.



Polished
movement.



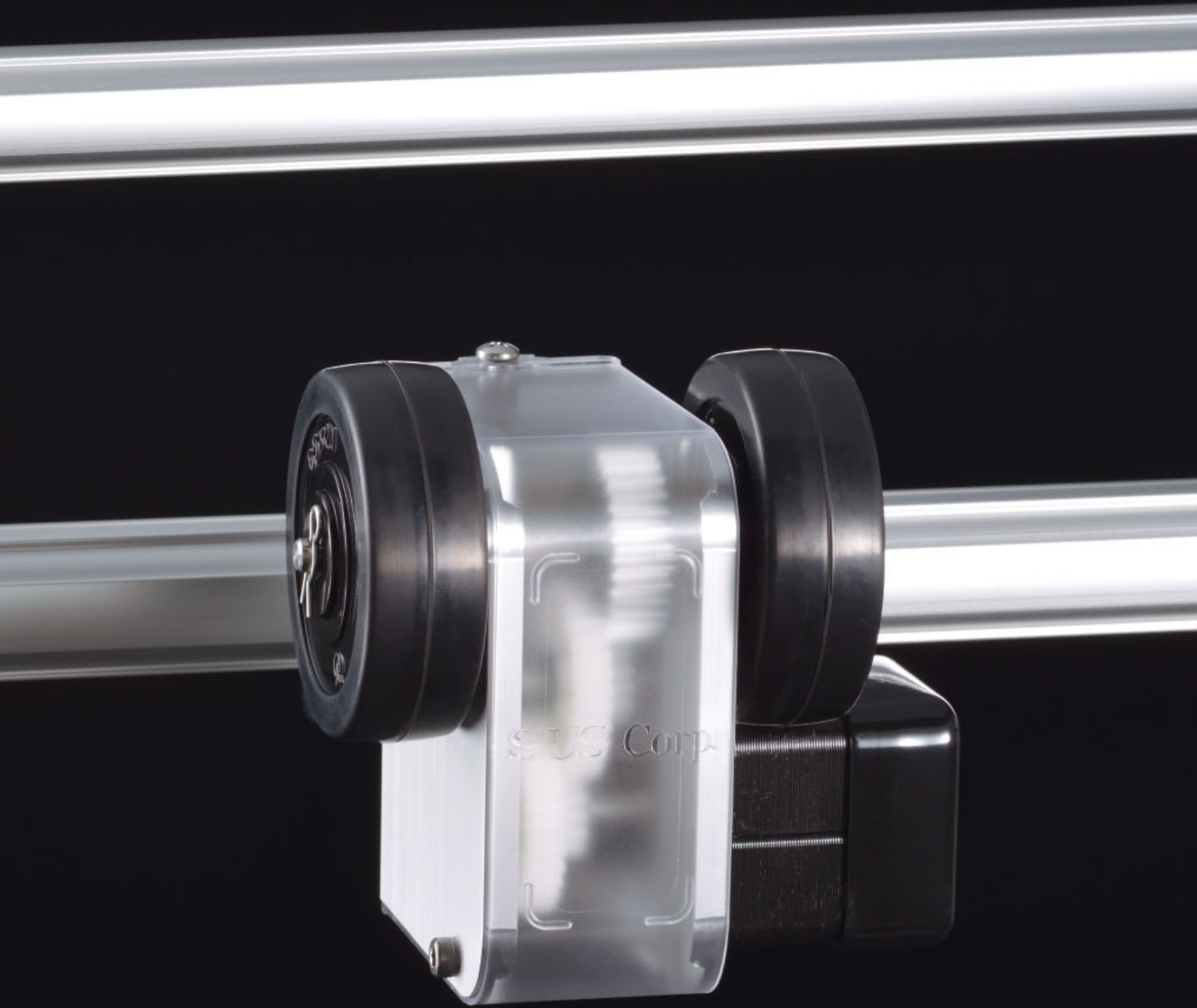







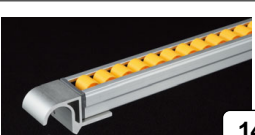


Electronic
precision.



Power that
never rests.

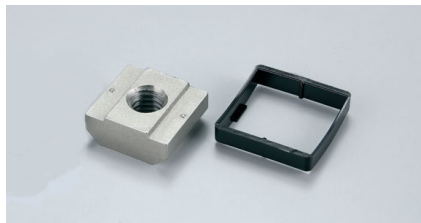


GF Aluminum Frames and Parts at a Glance			
Category	GF-N  Outside Diameter 28 mm Uniting strength with ease-of-use, GF-N has the largest offering of parts and accessories for unlimited applications.	GF-S  Outside Diameter 19 mm SUS's slimmest and most light-weight frame, perfect for tight areas and for supporting GF-N and GF-G.	GF-G  Outside Diameter 43 mm This profile shape is compatible with GF-N series fittings and has a larger diameter for increased strength.
01 Frames	 26	 132	 154
02 Caps	 30	 134	 156
03 Connectors	 34	 136	 158
04 Feet	 48	 142	 162
05 Moving Parts	 60	 144	 165
06 Electric Parts	 80	 147	 166
07 Corocon Rollers	 108	 147	
08 Accessories	 118	 148	 166
09 Door Parts	 126	 150	 166

Introduction

GF features and applications 10~

Bolts and Nuts



168~

Jigs



171

Technical Data

Example

Strength

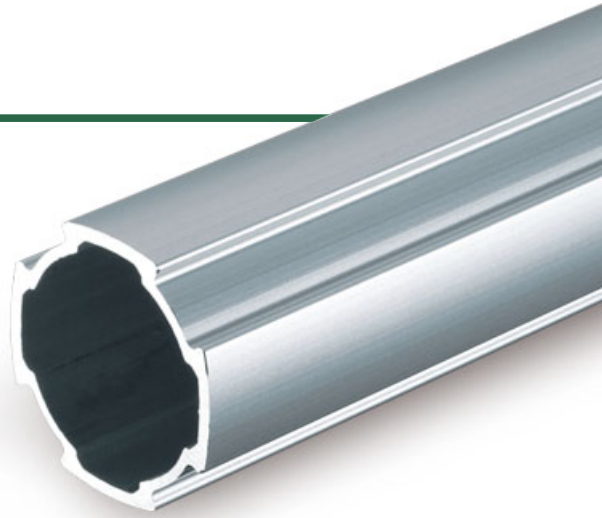
Assembly Basics and Tips

174~

GF
Green Frame

Features and Lineup

The Green Frame aluminum frame, "GF," was released in 2001. An original product produced and designed by SUS Corporation, it uses a single-touch joint system so that it can be assembled with a single wrench. GF offers numerous features that are perfect for on-site kaizen—continuous improvement.



Features **1**

Single-touch Joint

Fix the claws of the connector around the profile edges and tighten the bolt. Anyone can master GF assembly quickly and easily.



Features **2**

Parallel Lines and Right Angles

With frames and connectors designed to produce near-perfect parallel lines and right angles, minor or major adjustments are quick and easy, saving time and manpower.

The Four GF Series: Actual Size



GF-S

19 mm Type

**Slim Frame:
Build More with Less**

SUS's slimmest and most light-weight frame, perfect for tight areas and for supporting GF-N and GF-G.



GF-N

28 mm Type

**Standard GF, boasting an
overwhelming variety of
parts and accessories.**

Uniting strength with ease-of-use, the largest number of parts for unlimited applications.



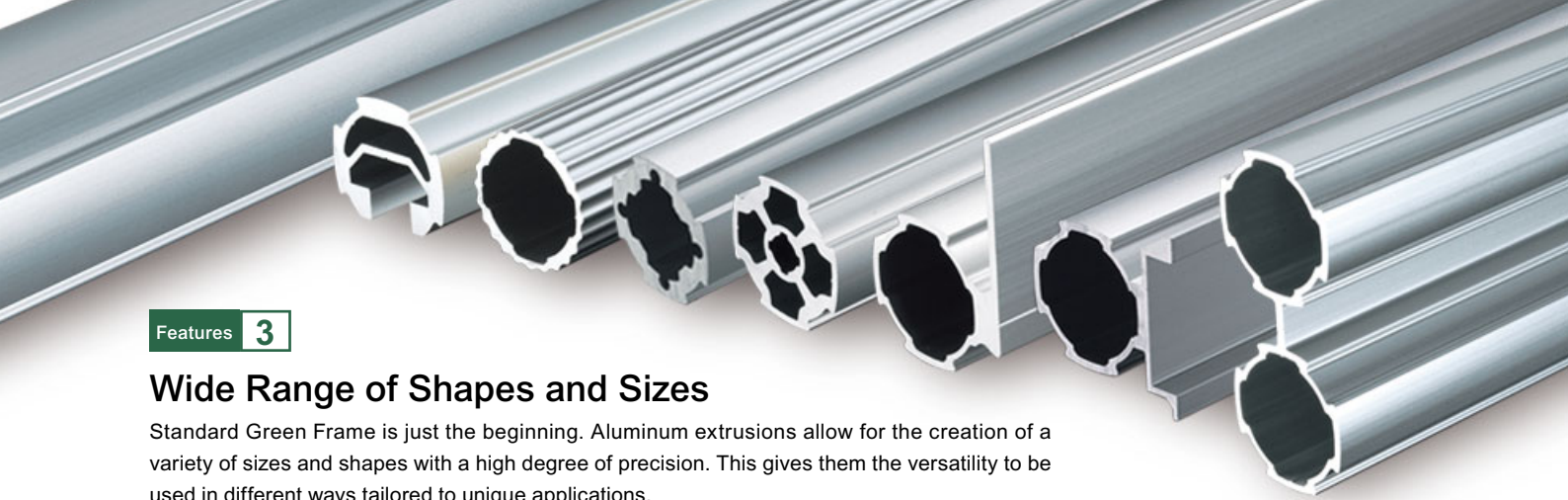
GF-G

43 mm Type

**A balanced frame combining
versatility with strength.**

This profile shape is compatible with GF-N series fittings and has a larger diameter for increased strength.





Features **3**

Wide Range of Shapes and Sizes

Standard Green Frame is just the beginning. Aluminum extrusions allow for the creation of a variety of sizes and shapes with a high degree of precision. This gives them the versatility to be used in different ways tailored to unique applications.



Features **4**

Extensive Parts

Basic connectors, cross-series accessories, motion parts for karakuri, and more let your ideas take shape.



Features **5**

Active Motion

Motion parts and electric modules combine to achieve basic movements, reducing the burden on the workforce.



GF-L

53 mm Type

High strength frame leading GF into a new frontier.

The largest frame size is ideal for high-load areas such as parts delivery racks and agricultural factories.



GF Did You Know?

“Green Frame”

GF stands for “Green Frame.” Rather than the color, “Green” refers to “environmentally-friendly products that minimize waste.” Aluminum’s non-wasteful design, high recyclability, and reusability make GF’s frames and connectors truly “green.”

World-famous GF

SUS Corporation makes deliveries to more than 20 countries including the USA, Canada, Mexico, France, Italy, Spain, and Russia, as well as Thailand, China, and the Philippines, reaching out from our corporate bases around the world.



Thanks to its high degree of design freedom and easy assembly/disassembly, GF is widely used in a variety of industries. Its lightweight nature means that the stress on trolleys is reduced, and its flexibility of design means that layouts can be adjusted with ease. Not only that, but GF has a high aesthetic appeal and is easy to modify for future improvements. This makes it an ideal material for kaizen—continuous improvement.



Automobile Parts Manufacturing Plant (Hamana Plastic Company, Ltd.) Sing Magazine No. 33 (July 2016)

Inside the factory, standardized work boards, chuters, and racks are lined up. The manufacturing flow is laid out in a straight line from setup to assembly and inspection, all the way to shipping. In a cell system, fluctuations in production quantity are directly related to expansions and retractions of the line itself.



Thermal Energy Equipment Manufacturer's Logistics Center (RB Controls Company, Ltd.)

Sing Magazine No. 34 (Dec 2016)

The storage rack's shelves are adjusted to fit the height and width of the parts. The racks are set at an incline to support first-in-first-out practices.



Automobile Factory (Nissan Motor Company, Ltd., Yokohama Plant)

Sing Magazine No. 30 (July 2015)

A stocker capable of holding five steps' worth of work in a single unit. It utilizes a curved frame to turn the structure into a flip-flop-like shape.



Automobile Factory (Nissan Motor Company, Ltd., Yokohama Plant) Sing Magazine No. 30 (July 2015)

The discharge trolley prevents items from falling out by raising a stopper at the end during transport.

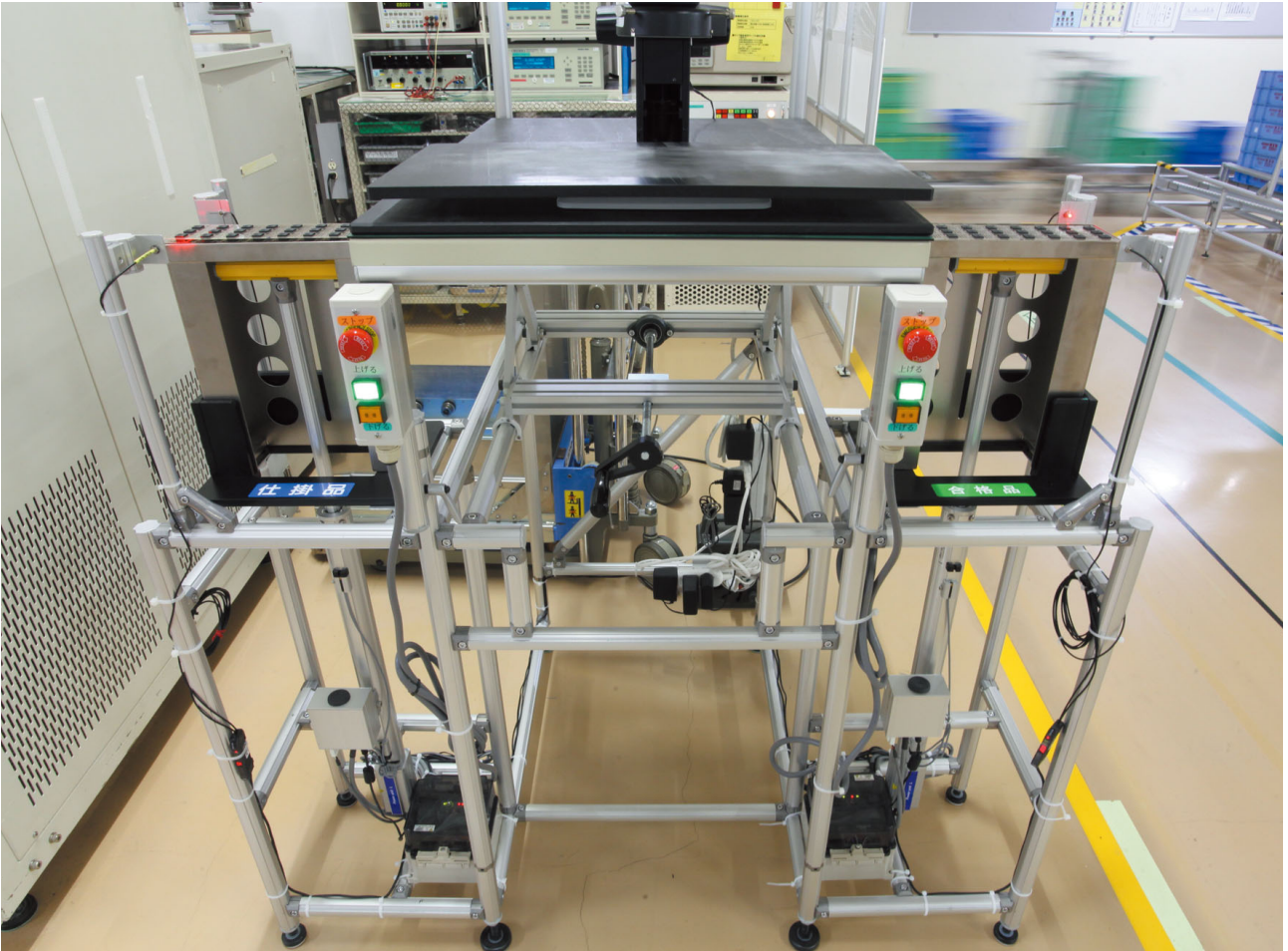


Agricultural Factory Cultivation Room
(Shikoku Instrumentation Company, Ltd., Sanuki Yasai Koubou)

Sing Magazine No. 33 (July 2016)

Inside the factory are lines of large cultivation racks constructed from GF. The GF profile allows a variety of items necessary for production to attach to the frames such as reflectors and pipes.

Improvements by various companies using karakuri promote advancements in manpower, productivity, and efficiency. GF is at the center. Green Frame's expanded lineup of electrical parts and modules further expand improvement options using basic electric parts. GF brings kaizen to the production site.



Automotive Parts Manufacturing Plant (Denso Corporation Kota Plant)

Sing Magazine No. 37 (Feb 2018)

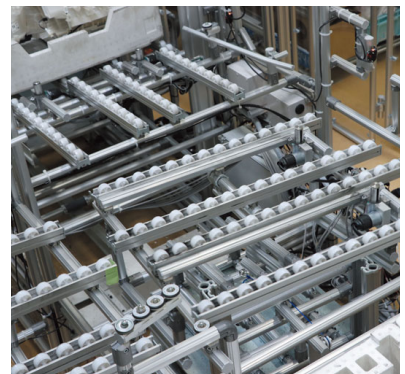
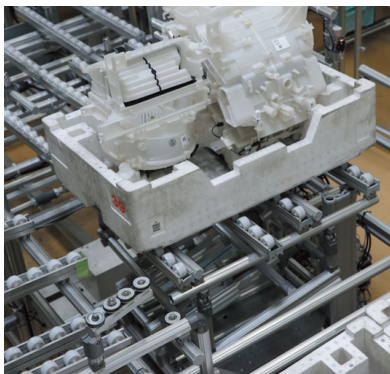
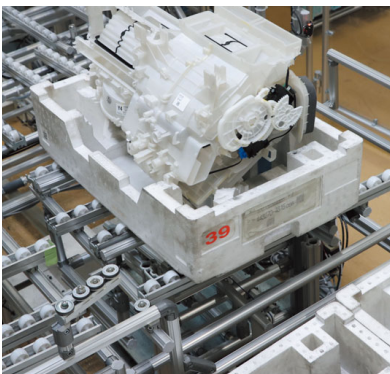
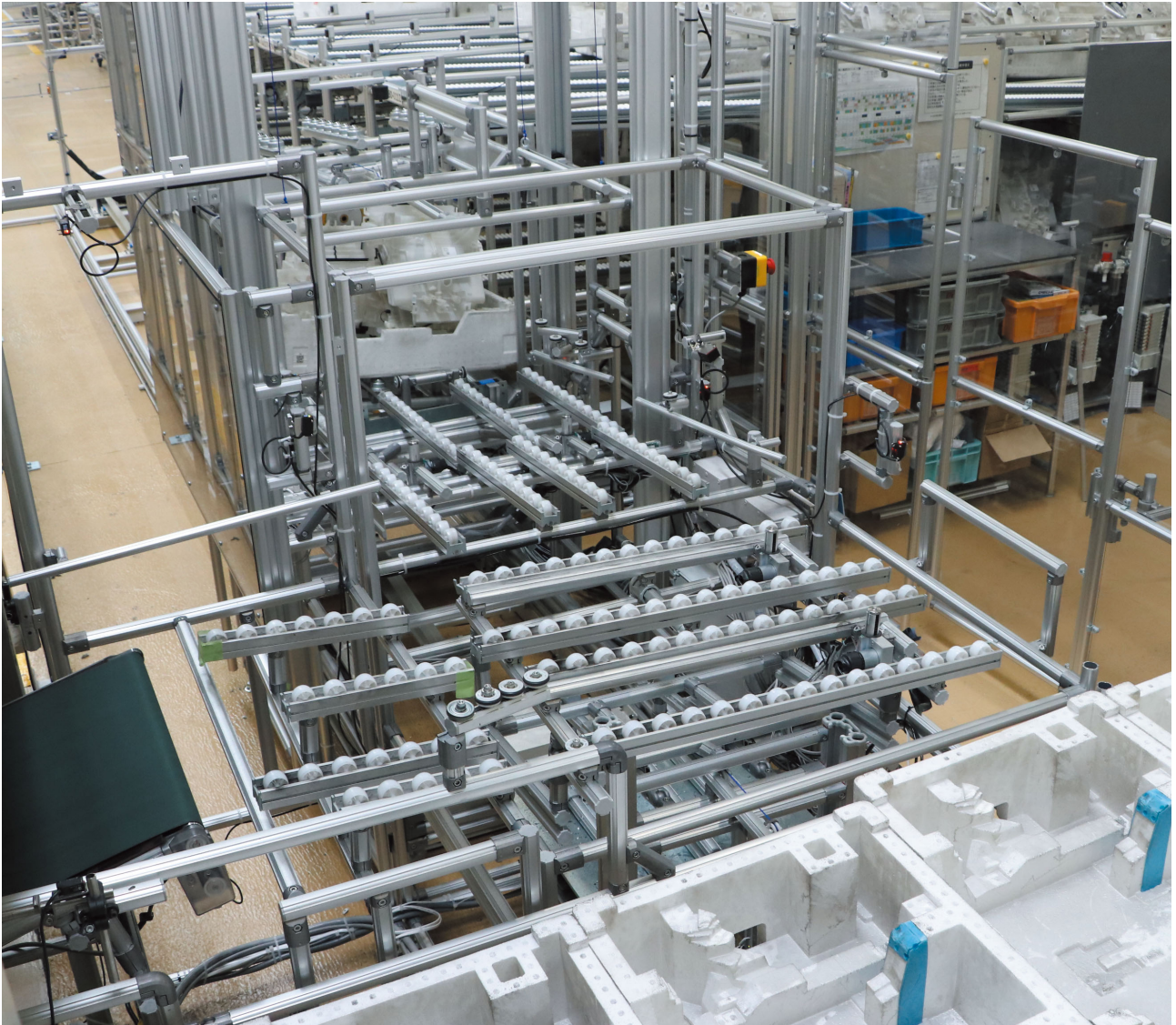
Electric level lifters moving in opposite directions are installed on the left and right sides of the work bench. Removal and storage always happens at the same level, reducing the risk of scratching.



Office Furniture Manufacturing Plant (Takano Company, Ltd., Shimojima Factory)

Sing Magazine No. 37 (Feb 2018)

A chuter and trolley that automatically transfer containers using the movement of the advancing AGV.



Automotive Parts Manufacturing Plant (Denso Fukushima Corporation) Sing Magazine No. 37 (Feb 2018)

A 90° turn incorporating electric parts such as GF Conveyors, Electric Stoppers, and Power Units.

The diverse parts and frames of the GF Series create endless possibilities. Their applications can be seen in settings far from factories, such as living spaces. Combining standard parts, GF's high degree of design freedom and versatility matches a wide range of materials and situations. GF sparks the joy of seeing your ideas come to life.



Private Residence (O Plan)

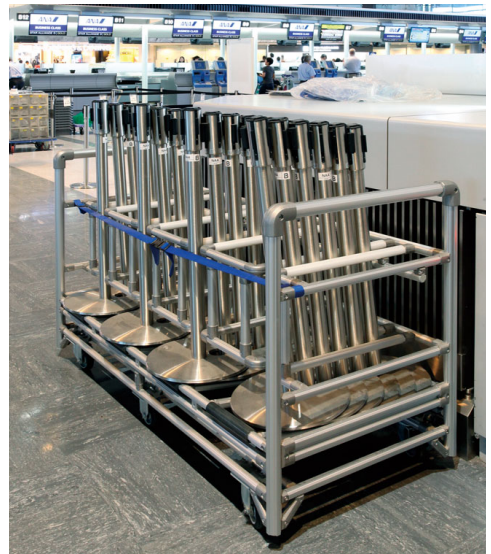
Furniture such as a clothes rack, bed, and bench are designed to fit the room. The frames are cut according to the height of the ceiling and the rack is affixed without damaging the wall and floor.



**Private Residence (I Plan)
Idea Competition Winner**

Sing Magazine No. 36 (Aug 2017)

This storage rack fits perfectly against the wall. The design is packed with ideas to ensure safety such as using anti-backs to prevent the baskets from falling out.



**Airport Departure Lobby
(Narita International Airport Corporation)**

Sing Magazine No. 36 (Aug 2017)

This simple, dedicated trolley stores and transports heavy, bulky tape stanchions in a compact way.



Airport Departure Lobby (Narita International Airport Corporation)

Sing Magazine No. 36 (Aug 2017)

Using a GF fence, the courtesy wheelchairs are kept partitioned off for storage.



Event Toys for Children (SUS Corporation)

Sing Magazine No. 37 (Feb 2018)

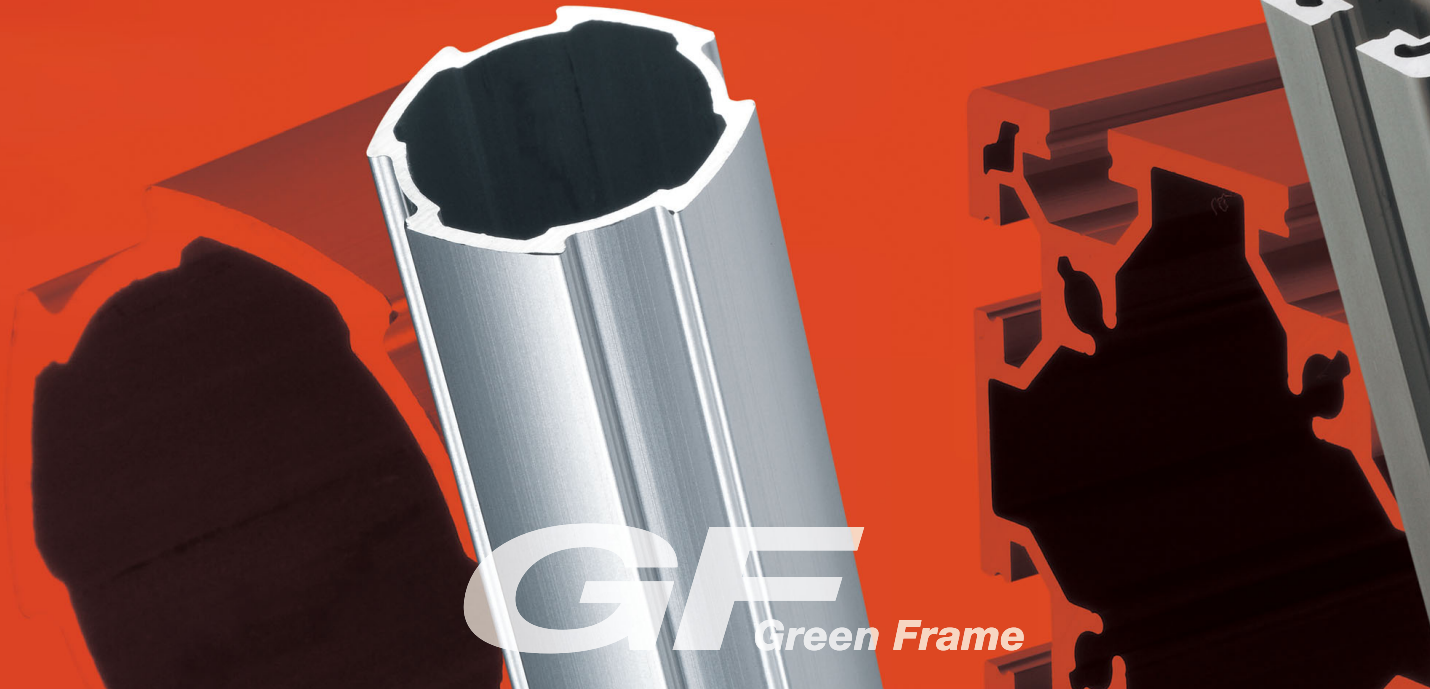
This fun backhoe scoops up balls! The link mechanism allows the arm to fold up and extend.

Only with Aluminum

Material and Shape

SUS Corporation's aluminum frames have excellent corrosion resistance and durability made possible by the extruded materials and anodized surface treatment.

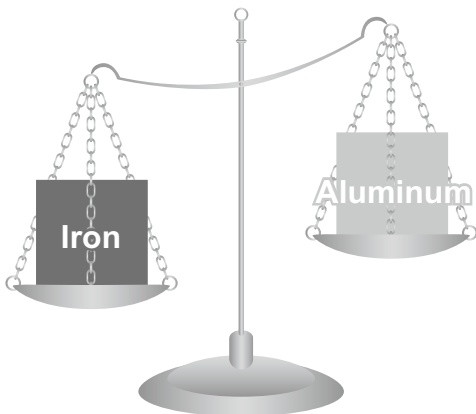
Scalability and connections that require no special training give GF frames a clear advantage over other materials like welded steel. Not only that, but the shape of the cross-section and the joint system can meet the challenges of almost any situation. Applications using GF are being invented and reinvented over and over again all over the world.



Lightweight

1/3 the Mass of Iron

Taking aluminum's relative density into account, SUS developed a lightweight, yet rigid frame with a carefully designed cross-sectional shape. This innovation reduces the overall weight of equipment and enables improvements. By using these frames for moveable racks, chutes, and trolleys, the burden on workers can be greatly reduced and line changes can be carried out with ease even after installation.

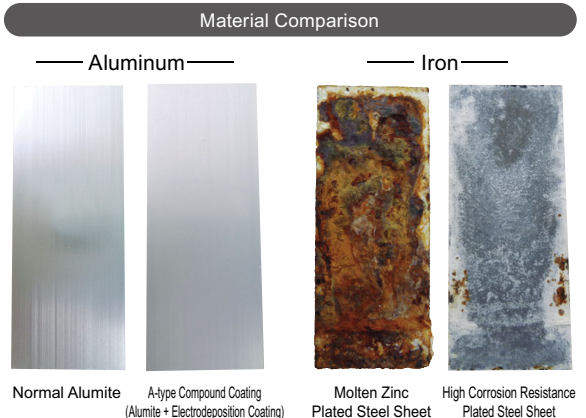


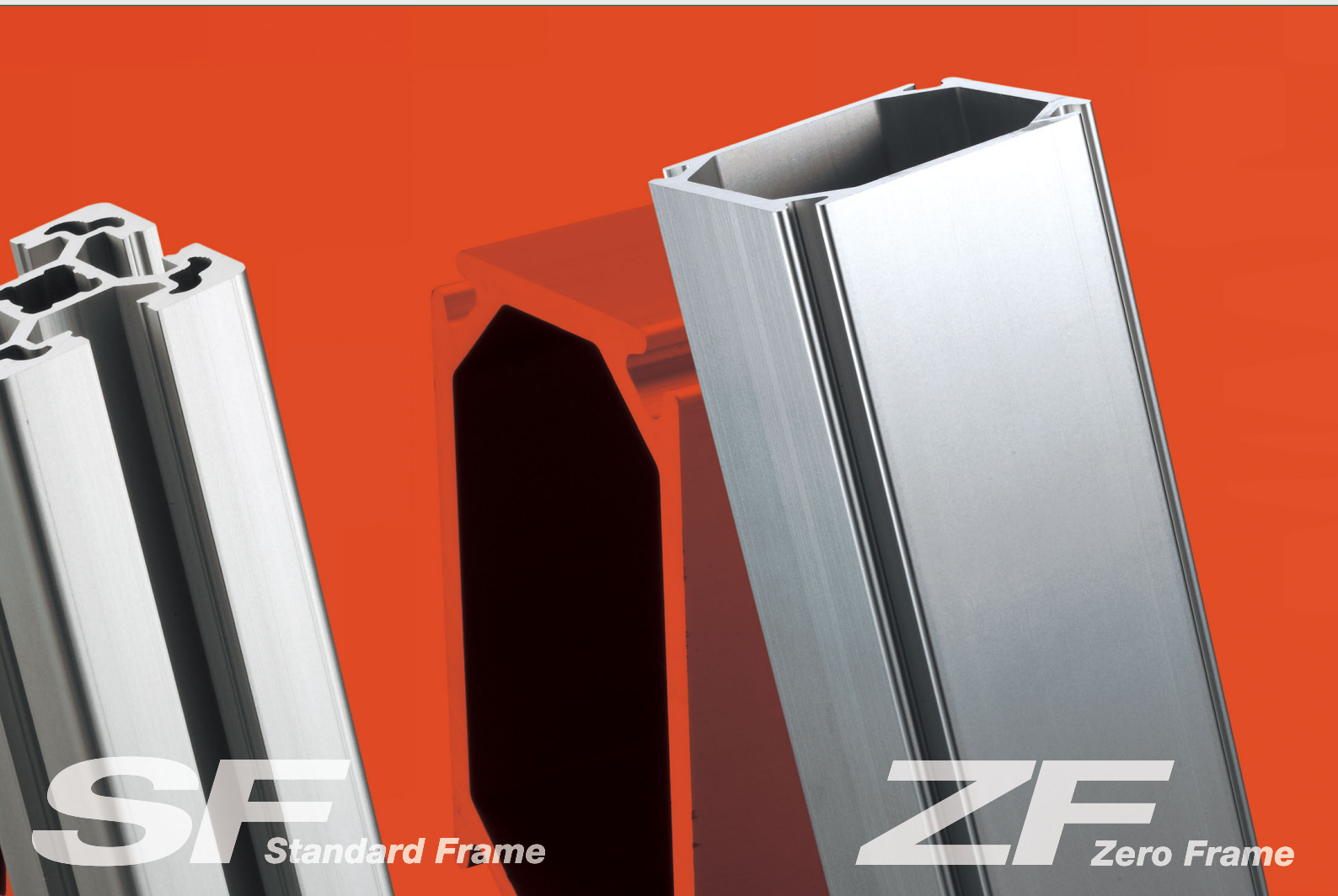
Strong vs. Corrosion

High Corrosion Resistance

The anodized layer of nine μm or more on the frames provides excellent resistance to corrosion and weather. The aluminum on the surface of the frame reacts with oxygen to form an oxide layer which does not peel off like paint and actually suppresses the buildup of foreign particles. Because the surface does not easily scratch or stain, the aluminum frames contribute to a more hygienic operating environment while maintaining a sleek aesthetic.

Corrosion Test Comparing Aluminum and Iron (Salt Water Spray Test: 1000 Hours)





Environmentally Friendly

Environmental Protection and Responsibility

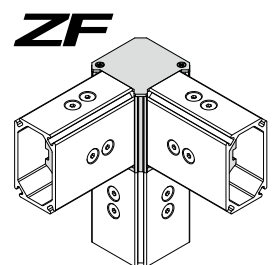
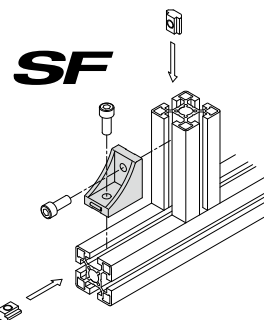
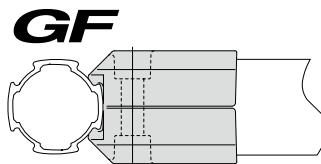
Aluminum enjoys a particularly high degree of recyclability compared to other metals. Recently, it has gained attention as a resource that can reduce environmental impact. The electricity needed to refine recycled metals is only 3% of that needed to refine new ones. To take advantage of this excellent resource, SUS uses aluminum in more than just frames; we also use it in numerous parts such as brackets and connectors.



Secure Bolts

Easy to Assemble and Disassemble and Highly Reusable

Because bolts are used to fasten frames together, structures can be disassembled and reassembled as needed. GF structures can also be expanded to match the available work space or altered to suit new purposes. Relocating a unit becomes a simple task by breaking it down into a few smaller parts. Green Frame promotes the reuse of materials, minimizing waste.



Quick Delivery of High Quality Aluminum Products Anywhere in the World

SUS is uncovering the new needs of developing markets.

In order to overcome cost competition, many companies are actively expanding overseas, establishing sales channels and manufacturing bases. International trade has become commonplace, and the same level of quality and speed that SUS brings to Japan is being sought all over the world. In addition to our group of international bases, SUS Corporation has established sales agents around the globe to build a strong network not only in Japan, but throughout South-east Asia, Europe, and South America.



● Overseas group companies centered in Asia ● Overseas distributors expanding global development

North America

● SUS America, Inc.

● Machine-Techpos Mexico, sa. de. C.V.

South America

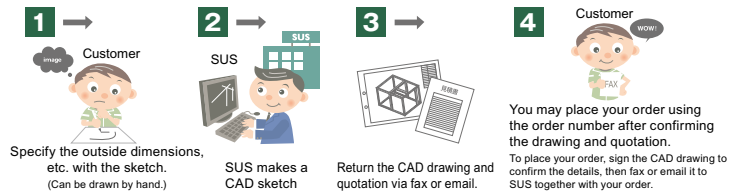
STH Industria e Comercio Ltda ●

Service and Support

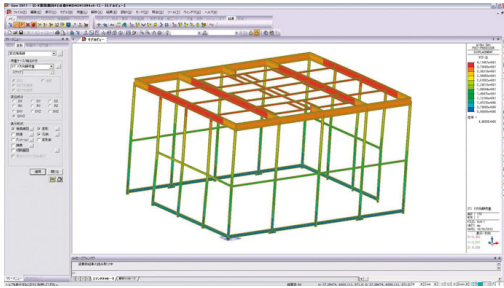
Design Support Service



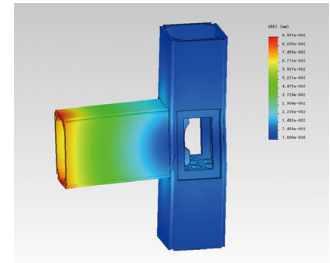
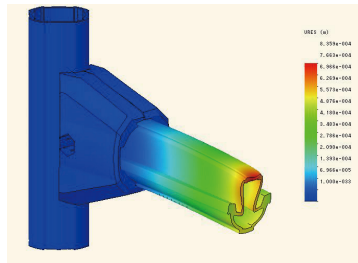
SUS Corporation provides design support services to assist our customers. Just provide SUS with a simple sketch showing your structure's desired dimensions and we will create a CAD drawing, select the necessary parts, and submit a quotation— all at the same time. In addition to this service, SUS also offers a free 3D drawing software, Unit Design (below). This simple program lets anyone design their own structure in Green Frame or Standard Frame. For details, please contact the SUS sales office near you.



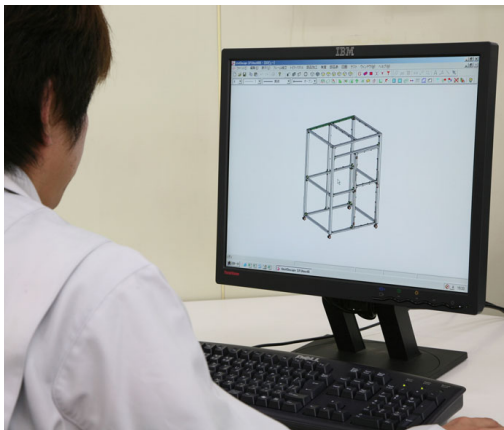
Structural Analysis Service



SUS will respond individually to requests for structural analysis of units such as stands and booths using aluminum frames. Please feel free to contact us. We will propose the most suitable solution for you using our years of experience as expert manufacturers of aluminum frames.



3D Drawing Software: Unit Design



This is SUS's original software for creating 3D assembly drawings of structures using SF and GF Series aluminum frames. You can download the software for free from our website. A library containing SF and GF information from the catalog is included in the software. Unit Design automatically generates parts lists and drawings from the 3D model. By making Unit Design more user-friendly than ever, anyone interested in the GF or SF Series can create their own structures, from designers to hobbyists.

 <https://www.susamericainc.com/featured/UnitDesign/index.php>



Assembly and Delivery Service



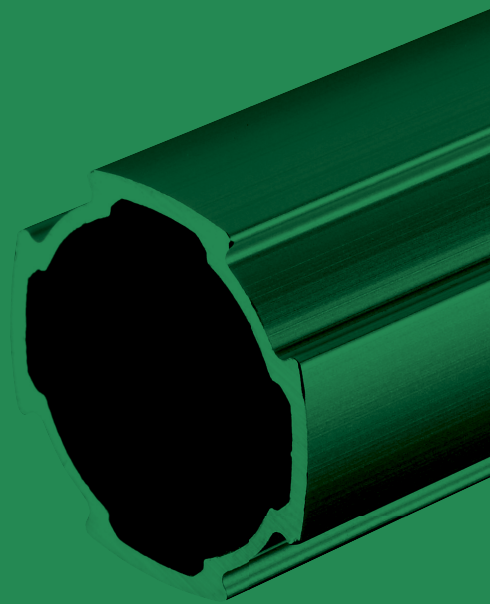
SUS Corporation was one of the first companies in the industry to launch an assembly and shipping service. Our professional technical staff stationed at our manufacturing bases will respond promptly and precisely to your request. Please indicate "Assembly Required" in your request for quotation and order. SUS will reply to you with CAD drawings and assembly estimates. We encourage you to make full use of our experience and skill as expert manufacturers.



Overseas Procurement Information



SUS Corporation has prepared a support system that quickly and thoroughly responds to your requests, even in factory automation environments different from those found in Japan. Numerous sales centers are located throughout Asia, including SUS's own extrusion plant and accessory parts factories in northern Thailand. Outside of southeast Asia, we also respond to requests in North America and Europe with prompt service. SUS continues to expand our business to meet rapidly increasing procurement needs worldwide.



GREEN FRAME
GF-N
28mm type

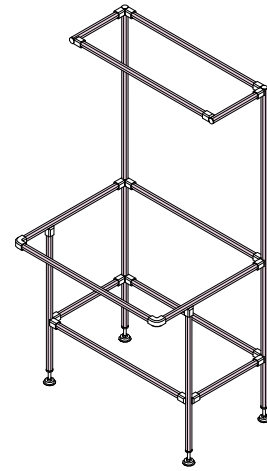
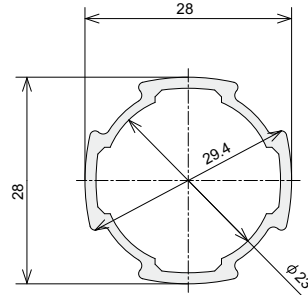
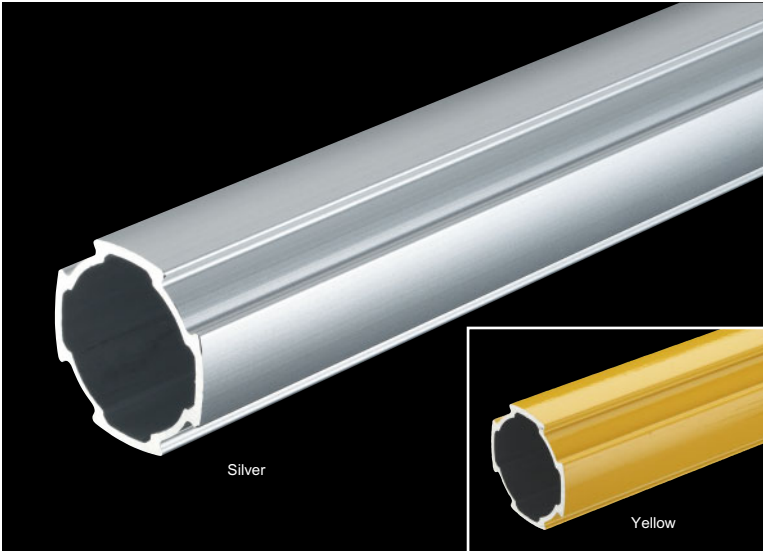
GF-N Frame

General Specifications

Material: Extruded Aluminum Resistance Value: $10^{-9} \sim 10^{-11} \Omega$ (Antistatic Level)
Silver Alumite Treatment Environment: RoHS10 Compliant

GF-N 28mm

Green Frame/Green Frame Yellow



GF Series standard frame (28 mm) is a universal type, balancing function and strength.

Name	Green Frame	Green Frame	Green Frame Yellow
	L=100~4000 mm	L=2000 mm	L=100~4000 mm
Item No.	GFF-000	GF2-000	GFF-000Y

Fixed size (5pcs./pack) ※For fixed size, please order by number of pack

Name	Green Frame 5 pcs./pack (Silver)			
	Scale (effective length ^{※1} L=4000 mm)×5 pcs.	3000 mm×5 pcs.	2000 mm×5 pcs.	1000 mm×5 pcs.
Item No.	GFK-F00	GFK-F06	GFK-F04	GFK-F02

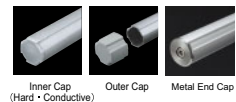
Technical Data

Section secondary $I_x=1.16 \times 10^4 \text{ mm}^4$
momentum : $I_y=1.16 \times 10^4 \text{ mm}^4$
Section coefficient : $Z_x=0.83 \times 10^3 \text{ mm}^3$
 $Z_y=0.83 \times 10^3 \text{ mm}^3$
Mass Unit : 0.37 kg/m

- Can be cut as short as 30mm
- Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
- Non Alumite also available (Silver only)

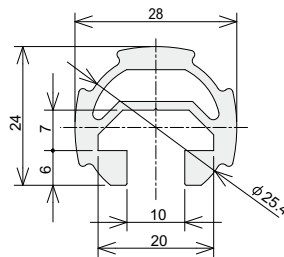
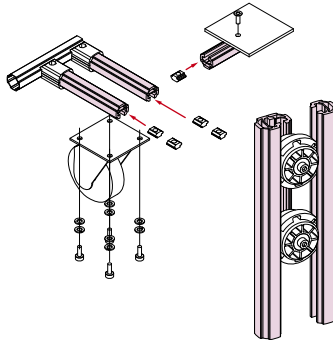
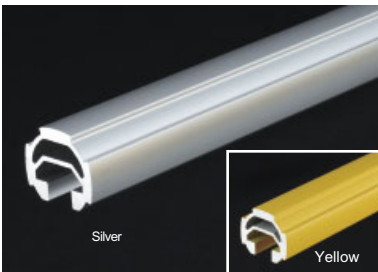
Compatible Frame Cap (P30)

- Inner Cap GFA-400
- Inner Cap Hard GFA-412
- Inner Cap Conductive GFA-411
- Outer Cap GFA-401
- Metal End Cap GFA-414



GF-G 43mm

Green Frame L Slot/Green Frame L Slot Yellow



Technical Data

Section secondary $I_x=1.19 \times 10^4 \text{ mm}^4$
momentum : $I_y=1.19 \times 10^4 \text{ mm}^4$
Section coefficient : $Z_x=0.96 \times 10^3 \text{ mm}^3$
 $Z_y=1.42 \times 10^3 \text{ mm}^3$
Mass Unit : 0.68 kg/m

- Can be cut as short as 30mm
- Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
- Available Frame size (Silver: ~6000 mm, Yellow: ~5000 mm)
- Non Alumite also Available (Silver only)

- By placing a ST Nut L (P169) into the 10 mm wide slot, you can install various parts with a screw.
- Slot can be used as a guide rail for slot roller.

Special ST Nut (with non slip cap) (P169)

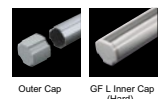
- ST Nut L M8 SFK-T11S
- ST Nut L M6 SFK-T10S
- ST Nut L M5 SFK-T09S
- ST Nut L M4 SFK-T08S



Name	Green Frame L Slot	Green Frame L Slot Yellow
	L=100~4000 mm	L=100~4000 mm
Item No.	GFF-004	GFF-004Y

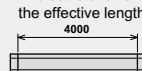
Frame Cap (P30)

- GF L Slot Inner Cap GFA-405
- GF L Slot Inner Cap Hard GFA-413
- Outer Cap GFA-401



In case of specific size (cut from factory)
Item No. or Product Name Length Volume
GFF-000 $\ell=800$ 5 pcs.

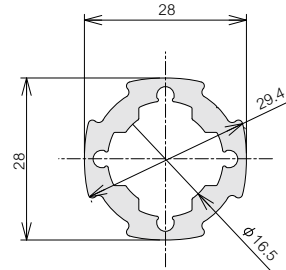
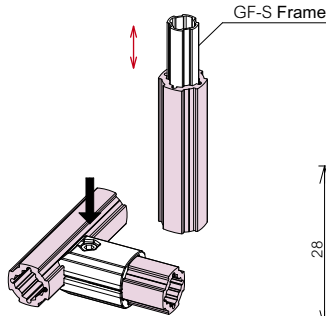
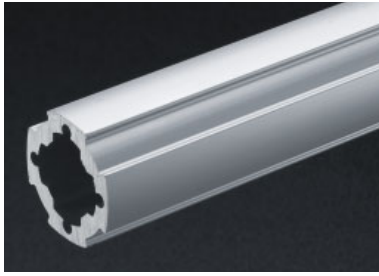
※1 The scale shows the effective length



GF-N Frame

General Specifications	Material: Extruded Aluminum	Resistance Value: $10^9 \sim 11 \Omega$ (Antistatic Level)
	Alumite Treatment	Environment: RoHS10 Compliant

Green Frame Hard



- Technical Data
- Section Secondary Momentum :**
 $I_x=2.01 \times 10^4 \text{ mm}^4$
 $I_y=2.01 \times 10^4 \text{ mm}^4$
- Section Coefficient :**
 $Z_x=1.44 \times 10^3 \text{ mm}^3$
 $Z_y=1.44 \times 10^3 \text{ mm}^3$
- Mass Unit : 0.76 kg/m**
- Can be cut as short as 30mm
 - Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
 - Available Frame size (~6000 mm)
 - Non alumite treatment also available

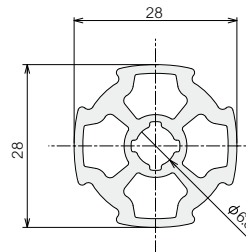
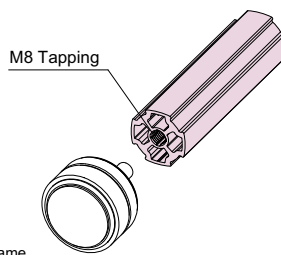
- In case of continuous impact to the fastening point, fit to the frame on the grip side of connector.
- Flex strength about 1.7 times that of standard Green Frame.
- GF-S (19 mm type) Frame (P132) can be inserted and slide.

Name	Green Frame Hard
	L=100~4000 mm
Item No.	GFF-019

■ Compatible Frame Cap (P30)
Outer Cap GFA-401



Green Frame T

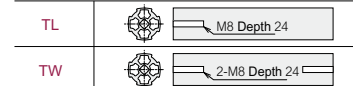


- Technical Data
- Section Secondary Momentum :**
 $I_x=1.72 \times 10^4 \text{ mm}^4$
 $I_y=1.72 \times 10^4 \text{ mm}^4$
- Section Coefficient :**
 $Z_x=1.23 \times 10^3 \text{ mm}^3$
 $Z_y=1.23 \times 10^3 \text{ mm}^3$
- Mass Unit : 0.79 kg/m**
- Can be cut as short as 30mm
 - Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
 - Special Frame Length of (~6000 mm) is available
 - Non alumite treatment also available

- Flex strength about 1.5 times that of standard Green Frame.
- Tapping available at end (M8).

Name	Green Frame T
	L=100~4000 mm
Item No.	GFF-017

■ Suitable frame for tapping at the end : Green Frame T

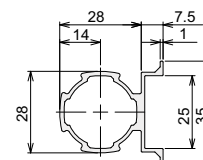
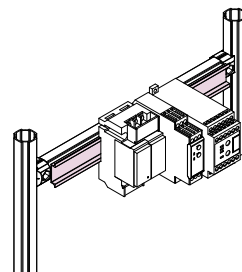


Order example: GFF-017 Green Frame T $t=800$ TL 3pcs.

■ Compatible Cap (P30,32)
GF T Inner Cap GFA-410
Outer Cap GFA-401



Green Frame DIN

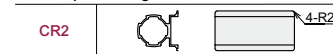


- Technical Data
- Section Secondary Momentum :**
 $I_x=2.36 \times 10^4 \text{ mm}^4$
 $I_y=1.88 \times 10^4 \text{ mm}^4$
- Section Coefficient :**
 $Z_x=1.35 \times 10^3 \text{ mm}^3$
 $Z_y=0.98 \times 10^3 \text{ mm}^3$
- Mass Unit : 0.53 kg/m**
- Can be cut as short as 30mm
 - Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
 - Non Alumite available
 - Making R (R3) at hub corner

- DIN rail is attached to Green Frame.
- Easy to attach devices to the DIN rail.

Name	Green Frame DIN
	L=100~4000 mm
Item No.	GFF-031

■ 4-R3 processing



GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

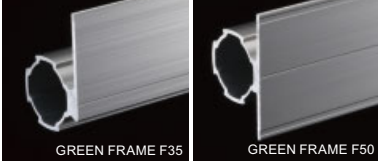
Technical Data

GF-N Frame

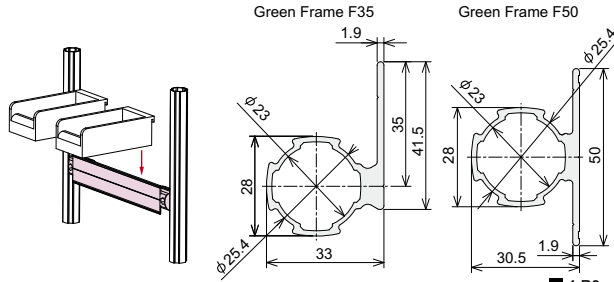
General Specifications Material: Extruded Aluminum Alumite Treatment Resistance Value $10^{9 \sim 11} \Omega$ (Antistatic Level) Environment : RoHS10 Compliant

GF-N
28mm

Green Frame F35/F50



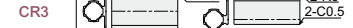
● Install a part container (P123) or use as a name plate.



Technical Data
Section Secondary Moment:
GREEN FRAME F35 $I_x=3.37 \times 10^4 \text{mm}^4$
 $I_y=3.02 \times 10^4 \text{mm}^4$
GREEN FRAME F50 $I_x=3.04 \times 10^4 \text{mm}^4$
 $I_y=2.56 \times 10^4 \text{mm}^4$
Section Coefficient:
 $Z_x=1.10 \times 10^3 \text{mm}^3$
 $Z_y=1.38 \times 10^3 \text{mm}^3$
 $Z_x=1.22 \times 10^3 \text{mm}^3$
 $Z_y=1.24 \times 10^3 \text{mm}^3$
Mass Unit: 0.67 kg/m 0.65 kg/m

- Can be cut as short as 30mm
- Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
- Non Alumite available
- Making R (R3) at hub corner

4-R3 processing



Name	Green Frame F35	Green Frame F50
	L=100~4000 mm	L=100~4000 mm
Item No.	GFF-014	GFF-005

Order Example GFF-014 Green Frame F35 L=800 CR3 3pcs.

Compatible Frame Cap (P30-32)

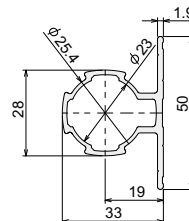
Inner Cap GFA-400
Inner Cap Hard GFA-412
Inner Cap Conductive GFA-411
Metal End Cap GFA-414



Green Frame F50-2



● Green Frame F50 (GFF-005) outer diameter: 33mm. The outer diameter is the same as Green Frame F35 (GFF-014), meaning it can attach with a Multi Connector Outer (GFJ-000).



Technical Data
Section Secondary Moment:
 $I_x=3.06 \times 10^4 \text{mm}^4$
 $I_y=3.01 \times 10^4 \text{mm}^4$
Section Coefficient:
 $Z_x=1.22 \times 10^3 \text{mm}^3$
 $Z_y=1.4 \times 10^3 \text{mm}^3$
Mass Unit: 0.63 kg/m

- Can be cut as short as 30mm
- Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
- Non Alumite available
- Making R (R3) at hub corner

4-R3 processing



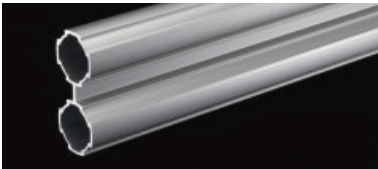
Name	Green Frame F50-2
	L=100~4000 mm
Item No.	GFF-052

Compatible Frame Cap (P30-32)

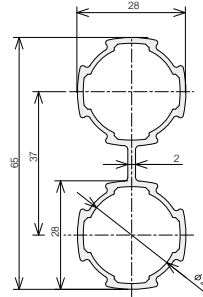
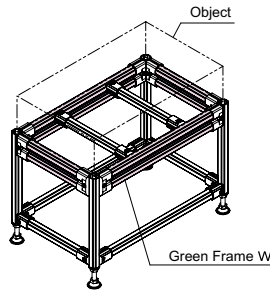
Inner Cap GFA-400
Inner Cap Hard GFA-412
Inner Cap Conductive GFA-411

Metal End Cap GFA-414
SR25 End Cap GFA-404
Green Frame F50-2 End Cover GFA-C66, GFA-C67

Green Frame W



● Good for areas requiring higher strength. When used vertically, it is about 10 times stronger than standard Green Frame.



Technical Data
Section Secondary Moment:
 $I_x=11.66 \times 10^4 \text{mm}^4$
 $I_y=2.31 \times 10^4 \text{mm}^4$
Section Coefficient:
 $Z_x=3.59 \times 10^3 \text{mm}^3$
 $Z_y=1.65 \times 10^3 \text{mm}^3$
Mass Unit: 0.79 kg/m

- Can be cut as short as 30mm
- Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
- Available Frame size (~6000 mm)
- Non alumite treatment also available

Compatible Frame Cap (P30,31)

Inner Cap GFA-400
Inner Cap Hard GFA-412
Inner Cap Conductive GFA-411
Metal End Cap GFA-414

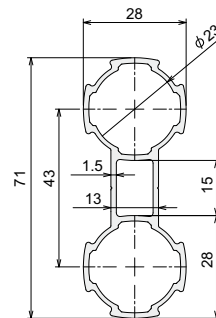


Name	Green Frame W
	L=100~4000 mm
Item No.	GFF-003

Green Frame W2



● Green Frame W2 (GFF-045) has an extended pitch of 6mm. It can be used together with a Cross Connector (GFJ-A11A) and Double Connector P15 (GFJ-A95) because they have the same pitch. It also prevents connector interference when a Linear Slider is attached.



Technical Data
Section Secondary Moment:
 $I_x=15.04 \times 10^4 \text{mm}^4$
 $I_y=2.48 \times 10^4 \text{mm}^4$
Section Coefficient:
 $Z_x=4.24 \times 10^3 \text{mm}^3$
 $Z_y=1.77 \times 10^3 \text{mm}^3$
Mass Unit: 0.87 kg/m

- Can be cut as short as 30mm
- Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
- Available Frame size (~6000 mm)
- Non alumite treatment also available

Compatible Frame Cap (P30,31)

Inner Cap GFA-400
Inner Cap Hard GFA-412
SR25 End Cap GFA-404

Inner Cap Conductive GFA-411
Metal End Cap GFA-414



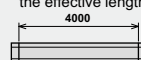
Name	Green Frame W2
	L=100~4000 mm
Item No.	GFF-045

In case of specific size (cut from factory)

Order Example

Item No. or Product Name Length Volume
GFF-014 $\ell=800$ **5 pcs.**

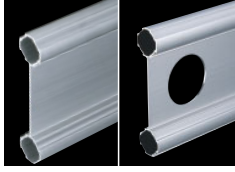
※1 The scale shows the effective length



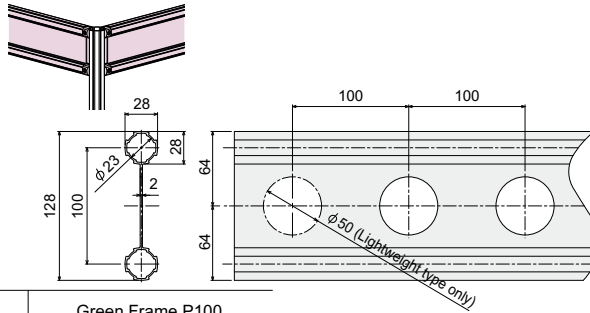
GF-N Frame

General Specifications	Material: Extruded Aluminum	Resistance Value $10^{-9} \sim 10^{-11} \Omega$ (Antistatic Level)
	Alumite Treatment	Environment : RoHS10 Compliant

Green Frame P100



- Can be used as a beam for large booths.



■ Technical Data

Section Secondary Moment :

High Rigidity Type	Lightweight Type
$I_x = 76.81 \times 10^4 \text{ mm}^4$	$I_x = 74.72 \times 10^4 \text{ mm}^4$
$I_y = 2.32 \times 10^4 \text{ mm}^4$	$I_y = 2.31 \times 10^4 \text{ mm}^4$

Section Coefficient :

$Z_x = 12.00 \times 10^3 \text{ mm}^3$	$Z_x = 11.68 \times 10^3 \text{ mm}^3$
$Z_y = 1.65 \times 10^3 \text{ mm}^3$	$Z_y = 1.65 \times 10^3 \text{ mm}^3$

Mass Unit : 1.13 kg/m 1.02 kg/m

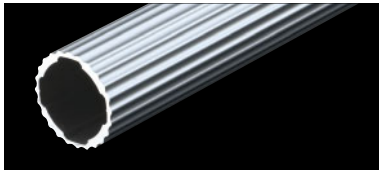
- Can be cut as short as 30mm
- Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
- Non Alumite available

Name	Green Frame P100	Green Frame P100 (Lightweight Type)
	L=100~4000 mm	L=100~4000 mm
Item No.	GFF-001	GFF-002

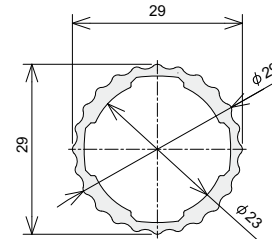
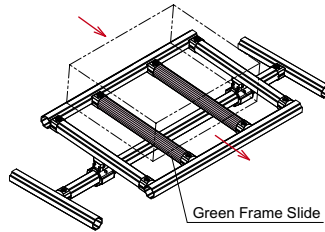
- Compatible Frame Cap (P30,31)
- Inner Cap **GFA-400**
 - Inner Cap Hard **GFA-412**
 - Inner Cap Conductive **GFA-411**
 - Metal End Cap **GFA-414**



Green Frame Slide



- Suitable for sliding objects on the frame.



■ Technical Data

Section Secondary Moment :

$I_x = 1.47 \times 10^4 \text{ mm}^4$	$I_y = 1.47 \times 10^4 \text{ mm}^4$
---------------------------------------	---------------------------------------

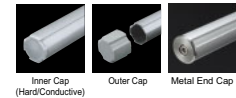
Section Coefficient :

$Z_x = 1.01 \times 10^3 \text{ mm}^3$	$Z_y = 1.01 \times 10^3 \text{ mm}^3$
---------------------------------------	---------------------------------------

Mass Unit : 0.46 kg/m

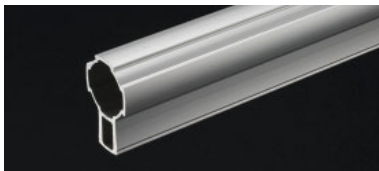
- Can be cut as short as 30mm
- Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
- Non Alumite available

- Compatible Frame Cap (P30,31)
- Inner Cap **GFA-400**
 - Inner Cap Hard **GFA-412**
 - Inner Cap Conductive **GFA-411**
 - Outer Cap **GFA-401**
 - Metal End Cap **GFA-414**

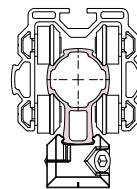


Name	Green Frame Slide
	L=100~4000 mm
Item No.	GFF-006

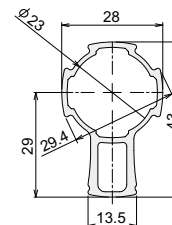
Green Frame LS



- Even after attaching the linear slider, you can still use the profile edge to attach connectors and other accessories.



Example of Use
Connectors can be attached after installing the linear slider.



■ Technical Data

Section Secondary Moment:

$I_x = 3.9 \times 10^4 \text{ mm}^4$	$I_y = 1.34 \times 10^4 \text{ mm}^4$
--------------------------------------	---------------------------------------

Section Coefficient:

$Z_x = 1.74 \times 10^3 \text{ mm}^3$	$Z_y = 0.95 \times 10^3 \text{ mm}^3$
---------------------------------------	---------------------------------------

Mass Unit: 0.61 kg/m

- Can be cut as short as 30mm
- Cut size unit of 0.1 mm is possible (Cutting tolerance is ± 0.5 mm)
- Available Frame size (~6000 mm)
- Non alumite treatment also available

- Compatible Frame Cap (P30,31)
- Inner Cap **GFA-400**
 - Inner Cap Hard **GFA-412**

- SR25 End Cap **GFA-404**
- Inner Cap Conductive **GFA-411**
- Metal End Cap **GFA-414**



Name	Green Frame LS
	L=100~4000 mm
Item No.	GFF-034

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

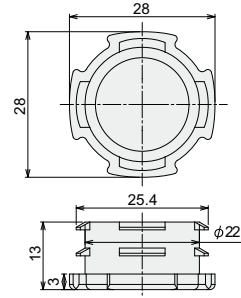
Jig

Technical Data

GF-N Cap

GF-N
28mm

Inner Cap / Inner Cap Hard

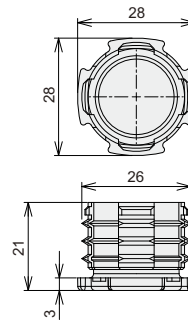
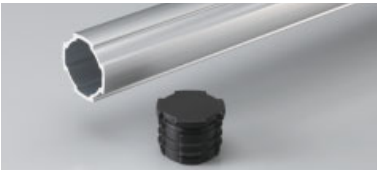


■ **Material/Technical Data**
Material : GFA-400:LDPE
 GFA-412:PA
Weight : 3 g
Environment : GFA-400
 RoHS10 Compliant

■ **Compatible Frame**
 Green Frame (GFF-000) Green FrameW (GFF-003)
 Green FrameF35 (GFF-014) Green FrameF50 (GFF-005)
 Green Frame Slide (GFF-006) Green FrameP100 (GFF-001 · GFF-002)
 Green FrameW2 (GFF-045) Green FrameF50-2 (GFF-052)
 Green FrameLS (GFF-034)

Name	Inner Cap	Inner Cap Hard
Item No.	GFA-400	GFA-412

Inner Cap Conductive

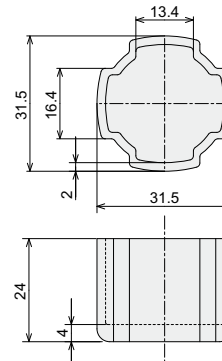
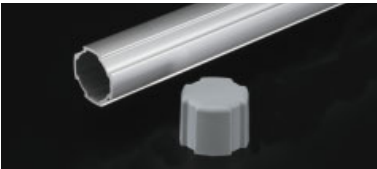


■ **Material/Technical Data**
Material : Conductive
 Polypropylene
Weight : 4 g
Environment : RoHS10 Compliant

■ **Compatible Frame**
 Green Frame (GFF-000) Green FrameW (GFF-003)
 Green FrameF35 (GFF-014) Green FrameF50 (GFF-005)
 Green Frame Slide (GFF-006) Green FrameP100 (GFF-001 · GFF-002)
 Green FrameW2 (GFF-045) Green FrameF50-2 (GFF-052)
 Green FrameLS (GFF-034)

Name	Inner Cap Conductive
Item No.	GFA-411

Outer Cap

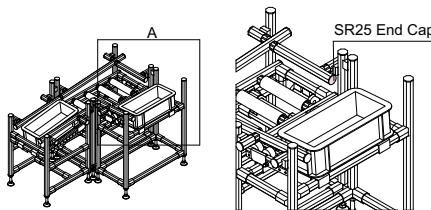


■ **Material/Technical Data**
Material : Low Density
 Polyethylene
Weight : 8 g
Environment : RoHS10 Compliant

■ **Compatible Frame**
 Green Frame (GFF-000) Green Frame Slot (GFF-004)
 Green Frame T (GFF-017) Green Frame Hard (GFF-019)

Name	Outer Cap
Item No.	GFA-401

SR25 End Cap



■ **Material/Technical Data**
Material : Nylon
Weight : 3 g
Environment : RoHS10 Compliant

● For preventing totes from catching at the entryway.

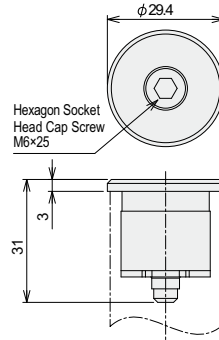
■ **Compatible Frame**
 Green Frame (GFF-000) Green Frame Slot (GFF-004)
 Green Frame T (GFF-017) Green Frame Hard (GFF-019)

Name	SR25 End Cap
Item No.	GFA-404



GF-N Cap

Metal End Cap

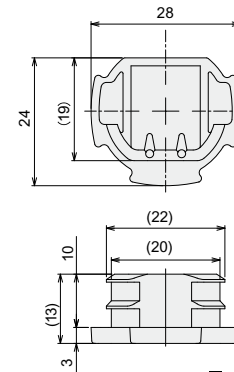
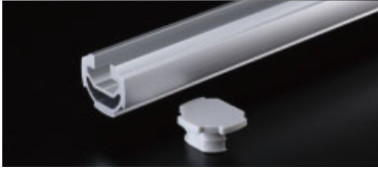


■ **Material/Technical Data**
Material : Steel · SUS304 · Rubber
Weight : 46 g
Environment : RoHS6 Compliant

■ **Compatible Frame**
 Green Frame (GFF-000) Green FrameW (GFF-003)
 Green FrameF35 (GFF-014) Green FrameF50 (GFF-005)
 Green Frame Slide (GFF-006) Green FrameP100 (GFF-001 · GFF-002)
 Green FrameW2 (GFF-045) Green FrameF50-2 (GFF-052)
 Green FrameLS (GFF-034)

Name	Metal End Cap
Item No.	GFA-414

GF L Slot Inner Cap

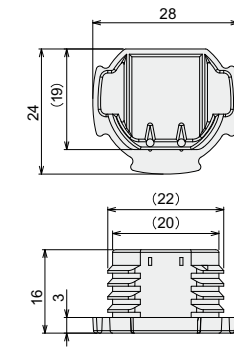
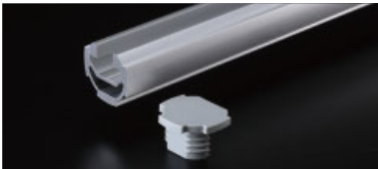


■ **Material/Technical Data**
Material : Low Density Nylon
Weight : 2 g
Environment : RoHS10 Compliant

■ **Compatible Frame**
 Green Frame Slot (GFF-004)

Name	GF L Slot Inner Cap
Item No.	GFA-405

GF L Slot Inner Cap Hard

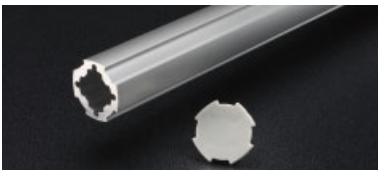


■ **Material/Technical Data**
Material : Nylon6
Weight : 3 g
Environment : RoHS10 Compliant

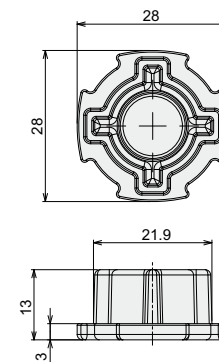
■ **Compatible Frame**
 Green Frame Slot (GFF-004)

Name	GF L Slot Inner Cap Hard
Item No.	GFA-413

GF Hard Frame Cap



● Special Cap for Green Frame Hard (GFF-019).



■ **Material/Technical Data**
Material : LDPE
Weight : 3 g
Environment : RoHS10 Compliant

■ **Compatible Frame (P27)**
 Green Frame Hard (GFF-019)

Name	GF Hard Frame Cap
Item No.	GFA-425

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

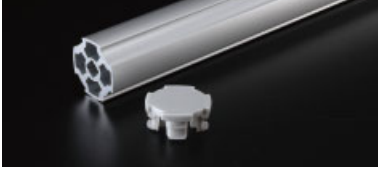
Jig

Technical Data

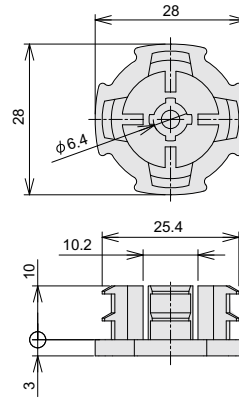
GF-N Cap

GF-N
28mm

GFT Inner Cap



● Special cap for Green Frame T (GFF-017).



■ **Material/Technical Data**
 Material : LDPE
 Weight : 3 g
 Environment : RoHS10 Compliant

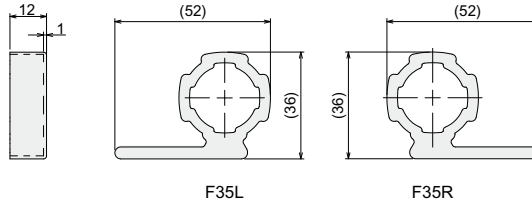
Name	GFT Inner Cap
Item No.	GFA-410

■ **Compatible Frame (P27)**
 Green Frame T (GFF-017)

Green Frame F35 End Cover



● For protecting the end face of frames.



■ **Material/Technical Data**
 Material : Flexible PVC
 Weight : 6 g
 Environment : RoHS10 Compliant

Name	Green Frame F35L End Cover	Green Frame F35R End Cover
	(Gray)	(Gray)
Item No.	GFA-430	GFA-431

GF-S
19mm

GF-G
43mm

Bolt
Nut

Jig

Technical
Data

GREEN FRAME
GF-N 28mm type

Connector

GF-N
28mm

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Electric Item 

Corocon Roller 

Accessory 

Door Part 

GF-S
19mm

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

Door Part 

GF-G
43mm

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

Bolt Nut

Jig

Technical Data

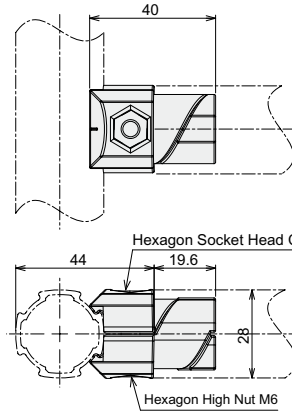
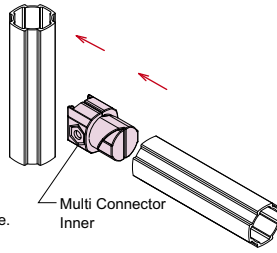
GF-N Connector

GF-N
28mm

Multi Connector Inner



- This connector has the same outside dimensions as the frame.
- Suitable for paths or chutes using coroco rollers, or for creating a sleek appearance.



■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt/Nut part : Steel
Weight : 54 g
Environment : RoHS10 Compliant

- Can also grip GF-G (43mm) frames

Name	Multi Connector Inner
Item No.	GFJ-200

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroco Roller

Accessory

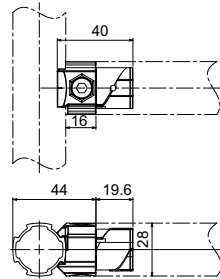
Door Part

GF-S
19mm

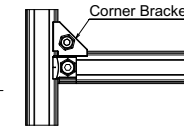
Multi Connector Inner 2



- This connector's shape is the same as the edges of the frame. A connector can be mounted to the side of this connector.
- Can also grip GF-G (43mm) frames.



[Example of Use]



■ **Material/Technical Data**
Material : Body: Aluminum Diecast
 Bolt/Nut: Aluminum
Weight : 46 g
Environment : RoHS Compliant

■ **Strength Data**
 Sliding Load : 700(N)
 Moment Load (vertical) : 9(N·m)
 Moment Load (horizontal) : 6(N·m)
 Tightening Torque : 11(N·m)

Name	Multi Connector Inner 2
Item No.	GFJ-252

Frame

Cap

Connector

Foot Component

Moving Part

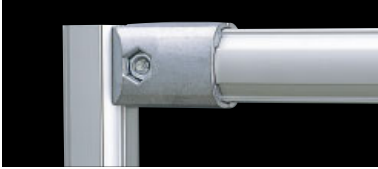
Coroco Roller

Accessory

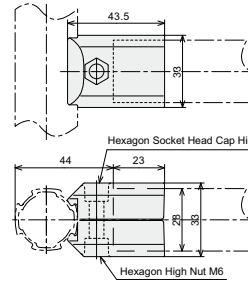
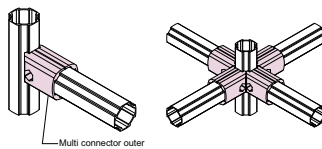
Door Part

GF-G
43mm

Multi Connector Outer



- 90° coupling.
- Fastening the joint requires only one bolt and wrench.



■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt / Nut part: Steel
Weight : 61 g
Environment : RoHS10 Compliant

- Can also grip GF-G (43mm) frames

Name	Multi Connector Outer
Item No.	GFJ-000

Frame

Cap

Connector

Foot Component

Moving Part

Coroco Roller

Accessory

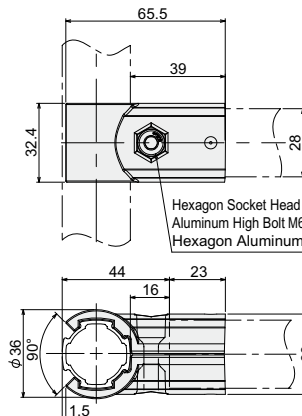
Bolt Nut

Jig

Multi Connector Outer Hard



- Can be used in places that experience repeated moment loads. Attach a drill screw into the recessed portion to prevent the frame from coming off. A diameter of $\phi 3.5$ is recommended for pilot holes.



■ **Material/Technical Data**
Material : Body: Aluminum Diecast
 Bolt/Nut: Aluminum
Weight : 71 g
Environment : RoHS10 Compliant

- Recessed Portion: Recommended screw SFB-X96 pan head drill screw 4 × 10

Name	Multi Connector Outer Hard
Item No.	GFJ-E55

*Tightening torque 11 N · m for aluminum bolts

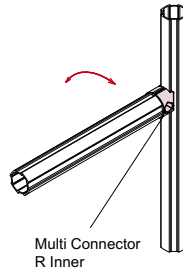
Technical Data

GF-N Connector

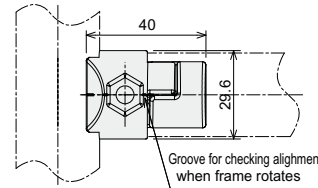
Multi Connector R Inner



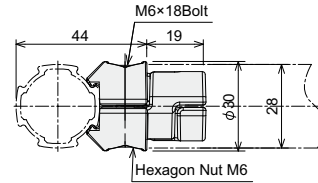
- Rotate to any angle before tightening.



Multi Connector R Inner



Groove for checking alignment when frame rotates



- **Material/Technical Data**
Material : Aluminum Diecast
Bolt/Nut part : Steel
Weight : 54 g
Environment : RoHS10 Compliant

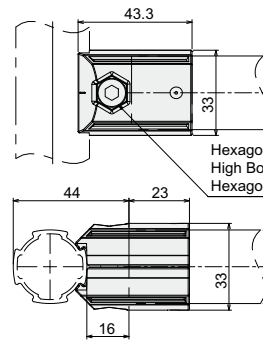
- Can also grip GF-G (43mm) frames

Name	Multi Connector R Inner
Item No.	GFJ-207

Multi Connector R Outer



- The frame can be rotated and secured at any angle. Use it with a frame that cannot use an inner type.
- Attach the drill screw to the recessed portion to prevent the frame from coming off.
- A diameter of $\phi 3.5$ is recommended for pilot holes. Use this when you want to increase the resistance to being pulled out.



Hexagon Socket Head Cap Aluminum High Bolt M6.5x22
Hexagon Aluminum Taper Nut M6.5

- **Material/Technical Data**
Material : Body: Aluminum Diecast
Bolt/Nut: Aluminum
Weight : 51 g
Environment : RoHS10 Compliant

- Can also grip GF-G (43mm) frames
- Recommended screw SFB-X96 pan head drill screw 4 x 10

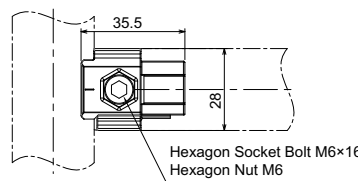
Name	Multi Connector R Outer
Item No.	GFJ-D17

*Tightening torque 11 N · m for aluminum bolts

L Slot Connector Inner



- This inner connector has the same size as the external diameter of the Green Frame L Slot.
- It has a grip shape that is the same as the protrusions of the frame so a connector can be mounted on the side.
- Can also grip GF-G (43mm) frames.



Hexagon Socket Bolt M6x16
Hexagon Nut M6

- **Material/Technical Data**
Material : Body: Aluminum Diecast
Bolt/Nut: Iron
Weight : 46 g
Environment : RoHS10 Compliant

- **Strength Data**
Sliding Load : 350(N)
Pull-Out Load : 350(N)
Moment Load (vertical) : 3(N·m)
Moment Load (horizontal) : 4(N·m)
Specified Torque : 10.8(N·m)

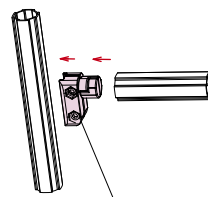
- *If strength is required, use in combination with a Corner Bracket

Name	L Slot Connector Inner
Item No.	GFJ-255

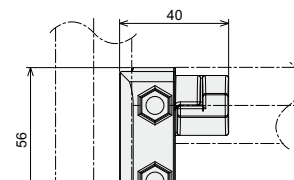
Multi Connector Long Inner



- This connector has a higher slide load compared to the Multi Connector Inner Type (P34).



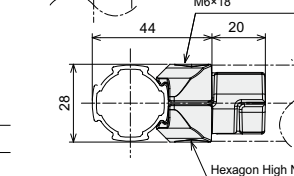
Multi Connector Long Inner



Hexagon Socket Head Cap High Bolt M6x18

- **Material/Technical Data**
Material : Aluminum Diecast
Bolt/Nut part : Steel
Weight : 82 g
Environment : RoHS10 Compliant

- Can also grip GF-G (43mm) frames



Hexagon High Nut M6

Name	Multi Connector Long Inner
Item No.	GFJ-215

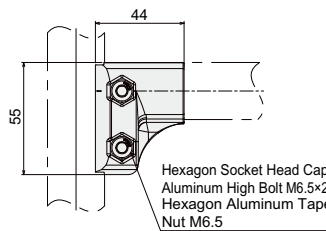
GF-N Connector

GF-N 28mm

Multi Connector Long Outer



- A connector with a higher sliding load than the Multi Connector Outer.



■ **Material/Technical Data**
 Material : Body: Aluminum Diecast
 Bolt/Nut: Aluminum
 Weight : 85 g
 Environment : RoHS10 Compliant

- Can also grip GF-G (43mm) frames

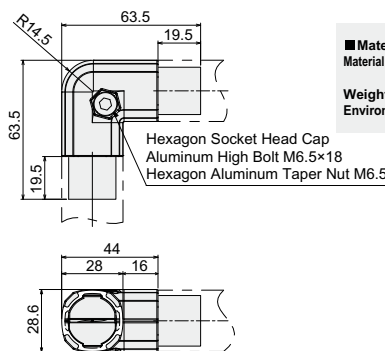
Name	Multi Connector Long Outer
Item No.	GFJ-C94

*Tightening torque 11 N·m for aluminum bolts

Angle Connector Inner Aluminum Bolt



- Make a 90° L-shaped corner connection while maintaining the same outer dimension as the frame.
- The updated design allows it to be fastened with a single bolt.



■ **Material/Technical Data**
 Material : Body: Aluminum Diecast
 Bolt/Nut: Aluminum
 Weight : 122 g
 Environment : RoHS10 Compliant

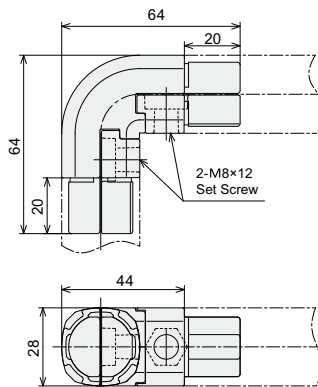
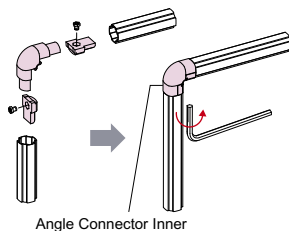
Name	Angle Connector Inner Aluminum Bolt
Item No.	GFJ-C98

*Tightening torque 11 N·m for aluminum bolts

Angle Connector Inner



- 90° L type is used for joining a corner while maintaining the same outer dimensions as the frame.



■ **Material/Technical Data**
 Material : Aluminum Diecast
 Bolt/Nut part : Steel
 Weight : 139 g
 Environment : RoHS10 Compliant

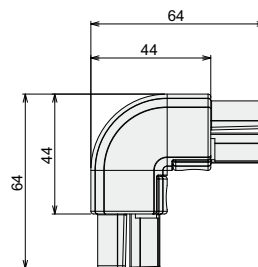
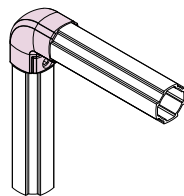
- Non-electrolyte Nickel plating type (Angle connector DX) also available (P36,37)

Name	Angle Connector Inner
Item No.	GFJ-204

Angle Connector DX



- A high quality connector with a non-electrolyte nickel finish.



■ **Material/Technical Data**
 Material : Aluminum Diecast
 Non electrolyte Nickel Plating Finish
 Weight : 136 g
 Environment : RoHS10 Compliant

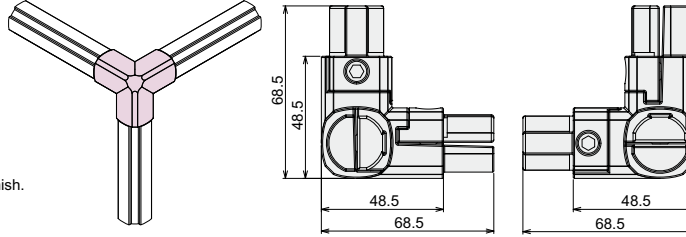
Name	Angle Connector DX
Item No.	GFJ-235

GF-N Connector

Angle Connector DX (3way type)



- A high quality connector with a non-electrolyte nickel finish.
- Connects in three directions.



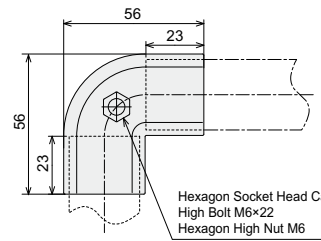
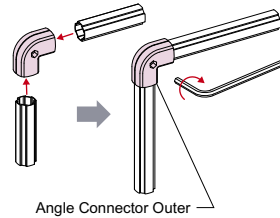
■ Material/Technical Data
Material : Aluminum Diecast
 Non electrolyte Nickel Plating Finish
Weight : 226 g
Environment : RoHS10 Compliant

Name	Angle Connector DX (3way type)
Item No.	GFJ-238

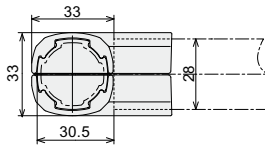
Angle Connector Outer



- 90° L type is used for joining corners.



■ Material/Technical Data
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 96 g
Environment : RoHS10 Compliant

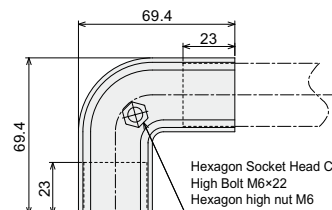
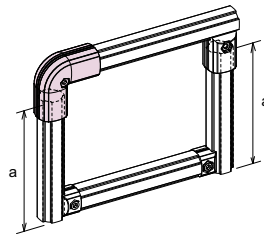


Name	Angle Connector Outer
Item No.	GFJ-005

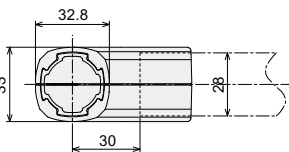
Angle Connector E Outer



- Keeping the frame length as it is, use to replace a Multi Connector Outer joint.



■ Material/Technical Data
Material : Aluminum Diecast
 Bolt/Nut part : Steel
Weight : 162 g
Environment : RoHS10 Compliant

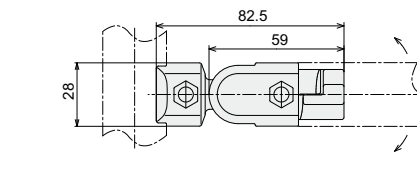
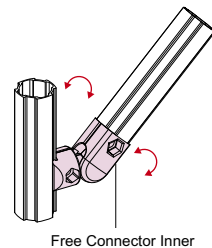


Name	Angle Connector E Outer
Item No.	GFJ-010

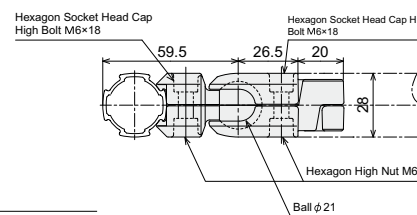
Free Connector Inner



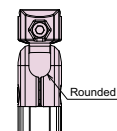
- Freely set the angle with a connector that has the same outside dimensions as the frame.



■ Material/Technical Data
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 110 g
Environment : RoHS10 Compliant



- Can also grip GF-G (43mm) frames



How to Distinguish

Name	Free Connector Inner
Item No.	GFJ-202

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data

GF-N Connector

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

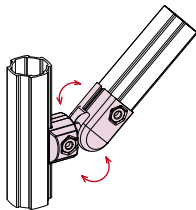
Accessory

Bolt Nut

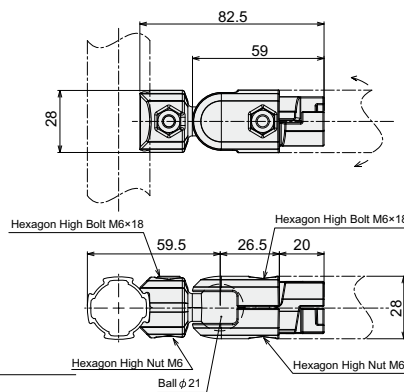
Jig

Technical Data

Free Connector V-M Inner

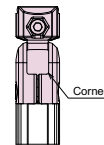


- Freely set the angle of the frame.
- Still moves freely after tightening the bolts.



■ Material/Technical Data
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 108 g
Environment : RoHS10 Compliant

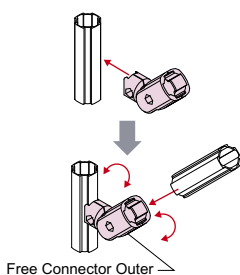
- Can also grip GF-G (43mm) frames



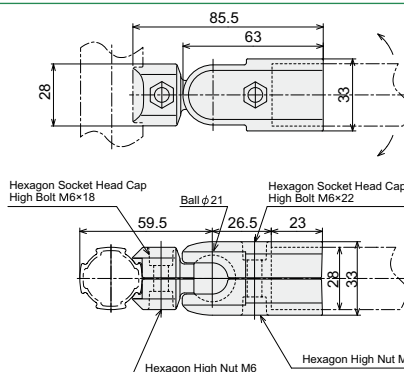
How to Distinguish

Name	Free Connector V-M Inner
Item No.	GFJ-B07

Free Connector Outer

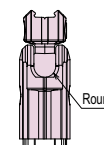


- Freely set the angle of the frame.
- Tighten the bolts to fix the angle.



■ Material/Technical Data
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 125 g
Environment : RoHS10 Compliant

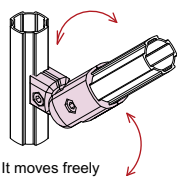
- Can also grip GF-G (43mm) frames



How to Distinguish

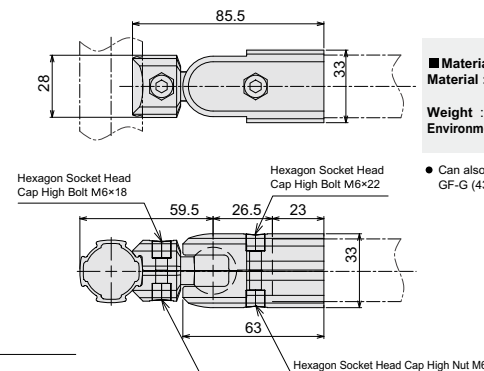
Name	Free Connector Outer
Item No.	GFJ-002

Free Connector V-M Outer



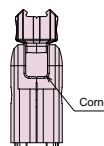
- Freely set the angle of the frame.
- Still moves freely after tightening the bolts.

It moves freely



■ Material/Technical Data
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 127 g
Environment : RoHS10 Compliant

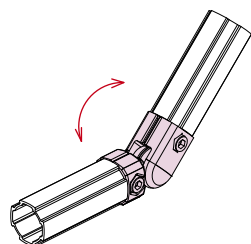
- Can also grip GF-G (43mm) frames



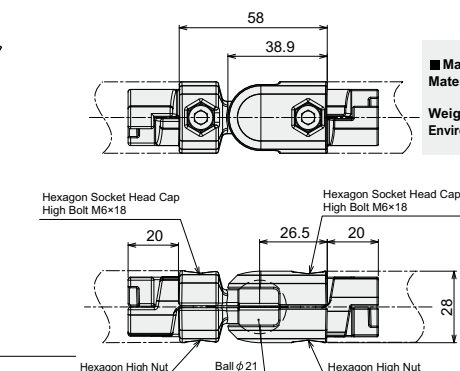
How to Distinguish

Name	Free Connector V-M Outer
Item No.	GFJ-B01

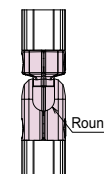
Free Connector H-F Inner



- Free angle connection to the end of each frame.
- Fix the angle by tightening the bolts.



■ Material/Technical Data
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 124 g
Environment : RoHS10 Compliant



How to Distinguish

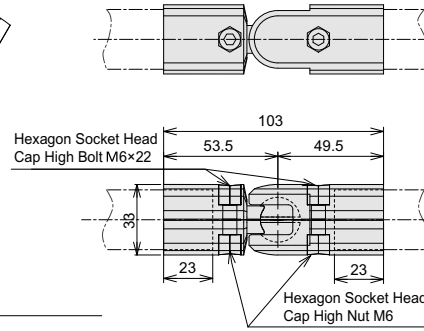
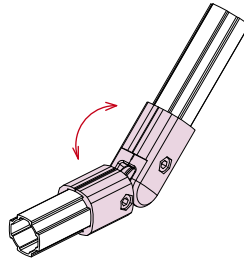
Name	Free Connector H-F Inner
Item No.	GFJ-B04

GF-N Connector

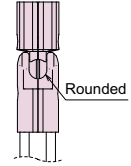
Free Connector H-F Outer



- Freely set the angle of the frame.
- Fix the angle by tightening the bolts.



■ Material/Technical Data
Material : Aluminum Diecast
Bolt / Nut part : Steel
Weight : 110 g
Environment : RoHS10 Compliant



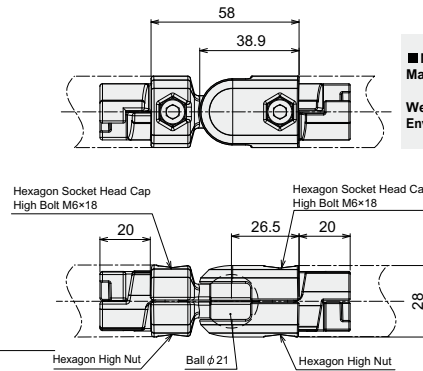
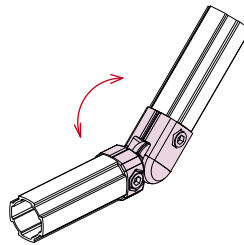
How to Distinguish

Name	Free Connector H-F Outer
Item No.	GFJ-B00

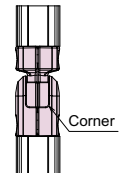
Free Connector H-M Inner



- Free angle connection to the end of each frame.
- Still moves freely after tightening the bolts.



■ Material/Technical Data
Material : Aluminum Diecast
Bolt / Nut part : Steel
Weight : 122 g
Environment : RoHS10 Compliant



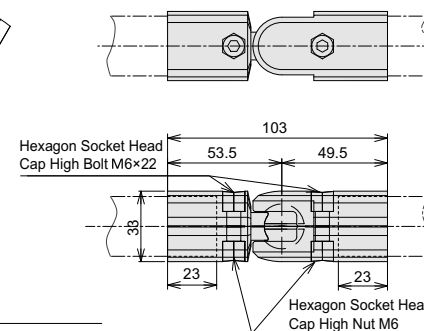
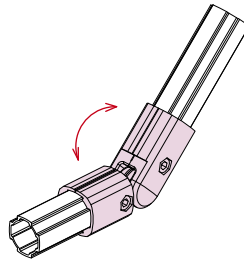
How to Distinguish

Name	Free Connector H-M Inner
Item No.	GFJ-B06

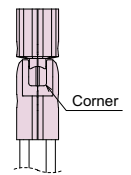
Free Connector H-M Outer



- Free angle connection to the end of each frame.
- Still moves freely after tightening the bolts.



■ Material/Technical Data
Material : Aluminum Diecast
Bolt / Nut part : Steel
Weight : 155 g
Environment : RoHS10 Compliant



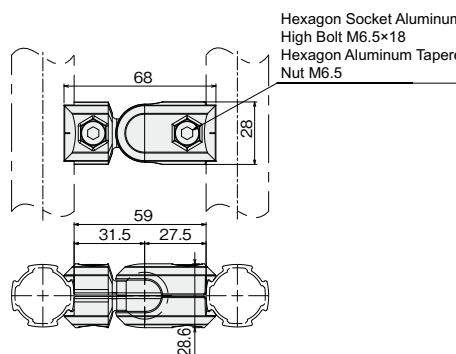
How to Distinguish

Name	Free Connector H-M Outer
Item No.	GFJ-A81

Free Connector Side F

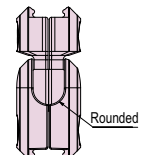


- The frame protrusions can be gripped on both sides of the connector.
- The frame mounting angle can be set freely.
- Tighten the bolt to fix the angle.
- Can also grip GF-G (43mm) frames.



■ Material/Technical Data
Material : Body: Aluminum Diecast
Bolt/Nut: Aluminum
Weight : 85 g
Environment : RoHS10 Compliant

■ Strength Data
Sliding Load : 800(N)
Tightening Torque : 11(N·m)



How to Distinguish

Name	Free Connector Side F
Item No.	GFJ-C77

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data

GF-N Connector

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

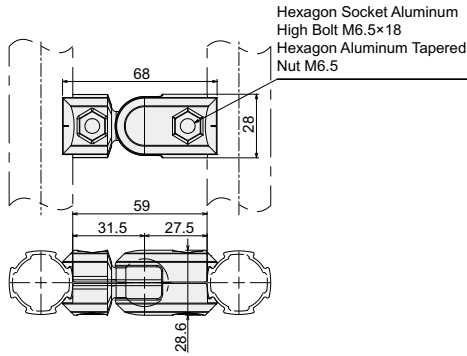
Jig

Technical Data

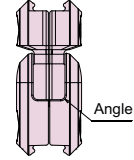
Free Connector Side M



- The frame protrusions can be gripped on both sides of the connector.
- The frame mounting angle can be set freely.
- Can still move after the bolt is tightened.
- Can also grip GF-G (43mm) frames.



Material/Technical Data
Material : Body: Aluminum Diecast
 Bolt/Nut: Aluminum
Weight : 84 g
Environment : RoHS10 Compliant
Strength Data
 Sliding Load : 800(N)
 Tightening Torque : 11(N·m)



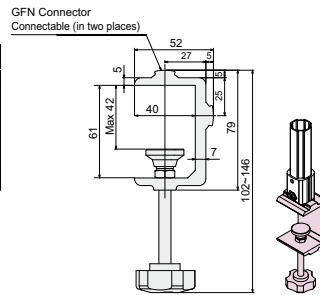
How to Distinguish

Name	Free Connector Side M
Item No.	GFJ-C79

Multi Clamper



- Clamp equipped with the same profile shape as GF-N (28 mm) and GF-G (43mm) frames.
- Easily attach GF and related items in places where there are no frames by inserting and securing a board or similar.



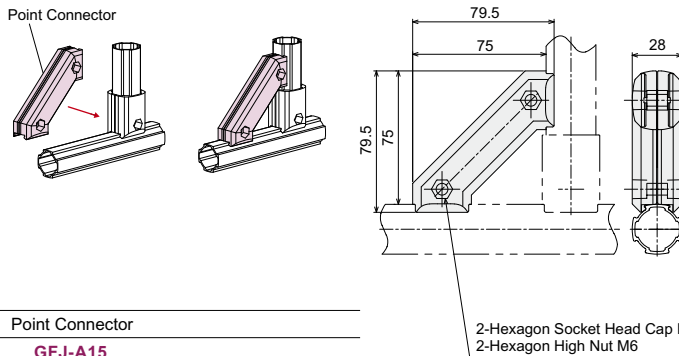
Material/Technical Data
Material : Aluminum Diecast
 Adjuster: Resin · Steel
 Bolt : Steel
 Knob : Resin
Weight : 189 g
Environment : RoHS10 Compliant

Name	Multi Clamper
Item No.	GFA-B10

Point Connector



- Use to reinforce 90 degree joints.



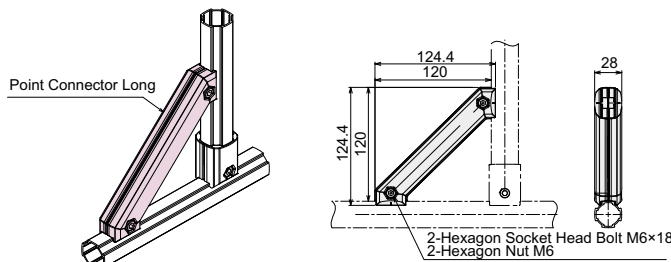
Material/Technical Data
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 123 g
Environment : RoHS10 Compliant
 • Can also grip GF-G (43mm) frames when using Multi Connector Inner Type G (P158)

Name	Point Connector
Item No.	GFJ-A15

Point Connector Long



- Large type Point Connector able to provide greater reinforcement to structures.
- Used with Multi Connector Outer Type (GFJ-014).

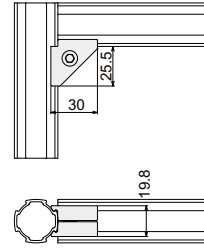
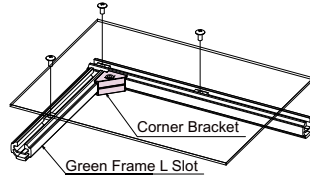


Material/Technical Data
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 167 g
Environment : RoHS10 Compliant

Name	Point Connector Long
Item No.	GFJ-B80

GF-N Connector

Corner Bracket

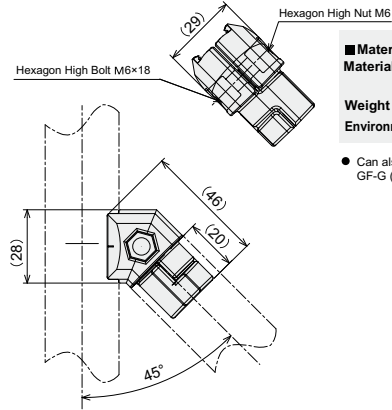
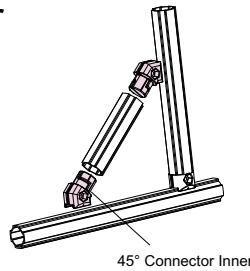


■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 23 g
Environment : RoHS10 Compliant

- Connect frames at 90° by attaching to the inside of frames.
- Does not add any length.

Name	Corner Bracket
Item No.	GFJ-032

45-Degree Connector Inner



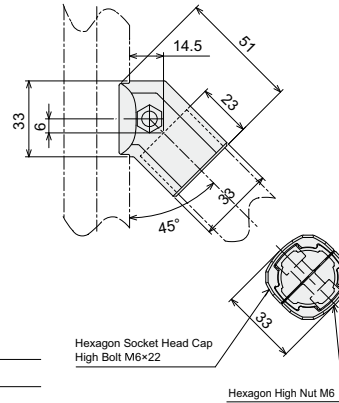
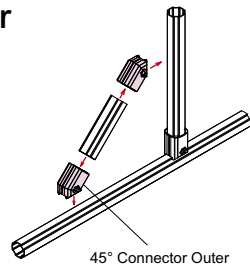
■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 55 g
Environment : RoHS10 Compliant

- Can also grip GF-G (43mm) frames

- This 45° connector has the same outer dimensions as the frame.

Name	45-Degree Connector Inner
Item No.	GFJ-220

45-Degree Connector Outer



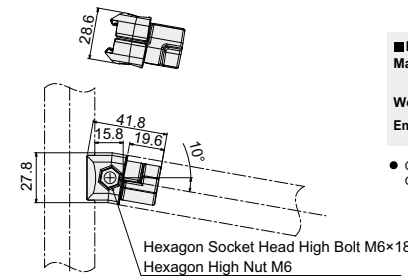
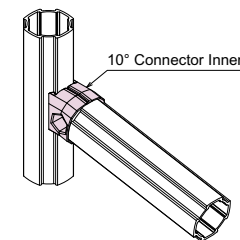
■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 61 g
Environment : RoHS10 Compliant

- Can also grip GF-G (43mm) frames

- Connect at a 45° angle.

Name	45-Degree Connector Outer
Item No.	GFJ-007

10-Degree Connector Inner



■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 52 g
Environment : RoHS10 Compliant

- Can also grip GF-G (43mm) frames

- Connect at a 10° angle.
- Effective for forming angles used in chuters or conveyors.

Name	10-Degree Connector Inner
Item No.	GFJ-212

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

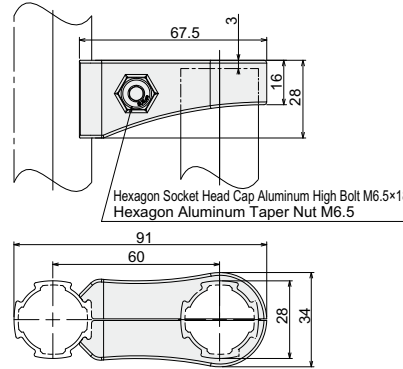
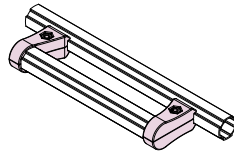
Jig

Technical Data

GF-N Connector

GF-N
28mm

Handle Connector



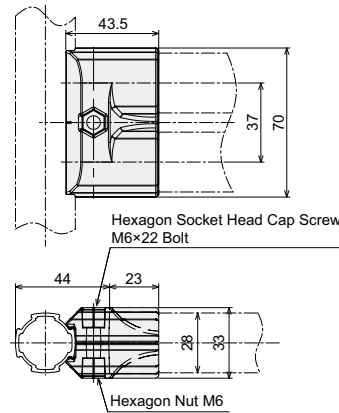
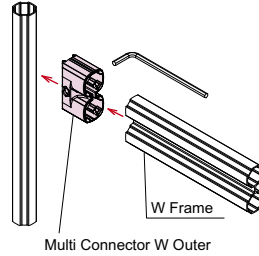
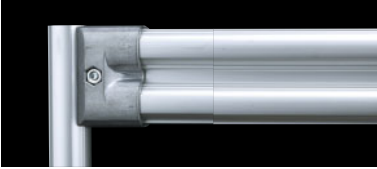
■ **Material/Technical Data**
(1 per set)
Material : Aluminum Diecast
Bolt/Nut: Aluminum
Weight : 70 g
Environment : RoHS10 Compliant
■ **Strength Data**
(Reference: 220N load acting on the handle when using two units)

- Can be used as a handle by assembling with GF (GFF-000).

- Can also grip GF-G (43mm) frames

Name	Handle Connector	
		1 per set
Item No.	GFJ-D99	GFK-A22

Multi Connector W Outer



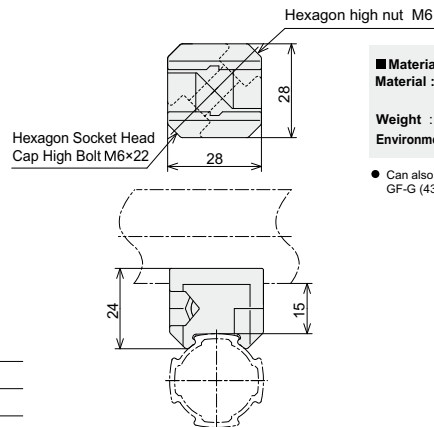
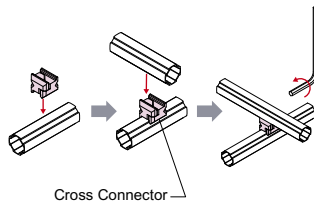
■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut part : Steel
Weight : 127 g
Environment : RoHS10 Compliant

- Coupling connector for Green Frame W (P28).

- Can also grip GF-G (43mm) frames

Name	Multi Connector W Outer	
Item No.	GFJ-012	

Cross Connector



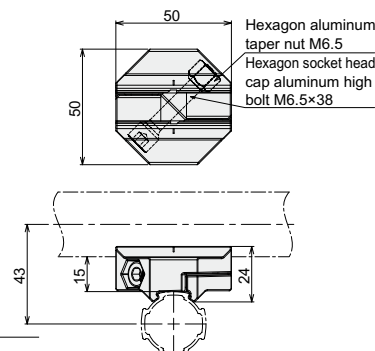
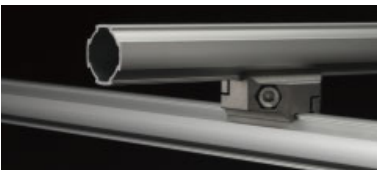
■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut part : Steel
Weight : 38 g
Environment : RoHS10 Compliant

- Use to connect crossed frames.

- Can also grip GF-G (43mm) frames

Name	Cross Connector	
Item No.	GFJ-A11	

Cross Connector Hard



■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt/Nut: Aluminum
Weight : 87 g
Environment : RoHS10 Compliant

- A cross connector (GFJ-A11A) with improved strength.
- Use to connect crossed frames.

- Can also be used with GF-G (43mm) frames

Name	Cross Connector Hard	
Item No.	GFJ-E12	

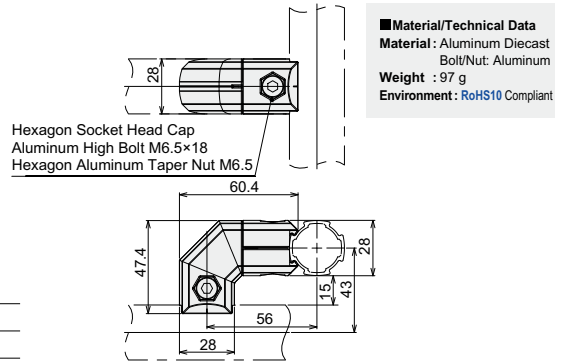
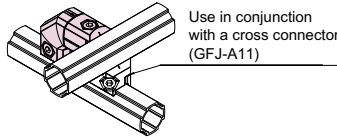
*Tightening torque 11 N·m for aluminum bolts

GF-N Connector

Point Connector Cross



- Connector to increase the strength of two (perpendicular) frames joined by a cross connector.



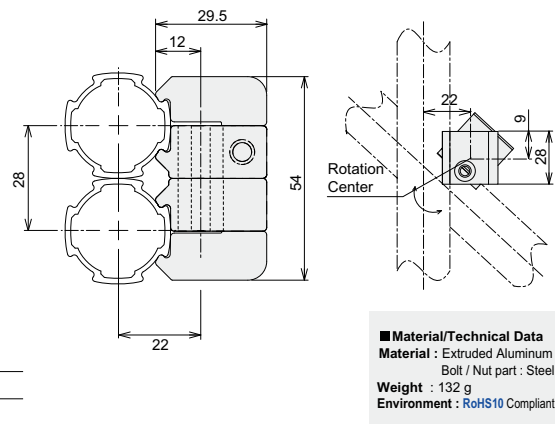
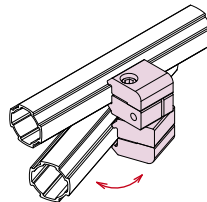
Name	Point Connector Cross
Item No.	GFJ-D02

*Tightening torque 11 N·m for aluminum bolts

Cross Connector Rotate Type



- Use this connector to join crossed frames at any angle.

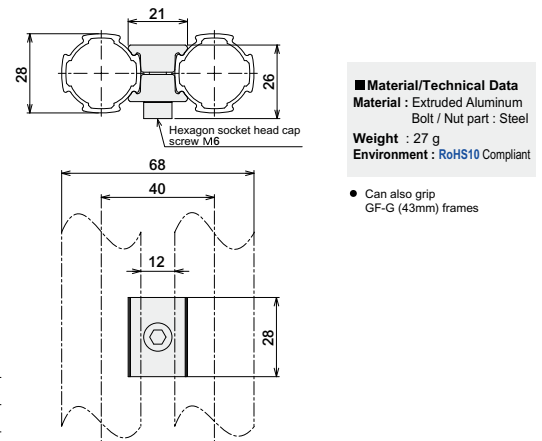
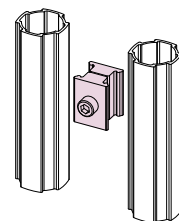


Name	Cross Connector Rotate Type
Item No.	GFJ-B08

Double Connector C Kit



- Joins parallel frames.

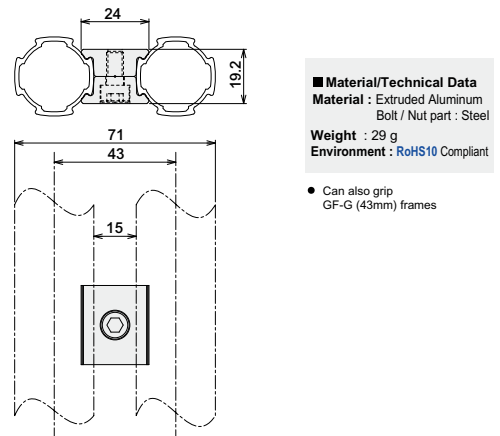
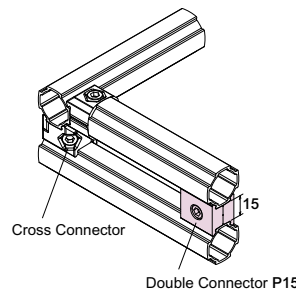


Name	Double Connector C Kit
Item No.	GFJ-A45

Double Connector P15



- Double Connector that can be used with the Cross Connector.



Name	Double Connector P15
Item No.	GFJ-A95

GF-N 28mm



GF-S 19mm



GF-G 43mm



Bolt Nut

Jig

Technical Data

GF-N Connector

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

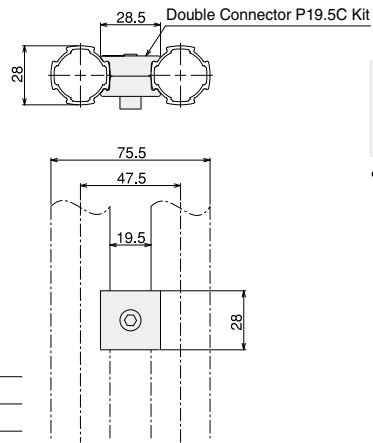
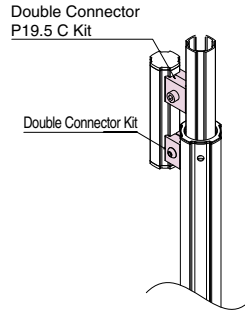
Jig

Technical Data

Double Connector P19.5 C Kit



- Wider than other types of Double Connectors.
- Can create a telescoping configuration when combined with Double Connector C Kit and Green Frames N and G.



■ **Material/Technical Data**
Material : Extruded Aluminum
 Bolt / Nut part : Steel
Weight : 38 g
Environment : RoHS10 Compliant

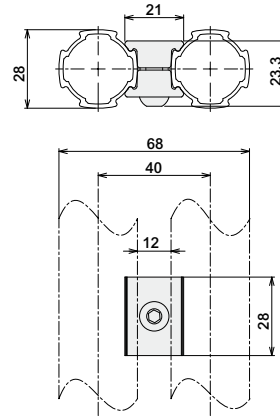
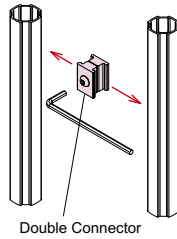
- Can also grip GF-G (43mm) frames

Name	Double Connector P19.5 C Kit
Item No.	GFJ-B32

Double Connector



- The connector and bolt head do not extend past the outer edge of the frames.



■ **Material/Technical Data**
Material : Extruded Aluminum
 Bolt / Nut part : Steel
Weight : 25 g
Environment : RoHS10 Compliant

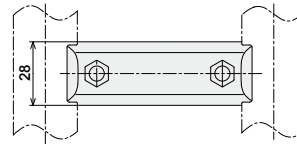
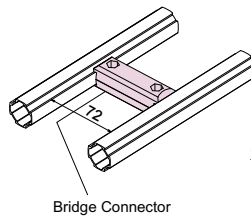
- Can also grip GF-G (43mm) frames
- In situations with repeated attachment and removal, use Double Connector C Kit.

Name	Double Connector
Item No.	GFJ-A42

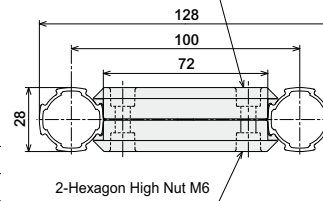
Bridge Connector



- Use for reinforcement between frames.



2-Hexagon Socket Head Cap High Bolt M6×18



■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 112 g
Environment : RoHS10 Compliant

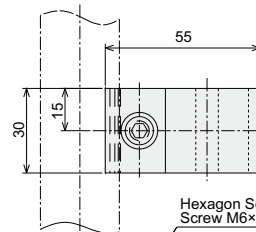
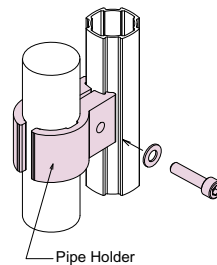
- Can also grip GF-G (43mm) frames

Name	Bridge Connector
Item No.	GFJ-A00

Pipe Holder



- Connect Universal Pipe (φ27 mm ~ φ30 mm) with the frame in parallel.



Hexagon Socket Head Cap Screw M6×25

Flat Washer M6

■ **Material/Technical Data**
Material : Extruded Aluminum
 Bolt / Nut part : Steel
Weight : 68 g
Environment : RoHS10 Compliant

- Can also grip GF-G (43mm) frames

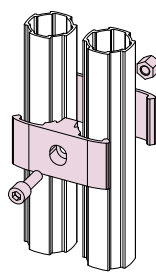
Name	Pipe Holder
Item No.	GFA-001

GF-N Connector

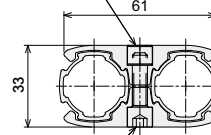
Parallel Holder



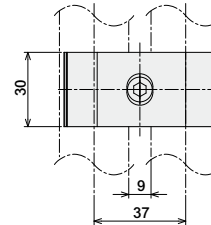
- Use this connector to join frames together in parallel.



Hexagon Socket Head Cap High Nut M6



Hexagon Socket Head Cap High Bolt M6×22



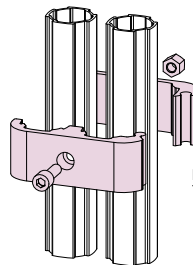
■ Material/Technical Data
Material : Extruded Aluminum
Bolt / Nut part : Steel
Weight : 65 g
Environment : RoHS10 Compliant

Name	Parallel Holder
Item No.	GFJ-A47

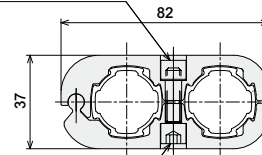
Parallel Holder HS



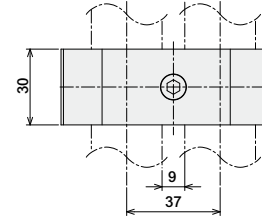
- High strength parallel holder.



Hexagon Socket Head Cap High Nut M6



Hexagon Socket Head Cap High Bolt M6×22



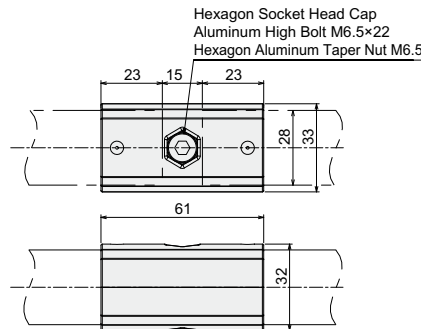
■ Material/Technical Data
Material : Extruded Aluminum
Bolt/Nut part : Steel
Weight : 144 g
Environment : RoHS10 Compliant

Name	Parallel Holder HS
Item No.	GFJ-A49

Straight Connector Outer



- A connector for joining two ends of a frame together.
- Attach the drill screw to the recessed portion to prevent the frame from coming off.
- A diameter of $\phi 3.5$ is recommended for pilot holes. Use this when you want to increase the resistance to being pulled out.



■ Material/Technical Data
Material : Aluminum Diecast
Bolt/Nut: Aluminum
Weight : 38 g
Environment : RoHS10 Compliant

- Recommended screw: SFB-X96 pan head drill screw 4 × 10 (trivalent chromium plating)

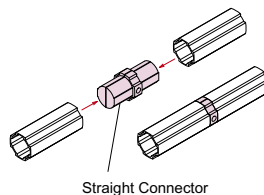
Name	Straight Connector Outer
Item No.	GFJ-D13

*Tightening torque 11 N · m for aluminum bolts

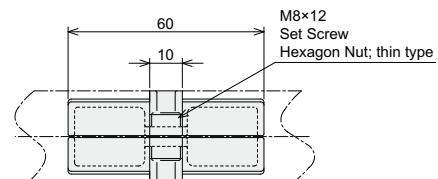
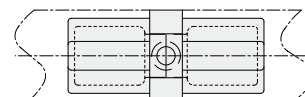
Straight Connector



- Use to join the ends of two frames together.



Straight Connector



■ Material/Technical Data
Material : Stainless
Bolt / Nut part : Steel
Weight : 113 g
Environment : RoHS10 Compliant

Name	Straight Connector
Item No.	GFJ-A17

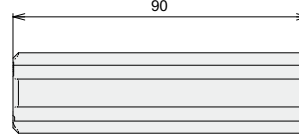
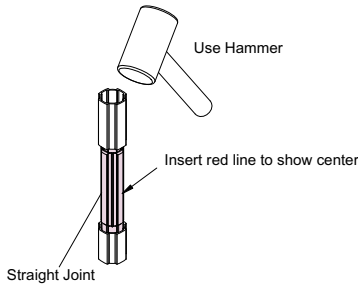
GF-N Connector

GF-N 28mm

Straight Joint



- Use to connect frames in places where the load is not applied in a way that could pull the frames apart.



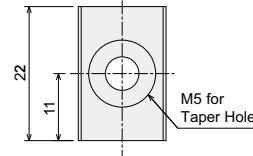
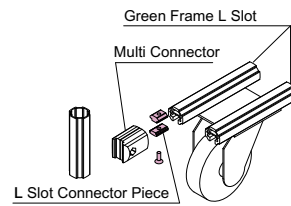
■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 29 g
Environment : RoHS10 Compliant

Name	Straight Joint
Item No.	GFJ-A46

L-Slot Connector Piece



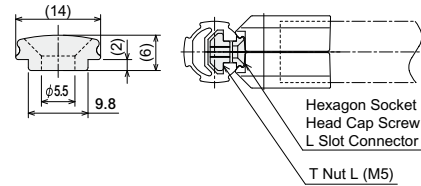
- After inserting into the groove of the L Slot Frame, attach multi connectors, etc.
- Use as a reinforcement with outer type connectors at the end of L Slot frames.



■ **Material/Technical Data**
Material : Extruded Aluminum
Bolt / Nut part : Steel
Weight : 20 g
Environment : RoHS10 Compliant

- Use GF-SF connector (P46) when connecting GF frames and SF frames

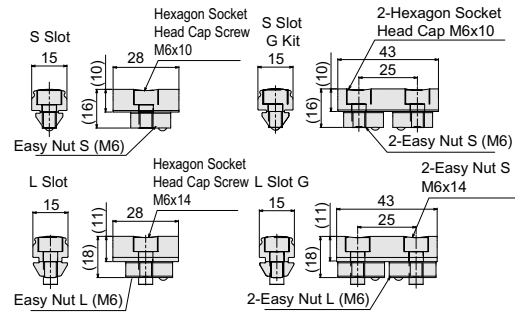
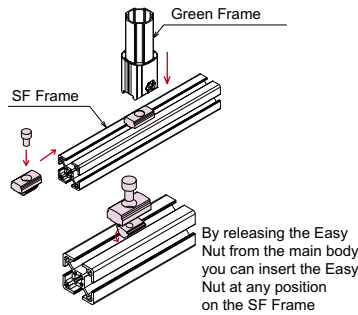
Name	L-Slot Connector Piece
Item No.	GFA-601



GF-SF Connector



- Use to connect Green Frame and SF Frame (Aluminum Structural Corner Type)



■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 9 g (S slot kit) 25 g (L slot kit)
33 g (S slot G kit) 44 g (L slot G kit)
Environment : RoHS 10 Compliant

- For SF Frame, please see in "Aluminum Structural Catalog"

Name	GF-SF Connector Kit			
	S Slot Kit	L Slot Kit	S Slot G Kit	L Slot G Kit
Item No.	GFA-603	GFA-607	GFA-605	GFA-609

Connectable Frame/Composition Contents

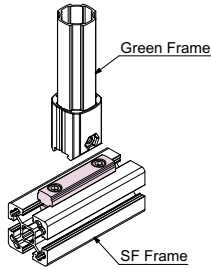
	GF Frame	SF Frame	Composition Contents	
S slot	GF N series (size 28 mm)	SF-30 series (Groove width 8 mm)	GF-SF Connector S lot x1	Hexagon Socket Head Cap (M6x10) x1 Easy Nut S (M6)x1
L slot	GF N series (size 28 mm)	SF-40*45 series (Groove width 10 mm)	GF-SF Connector L lot x1	Hexagon Socket Head Cap (M6x14) x1 Easy Nut L (M6)x1
S slot G kit	GF G series (size 43 mm)	SF-30 series (Groove width 8 mm)	GF-SF Connector S lot G x1	Hexagon Socket Head Cap (M6x10) x2 Easy Nut S (M6)x2
L slot G kit	GF G series (size 43 mm)	SF-40*45 series (Groove width 10 mm)	GF-SF Connector L lot G x1	Hexagon Socket Head Cap (M6x14) x2 Easy Nut L (M6)x2

GF-N Connector

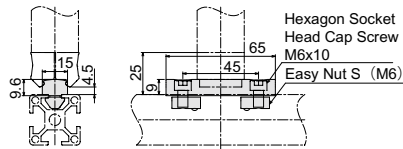
GF-SF Connector Long



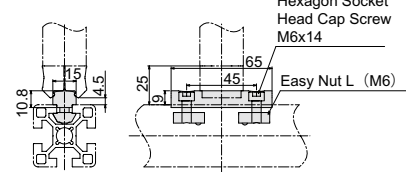
● GF-SF Connector capable of position adjustment by loosening the bolts, even after attaching a connector.



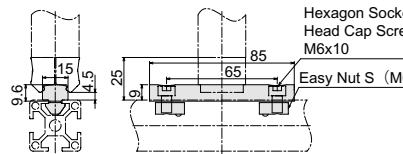
S Slot Long



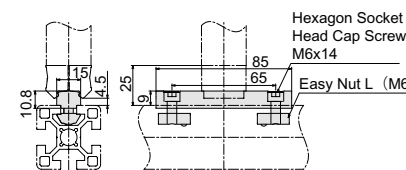
L Slot Long



S Slot Long G



L Slot Long G



Material/Technical Data

Material: Aluminum Diecast Bolt/Nut: Iron
Weight: 41 g (S Slot Long kit)
52 g (L Slot Long kit)
47 g (S Slot Long G kit)
59 g (L Slot Long G kit)
Environment: RoHS10 Compliant

● For SF Frame, please see in "Aluminum Structural Catalog"

Name	GF-SF Connector Long			
	S Slot Long Kit	L Slot Long Kit	S Slot Long G Kit	L Slot Long G Kit
Item No.	GFA-615	GFA-611	GFA-617	GFA-613

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

GF-N Foot Component

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

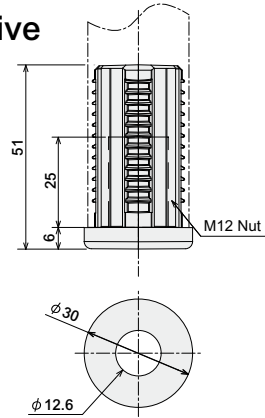
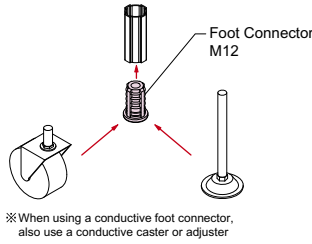
Jig

Technical Data

Foot Connector M12/Foot Connector M12 Conductive



- Use M12 adjuster or shaft screw caster to install.



Name	Foot Connector M12	Foot Connector M12 Conductive
Item No.	GFN-E02	GFN-E17

■Material/Technical Data
Resin type
Material : Polyamide 6
Weight : 24 g
Environment : RoHS10 Compliant
Aim to Resistance value : $10^9 \sim 10^{11} \Omega$ (Antistatic level)
Load Capacity : 1250 N

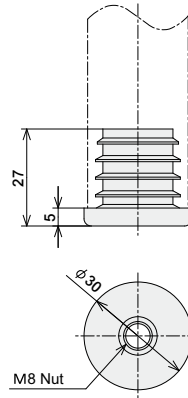
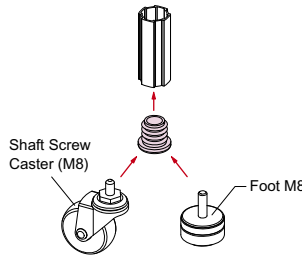
Conductive Resin type
Material : Conductive Polypropylene
Weight : 21 g
Environment : RoHS10 Compliant
Aim to Resistance value : $10^4 \sim 5 \Omega$ (Conductivity level)
Load Capacity : 500 N

- When using carts or trolleys that are frequently moved, or in cases where the foot connector will undergo strong impacts when moved, we recommend attaching fixed and free casters using Green Frame L Slot (P54).

Foot Connector M8



- Use M8 adjuster or shaft screw caster to install.



Name	Foot Connector M8
Item No.	GFN-E01

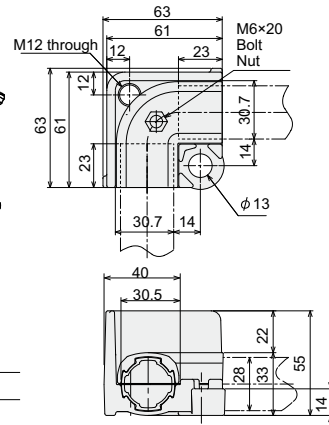
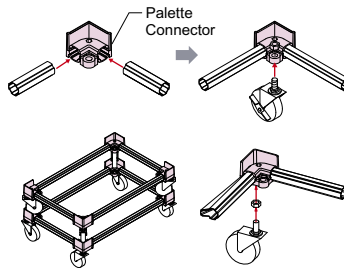
■Material/Technical Data
Material : ABS Resin
Weight : 12 g
Environment : RoHS10 Compliant
Load Capacity : 1200 N

- When using carts or trolleys that are frequently moved, or in cases where the foot connector will undergo strong impacts when moved, we recommend attaching fixed and free casters using Green Frame L Slot (P54).

Palette Connector



- Apply at the corner of Palette Trolley.
- Use this trolley for storage by stacking items.



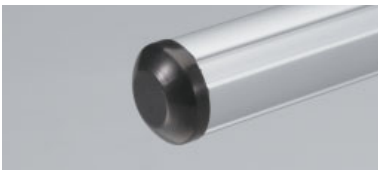
Name	Palette Connector
Item No.	GFJ-A13

■Material/Technical Data
Material : Aluminum Diecast
Weight : 193 g
Environment : RoHS10 Compliant
Load Capacity : 3250 N

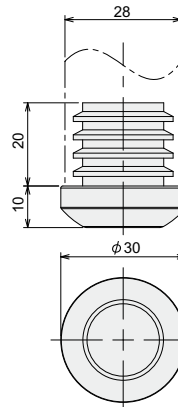
■Product included
Hexagon Nut M12 (Trivalent Chrome Plating)×1

- Compatible caster: M12 Type of Shaft screw caster

Rubber Fit Inner



- Rubber foot inserted into GF frames, etc.
- Can also be used as a simple anti-slip device.



Name	Rubber Fit Inner
Item No.	GFN-013

■Material/Technical Data
Material : NBR
Weight : 16 g
Environment : RoHS10 Compliant
Load Capacity : 200N

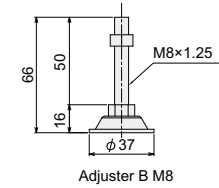
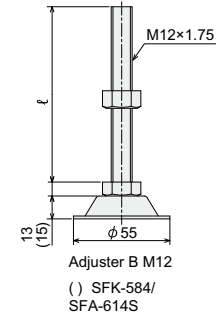
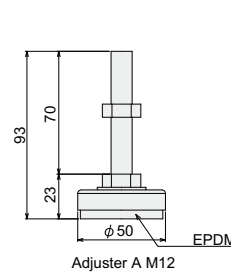
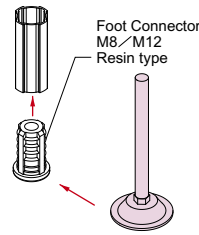
GF-N Foot Component

Adjuster



■ SUS Original Adjuster

Name	Adjuster B		
	M12-68T	M12-100T	M12-100T (Stainless)
Item No.	SFK-C84	SFK-933	SFK-933S
ℓ (mm)	68	100	100
Weight (g)	129	153	155
Load Capacity (N)	3500	5000	3000



■ Adjuster

Name	Adjuster A	Adjuster B					
	M12-70	M8-50	M8-50 (Stainless)	M12	M12 (Stainless)	M12-150	M12-150 (Stainless)
Item No.	SFA-607	SFA-613	SFA-613S	SFK-584	SFK-584U	SFA-614	SFA-614S
ℓ (mm)	70	50	50	100	100	150	150
Weight (g)	173	55	55	169	165	205	204
Load Capacity (N)	3500	2000	2000	5000	3000	6000	6000

■ Material/Technical Data
M12-68T
 Material : SS400
M12-100T/M12
 Material : SS400
M12-100T (Stainless)/M12 (Stainless)
 Material : SUS304
M12-150
 Material : SWRM/SS400/SPHC
M12-150 (Stainless)
 Material : SUS304
M12-70
 Material : SPCC/SWCH/EPDM
M8-50
 Material : SPCC/SWRM
M8-50 (Stainless)
 Material : SUS304
 Environment : RoHS10 Compliant (Adjuster B)

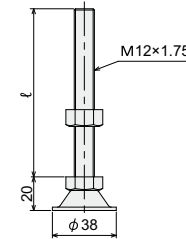
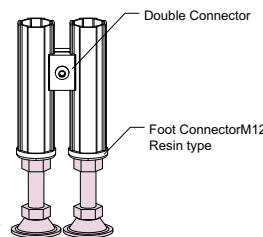
Small Diameter Adjuster M12



● This adjuster can be used with frames connected by a double connector

■ SUS Original Small Size Adjuster

Name	Small Diameter Adjuster			
	M12-60T	M12-100T	M12-100T (Stainless)	M12 (Stainless)
Item No.	GFN-002	GFN-000	GFN-003S	GFN-001
ℓ (mm)	60	100	100	100
Weight (g)	101	132	134	200
Load Capacity (N)	2000	2000	1200	1200



■ Material/Technical Data
M12-60
 Material : SS400
M12-100
 Material : SS400
M12-100 (Stainless)/M12 (Stainless)
 Material : SUS304
 Environment : RoHS10 Compliant

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

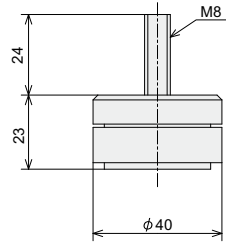
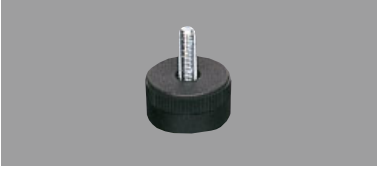
Jig

Technical Data

GF-N Foot Component

GF-N
28mm

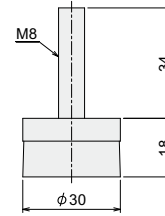
Foot M8



■ **Material/Technical Data**
Material :
 Thread : Steel
 Base : Polyamide
Weight : 35 g
Environment : RoHS10 Compliant
Load Capacity : 800 N

Name	Foot M8
Item No.	SFA-602

Adjuster M8 with Non-slip Sheet

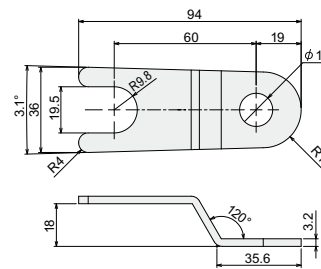


■ **Material/Technical Data**
Material : Screw: Stainless steel
 End Plate: POM
 Non-slip Sheet:
 PU (transparent)
Weight : 26 g
Environment : RoHS10 Compliant
Load Capacity : 490N

- Adjuster fitted with a non-slip sheet.
- The installation portion and the knob can rotate independently in their installed positions, so they can be adjusted as-is.
- Wipe the non-slip sheet with a damp cloth to restore its adhesive force.

Name	Adjuster M8 with Non-slip Sheet
Item No.	GFN-009

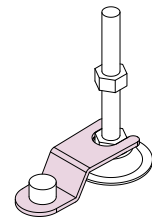
Clamp for Adjuster



■ **Material/Technical Data**
Material : SPCC
Weight : 70 g
Environment : RoHS10 Compliant

- Special clamp for adjuster M12 only.
 Prevents movement due to vibration or impact.

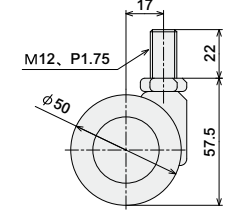
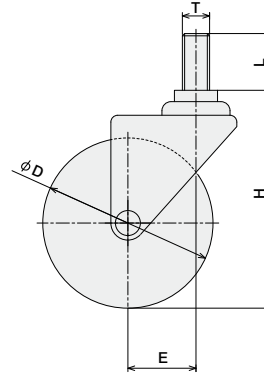
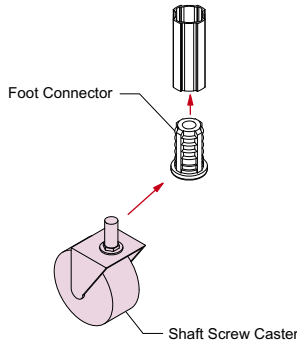
Name	Clamp for Adjuster
Item No.	GFA-B89



GF-N Foot Component

Caster Screw Fitting Type $\phi 50$ Rubber, Nylon/ $\phi 75$ Rubber, Nylon, Conductive

Environment: **RoHS10** Compliant



$\phi 50$ M12 Only Caster has double wheel
Wheel: Nylon

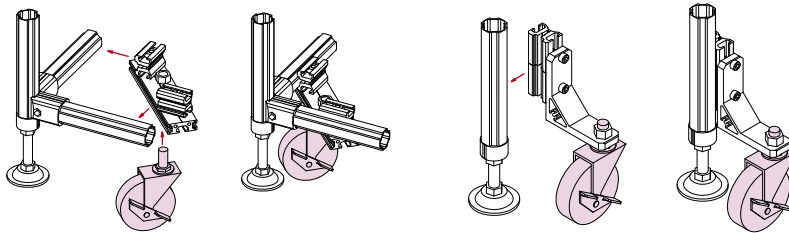
• This caster is for installation with Foot Connector, Adjuster Caster Connector, etc.

■ Shaft Screw Caster Size, Weight

D (mm)	T (mm)	Wheel Material	Body Material		No Brake	With Brake	Load Capacity	L (mm)	H (mm)	E (mm)	Weight (g)	Compatible Foot Connector/ Adjuster Caster Connector
$\phi 50$	M8	Rubber	Steel	Item No.	GFN-619	GFN-620	300 N	14	67	20	152 (173)	Foot Connector M8 (GFN-E01) Green Frame T (GFF-017) M8 Tapping
		Rubber	Steel	Item No.	GFN-665	GFN-666	300 N	14	68	21	151 (182)	
	M12	Nylon	—	Item No.	GFN-513	GFN-512	600 N	22	57.5	17	130 (130)	
$\phi 75$	M12	Rubber	Steel	Item No.	GFN-667	GFN-668	400 N	25	95	28	245 (270)	Foot Connector M12 (GFN-E02) Foot Connector M12 (Conductive Resin Type) (GFN-E17) Adjuster Caster Connector A (GFN-C08) Adjuster Caster Connector B (GFN-C09) Palette Connector (GFJ-A13) • $\phi 100$ Shaft Screw Caster refers to GF-G (OD 43mm) → P163
		Rubber	Steel	Item No.	GFN-525	GFN-523	400 N	25	96	30	282 (312)	
		Nylon	Steel	Item No.	GFN-609	GFN-610	500 N	25	95	29	188 (237)	
		Conductive	Steel	Item No.	GFN-526	GFN-524	240 N	25	95	29	316 (352)	

• (Blue Number) is weight including brake • Use thin spanner for installation → P171

Example of installation using Adjuster Caster Connector



Caster Material



Special Caster Material

	Elasticity	Abrasion Resistance	Oil Resistance	Water Resistance	Chemical Resistance	Heat Resistance
Rubber	◎	○	×	○	○	○
Nylon	×	◎	◎	◎	◎	○
Conductive (Rubber)	◎	○	×	○	○	○

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

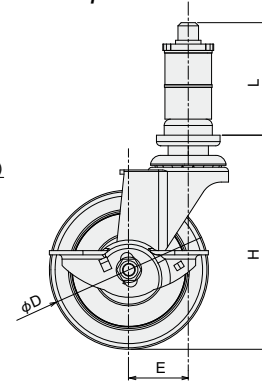
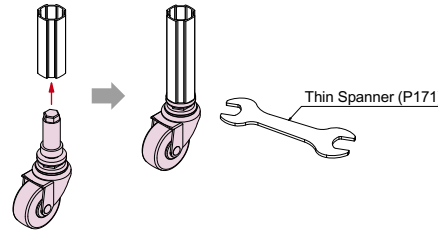
Jig

Technical Data

GF-N Foot Component

Environment: RoHS10 Compliant

Frame Caster N Frame $\phi 50$ Rubber/ $\phi 65$ Rubber/ $\phi 75$ Rubber, Urethane/ $\phi 100$ Rubber



- Insert directly into the frame and tighten with the Thin Spanner (P171). The resin will crimp and lock to the frame.

Size, Weight

D (mm)	Wheel Material	Body Material		No Brake	With Brake	Spanner Size	Load Capacity	L (mm)	H (mm)	E (mm)	Weight (g)	Compatible Frames
$\phi 50$	Rubber	Steel Rubber	Item No.	GFN-627	GFN-628	21	300 N	38.5	70	21	190 (220)	Green Frame (GFF-000) Green Frame F35 (GFF-014) Green Frame F50 (GFF-005) Green Frame W (GFF-003) Green Frame Slide (GFF-006) Green Frame P100 (GFF-001)
$\phi 65$	Rubber		Item No.	GFN-566	GFN-567	21	300 N	38.5	87.5	24	240 (270)	
$\phi 75$	Rubber		Item No.	GFN-629	GFN-630	21	300 N	38.5	97	28	270 (300)	
	Urethane		Item No.	GFN-580	GFN-581	21	400 N	38.5	97	28	230 (260)	
	Urethane (For high load)		Item No.	GFN-659	GFN-660		600 N	58.5	98.5	28	(460)	
$\phi 100$	Rubber		Item No.	GFN-582	GFN-583	500 N	58.5	127.5	30	590 (650)		

- (Blue Number) is weight including brake. ● Use thin spanner to install. →P171

- For GF-G (43 mm) →P163

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

GF-N Foot Component

Frame Caster Fixed $\phi 50$ Rubber/ $\phi 75$ Rubber

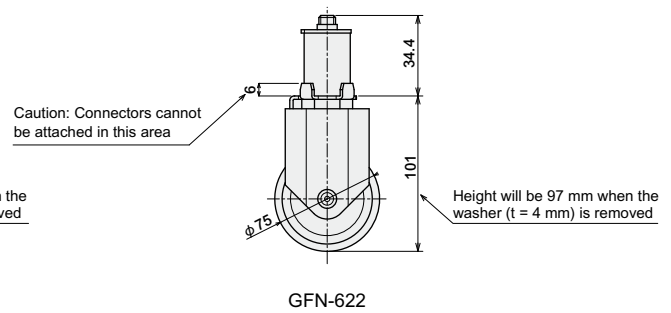
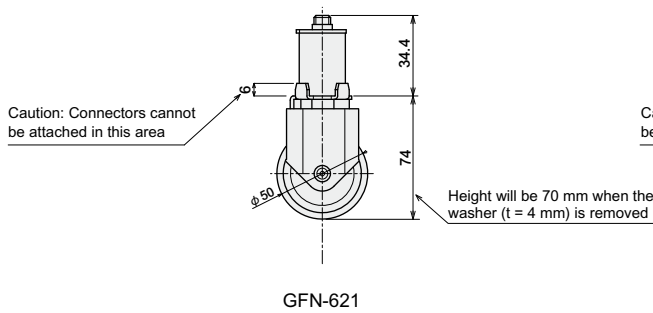


- Insert directly into the frame and tighten with the Thin Spanner (P171). The resin will crimp and lock to the frame.

■ **Material/Technical Data**
Material : SPHC
Wheel : Rubber
Environment : RoHS10 Compliant
Load Capacity : 300 N

- Use Thin Spanner to install (P171)
- Use stubby wrench 5 mm to lock wheel to the frame
- For details of installation, refer to P222

Name	Frame Caster Fixed $\phi 50$ Rubber
Item No.	GFN-621
Weight	193g
Name	Frame Caster Fixed $\phi 75$ Rubber
Item No.	GFN-622
Weight	268g



GF-N 28 mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19 mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43 mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

GF-N Foot Component

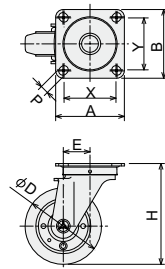
Environment: RoHS10 Compliant

GF-N
28mm

Free Caster $\phi 100/\phi 150$ Fixed Caster $\phi 100/\phi 150$

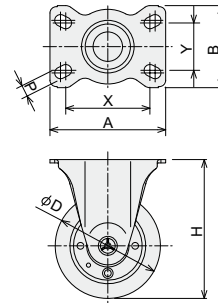


Free Caster



$\phi 100 \cdot \phi 150$ Adjustable

Fixed Caster



$\phi 100 \cdot \phi 150$ Fix

- Install T Nut and Bolt to Green Frame L Slot

Size, Weight

D (mm)	T (mm)	Body Material	Item No.	Adjustable		Fix	Load Capacity	X (mm)	Y (mm)	A (mm)	B (mm)	H (mm)	P (mm)	E (mm)	Weight (g)	Compatible Frames
				No Brake	With Brake											
$\phi 100$	Rubber	Steel	Item No.	GFN-504	GFN-500	GFN-502	1200 N	68	68	90	90	132	11	35	1054	Green Frame L Slot (GFF-004)
				GFN-511	GFN-508	GFN-553									1000 N	
	Urethane		Item No.	GFN-521	GFN-507	GFN-554	1600 N	75	75	102 (106)	102 (111)	190	41	1054		
				GFN-522	GFN-517	GFN-555								1400 N	1084	
$\phi 150$	Rubber	Steel	Item No.	GFN-521	GFN-507	GFN-554	1600 N	75	75	102 (106)	102 (111)	190	41	1810	Green Frame L Slot (GFF-004)	
				GFN-522	GFN-517	GFN-555								1400 N		1840
	Urethane		Item No.	GFN-521	GFN-507	GFN-554	1600 N	75	75	102 (106)	102 (111)	190	41	1391		
				GFN-522	GFN-517	GFN-555								1400 N		1810
															1840	
															1810	
															1338	

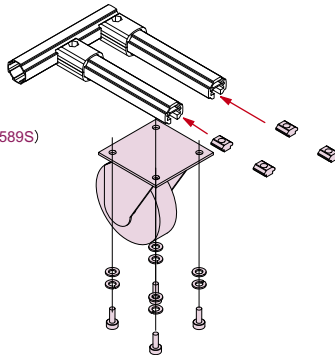
- () is dimension for Fix Caster

- **Weight** Top : Adjustable no brake
Middle : Adjustable with brake
Bottom : Fix

- To install in Green Frame L Slot requires $\phi 100/\phi 150$

- ST Nut-L M8 (SFK-T11S)
- Hexagon Socket Head Cap Screw M8X18 (SFB-589S)
- Flat Washer M8 Small Round (SFB-903S)
- Spring Washer M8 (SFB-934S)
- 4 pcs Each/1 Wheel

Not included



GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

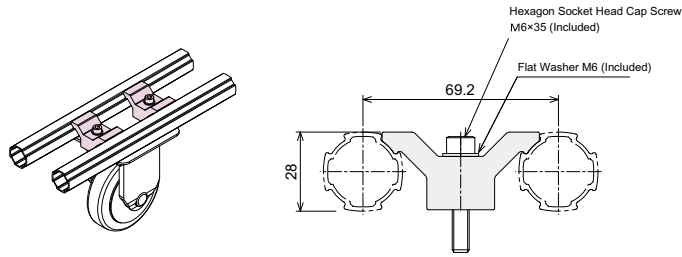
Technical Data

GF-N Foot Component

Caster Fix



- Can be installed without turning over the structure.



Material/Technical Data
Material : Extruded Aluminum
Weight : 64 g
Environment : RoHS10 Compliant

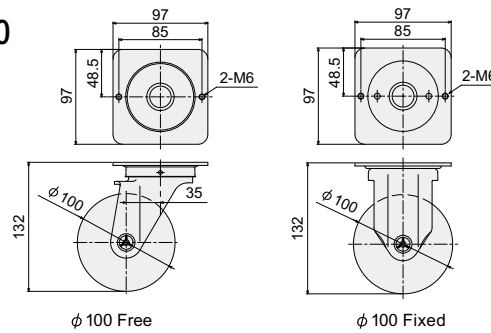
Product included
 Hexagon socket head cap screw M6x35 (Trivalent Chromium Plating)
 Flat Washer M6 (Trivalent Chromium Plating)

Name	Caster Fix
Item No.	GFN-C10

Fixed Caster φ100 Free Caster φ100

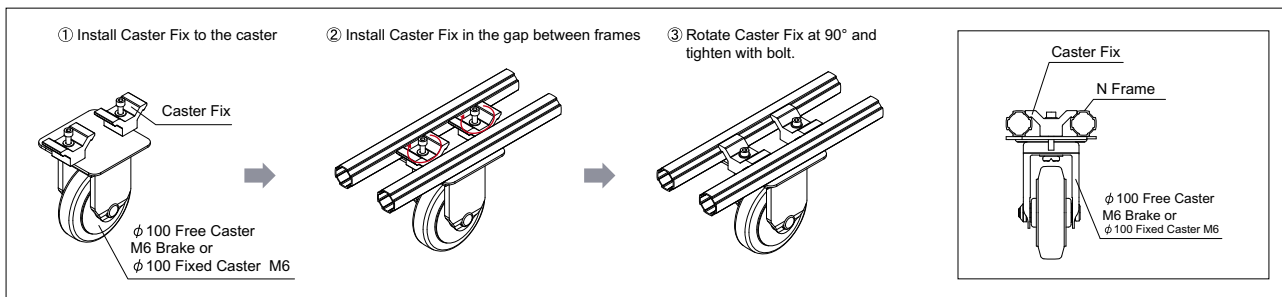


- Caster used specially with Caster Fix.



Material/Technical Data
Material : Steel
 Wheel : Rubber
Environment : RoHS10 Compliant

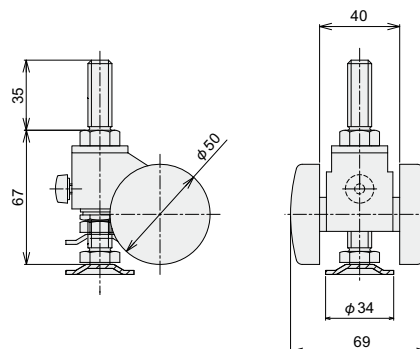
Name	Fixed Caster φ100 Rubber M6	Free Caster φ100 Rubber M6 with Brake	Free Caster φ100 Rubber M6
Item No.	GFN-503	GFN-501	GFN-557
Weight (g)	930	1260	1120
Load Capacity (N)	930 N	1200 N	1200 N



Caspad φ50-M12



- Caster and Adjuster are a single unit.



Material/Technical Data
Material : Wheel : Nylon
 Adjuster Bolt : SS400 Unichrome Equivalent
Weight : 260 g
Environment : RoHS10 Compliant
Load Capacity : 588 N

Name	Caspad φ50 – M12
Item No.	SFA-703

GF-N Foot Component

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

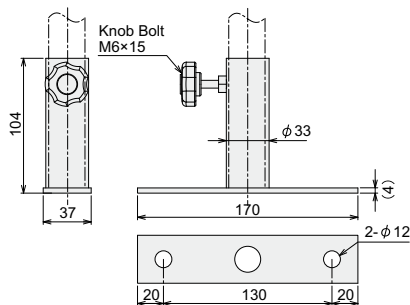
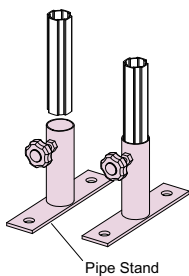
Jig

Technical Data

Pipe Stand A



- Use to affix a frame to the floor.



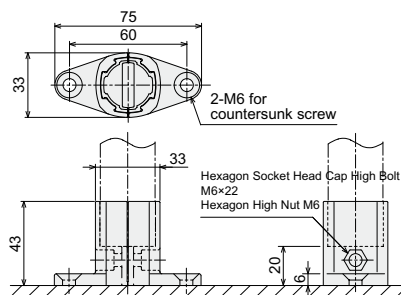
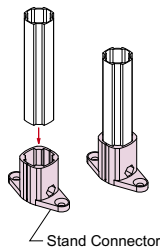
Material/Technical Data
 Material : SPHC/SPCC
 Weight : 285 g
 Environment : RoHS10 Compliant

Name	Pipe Stand A
Item No.	GFN-E15

Stand Connector



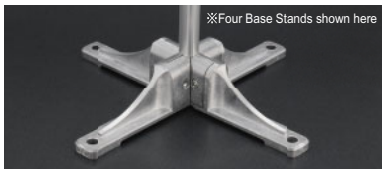
- Use to affix a frame to the floor or wall.



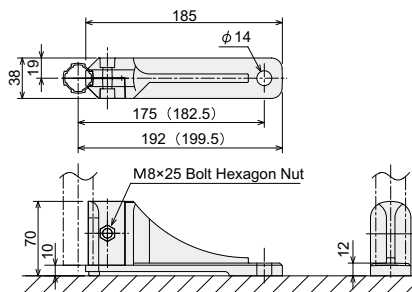
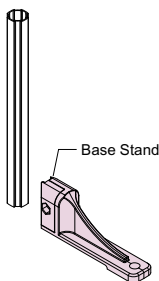
Material/Technical Data
 Material : Stainless
 Weight : 183 g
 Environment : RoHS10 Compliant

Name	Stand Connector
Item No.	GFJ-A36

Base Stand



- Use as a foot for a stand or partition.



Material/Technical Data
 Material : Aluminum Diecast
 Bolt/Nut : Steel
 Weight : 411 g
 Environment : RoHS10 Compliant

- Compatible with GF-G Frames

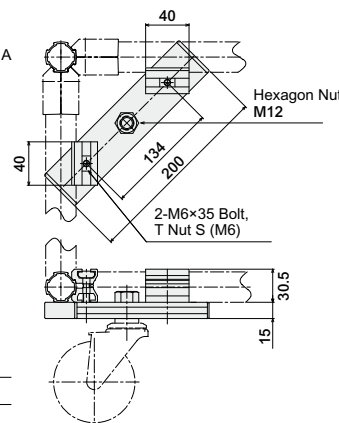
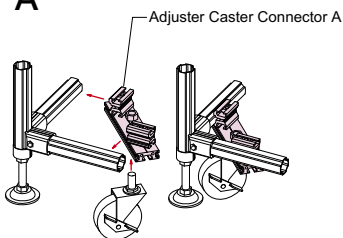
() Dimension will apply when using Green Frame G

Name	Base Stand
Item No.	GFN-E08

Adjuster Caster Connector A



- Use to attach a caster to a structure with an adjuster.



Material/Technical Data
 Resin type
 Material : Extruded Aluminum
 Weight : 269 g
 Environment : RoHS10 Compliant
 Load Capacity : 1900 N

Product included
 Hexagon Nut M12 (Trivalent Chrome Plating)×1
 T Nut S (M6)×2
 Hexagon socket head cap screw M6×35 (Trivalent Chrome Plating)×2
 T slot frame cap 1540 (Black)×2

- Adjuster and caster not included.
- Compatible caster: M12 Each type of shaft screw caster
- Compatible adjuster: M12 Each type of adjuster

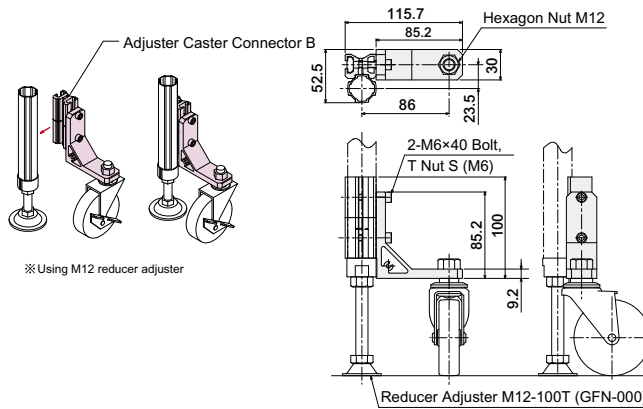
Name	Adjuster Caster Connector A
Item No.	GFN-C08

GF-N Foot Component

Adjuster Caster Connector B



- Use to attach a caster to a structure with an adjuster.



■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 223 g
Environment : RoHS10 Compliant
Load Capacity : 900 N

■ **Product included**
 Hexagon Nut M12 (Trivalent Chrome Plating)×1
 T Nut S (M6)×2
 Hexagon socket head cap screw M6×40 (Trivalent Chrome Plating)×2

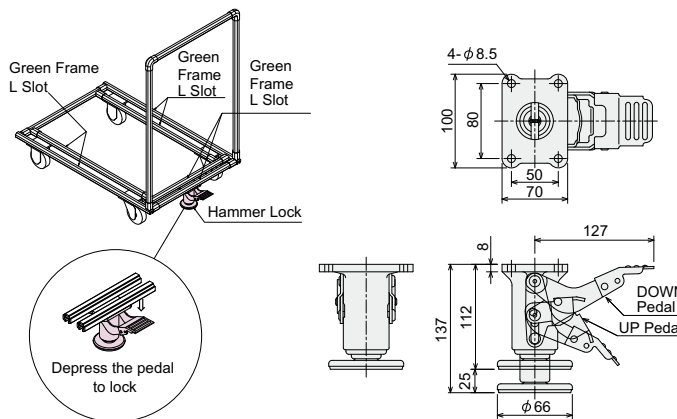
- Adjuster and caster not included.
- Compatible caster: M12 Each type of shaft screw caster
- Compatible adjuster: Reducer Adjuster M12-100

Name	Adjuster Caster Connector B
Item No.	GFN-C09

Hammer Lock 100



- Depress the pedal to lock in place.
- Install with Green Frame L Slot.
- Compatible with Fixed and Free Caster ϕ 100.
- Pressing force when locked : 392 N



■ **Material/Technical Data**
Material : Resin or Steel
Weight : 770 g
Environment : RoHS10 Compliant

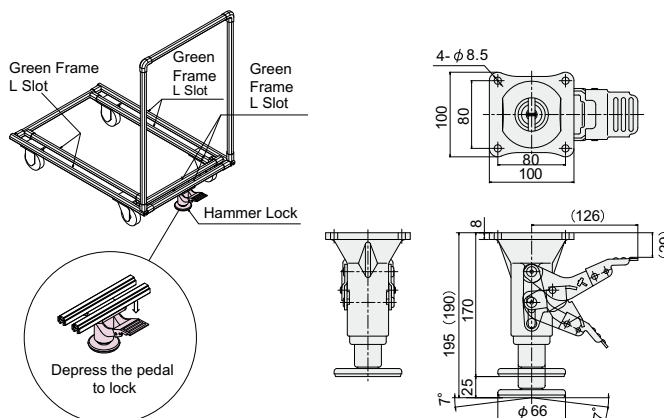
- In case of installation to Green Frame L Slot
 ST Nut-L M8 (SF-K-T11S)
 Hexagon socket head cap screw M8×20 (SFB-582S)
 Flat Washer M8 (SFB-903S) please prepare 4 pcs each of above.
- Refer to the image at left for how to arrange the frames when installing.
- Casters will bear the load.
- For installation please refer to P222.

Name	Hammer Lock 100
Item No.	GFN-F00

Hammer Lock 150



- Depress the pedal to lock in place.
- Install with Green Frame L Slot.
- Compatible with Fixed and Free Caster ϕ 150.
- Pressing force when locked : 392 N



■ **Material/Technical Data**
Material : Resin or Steel
Weight : 850 g
Environment : RoHS10 Compliant

- In case of installation to Green Frame L Slot
 ST Nut-L M8 (SF-K-T11S).
 Hexagon socket head cap screw M8×20 (SFB-582S)
 Flat Washer M8 (SFB-903S) please prepare 4 pcs each of above.
- Refer to the image at left for how to arrange the frames when installing.
- Casters will bear the load.
- For installation please refer to P222.

Name	Hammer Lock 150
Item No.	GFN-F01

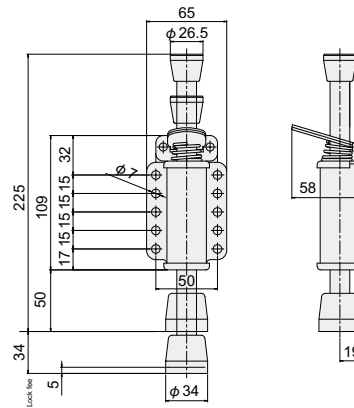
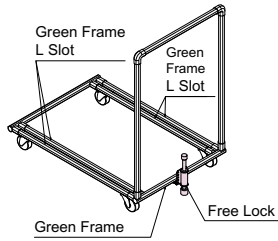
GF-N Foot Component

GF-N 28mm

Free Lock 75/100 Kit



- Depress the pedal to lock in place.
- Compatible with Caster $\phi 75 \cdot 100$.
- Pressing force when locked : 392 N



■ **Material/Technical Data**
Material : Steel or Rubber
Weight : 494 g
Environment : RoHS10 Compliant

■ **Product included**
 Free Lock Connector×1
 Hexagon socket head cap screw M6×35 (Trivalent Chrome)×2
 Flat Washer M6 (ISO)×2
 ST Nut-S (M6)×2

- Casters will bear the load.
- For installation please refer to P222.

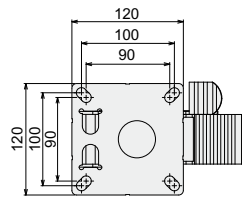
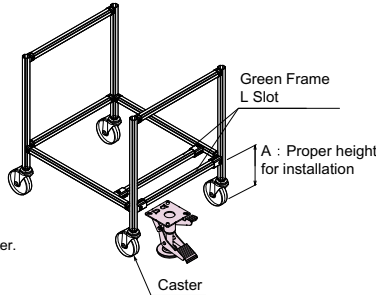
Name	Free Lock 75/100 Kit
Item No.	GFN-F02

GF-S 19mm

Floor Lock



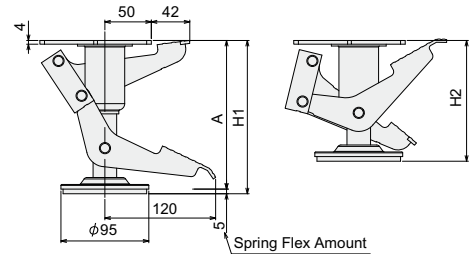
- This lock can be used with Frame Caster or Shaft Screw Caster.



■ **Material/Technical Data**
Material : 1.61 kg (FL-125)
 1.64 kg (FL-150)
 1.67 kg (FL-200)
Environment : RoHS10 Compliant

- Please keep the proper height of installation.
- For installation please refer to P222.

Name	Floor Lock		
	FL-125	FL-150	FL-200
Item No.	GFN-606	GFN-607	GFN-608
A (mm) : proper height for installation	160	205	243
H1 (mm)	165	210	248
H2 (mm)	130	175	213
Load Capacity (N)	2,000	3,000	3,500



GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut


Jig

Technical Data

GREEN FRAME
GF-N 28_{mm} type Moving Part

GF-N
28_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Electric Item 

Corocon Roller 

Accessory 

Door Part 

GF-S
19_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 


Corocon Roller 

Accessory 

Door Part 

GF-G
43_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

Bolt Nut

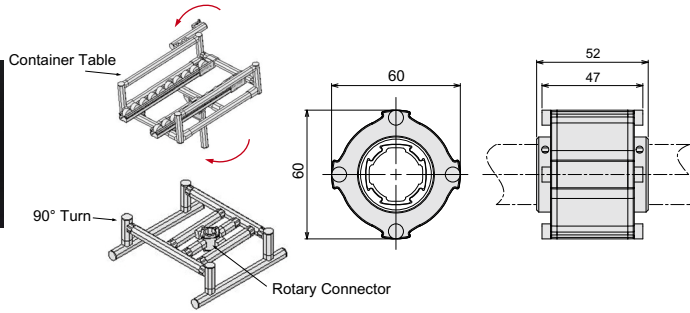
Jig

Technical Data

GF-N Moving Part

GF-N
28mm

Rotary Connector

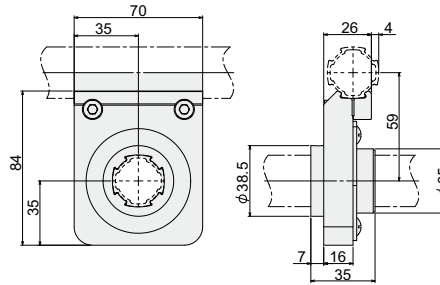
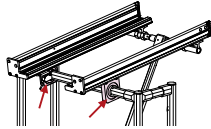


- This part uses bearings for improved rotation.

Material/Technical Data
Material :
 Body Part : Extruded Aluminum
 Cap : Aluminum Diecast
 Bearing : SUJ2
Weight : 130 g
 • Permitted Revolution : 13000 rpm

Name	Rotary Connector		
Item No.	GFJ-A94		

Single Rotary Connector (2 per set)

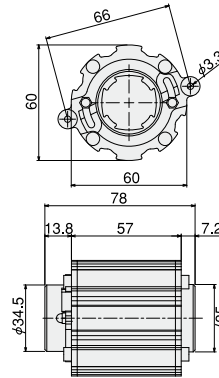
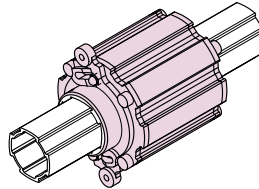


- Low-cost version of the rotary connector. This item rotates using bearings. Support at both ends.

Material/Technical Data
Material : Extruded Aluminum
 Bearing : Iron
 Bolts and Others : Stainless steel
Weight : 700 g (350g per unit)
Environment : RoHS10 Compliant
 • Can also grip GF-G (43mm) frames.

Name	Single Rotary Connector (2 per set)		
Item No.	GFW-557		

One Way Clutch

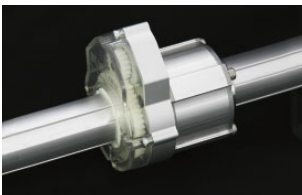


- Rotates one-way only (switching the release plate off allows rotation both ways). Eight grips allow for attaching connectors to its surface.

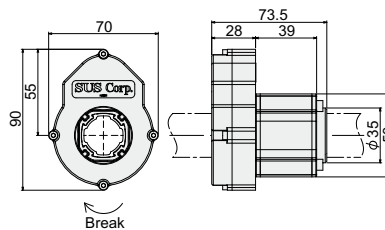
Material/Technical Data
Material : Body : Extruded Aluminum
 Cap : Aluminium Diecast
 Bearing : Stainless
 Spacer Nut:Stainless
 Bolt : Steel
Weight : 288 g
Environment : RoHS10 Compliant

Name	One Way Clutch		
Item No.	GFJ-C19		

Rotary Connector with Rotary Damper



- This item combines a braking system that uses hydraulic dampers and a rotary connector (GFJ-A94) that achieves a smooth rotation with bearings. A break can be applied to the rotational axis.



Material/Technical Data
Material : Rotary damper: Resin, Aluminum
 Rotary Connector: Aluminum, Iron
Weight : 254 g
Environment : RoHS10 Compliant

Selection Criteria
Rated Torque : Soft 0.3 - 0.6 N · m
 Medium 0.5 - 1.0 N · m
 Hard 0.7 - 1.4 N · m

Kit Contents
 Rotary damper (soft, medium, hard) × 1
 Rotary connector × 1

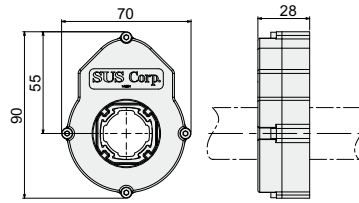
Name	Rotary Connector with Rotary Damper		
	Soft Type	Medium Type	Hard Type
Item No.	GFW-493	GFW-494	GFW-495

GF-N Moving Part

Rotary Damper



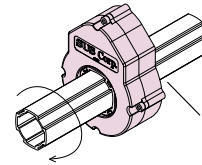
- This is a braking system that uses hydraulic dampers. A break can be applied to the rotational axis. Used in combination with the rotary connector (GFJ-A94) or one way clutch (GFJ-C19).
- Calculate the working torque and select a damper.



Material/Technical Data
Material : Extruded Aluminum
 Cover, Gear: Resin
 Bolt: Iron
 Damper: Resin, Stainless Steel
Weight : 124 g
Environment : RoHS10 Compliant

Selection Criteria
Rated Torque : Soft 0.3 - 0.6 N · m
 Medium 0.5 - 1.0 N · m
 Hard 0.7 - 1.4 N · m

- Individually remove the rotary connector or one way clutch bolt, as well as the rotary damper cap, and fasten them together.



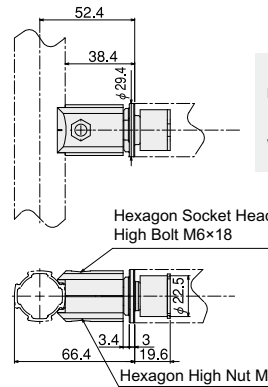
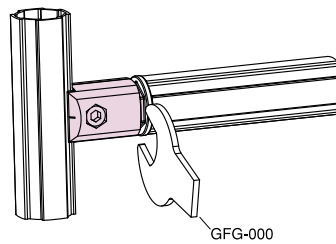
When viewed as shown at left, turning the frame clockwise will engage the break; turning the frame counterclockwise will allow it to move smoothly.

Name	Rotary Damper		
	Soft Type	Medium Type	Hard Type
Item No.	GFW-487	GFW-488	GFW-489

Pin Connector



- Frames attached to this connector can rotate freely.



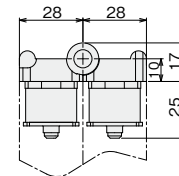
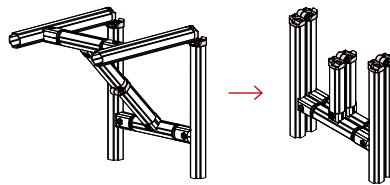
Material/Technical Data
Material : Body : Aluminium Diecast
 Bolt, Nut, Bearing Part : Steel
 Fixed Area : Rubber, Steel
Weight : 99 g

Name	Pin Connector
Item No.	GFJ-B58

Folding Connector



- Can be folded and used for folding tables or chairs, as well as in karakuri functions.



Material/Technical Data
Material : Body : Aluminium Diecast
 Pin : Steel
 Fixed Area : Rubber, Steel
Weight : 87 g
Environment : RoHS6 Compliant

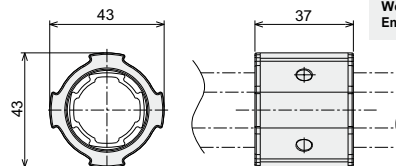
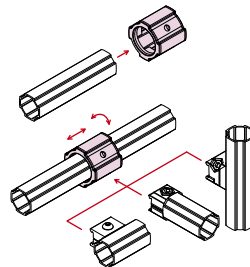
- Apply grease to the hinges before using to perform repeated operations.

Name	Folding Connector
Item No.	GFJ-247

Hinge Connector



- This connector is good for rotation or slide movements.



Material/Technical Data
Material : Body Part : Aluminium Extrusion
 Slide Bush : Nylon 6
Weight : 31 g
Environment : RoHS10 Compliant

Name	Hinge Connector
Item No.	GFJ-A04

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

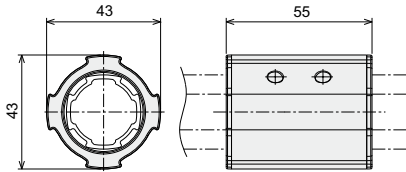
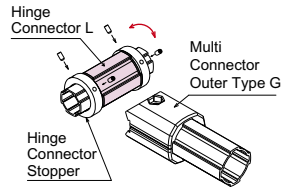
Jig

Technical Data

GF-N Moving Part

GF-N
28mm

Hinge Connector L



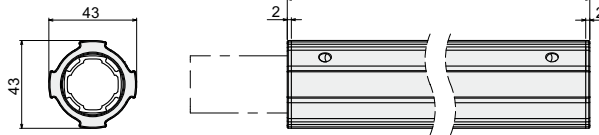
■ **Material/Technical Data**
Material :
 Body Part : Aluminum Extrusion
 Slide Bush : Nylon 6
Weight : 45 g
Environment : RoHS10 Compliant

- Multi Connector Outer Type G (43 mm) can grip the Hinge Connector L.

Name	Hinge Connector L
Item No.	GFJ-A07

※Product name of Hinge Connector G has changed to Hinge Connector L.

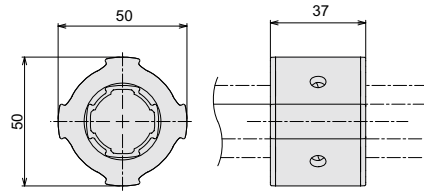
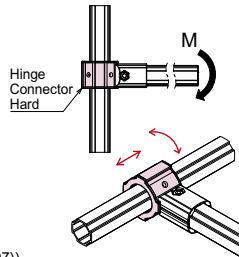
Hinge Connector 100/Hinge Connector 150



■ **Material/Technical Data**
Material : Body : Extruded Aluminium
 Slide Bush : Nylon 6
Weight : 78 g (100)
 115 g (150)
Environment : RoHS 10 Compliant

Name	Hinge Connector 100	Hinge Connector 150
Item No.	GFJ-B60	GFJ-B62

Hinge Connector Hard

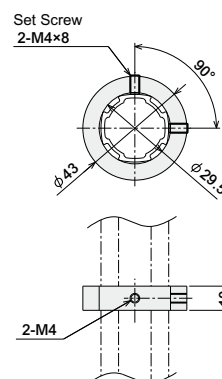
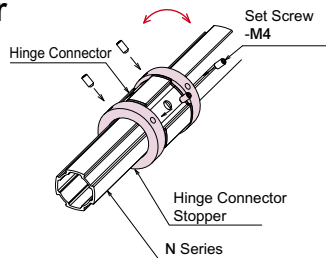


■ **Material/Technical Data**
Material :
 Body Part : Extruded Aluminium
 Slide Bush : Nylon 6
Weight : 62 g
Environment : RoHS10 Compliant

- The Hinge Connector Hard increases the strength versus moment loads (more than two times that of the Hinge Connector (P197)).

Name	Hinge Connector Hard
Item No.	GFJ-A88

Hinge Connector Stopper



■ **Material/Technical Data**
Material : Extruded Aluminium
Weight : 21 g
Environment : RoHS10 Compliant

- Hinge Connector Stopper.

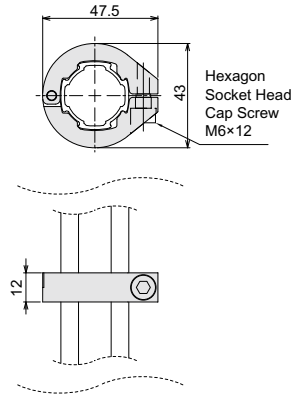
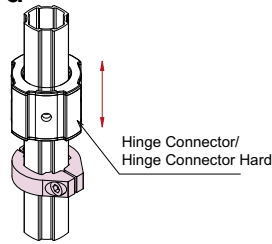
Name	Hinge Connector Stopper
Item No.	GFJ-A09

GF-N Moving Part

Hinge Connector Stopper Hard



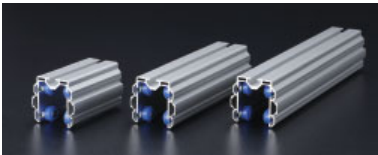
- Load Capacity (750 N) is two times that of the Hinge Connector Stopper.



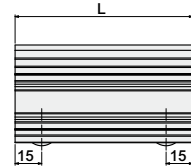
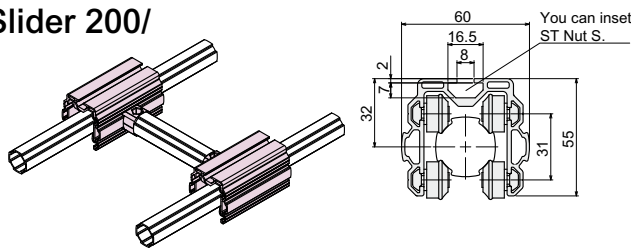
■ **Material/Technical Data**
Material : Body Part: Aluminum Diecast
 Pin : Stainless
 Bolt, Nut : Steel
Weight : 33 g
Environment : RoHS10 Compliant

Name	Hinge Connector Stopper Hard
Item No.	GFJ-A61

Linear Slider 100/Linear Slider 200/ Linear Slider 300



- Slides smoothly with four bearing rollers



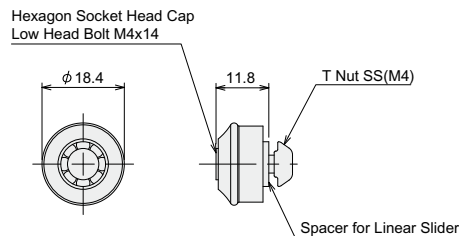
■ **Material/Technical Data**
Material : Body : Extruded Aluminium
 Roller : NC Nylon
 Bearing : Steel
 Bolt, Nut : Stainless
Weight : 105 g (100)
 403 g (200)
 562 g (300)
Environment : RoHS10 Compliant

Name	Linear Slider 100	Linear Slider 200	Linear Slider 300
Item No.	GFW-440	GFW-441	GFW-442

Linear Roller



- Roller for Linear Slide Frame.
Estimated Load Capacity = 10N/pc.



■ **Material/Technical Data**
Material : PA
Weight : 10 g
Environment : RoHS10 Compliant

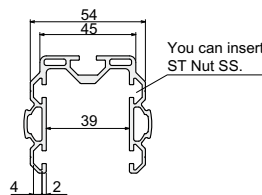
- A stubby wrench is necessary for assembly (short body type).

Name	Linear Roller
Item No.	GFW-437

Linear Frame



- Custom length Linear Slide Frame.
Estimated Load Capacity = 10N/pc.



■ **Material/Technical Data**
Material : Body : Extruded Aluminium
Weight : 1.45kg/m
Environment : RoHS10 Compliant

Name	Linear Frame L=100~4000mm
Item No.	GFF-M05

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data

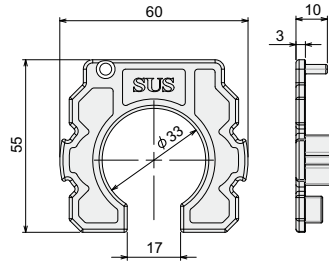
GF-N Moving Part

GF-N 28mm

Linear Slider Cap



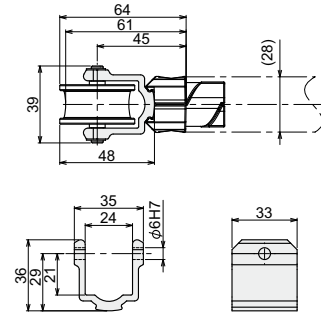
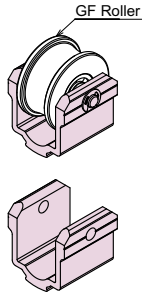
- This is an end protector cap for linear sliders. Tapping screws are used to fix it in place.



- **Material/Technical Data**
- Material : Body: Resin
- Bolts: Iron
- Weight : 8 g
- Environment : RoHS10 Compliant
- **Kit Contents (1 piece set)**
- Cap×1
- Cross Socket Flathead Tapping Screw 3.5×12×1

Name	Linear Slider Cap 1 per set	Linear Slider Cap 2 per set
Item No.	GFW-468	GFW-469

GF Roller Bracket Kit



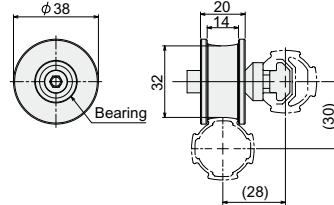
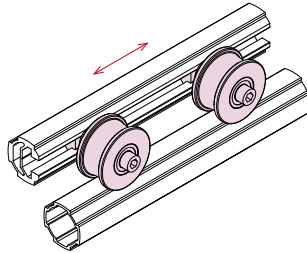
- **Material/Technical Data**
- Material : Extruded Aluminium
- Pin, E Ring : Steel
- Roller Part : Polyacetal, Steel
- Bracket Part : Extruded Aluminium
- Weight : 39 g (GFK-950)
- 70 g (GFK-951)
- Environment : RoHS10 Compliant

- **Kit Contents**
- GF Roller Bracket(Unit) *1pc
- φ6h9 Shaft*1pc
- E Ring *2pcs

- When mounting optional rollers, use rollers less than φ40, 24mm width.

Name	GF Roller Bracket Kit	GF Roller Bracket Kit (with GF Roller)
Item No.	GFK-950	GFK-951

GF Roller Mounting Kit



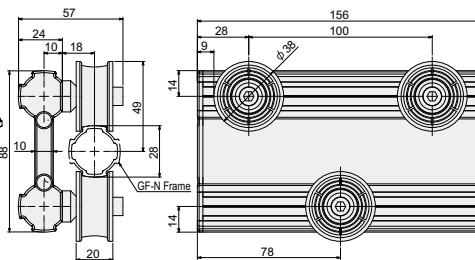
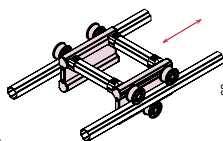
- **Material/Technical Data**
- Material : Body : Polyacetal
- Bearing, Bolt : Steel
- Spacer, Nut : Stainless
- Weight : 63 g
- Environment : RoHS10 Compliant

- **Kit Contents**
- Bearing Spacer * 1pc
- GF Roller(Unit) *1pc
- Hexagon Socket Bolt M6*40*1pc
- ST Nut L(M6)*1pc

- Rolls on the profile edge of Green Frame N.

Name	GF Roller Mounting Kit
Item No.	GFK-948

Roller Slider L150



- **Material/Technical Data**
- Material : Extruded Aluminum
- Roller, Cap: Resin
- Spacer: Stainless Steel
- Bolts, Nuts: Iron
- Weight : 460 g
- Environment : RoHS10 Compliant

- **Strength Data**
- Permissible load: 600 (N)
- (When using two in parallel)

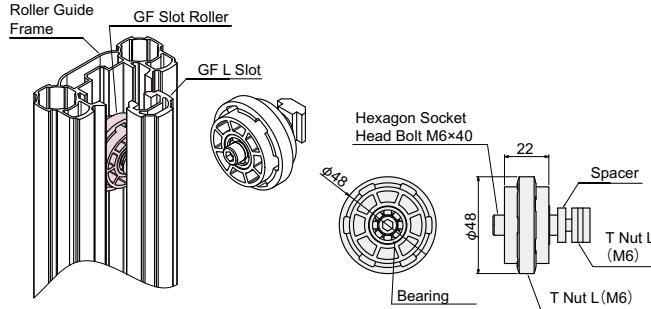
- Use in parallel so that a moment load is not applied.

- Allows GF-N frames to glide smoothly between bearing rollers.

Name	Roller Slider L150
Item No.	GFW-527

GF-N Moving Part

GF Slot Roller Kit

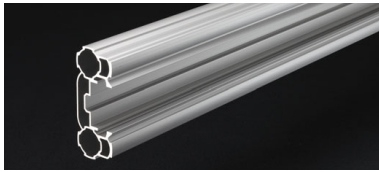


- **Material/Technical Data**
Material : Body : Resin Product
Spacer Part : Aluminium
Weight : 70 g
- **Kit Contents**
GF Slot Roller *1pc
Bearing Spacer *1pc
Hexagon Socket Bolt M6*40 *1pc
Bearing *1pc
Roller Color *1pc
T Nut L(M6) *1pc

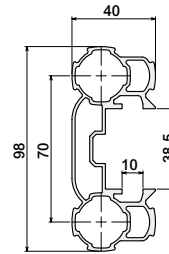
● Be careful of orientation when mounting.

Name	GF Slot Roller Kit
Item No.	GFK-N07

Roller Guide Frame



● Guide Frame for GF Slot Roller.



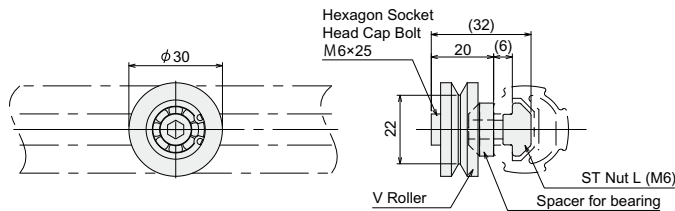
- **Technical Data**
Section secondary moment:
Ix = 11.47×10⁴mm⁴
Iy = 63.51×10⁴mm⁴
Section coefficient:
Zx = 5.59×10³mm³
Zy = 12.96×10³mm³
Mass Unit: 1.86 kg/m
Environment : RoHS10 Compliant

Name	Roller Guide Frame L=400~4000mm
Item No.	GFF-M01

V Roller Mounting Kit



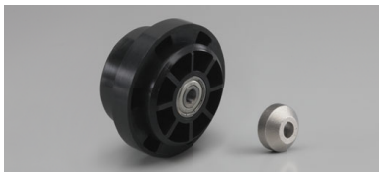
● Placed between flat plates of Green Frame F35 / F50 etc. as a linear motion guide. Estimated Load Capacity = 10N.



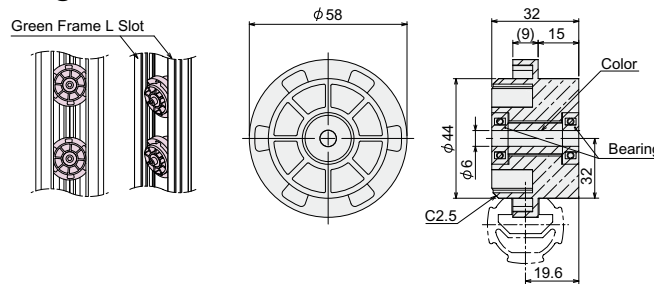
- **Material/Technical Data**
Material : Body : Polyacetal
Bearing : SUJ2
Spacer : Stainless
Weight : 43 g
Environment : RoHS10 Compliant
- **Kit Contents**
Bearing Spacer * 1pc
V Roller(Unit) *1pc
Hexagon Socket Bolt M6*25*1pc
ST Nut L(M6)*1pc

Name	V Roller Mounting Kit
Item No.	GFK-949

Slot Roller L40 Light Mounting Kit



● The Slot Roller uses the groove of the GF L Slot or SF Frame L Slot as a rail.



- **Material/Technical Data**
Material : Body : Nylon 6
Bearing - Bearing Holder : Steel
Spacer : Aluminum Extrude
Weight : 69 g
Environment : RoHS10 Compliant
- **Kit Details**
Bearing Spacer ×1
Slot Roller L40 Light ×1
- Load capacity : 15kg/pcs
● Applied torque : 6 N·m
● Bolt and nut are not included in the Kit. Purchase separately.

Name	Slot Roller L40 Light Mounting Kit
Item No.	SFK-809

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data

GF-N Moving Part

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

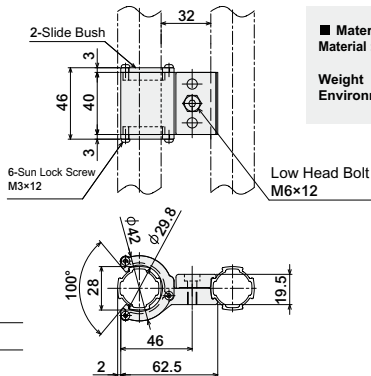
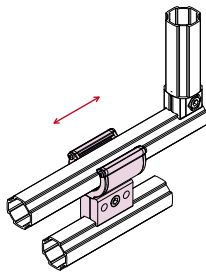
Jig

Technical Data

GF Slider F-F



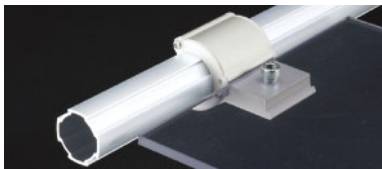
• Use for sliding frame.



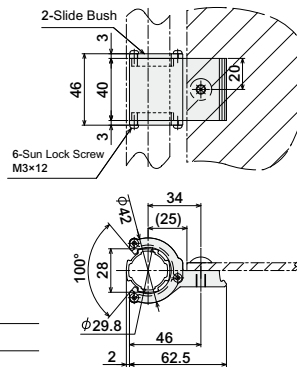
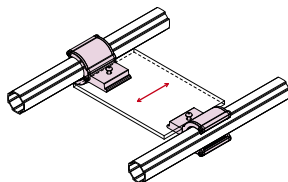
■ **Material/Technical Data**
 Material : Body : Extruded Aluminum
 Slide Bush : Polyacetal
 Weight : 130 g
 Environment : RoHS10 Compliant

Name	GF Slider F-F
Item No.	GFJ-A38

GF Slider P-F



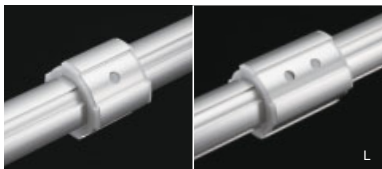
• Use for sliding panel.



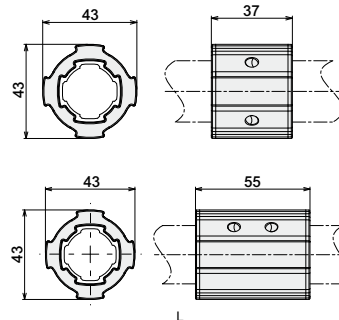
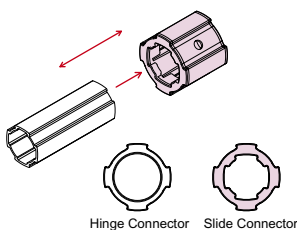
■ **Material/Technical Data**
 Material : Body : Extruded Aluminum
 Slide Bush : Polyacetal
 Weight : 106 g
 Environment : RoHS10 Compliant

Name	GF Slider P-F
Item No.	GFJ-A41

Slide Connector



• Sliding part that does not rotate.
 It has a smaller clearance than the Hinge Connector.



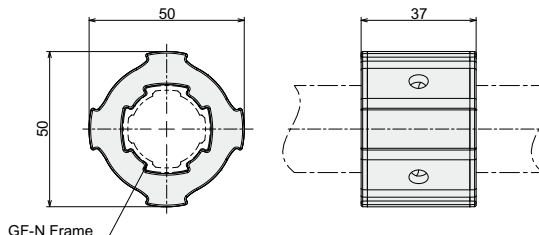
■ **Material/Technical Data**
 Material : Body : Extruded Aluminum
 Slide Bush : Resin
 Weight : 35 g
 48 g (L)
 Environment : RoHS10 Compliant

Name	Slide Connector	Slide Connector L
Item No.	GFJ-B28	GFJ-B29

Slide Connector Hard



• Allows a sliding motion without rotation. Its strength versus moments loads is more than twice that of a hinge connector.



■ **Material/Technical Data**
 Material : Extruded Aluminum
 Slide Bush : POM
 Weight : 70 g

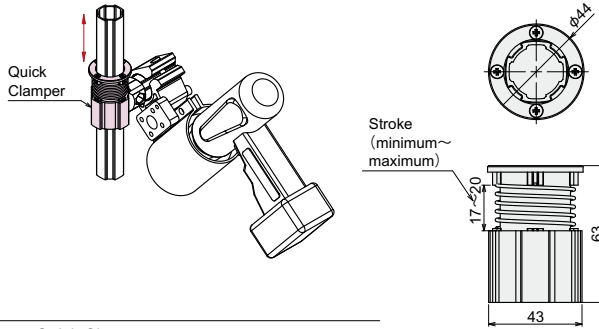
Name	Slide Connector Hard
Item No.	GFJ-C44

GF-N Moving Part

Quick Clamper



- Holds objects at any height.
- Locked by its own weight and can be released by detaching cap.



■ **Material/Technical Data**
Material : Body : Extruded Aluminium
 Spring : Stainless
 Resin Roller : PPS
 Plate : Aluminium
 Bolt : Stainless
Weight : 80 g
Environment : RoHS6 Compliant

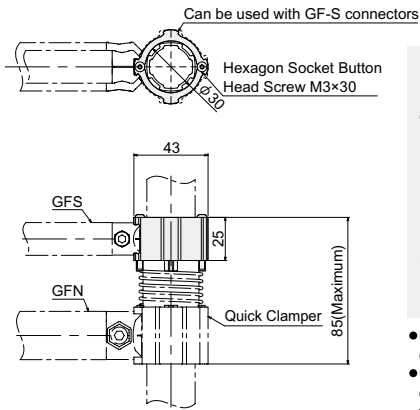
- Keep shock load or moment load from being placed on the Quick Clamper
- Install the Quick Clamper so that the angle deviation from the Green Frame is within $\pm 1^\circ$.
- Load Capacity : 100N

Name	Quick Clamper
Item No.	GFJ-C20

Quick Lever Cap Mounting Kit



- This can be used in place of the cap included on the Quick Clamper (GFJ-C20). By connecting two Quick Clamper caps on a frame, you can form a mechanism that can move up and down, but which only releases the lock when the frames are gripped together.



■ **Material/Technical Data**
Material : Extruded Aluminium
 Bolt/Nut: Steel
Weight : 33 g
Environment : RoHS10 Compliant

■ **Strength Data (when using two quick clampers)**
 Holding Force: 100 (N)

■ **Kit Contents**
 Quick Lever Cap × 1
 Hexagon socket button head screw M3×30×2

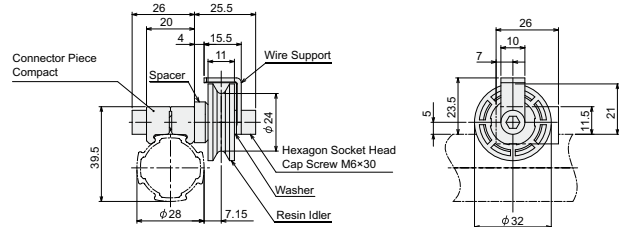
- Remove the Quick Clamper's cap portion before mounting.
- Use with a width of 1000mm or less (reference value) or it will be difficult to release the lock.

Name	Quick Lever Cap Mounting Kit
Item No.	GFK-N15

Resin Idler Support Kit A



- A convenient kit for using the Resin Idler (GFA-A30).
- The Connector Piece Compact (GFJ-B09) for mounting and the support kit for preventing the wire from slipping off are included.



■ **Material/Technical Data**
Material : Main Unit Spacer: Stainless steel
 Connector Piece: Extruded Aluminium
 Idler: Resin, Bolt Washer: Iron
Weight : 56 g
Environment : RoHS10 Compliant

■ **Strength Data**
 Load capacity: 30 (N)

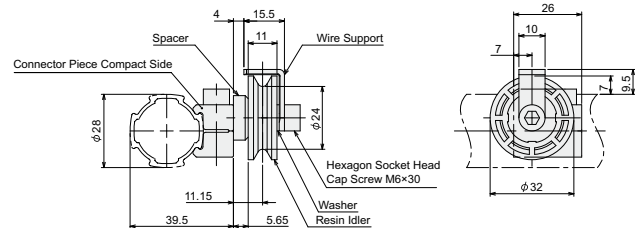
■ **Kit Contents**
 Wire Support × 1
 Washer × 1
 Connector Piece Compact × 1
 Hexagon Socket Head Cap Screw M6×30×1
 Resin Idler × 1
 Spacer × 1

Name	Resin Idler Support Kit A
Item No.	GFK-959

Resin Idler Support Kit B



- A convenient kit for using the Resin Idler (GFA-A30).
- The Connector Piece Compact Side (GFJ-B18) for mounting and the support kit for preventing the wire from slipping off are included.



■ **Material/Technical Data**
Material : Main Unit Spacer: Stainless steel
 Connector Piece: Extruded Aluminium
 Idler: Resin, Bolt Washer: Iron
Weight : 56 g
Environment : RoHS10 Compliant

■ **Strength Data**
 Load capacity: 30 (N)

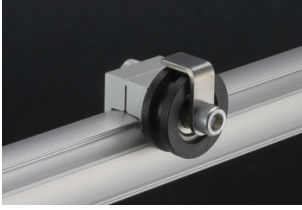
■ **Kit Contents**
 Wire Support × 1
 Washer × 1
 Connector Piece Compact Side × 1
 Hexagon Socket Head Cap Screw M6×30×1
 Resin Idler × 1
 Spacer × 1

Name	Resin Idler Support Kit B
Item No.	GFK-960

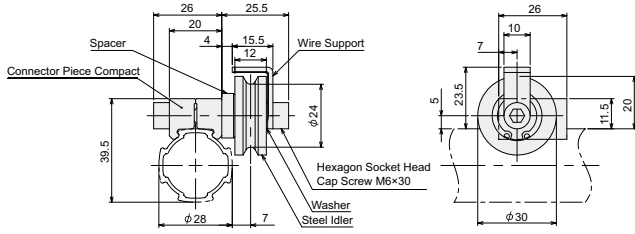
GF-N Moving Part

GF-N
28mm

Steel Idler Support Kit A



- A convenient kit for using the Steel Idler (GFW-239).
- The Connector Piece Compact (GFJ-B09) for installation and the support kit for preventing the wire from slipping off are included.



■ **Material/Technical Data**

Material : Main Unit Spacer: Stainless steel
 Connector Piece: Extruded Aluminum
 Idler/Bolt Washer: Steel

Weight : 91 g

Environment : RoHS10 Compliant

■ **Strength Data**

Load capacity: 200 (N)

■ **Kit Contents**

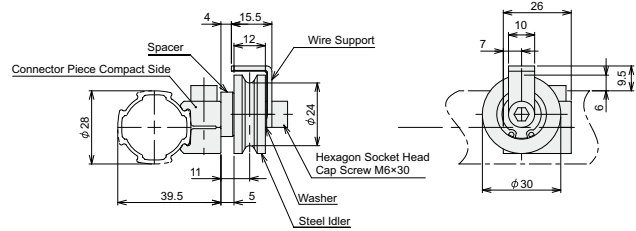
Wire Support × 1
 Washer × 1
 Connector Piece Compact × 1
 Hexagon Socket Head Cap Screw M6×30
 Steel Idler × 1
 Spacer × 1

Name	Steel Idler Support Kit A
Item No.	GFK-957

Steel Idler Support Kit B



- A convenient kit for using the Steel Idler (GFW-239).
- The Connector Piece Compact Side (GFJ-B18) for installation and the support kit for preventing the wire from slipping off are included.



■ **Material/Technical Data**

Material : Main Unit Spacer: Stainless steel
 Connector Piece: Extruded Aluminum
 Idler/Bolt Washer: Steel

Weight : 91 g

Environment : RoHS10 Compliant

■ **Strength Data**

Load capacity: 200 (N)

■ **Kit Contents**

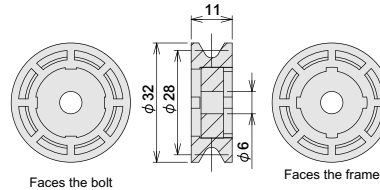
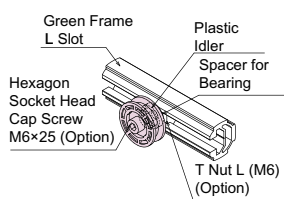
Wire Support × 1
 Washer × 1
 Connector Piece Compact Side × 1
 Hexagon Socket Head Cap Screw M6×30
 Steel Idler × 1
 Spacer × 1

Name	Steel Idler Support Kit B
Item No.	GFK-958

Plastic Idler



- Resin idler with 32mm groove for 2mm wire.
- Approx. weight : 30-N



■ **Material/Technical Data**

Material : Body : Resin
 Bearing : Steel
 Spacer: Extruded Aluminum

Weight : 13 g (Single)
 21 g (Kit)

Environment : RoHS10 Compliant

■ **Kit Details**

Spacer for Bearing×1
 Plastic Idler (Single)×1

• Caution: Confirm direction before installing.

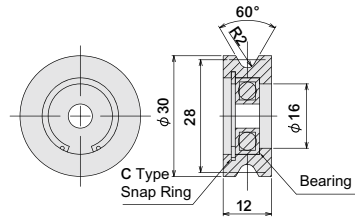
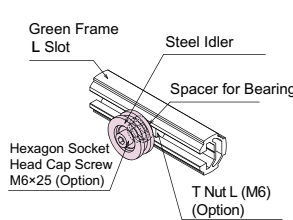
• Bolt and nut are not included in the kit. Purchase separately.

Name	Plastic Idler Kit	Plastic Idler
Item No.	GFK-910	GFA-A30

Steel Idler



- Steel Idler for 2mm wire.



■ **Material/Technical Data**

Material : Body : Steel
 Bearing/Bearing Holder : Steel
 Snap ring : Stainless
 Spacer : Aluminum Extrude

Weight : 50 g (Single)
 53 g (Kit)

Environment : RoHS10 Compliant

■ **Kit Details**

Spacer for Bearing×1
 Steel Idler (Single)×1

• Bolt and nut are not included in the kit. Purchase separately.

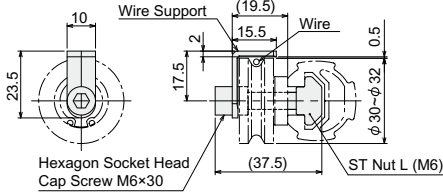
Name	Steel Idler Kit	Steel Idler
Item No.	GFK-911	GFW-239

GF-N Moving Part

Wire Support Kit



- Prevents the wire from detaching from the idler.



■ **Material/Technical Data**
Material : Body, Washer, Nut : Stainless Bolt : Steel
Weight : 28 g
Environment : RoHS10 Compliant

■ **Kit Contents**
 Wire Support *1pc
 Washer *1pc
 Hexagon Socket Head Cap Screw M6*30 *1pc
 ST Nut L (M6) *1pc

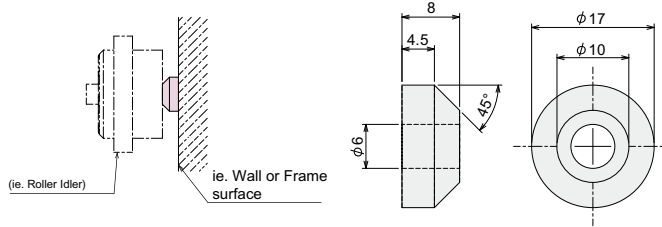
■ **Compatible Idler**
 Plastic Idler Kit (GFK-910)
 Steel Idler Kit (GFK-911)

Name	Wire Support Kit
Item No.	GFK-947

Spacer for Bearing



- Use with Idler or Slot Roller.



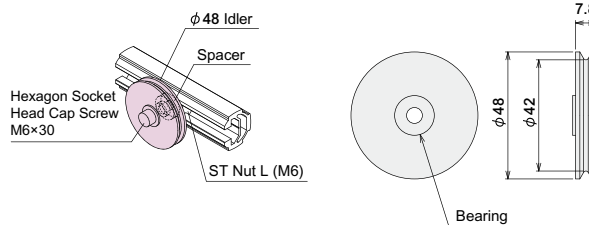
■ **Material/Technical Data**
Material : Stainless
Weight : 10 g
Environment : RoHS10 Compliant

Name	Spacer for Bearing
Item No.	GFA-C82

φ48 Idler



- Steel idler with 48mm groove for 1mm or 2mm wire.
- Approx. weight : 300~N
- Please use GFA-A54 spacer for φ48 single idler.



■ **Material/Technical Data**
Material : Body : Steel Bearing : Steel Spacer: Extruded Aluminum
Weight : 100 g (Single) 129 g (Kit)
Environment : RoHS10 Compliant

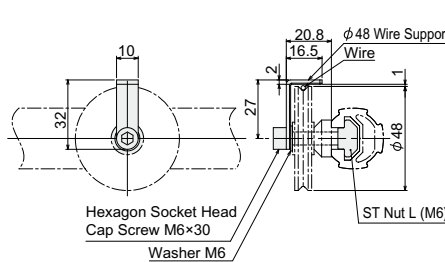
■ **Kit Details**
 Spacer (GFA-A71) × 1
 φ48 Idler (Single) × 1
 Hexagon Socket Head Cap Screw M6 × 30 × 1
 ST Nut L (M6) × 1

Name	φ48 Idler Fixed Kit	φ48 Idler
Item No.	GFK-916	GFW-263

φ48 Wire Support Kit



- This part prevents the wire from sliding off the φ48 idler.



■ **Material/Technical Data**
Material : Stainless Nut : Stainless Bolt/Washer : Steel
Weight : 30 g
Environment : RoHS10 Compliant

■ **Kit Contents**
 φ48 Wire Support × 1
 Washer M6 × 1
 Hexagon Socket Head Cap Screw M6 × 30 × 1
 ST Nut L (M6) × 1

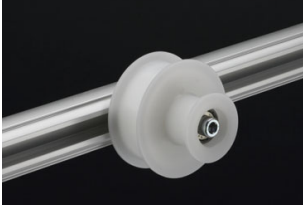
● φ48 idler is not included.

Name	φ48 Wire Support Kit
Item No.	GFK-956

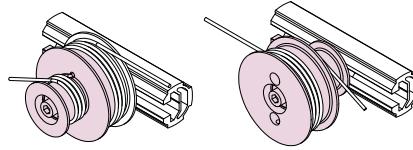
GF-N Moving Part

GF-N 28mm

Two Stage Pulley



- Combines two pulleys of different diameters into a single item.



Make sure the string does not wind in two layers.
Can be used in either direction.

Material/Technical Data

Material : POM
Color/Spacer/Bolt : Stainless
Nut/Bearing : Steel
Weight : 128 g

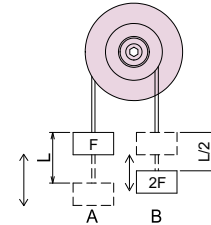
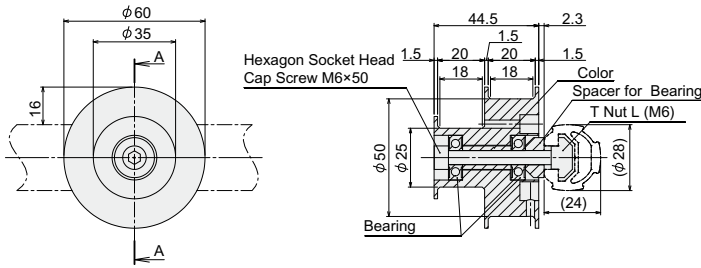
Fishing Wire Length
φ50 : 1300 mm or lower
φ25 : 650 mm or lower

Load Capacity : φ50 : 100 N
φ25 : 200 N

Kit Contents

Two stage pulley × 1,
Two stage pulley color × 1,
Bearing × 2, Spacer × 1,
T Nut L(M6) × 1,
Hexagon socket head cap screw M6×50 × 1

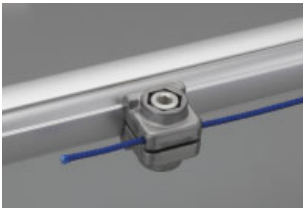
Name	Two Stage Pulley
Item No.	GFK-A18



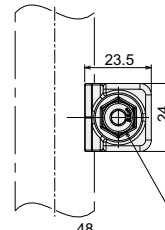
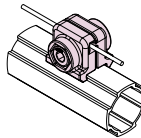
Prepare the string on the two pulleys.
Pulling the string on the B side reduces the distance by half and doubles the force needed to move the load. By pulling the string on the A side, the force needed to move the load is cut in half and the pulling distance is doubled.
L : max 1300 mm/F : max 100 N

GF-S 19mm

Wire Lock Connector



- Special connector for φ2 Fishing Gut Wire (GFW-422/424). Secure the wire by threading it through the hole and tightening the bolt.
- When using High Strength φ2 Nylon Wire (GFW-464/465/466), keep within a maximum load capacity of 25kgf.
- After threading, the wire can be oriented in three different directions.



Hexagon Socket Head Cap Aluminum Bolt M6.5×18
Hexagon Aluminum Taper Nut M6.5

Area where the wire passes through

Material/Technical Data

Material : Aluminum Diecast
Bolt/Nut: Aluminum
Weight : 26 g
Environment : RoHS10 Compliant

- Nylon wire maximum strength: within 25kgf.
- Make sure the nylon wire passes through the connector completely.

Name	Wire Lock Connector
Item No.	GFJ-D90

GF-G 43mm

High Strength φ2 Nylon Wire



- About 1.8 times stronger than φ2 Fishing Gut Wire (GFW-422/424).

Material/Technical Data

Material : Ultrahigh Molecular Weight Polyethylene
Weight : 13 g/26 g/52 g

- May elongate during initial uses. Apply a load (approximately 10 kg) for about one hour before use.

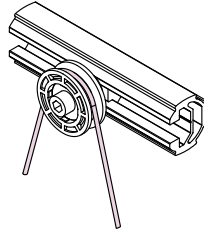
Name	High Strength φ2 Nylon Wire		
	5 m	10 m	20 m
Item No.	GFW-464	GFW-465	GFW-466

GF-N Moving Part

φ2 Fishing Gut Wire 5m
φ2 Fishing Gut Wire 20m



- Gut wire provides greater strength while bent.



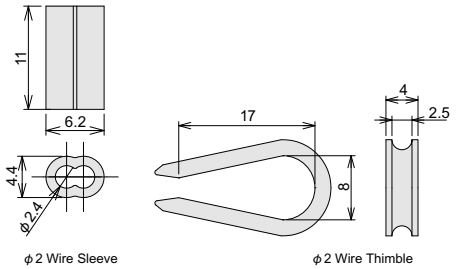
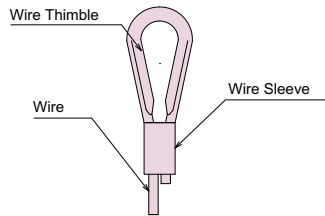
Material/Technical Data
Material : Polyester fiber

Name	φ2 Fishing Gut Wire 5m	φ2 Fishing Gut Wire 20m
Item No.	GFW-422	GFW-424

φ2Wire φ2Wire Sleeve φ2Wire Thimble



- φ2 Wire crimping part (φ2 Wire Sleeve (30 pcs./pack))
- Protects the wire connection (φ2 Wire Thimble)

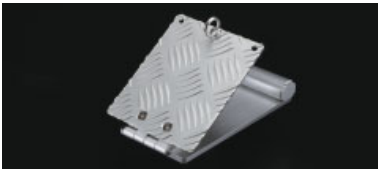


Material/Technical Data
φ2 Wire φ2 Wire Sleeve φ2 Wire Thimble
Material : Stainless Aluminum Stainless
Weight : 20 g/m 1 g 1 g
Environment : RoHS Compliant

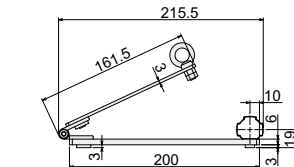
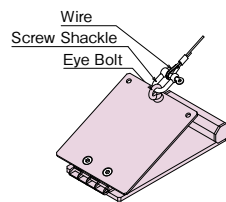
- Do not apply tensile strength more than 50 kg to the wire
- Cut off wire end. Wire length from factory is slightly longer than the length above
- Use a wire cutter or swagging tool to cut wire or crimp sleeve

Name	φ2 Wire 10m	φ2 Wire 20m	φ2 Wire Sleeve (30 pcs./pack)	φ2 Wire Thimble
Item No.	GFW-250	GFW-251	GFW-224	GFW-225

Foot Pedal

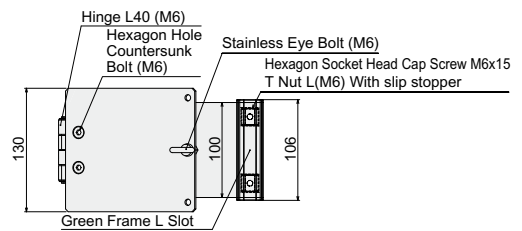


- Connect the wire with eyebolts, etc. to utilize it with mechanisms such as intermittent stoppers.

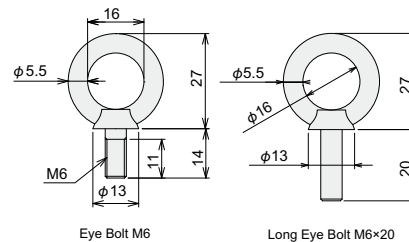
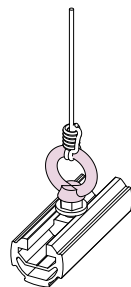
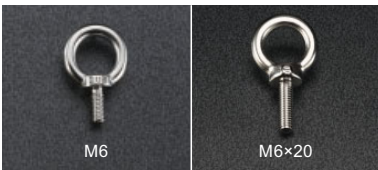


Material/Technical Data
Material : Aluminum and Others
Weight : 688 g
Environment : RoHS10 Compliant

Name	Foot Pedal
Item No.	GFW-593



Eye Bolt M6



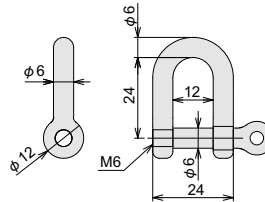
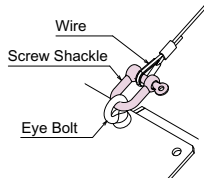
Material/Technical Data
Material : Stainless
Weight : 16g (Eye Bolt M6)
20g (Long Eye Bolt M6x20)
Environment : RoHS10 Compliant

Name	Eye Bolt M6	Long Eye Bolt M6x20
Item No.	GFW-247	GFW-455

GF-N Moving Part

GF-N 28mm

Screw Shackle M6



■ **Material/Technical Data**
 Material : Stainless
 Weight : 23 g
 Environment : RoHS10 Compliant

Name	Screw Shackle M6
Item No.	GFW-246

Break Roller

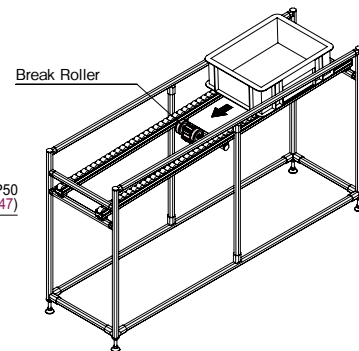
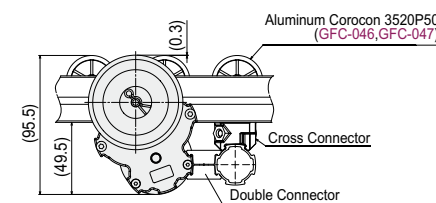
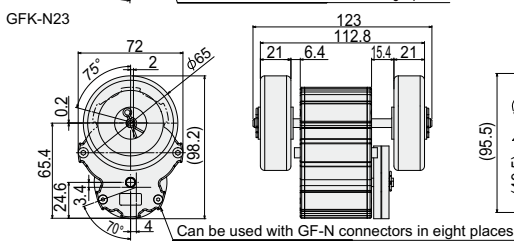
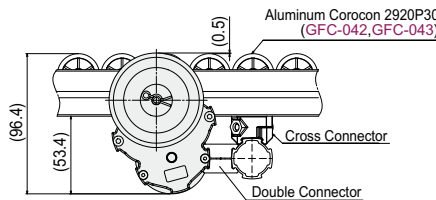
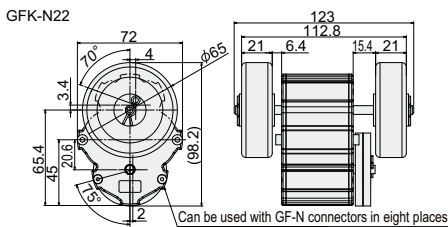


- Break which uses the principle of the flywheel as a brake for chuters.
- Can be used as a breaking mechanism for objects up to 10 kilograms in weight.
- Does not require adjustment to the mounting height when used with aluminum corocon.

■ **Material/Technical Data**
 Material : Extruded Aluminum
 Tire : Rubber
 Color/Gear/bush : Resin
 Bottle : Steel, Stainless
 Shaft : Steel
 Bolt : Stainless
 Weight : 569 g

- Two $\phi 50t5$ (GFW-516) flywheels are used in each of the two flywheels in the break roller (GFK-N22/N23).

Name	Break Roller P30	Break Roller P50
Item No.	GFK-N22	GFK-N23





GF-N Moving Part

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

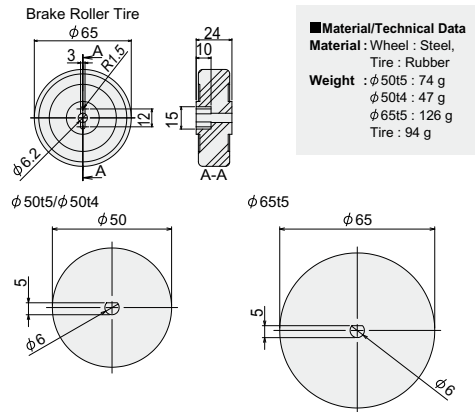
Technical Data

Fly Wheel/Brake Roller Tire

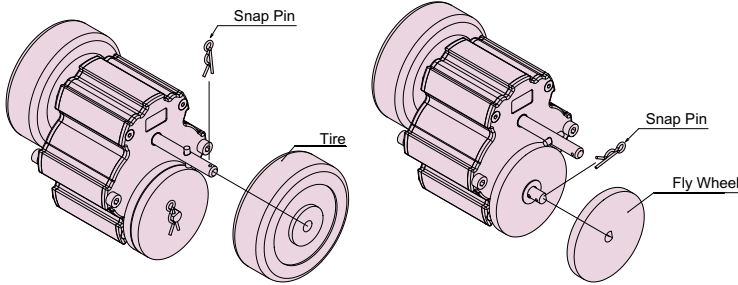


- Special weight only for the Brake Roller (GFK-N22/N23).
- Acts as a breaking mechanism when attached to the break roller.
- Use to adjust the weight.

Name	Fly Wheel			Brake Roller Tire
	φ50t5	φ50t4	φ65t5	
Item No.	GFW-516	GFW-517	GFW-518	GFW-509



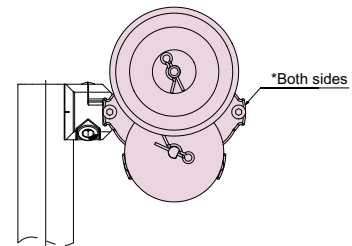
How to adjust the weight



- ① Remove the snap pin, then remove the tire.
- ② Remove the snap pin for the flywheel, then add or remove the flywheel to adjust the weight.

Alternative Installation Method

When using corocon other than aluminum corocon 2920P30 or 3520P50, use the center protrusion marked with an "★" to make adjustments.



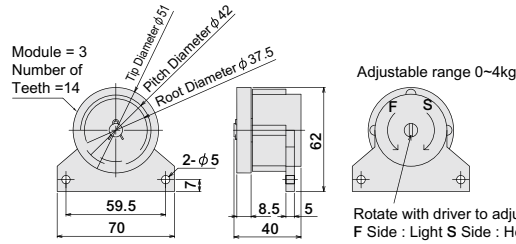
GF-N Moving Part

GF-N
28mm

Brake Assembly Kit



- Applies an adjustable braking force in either direction to prevent sudden up or down motions.

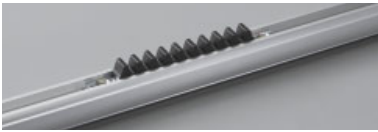


■ **Material/Technical Data**
Material : Body and Gear : Resin
 Bearing : Steel
 Spacer : Extruded Aluminum
Weight : 173 g
 ■ **Product included**
 Spacer for Brake Device×1
 S Easy Nut L (M5)×2
 Hexagon socket head cap screw M5-20 (Stainless)×2
 Hexagon socket head cap screw M5-12 (Stainless)×2
 Brake Device 08×1

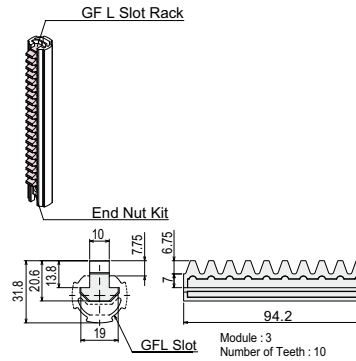
- Can be adjusted to brake in any direction
- Braking force can be adjusted
- This product works with the Brake Rack

Name	Brake Assembly Kit	
Item No.	GFK-914	

GF L Slot Rack



- This rack can be directly attached to a GF L Slot (GFF-004).
- Additional racks can be mounted.
- For use with the Brake Device (GFK-914).

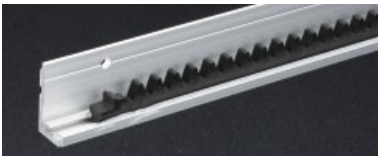


■ **Material/Technical Data**
Material : POM
Weight : 20 g
 ■ **Material/Technical Data**
 Tightening torque : 5 (N · m)
 ■ **End Nut Kit**
 T Nut L (M8) ×2
 Flat Tip Set Screw M8×8 ×2

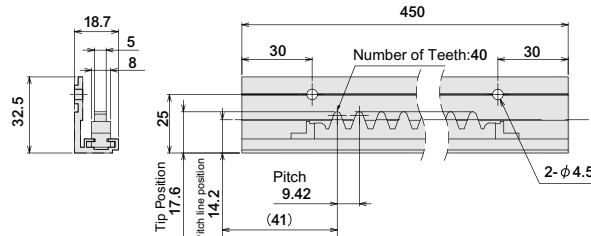
- Use the end nut kit as a retainer
- Direction differs by 90° from Brake Rack Kit (GFK-915)

Name	GF L Slot Rack	End Nut Kit
Item No.	GFW-565	GFK-A23

Brake Rack Kit



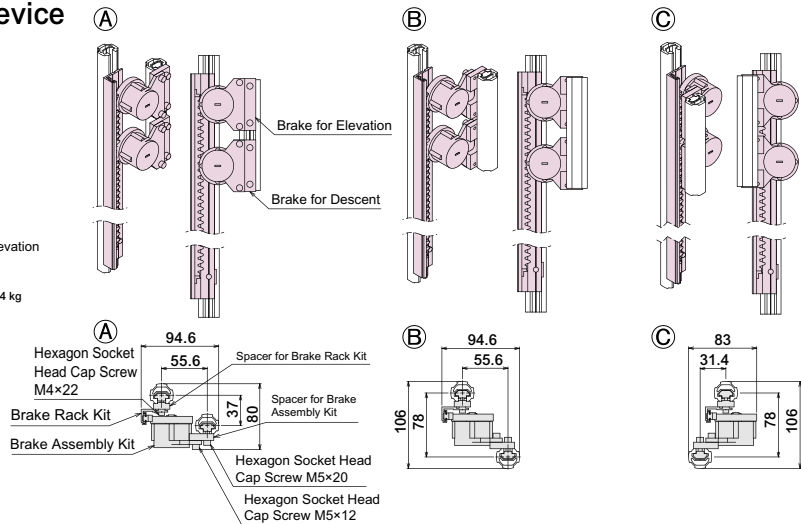
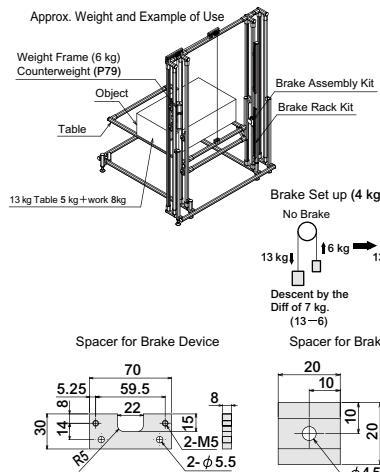
- Please use as a rack for the Brake Assembly Kit.



■ **Material/Technical Data**
Material : Frame : Extruded Aluminum
 Rack : Resin
Weight : 233 g
 ■ **Product included**
 Spacer for Brake Rack×2
 Brake Rack×1
 S Easy Nut L (M4)×2
 Hexagon socket head cap screw M4-22 (Stainless)×2

Name	Brake Rack Kit	
Item No.	GFK-915	

Example of installation of Brake Device



※For both directions, downward and upward, two devices are needed. One is used as an "Elevation Brake" to go upward and the other is used as a "Descent Brake" to go downward. For only one direction, only one device is needed.

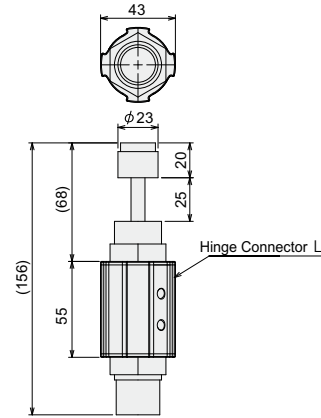


GF-N Moving Part

Shock Absorber



- Absorbs an object's impact force. The main unit uses a Hinge Connector L (GFJ-A07) for easy installation.

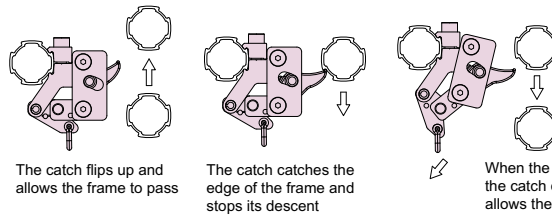


Material/Technical Data
Material :
 Absorber : Iron (composite)
 Main Unit : Extruded Aluminum
Weight : 504 g

Strength Data
Load Capacity :
 Stroke : 25 mm
 Maximum Energy Absorbed : 8.1 J
 Impact Speed Range : 0.7 - 3 (m/s)

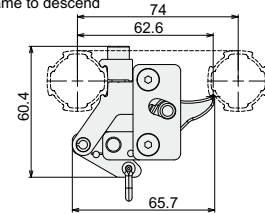
Name	Shock Absorber
Item No.	GFK-N89

Elevator Lock



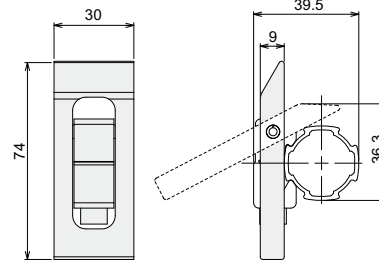
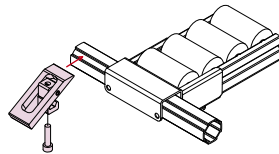
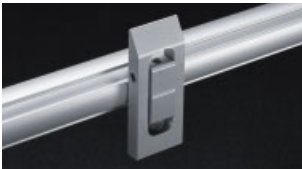
Material/Technical Data
Material : Body : Extruded Aluminum
 Stainless
 Receiving : Nylon
Weight : 134 g
Environment : RoHS10 Compliant

- This part holds the position of the table in vertical motions and can be disengaged by pulling a wire.
- Load Capacity : 200 N



Name	Elevator Lock
Item No.	GFK-N06

Conveyor Anti Back



Material/Technical Data
Material : Body : Extruded Aluminum
 Bolt : Steel
 Fulcrum Pin : Stainless
Weight : 52.1 g
Environment : RoHS10 Compliant

- When objects flow from one direction, this device prevents the objects from moving in the opposite direction.
- Load Capacity : 200 N



Name	Conveyor Anti Back
Item No.	GFK-N05

GF-N 28mm



GF-S 19mm



GF-G 43mm



Bolt Nut

Jig

Technical Data

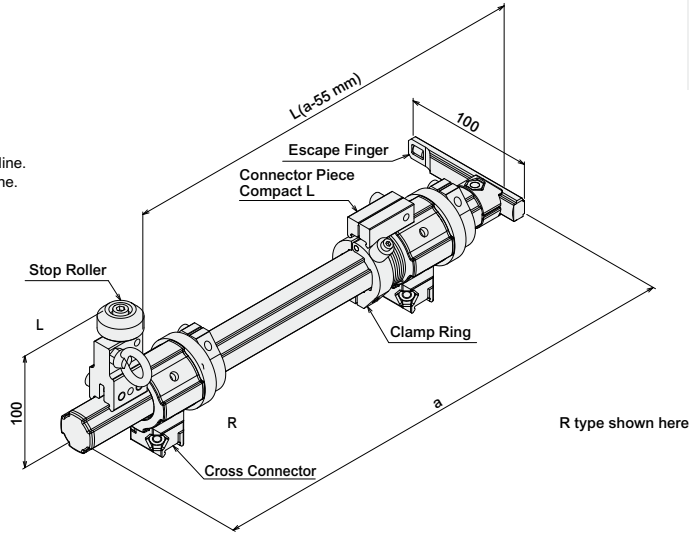
GF-N Moving Part

GF-N 28mm

Intermittent Stopper (Built-in Spring)



- Spring-powered stopper for karakuri mechanisms on an incline. Separates and dispenses a single item from the front of a line.



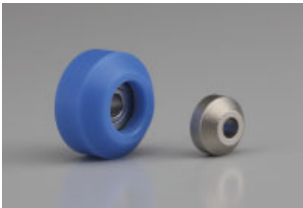
■ **Material/Technical Data**
Material : Compounding
Weight : *Except GF Frame
 572 g (GFK : 925,926)
 (GFK : 919,920)
 570 g (GFF : 917,918)
Environment : RoHS6 Compliant

Name	Intermittent Stopper (Built-in Spring)					
	Light Load		Medium Load		Heavy Load	
	For empty boxes		Total Item Weight: 70 kg Weight Per Item: Up to 20 kg		Total Item Weight 100 kg Weight Per Item: Up to 20 kg	
	L	R	L	R	L	R
Item No.	GFK-925	GFK-926	GFK-919	GFK-920	GFK-917	GFK-918

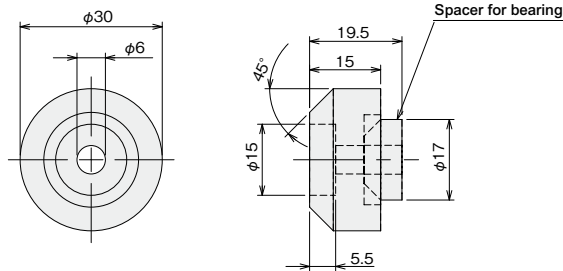
- L: Stop roller angled to the left
- R: Stop roller angled to the right
- Specify desired length of "a" when ordering.
 *800 ≧ a ≧ 230 mm

Order Example: GFK-925 a=450 mm

Stop Roller



- Roller used in the Intermittent Stopper. Can be used to stop objects.



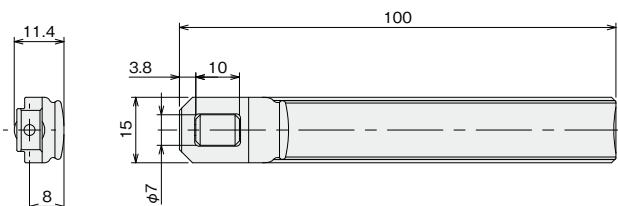
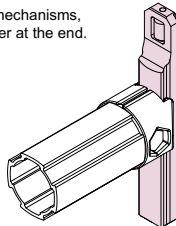
■ **Material/Technical Data**
Material : PA
 Bearing, Snap ring: Hard Steel
 Spacer for bearing: Stainless
Weight : 18 g
Environment : RoHS6 Compliant

Name	Stop Roller
Item No.	GFW-295

Escape Finger



- Used in karakuri mechanisms, this part has a roller at the end.

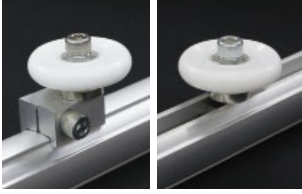


■ **Material/Technical Data**
Material : Extruded Aluminum
 Pin : Steel
 Roller : PA
Weight : 34 g
Environment : RoHS10 Compliant

Name	Escape Finger
Item No.	GFW-294

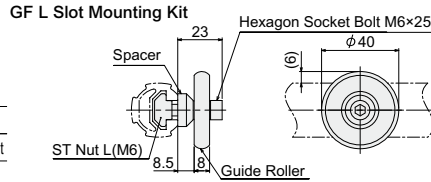
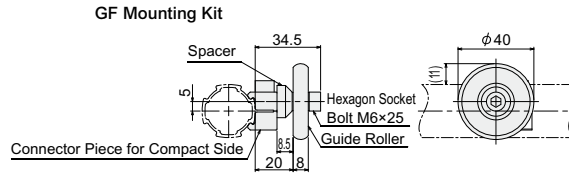
GF-N Moving Part

Guide Roller



- Guide roller with bearing.
- Items can be positioned and smoothly transported to a chuter by attaching this roller.
Can be installed in two types of frames: GF-N and Green Frame L Slot.

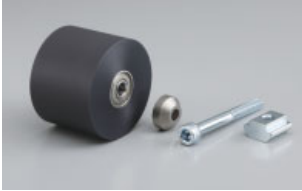
Name	Guide Roller	
	Guide Roller GF Mounting Kit	Guide Roller GF LSlot Mounting Kit
Item No.	GFK-N16	GFK-N17



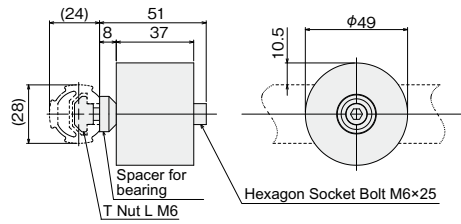
Material/Technical Data
Material : Guide Roller : Resin
 Spacer : Stainless Steel
 Bolt : Iron
 Connector Piece : Aluminum Extrusion
Weight : GF : 41 g
 GF Lslot : 35 g

Kit Details
 GF : Guide roller unit, Spacer
 hexagon socket bolt M6 x 25,
 Connector piece for compact
 side 1each
 GF Lslot: Guide roller unit, Spacer,
 hexagon socket bolt M6 x 25,
 ST nut L (M6) 1each

φ 49 Guide Roller



- Guide roller wide type.
- Guide roller with bearing.

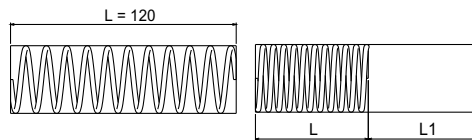


Material/Technical Data
Material : Roller : PA
 Spacer : Stainless
 Color/Bolt/Nut : Steel
 Bearing : Hard steel
Weight : 137 g
Load Capacity : 150 (N)

Kit Details
 φ 49 Guide Roller×1
 Spacer for bearing×1
 Hexagon socket head cap screw
 M6×55×1
 T Nut L (M6)×1

Name	φ 49 Guide Roller
Item No.	GFW-566

Compression Spring (120-1.0/1.2/1.5)



Material/Technical Data
Material : Iron
Environment : RoHS Compliant

L : Length When Fully Compressed
 L1 : Maximum Reduction of Length

- A GF-N Frame with an external dimension of 28 mm can be passed through the center of this compression spring.
Can be combined to absorb shock, position, or lock.

Name	Compression Spring	Compression Spring	Compression Spring
	120-1.0	120-1.2	120-1.5
Item No.	GFW-458	GFW-459	GFW-460

Spring Specifications

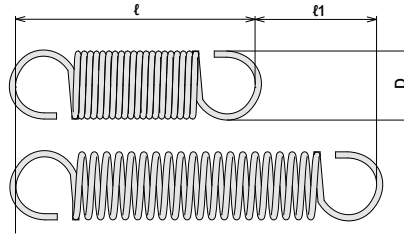
Name	Item No.	Load Rate (N/mm)	Maximum Load (N)	Fully Compressed Length (mm)	Maximum Shrinkage (mm)	Wire Diameter (φ)	Outer Diameter (φ)	Inner Diameter (φ)	Weight (g)
120-1.0	GFW-458	1.0	83.6	36.4	83.6				58
120-1.2	GFW-459	1.2	106.5	31.2	88.8	2.6	36	30.8	50
120-1.5	GFW-460	1.5	141	26	94				41

- GF-N 28mm
 - Frame
 - Cap
 - Connector
 - Foot Component
 - Moving Part
 - Electric Item
 - Coroon Roller
 - Accessory
 - Door Part
- GF-S 19mm
 - Frame
 - Cap
 - Connector
 - Foot Component
 - Moving Part
 - Coroon Roller
 - Accessory
 - Door Part
- GF-G 43mm
 - Frame
 - Cap
 - Connector
 - Foot Component
 - Moving Part
 - Coroon Roller
 - Accessory
 - Bolt Nut
 - Jig
 - Technical Data

GF-N Moving Part

GF-N
28mm

Tension Spring



Name	Light Load (Guideline for Spring Constant 0.1 N/mm) (Guideline for Maximum Load 10~21N)			Middle Load (Guideline for Spring Constant 0.3~0.45 N/mm) (Guideline for Maximum Load 20~45N)			Heavy Load (Guideline for Spring Constant 0.7~0.9 N/mm) (Guideline for Maximum Load 28~73N)		
	Tension Spring Light S	Tension Spring Light M	Tension Spring Light L	Tension Spring Middle S	Tension Spring Middle M	Tension Spring Middle L	Tension Spring Hard S	Tension Spring Hard M	Tension Spring Hard L
Item No.	GFW-252	GFW-253	GFW-254	GFW-255	GFW-256	GFW-257	GFW-258	GFW-259	GFW-260

Spring Specification Table

Name	D	ℓ	Wire Diameter (mm)	In case of dynamic load		ℓ + ℓ1	Initial Tension (N)	Spring Constant (N/mm)	Weight (g)	Material	
				ℓ1 Maximum Elongation amount (Fmax.mm)	Maximum Load (N)						
Light Load	Light S	10	51	0.8	73.9	10.88	124.9	1.47	0.127	6	SWP-A
	Light M	14	70	1	128.5	14.67	198.5	1.8	0.1	16	
	Light L	16	106	1.2	192.2	21.85	298.2	2.88	0.099	32	
Middle Load	Middle S	8	50	0.9	36.2	20.41	86.2	3.95	0.455	5	
	Middle M	12.5	75	1.2	75.3	28.96	150.3	4.93	0.319	17	
	Middle L	18	95	1.6	99.8	45.16	194.8	7.4	0.378	40	
Heavy Load	Hard S	8	54	1	30.3	28.08	84.3	6.2	0.723	6	
	Hard M	16	73	1.6	54	51.83	127	9.6	0.782	29	
	Hard L	16	100	1.8	64	73.9	173.9	15.8	0.91	62	

●For details on maximum elongation, use the chart below. If you surpass the maximum elongation amount, it could result in deformation or damage of the spring. ●If used in an environment that has a temperature of more than 40°C, the load value may decay. (1N≒0.102kgf)
●Initial Tension : load of tension spring at the first stretch ●Spring Constant : $\frac{\text{Load (N)}}{\text{Elongation amount (mm)}}$

Guideline to choose tension spring

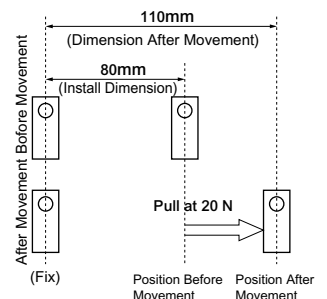
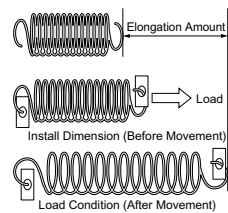
Selection of Condition

1. Slightly shorter than installed dimension
2. In a load condition that is within the maximum of elongation
3. Assumption load is under maximum load
4. Calculated load by below formula is smaller than assumption load

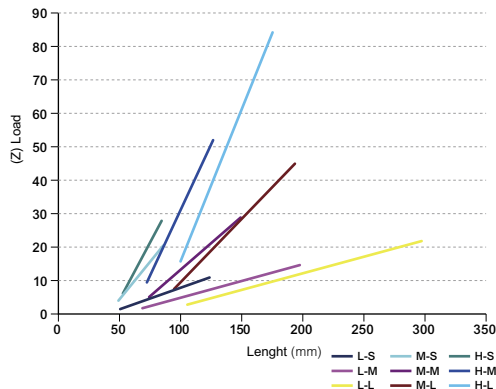
$$\text{Load (N)} = \text{Initial Tension (N)} + (\text{Elongation amount} \times \text{Spring Constant})$$

Selection Example

Install Dimension (Before Movement) Length 80 mm
Pull at 20 N
↓
Slightly Shorter
Middle M (75 mm) · Hard M (73 mm)
↓
Dimension of Load Condition (After movement) 110 mm
↓
Elongation Estimate
Maximum Elongation Amount
Middle M : 110 mm - 75 mm = 35 mm < 75.3 **OK**
Hard M : 110 mm - 73 mm = 37 mm < 54 **OK**
↓
Load Estimate
Initial Tension Elongation Amount Spring Constant
Middle M : 4.93 + (35 × 0.319) = 16.095N < 20N **OK**
Hard M : 9.6 + (37 × 0.782) = 38.534N > 20N **NG**
↓
Therefore, **Middle M Type** is best suited.



Tension Spring load and total length

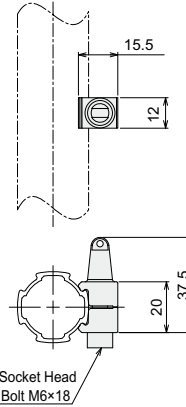
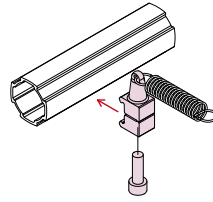


GF-N Moving Part

Spring Post Connector



- The Spring Post Connector installed to a spring post and frame is an essential, compact part.



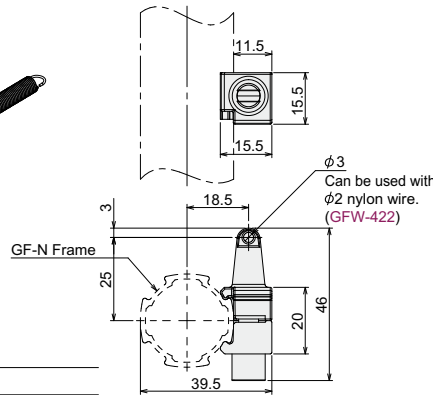
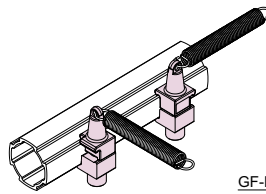
Material/Technical Data
Material : Hook : Stainless
 Fix : Extruded Aluminum
 Bolt : Steel
Weight : 24 g
Environment : RoHS Compliant

Name	Spring Post Connector
Item No.	GFJ-B10

Spring Post Connector 2



- Compact spring post that unifies the post and connector. Change the orientation according to the direction of the spring.



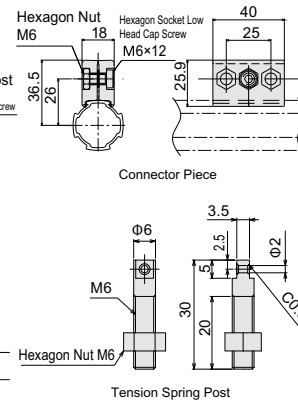
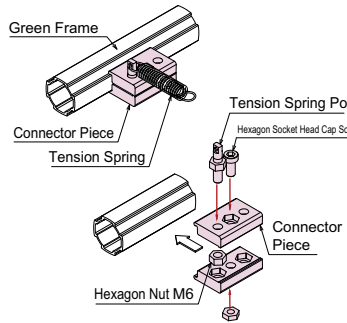
Material/Technical Data
Material : Fix : Extruded Aluminum
 Hook : Stainless
 Bolt : Steel
Weight : 26 g
Environment : RoHS10 Compliant

Strength Data
Load Capacity : 100 (N)

- Can also grip GF-G (43mm) frames.

Name	Spring Post Connector 2
Item No.	GFJ-D93

Tension Spring Post



Material/Technical Data
Material : Post Tension Spring : Steel
 Connector Piece : Aluminum
 Diecast Hexagon Nut : Steel
Weight : 16 g (M6) 53 g (Kit)
Environment : RoHS10 Compliant

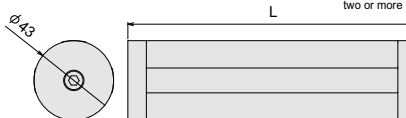
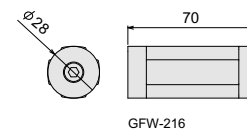
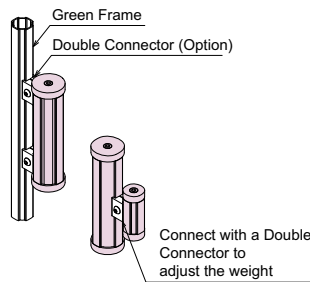
Kit Details
 Connector Piece L (Single)×2
 Tension Spring Post×1
 Hexagon Nut M6 (1Type)
 Trivalent Chromium Plating×2
 Hexagon Nut M6 (3Type)
 Trivalent Chromium Plating×1
 Hexagon socket low head cap screw M6×12
 Trivalent Chromium Plating×1

Name	Tension Spring Post Kit	Tension Spring Post
Item No.	GFK-913	GFW-240

Weight Frame



- Weight with the same profile edge as a GF frame.
- Frames and weight frames can be connected to one another with a double connector.



Material/Technical Data
Material : Extruded Aluminum
 Core : Steel
 Receiving : Nylon6
Weight : 200 g (0.2 kg)
 500 g (0.5 kg)
 1000 g (1 kg)
 2000 g (2 kg)
Environment : RoHS10 Compliant

- When attaching a Weight Frame to a moving part, be sure to secure it in two or more places.

Name	Weight Frame			
	0.2 kg	0.5 kg	1.0 kg	2.0 kg
Item No.	GFW-216	GFW-219	GFW-220	GFW-222
L (mm)	70	83	156	302

GFW-219/GFW-220/GFW-222

Power Unit

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

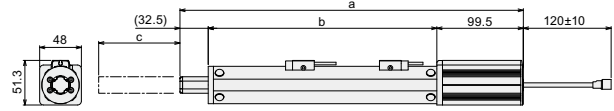
Corocon Roller

Accessory

Door Part



- st Max 0.3 m**
- Load Capacity Vertical Max 10 kg**
- Lineup Six Types**
- SiO Controllable**

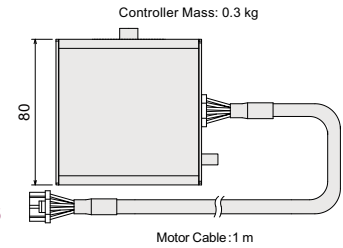


Stroke (mm)	a	b	c	Mass (kg)
100	395	263	100	1.1
200	495	363	200	1.3
300	595	463	300	1.4

Power Unit and controller come as a set.

Items

Stroke (mm)	100		200		300	
Type	H(High speed)	L(Low speed)	H(High speed)	L(Low speed)	H(High speed)	L(Low speed)
Item No.	XAK-P01	XAK-P02	XAK-P03	XAK-P04	XAK-P05	XAK-P06

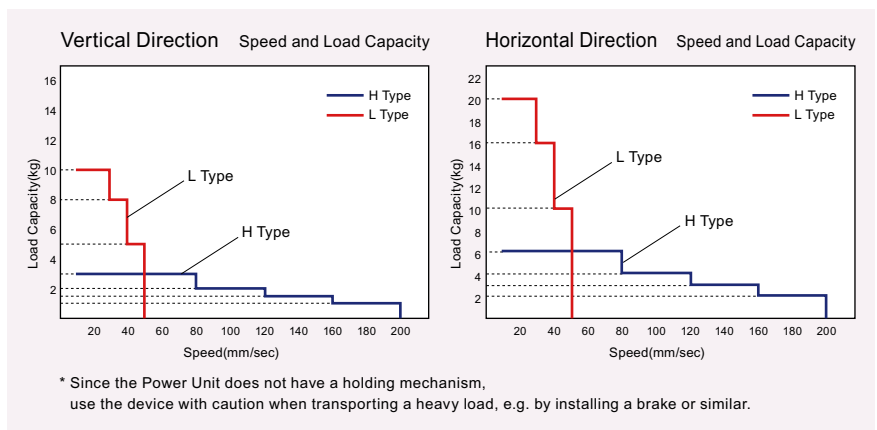


L (Low speed) Type ... Large weights can be moved at a low speed.
H (High speed) Type ... Force is weak, but suitable for applications which require quick movements.

Order Example Item No. or Product Name Quantity
XAK-P02 units

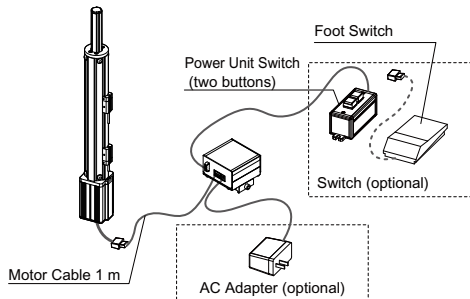
Specifications

Type	Low Speed Type (L)	High Speed Type (H)
Maximum Speed	50mm/sec	200mm/sec
Load Capacity at Maximum Speed *1	Vertical: 5 kg Horizontal: 10 kg	Vertical: 1 kg Horizontal: 2 kg
Motor	Stepping Motor	
Body	Aluminum Frame: Green Frame G	
Rod Frame	Aluminum Frame: Green Frame S	
Stroke	100 mm, 200 mm, 300 mm	



*1. Load capacity varies according to the operating speed. See graph for details. The horizontal load capacity is based on using a horizontal table or guide fitted to the outside of the unit.
Caution: the bearing may be damaged if an external force is applied to the rod in a direction different from its direction of travel.
Use the optional AC adapter (**SUC-261**) for the power supply.

Options



AC Adapter AC100 V → DC24 V



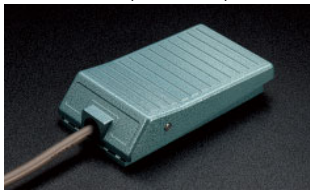
Item No.
SUC-261

Power Unit Switch (two buttons)



Item No.
XAK-S046

Foot Switch (one switch)



Item No.
XAK-S047

Power Unit Extension Motor Cable (2 m)



Item No.
XAR-P01

Power Unit Switch Cable (3 m)



Item No.
XAR-P02

Power Unit Switch Cable 2 (3 m)



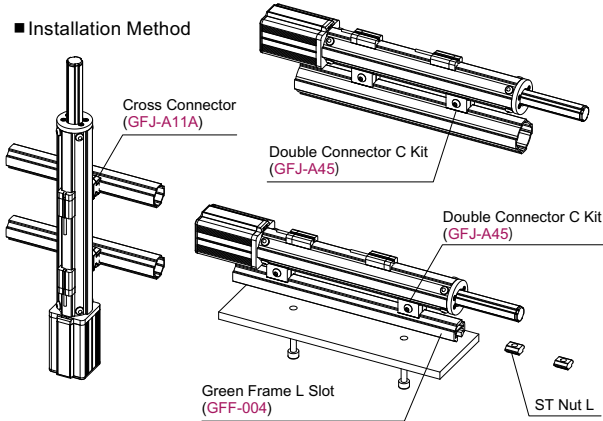
Item No.
XAR-P04

*Use when switches are prepared by customers. *Use when switches are prepared by customers.

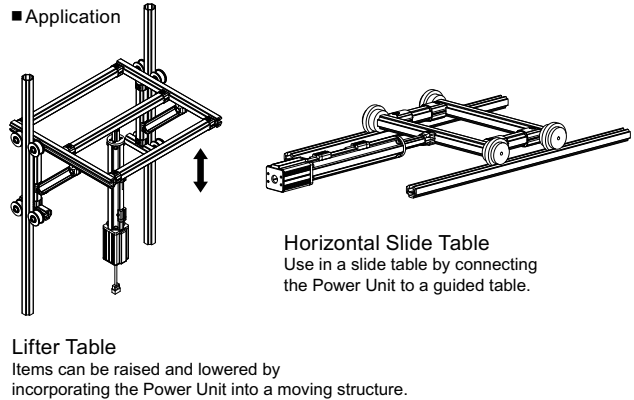
Power Unit

Installation Method / Application

Installation Method

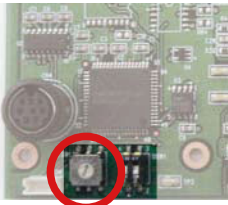


Application

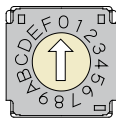


Settings · Adjustments

Nine Operating Patterns



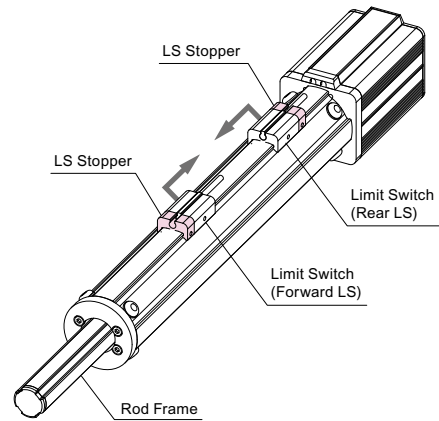
You can use any of the nine pre-programmed operating patterns below by selecting it on the setting switch inside the controller.



Turn the setting switch in the controller with a small flathead screwdriver. The pattern changes when the power is turned on again.

SW1	Operating Details
0	Advance when switch 1 is ON Retract when switch 2 is ON
1	When switch 1 is ON, move until forward LS is turned ON When switch 2 is ON, move until rear LS is turned ON
2	Advance when switch 1 is ON and return to the rear LS when OFF
3	Retract when switch 1 is ON and return to the forward LS when OFF
4	When switch 1 is ON, advance until the forward LS is ON, then retract to the rear LS
5	When switch 1 is ON, retract until the rear LS is ON, then advance to the forward LS
6	Advance when switch 1 is ON and return to the rear LS when turned OFF When returning, advance again if switch 1 is turned ON
7	Retract when switch 1 is ON and return to the forward LS when turned OFF When returning, retract again if switch 1 is turned ON
8	When switch 1 is ON, advance in increments When switch 2 is ON, retract in increments * Initial incremental value is 100mm. Options can be changed using the PC software.

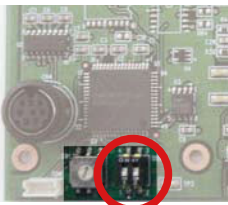
How to Adjust the Position of the Limit Switch



You can easily set the location of the limit switch by loosening the screw with a hex wrench just enough to allow it to slide.

* Because the LS stoppers are affixed at the stroke limit, do not force them.

Changing Between Four Speeds



You can select one of four operating speeds with the setting switch in the controller. By using the PC software, you can also separately set the advancing and retracting speeds, such as "fast advance" and "slow retract." The speed selector is set to "1" as the default. Advancing and retracting speeds are set to the same speed.

Speed Selection	1	2	3	4
DSW1 Setting	ON OFF OFF OFF	ON OFF ON OFF	ON OFF OFF ON	ON ON ON ON
Speed (L Type)	50mm/sec	40mm/sec	30mm/sec	20mm/sec
Speed (H Type)	200mm/sec	160mm/sec	120mm/sec	80mm/sec

Set the switch with a small flathead screwdriver.
Caution: the speed will change from the next movement onwards once the setting has been selected.

*Black indicates the switch position.

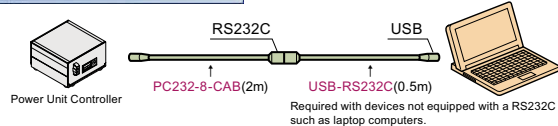
The four speed settings can also be changed using the PC software. The program can be downloaded for free from the SUS website.



[Functions]

- Change speed settings
- Change acceleration/deceleration time
- Change waiting time in operating patterns 4 and 5
- Save setting values to PC
- Print setting values
- Change parameters for eight operating patterns

* A special cable is required to connect the Power Unit controller with a PC. (PC232-8-CAB)
A USB-RS232C conversion adapter is required for a PC which has no RS232C port. (USB-RS232C)



PC Communication Cable

Item No.
PC232-8-CAB

Converter

Item No.
USB-RS232C

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

Jig

Technical Data

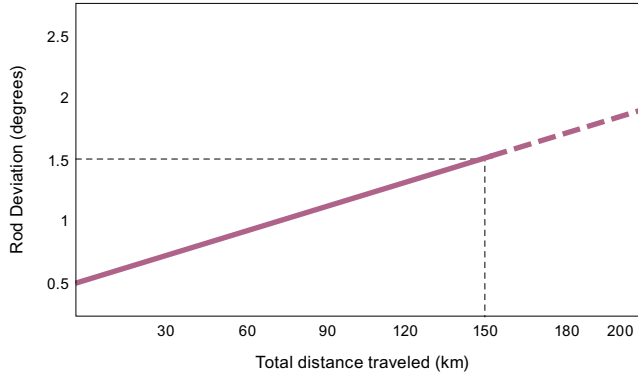
Power Unit

GF-N
28mm

Important Notes

- The Power Unit is not a high precision positioning device. It can perform actions such as “push” and “pull.” Since positioning is performed using limit switches, it is not suitable for repeated positioning.
- The Power Unit is designed to operate at a frequency of one cycle per minute, so it is not suitable for higher frequency uses.

Distance Travelled and Rod Deviation

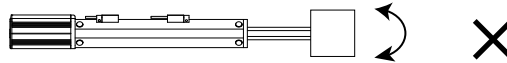


The Power Unit will reach the end of its life when the deviation at the tip is more than 1.5 degrees when the rod is extended (estimated total distance travelled: 150km).

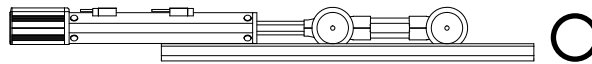
Reference: A total travel distance of 150km is equivalent to 250,000 cycles at a stroke of 300mm. The distance travelled will total 150km in about two years at a continuous rate of one cycle per minute.

- Make sure no external force interferes with the rod except in the direction of the rod's advance and retraction.

Example: When Used Horizontally



Ensure that a moment load is not applied on the rod.



Use the Power Unit with a horizontal table or an externally affixed guide to ensure that no extraneous forces interfere with its movements.

- The controller has a high frequency chopping circuit for driving the motor. As a result, it may generate external noise. This can affect equipment that handles low level signals such as measuring instruments or radio receivers, and may cause problems if used in the same device.
- Because the Power Unit does not have a safety mechanism in the event of a power outage, if an unexpected loss of power occurs, the rod may suddenly move to the stroke limit. Similarly, if the Power Unit is actively transporting an object, it may suddenly move to the stroke limit if the power supply is cut off.
- The Power Unit may not operate normally if the rod is moved to a position beyond the sensor by an external force.

Bolt
Nut

Jig

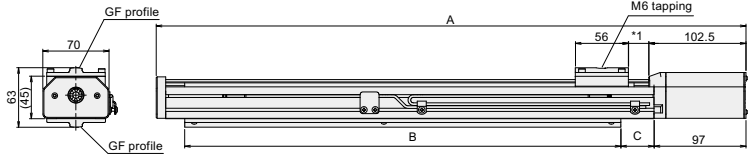
Technical
Data

Power Unit - Slider Type 50L



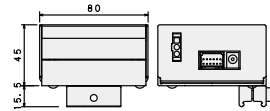
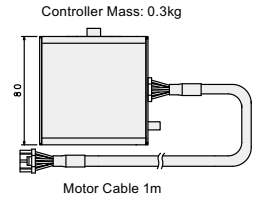
Power Unit and controller come as a set.

st Max 0.58m
Load Capacity Vertical Max 12kg
Lineup Three Types
SiO Controllable



Stroke(mm)	A	B	C	Mass(kg)
380	622	460	35	3.9
480	722	540	35	4.5
580	822	652	39	5.0

* 1: 31.5mm at nominal stroke operation



Items

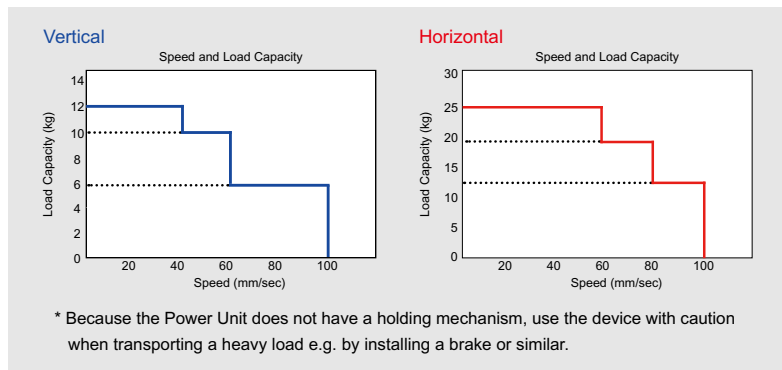
Stroke (mm)	380	480	580
Item No.	XAK-P07	XAK-P08	XAK-P09

Specifications

Maximum Speed	100mm/sec
Load Capacity at Maximum Speed *2	Vertical: 6kg Horizontal: 12kg
Motor	Stepping Motor
Guide	Linear Guide
Drive System	Ball Screw

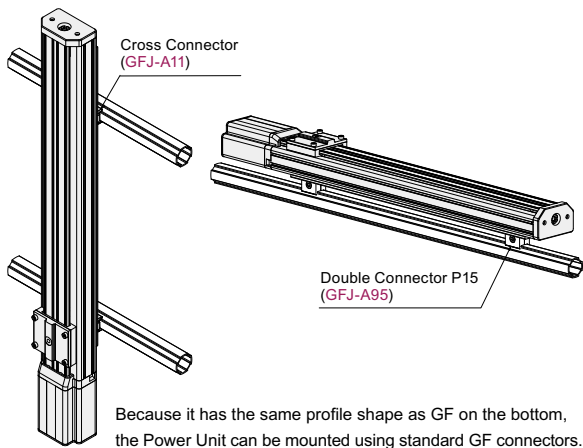
*2: Load capacity varies according to the operating speed. See graph for details.

Use the optional AC adapter (SUC-261) for the power supply.

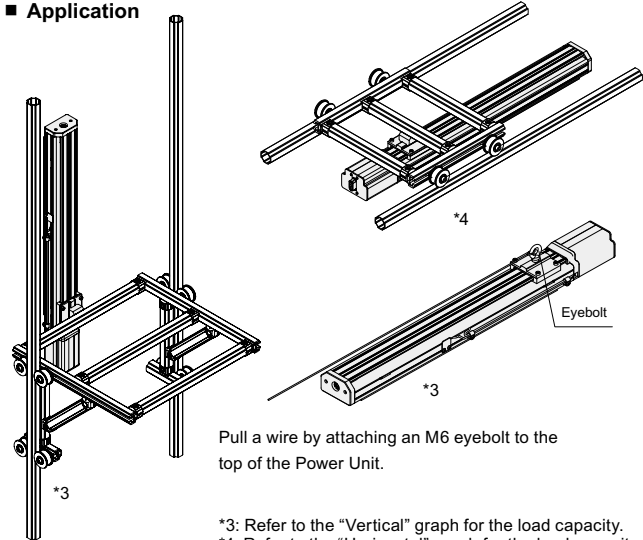


Installation · Application

Installation Method



Application

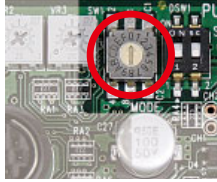


Power Unit - Slider Type 50L

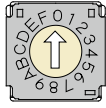
GF-N
28mm

Settings · Adjustments

Nine Operating Patterns



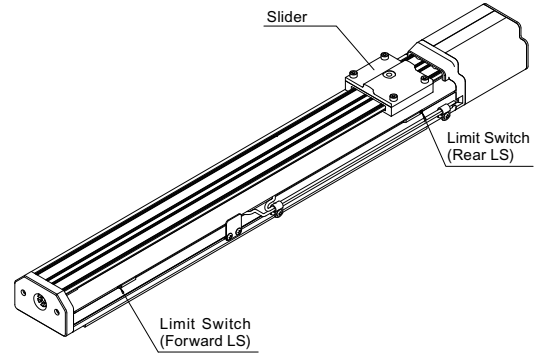
You can use any of the nine pre-programmed operating patterns below by selecting it on the setting switch inside the controller.



Turn the setting switch in the controller with a small flathead screwdriver. The pattern changes when the power is turned on again.

SW1	Operating Details
0	Advance when switch 1 is ON Retract when switch 2 is ON
1	When switch 1 is ON, move until forward LS is turned ON When switch 2 is ON, move until rear LS is turned ON
2	Advance when switch 1 is ON and return to the rear LS when OFF
3	Retract when switch 1 is ON and return to the forward LS when OFF
4	When switch 1 is ON, advance until the forward LS is ON, then retract to the rear LS
5	When switch 1 is ON, retract until the rear LS is ON, then advance to the forward LS
6	Advance when switch 1 is ON and return to the rear LS when turned OFF When returning, advance again if switch 1 is turned ON
7	Retract when switch 1 is ON and return to the forward LS when turned OFF When returning, retract again if switch 1 is turned ON
8	When switch 1 is ON, advance in increments When switch 2 is ON, retract in increments * Initial incremental value is 100mm. Options can be changed using the PC software.

Adjust the Position of the Limit Switch



You can easily set the location of the limit switch by loosening the screw with a flathead screwdriver just enough to allow it to slide.

Changing Between Four Speeds



You can select one of four operating speeds with the setting switch in the controller. By using the PC software, you can also separately set the advancing and retracting speeds, such as "fast advance" and "slow retract."
The speed selector is set to "1" as the default. Advancing and retracting speeds are set to the same speed.

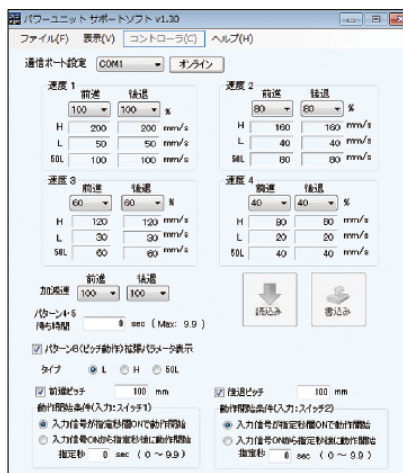
Speed Selection	1	2	3	4
DSW1 Setting				
Speed	100mm/sec	80mm/sec	60mm/sec	40mm/sec

Set the switch with a small flathead screwdriver.

Caution: the speed will change from the next movement onwards once the setting has been selected.

*Black indicates the switch position.

The four speed settings can also be changed using the PC software.
The program can be downloaded for free from the SUS website.



[Functions]

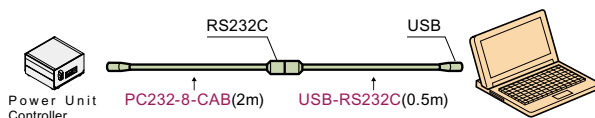
- Change speed settings
- Change acceleration/deceleration time
- Change waiting time in operating patterns 4 and 5
- Save setting values to PC
- Print setting values
- Change parameters for eight operating patterns

* A special cable is required to connect the Power Unit controller with a PC.
(PC232-8-CAB)

A USB-RS232C conversion adapter is required for a PC which has no RS232C port.

PC Communication Cable

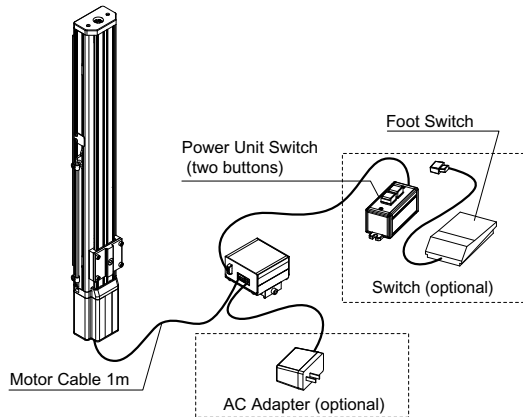
Model	PC232-8-CAB
Converter	
Model	USB-RS232C



Required with devices not equipped with a RS232C connector, such as laptop computers.

Power Unit - Slider Type 50L

Options



Power Unit Switch Cable (3m)



Use this when advance and retract switches are provided by the customer. (When installing two switches in the same place.)

Item No.

XAR-P02

Power Unit Switch (2 buttons)



Switch box for advancing and retracting.

Item No.

XAK-S046

24V Output Cable (0.3m)



Use as a power supply when using a photoelectric sensor, etc., instead of a switch. (Within a maximum of 0.1A)

Item No.

XAR-P07

Power Unit Extension Motor Cable (2m)



Use to install a device away from the controller. Maximum length of 9m (four pieces).

Item No.

XAR-P01

AC Adapter



Converts AC100V to DC24V to supply power to the controller.

Item No.

SUC-261

Cable with DC Plug (0.5m)



Use to supply power to the controller from the DC24V power supply prepared by the customer.

Item No.

IFP-A034

Power Unit Switch Cable 2 (3m)



Use this when advance and retract switches are provided by the customer. (When installing two switches in separate locations.)

Item No.

XAR-P04

Output Cable (0.3m)



Use to import the advance/retract LS signal into an external device.

Item No.

XAR-P06

Input Cable to Disable Timer (0.3m)



Use when you want to disable the timer setting in the controller.

Item No.

XAR-P08

Foot Switch (1 switch)



Foot switch for advancing movement. (Can be used for operating patterns 2 through 7.)

Item No.

XAK-S047

Important Notes

- The Power Unit is not a high precision positioning device. It can perform actions such as "push" and "pull." Since positioning is performed using limit switches, it is not suitable for repeated positioning.
- The controller has a high frequency chopping circuit for driving the motor. As a result, it may generate external noise. This can affect equipment that handles low level signals such as measuring instruments or radio receivers, and may cause problems if used in the same device.
- Because the Power Unit does not have a safety mechanism in the event of a power outage, if an unexpected loss of power occurs, the rod may suddenly move to the stroke limit. Similarly, if the Power Unit is actively transporting an object, it may suddenly move to the stroke limit if the power supply is cut off.
- The Power Unit may not operate normally if the rod is moved to a position beyond the sensor by an external force.

GF-N
28 mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S
19 mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G
43 mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

Jig

Technical Data

Power Unit Slider Type 50L with Brake

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

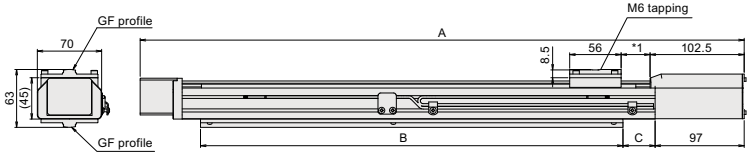
Corocon Roller

Accessory

Door Part



- st
Max
0.58m
- Load Capacity
Vertical Max
12 kg
- With
Brake
- Lineup
Three
Types
- SiO
Controllable



*1: 31.5mm at nominal stroke operation

Stroke (mm)	A	B	C	Mass(kg)
380	657.7	460	35	4.2
480	757.7	540	35	4.7
580	857.7	652	39	5.3

The Power Unit and controller come as a set.
Use the optional AC adapter (SUC-261) for the power supply.

Items

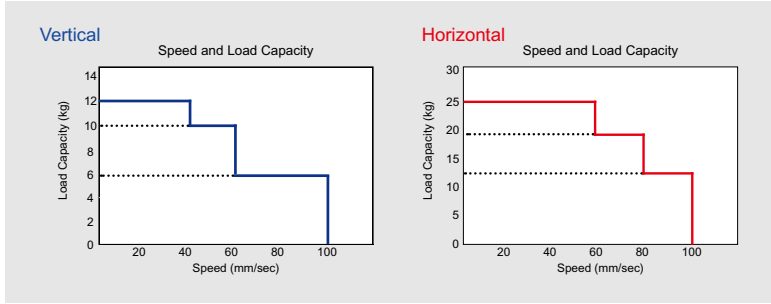
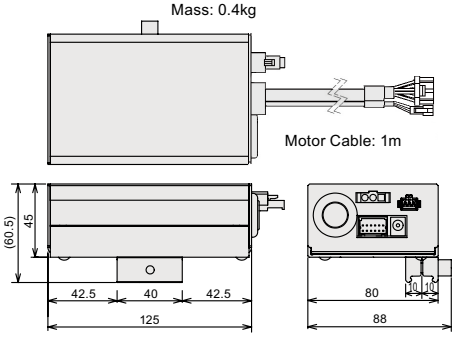
Stroke (mm)	380	480	580
Item No.	XAK-P10	XAK-P11	XAK-P12

Power Units with the PU50L brake are paired with a dedicated controller.
They cannot be used with a controller for models without brakes.

Specifications

Power Supply *2	DC24V±10%1A
Maximum Speed	100mm/sec
Load Capacity at Maximum Speed *3	Vertical: 6kg Horizontal: 12kg
Motor	Stepping Motor
Guide	Linear Guide
Drive System	Ball Screw
Brake	For retention purposes during a power loss

*2: Use the optional AC adapter (SUC-261) for the power supply.
*3: Load capacity varies according to the operating speed.
See the graph on the right for details.



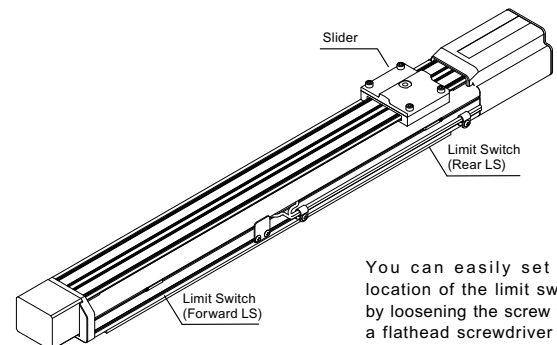
Operating Patterns



You can use any of the nine pre-programmed operating patterns below by selecting it on the setting switch inside the controller.

SW1	Operating Details
0	Advance when switch 1 is ON Retract when switch 2 is ON
1	When switch 1 is ON, move until forward LS is turned ON When switch 2 is ON, move until rear LS is turned ON
2	Advance when switch 1 is ON and return to the rear LS when OFF
3	Retract when switch 1 is ON and return to the forward LS when OFF
4	When switch 1 is ON, advance until the forward LS is ON, then retract to the rear LS
5	When switch 1 is ON, retract until the rear LS is ON, then advance to the forward LS
6	Advance when switch 1 is ON and return to the rear LS when turned OFF When returning, advance again if switch 1 is turned ON
7	Retract when switch 1 is ON and return to the forward LS when turned OFF When returning, retract again if switch 1 is turned ON
8	When switch 1 is ON, advance in increments When switch 2 is ON, retract in increments * Initial incremental value is 100mm. Options can be changed using the PC software.

How to Adjust the Position of the Limit Switch



You can easily set the location of the limit switch by loosening the screw with a flathead screwdriver just enough to allow it to slide.

About the Brake

The brake is a mechanism designed to hold the slider in place in the event of power loss or emergency stop.
The controller automatically controls the locking/release of the brake.

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

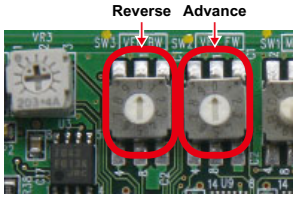
Bolt Nut

Jig

Technical Data

Power Unit Slider Type 50L with Brake

Changing the Operating Speed



You can select one of ten operating speeds by using the setting switch in the controller. The advance and reverse speeds can be set separately, such as "fast advance" and "slow reverse."

Select	0	9	8	7	6	5	4	3	2	1
Speed(mm/sec)	100	90	80	70	60	50	40	30	20	10

Set the switch with a small flathead screwdriver.

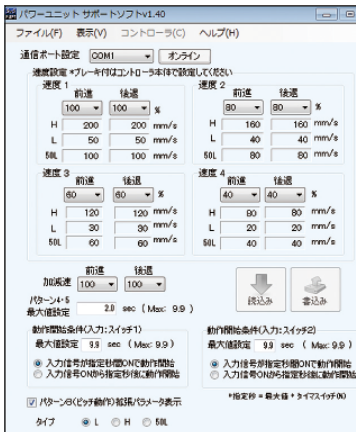
Caution: the speed will change from the next movement onwards once the setting has been selected.

* Speed setting in the PC software is not valid.

Changing the Internal Settings

PC Software

The program can be downloaded for free from the SUS website.



[Functions]

- Change acceleration/deceleration time
- Change waiting time in operating patterns 4 and 5
- Save setting values to PC
- Print setting values
- Change parameters for eight operating patterns

* A special cable is required to connect the Power Unit controller with a PC.

(PC232-8-CAB)

A USB-RS232C conversion adapter is required for a PC which has no RS232C port.

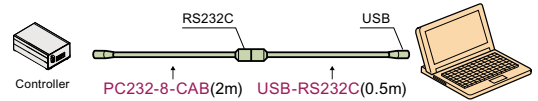
(USB-RS232C)

PC Communication Cable

Model	PC232-8-CAB
-------	-------------

Converter

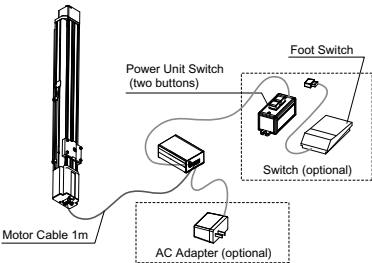
Model	USB-RS232C
-------	------------



Required with devices not equipped with a RS232C connector, such as laptop computers.

Options

A variety of options is available.



AC Adapter



Converts AC100V to DC24V to supply power to the controller.

Item No.
SUC-261

Power Unit Switch Cable (3m)



Use this when advance and retract switches are provided by the customer. (When installing two switches in the same place.)

Item No.
XAR-P02

Extension Motor Cable with Brake (2 m)



Use to install a device away from the controller. Maximum length of 9m (four pieces).

Item No.
XAR-P09

Power Unit Switch Cable 2 (3m)



Use this when advance and retract switches are provided by the customer. (When installing two switches in separate locations.)

Item No.
XAR-P04

Power Unit Switch (two buttons)



Switch box for advancing and retracting.

Item No.
XAK-S046

Foot Switch (one switch)



Foot switch for advancing movement. (Can be used for operating patterns 2 through 7.)

Item No.
XAK-S047

Important Notes

- The Power Unit is not a high precision positioning device. It can perform actions such as "push" and "pull." Since positioning is performed using limit switches, it is not suitable for repeated positioning.
- The controller has a high frequency chopping circuit for driving the motor. As a result, it may generate external noise. This can affect equipment that handles low level signals such as measuring instruments or radio receivers, and may cause problems if used in the same device.
- The Power Unit may not operate normally if the rod is moved to a position beyond the sensor by an external force.
- This brake is used to hold the slider in place when the power supply is cut off. It cannot be used for actual braking.

Electric Winch

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part



Easy Installation

Load Capacity Vertical Max
15 kg

Lineup Four Types

SiO Controllable

The Electric Winch is a power-driven unit that assists with up/down movement by winding and unwinding a nylon wire. The winch can easily raise or lower with a switch, completely eliminating the need for difficult operation.

1 Select from Two Types of Speeds and Loads
With a moveable distance of 1,000mm, the Electric Winch can be used for a variety of applications.
L Type Maximum Speed: 40mm/sec, Load Capacity: 15kg
H Type Maximum Speed: 200mm/sec, Load Capacity: 3kg

3 Easy to Control
The dedicated controller uses the same system as the Power Unit. The winch operates with only two signals: wind and unwind. Movement pattern and speed can be easily adjusted.

2 Easy to Connect to GF Frames
The bottom of the Electric Winch is fitted with GF compatible connectors, making it easy to mount.

4 Wide Range of Options
Indicators for raising and lowering limits such as photoelectric sensors and limit switches can be attached with GF connectors. There's no need to deal with troublesome wiring; simply plug in the connectors. A variety of additional options is also available.

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

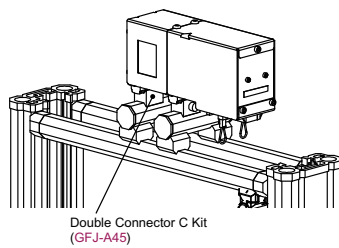
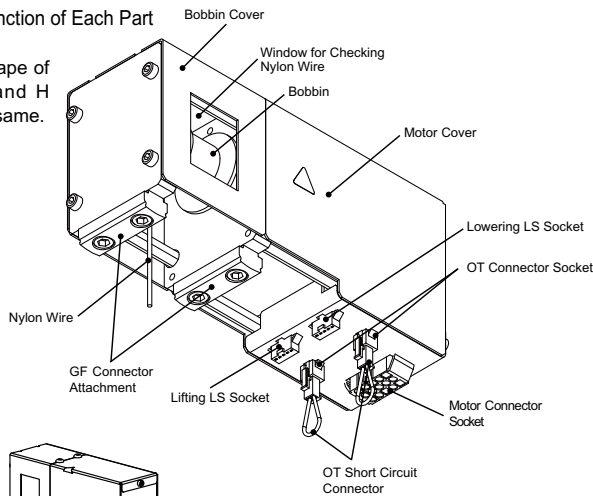
Accessory

Door Part

Electric Winch Main Body

Name / Function of Each Part

The outer shape of the L type and H type are the same.

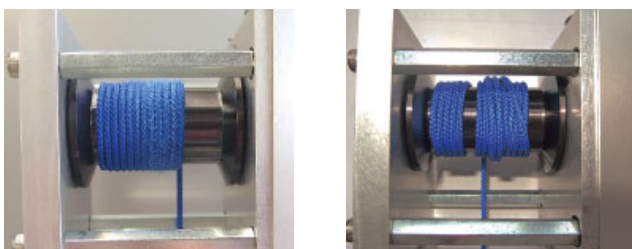


Installation Method

GF profile attachments are affixed to the bottom of the main body, allowing for installation with standard GF connectors. GF Connector Size: GF-N series attachments are fixed in two places.

About the Nylon Wire

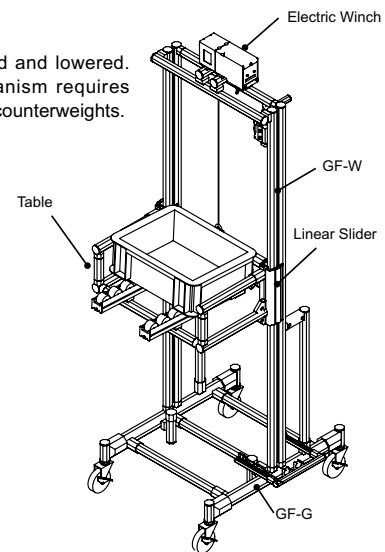
Nylon wire wears out over time. Be sure that it winds evenly. Risk of snapping increases when overlapping occurs.



Example of Use

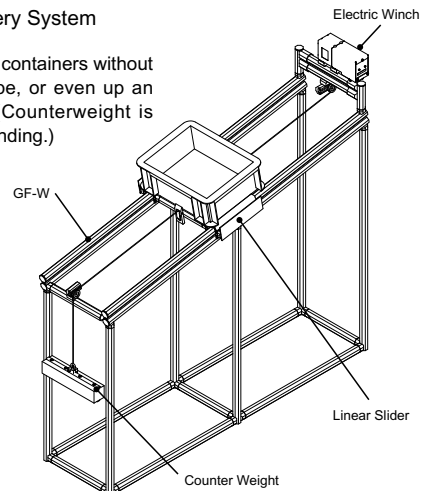
Container Lifter

Table can be raised and lowered. This simple mechanism requires neither springs nor counterweights.



Lateral Delivery System

Laterally transfer containers without a downward slope, or even up an inclined slope. (Counterweight is required for unwinding.)

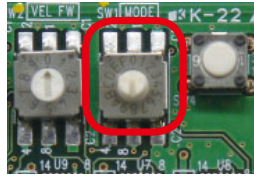


Electric Winch

Controller

Operating Pattern

Simply select one of the eight pre-programmed operating patterns from the chart below by using the setting switch in the controller.



SW1	Operating Details
0	Wind when switch 1 is ON Unwind when switch 2 is ON
1	When switch 1 is ON, move until lifting LS turns ON When switch 2 is ON, move until lowering LS turns ON
2	Wind while switch 1 is ON, then return to the lowering LS when OFF
3	Unwind while switch 1 is ON, then return to the lifting LS when OFF
4	When switch 1 is ON, wind until the lifting LS turns ON, then return to the lowering LS
5	When switch 1 is ON, unwind until the lowering LS turns ON, then return to the lifting LS
6	Wind while switch 1 is ON and return to the lowering LS when OFF When returning, wind again if switch 1 is turned ON
7	Unwind while switch 1 is ON and return to the lifting LS when OFF When returning, unwind again if switch 1 is turned ON

* Use of options 8-F is prohibited. Do not select.

Input Signal

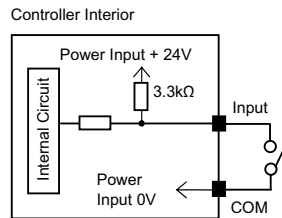
Switch Connector

No.	Signal Name	Function
1	SW1	Switch 1 input
2	SW2	Switch 2 input
3	COM	COM input

Input Connector to Disable Timer (Inside Controller)

No.	Signal Name	Function
1	SWTC1	Disable the switch 1 input timer
2	SWTC2	Disable the switch 2 input timer
3	COM	COM input

Category	Specifications
Input Voltage	DC24V±10%
Input Current	Approx. 7mA/DC2V



PC Software

The acceleration/deceleration settings can be changed using the PC software. The program can be downloaded for free from the SUS website.

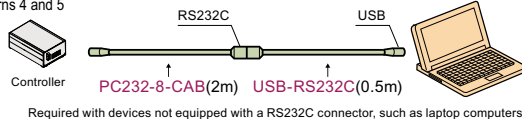


- PC Communication Cable**
Model: **PC232-8-CAB**
- Converter**
Model: **USB-RS232C**
- Electric Winch Support Software (CD)**
Model: **XAT-019**

Supported OS: Windows 7, 8, 8.1, 10 (32/64-bit version) *Even with the above OS, depending on the model, the acceleration/deceleration setting may not operate properly.

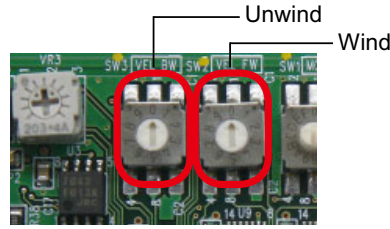
[Functions]

- Set acceleration/deceleration time
- Change waiting time in operating patterns 4 and 5
- Set stroke
- Set conditions to start operation
- Save setting values to PC
- Print setting values, etc.



Required with devices not equipped with a RS232C connector, such as laptop computers.

Changing the Operating Speed



You can select one of ten operating speeds by using the setting switch in the controller.

The winding and unwinding speeds can be set separately, such as "fast wind" and "slow unwind."

Select	0	9	8	7	6	5	4	3	2	1
L Speed(mm/sec)	40	36	32	28	24	20	16	12	8	4
H Speed(mm/sec)	200	180	160	140	120	100	80	60	40	20

Output Signal

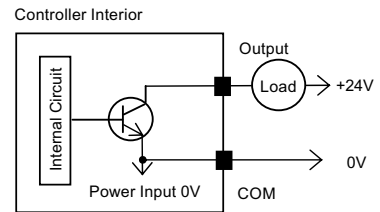
External Output Connector (inside controller)

No.	Signal Name	Function
1	D-LS	Turns ON when the lowering LS is ON
2	-	Unused
3	U-LS	Turns ON when the lifting LS is ON
4	RDY	Turns on when power is ON and turns OFF during alarm
5	MOVE	Turns ON during operation
6	COM	COM output

24V Output Connector (inside controller)

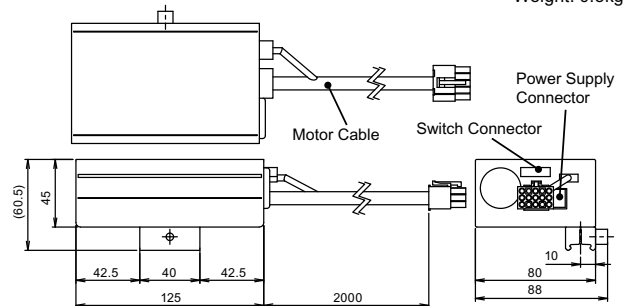
No.	Signal Name	Function
1	24V	DC 24V output
2	0V	Use at a maximum of 0.1A or less

Category	Specifications
Load Voltage	DC24V±10%
Maximum Load Current	20mA/1 Point



Outside Dimensions / Installation Method

Weight: 0.5kg



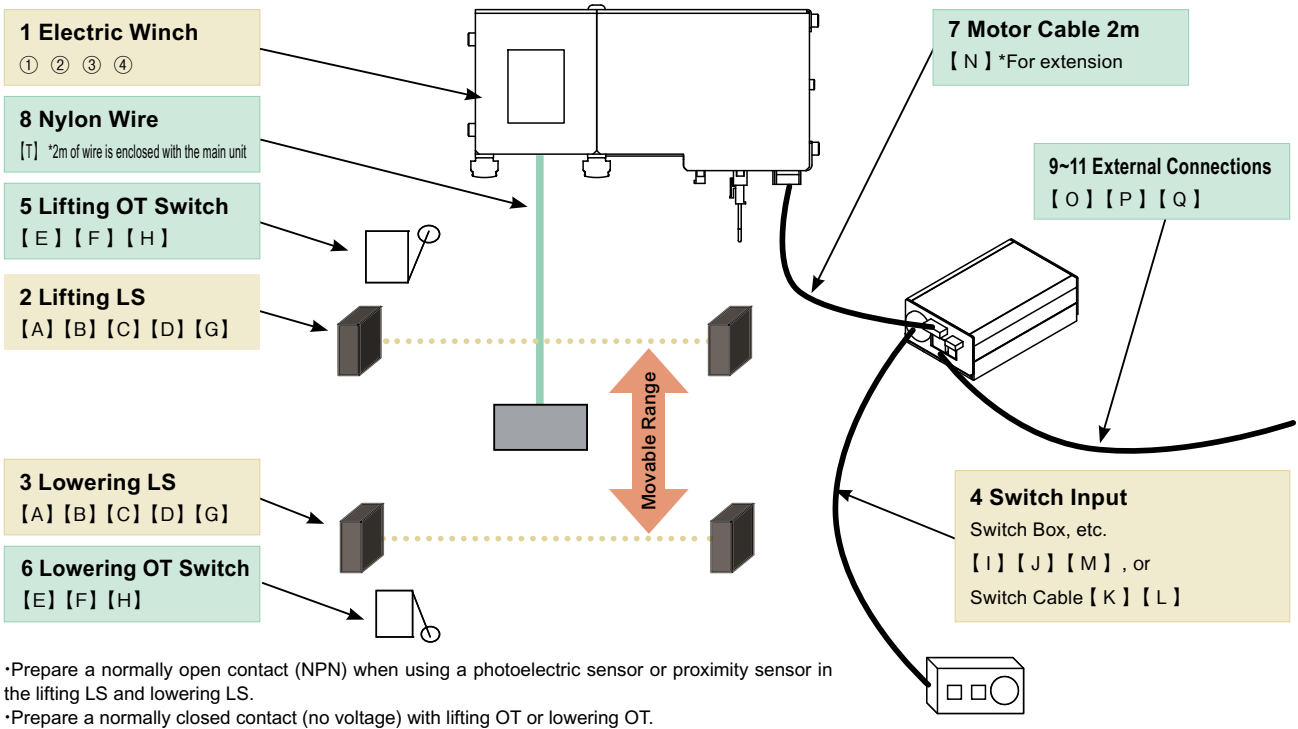
The bottom of the controller is fitted with GF compatible clamps, allowing for single-touch joint mounting.

Electric Winch

■ Device Selection

■ Parts Configuration

Parts configuration diagram for the Electric Winch. When using the Electric Winch, select and combine the required parts and the optional items where necessary. Items [A] through [Q] in the diagram can be found by their corresponding letters in the optional parts listed on the next page.



Electric Winch Kit (Main Unit + Controller + Power Supply)

	Name	Item No.	Main Unit	Controller	Power Supply
①	DW1000L-AC	XAK-S055	L (low speed)		With AC Adapter [R]
②	DW1000L-DC	XAK-S056			With DC Cable [S]
③	DW1000H-AC	XAK-S068	H (high speed)		With AC Adapter [R]
④	DW1000H-DC	XAK-S069			With DC Cable [S]

■ Component Selection Table

After checking the diagram above, select one part at a time for each item in the table to complete the selection of necessary components.

	No.	Item Name	Option	Item No.	Quantity
Selection Required	1	Electric Winch Kit	① ② ③ ④		
	2	Lifting LS	A B C D G		
	3	Lowering LS	A B C D G		
	4	Switch Input	I J M K L		
Optional Selection	5	Lifting OT Switch	E F H		
	6	Lowering OT Switch	E F H		
	7	Motor Extension Table	N	XAR-024	
	8	Nylon Wire*	T	GFW-461	
	9	External Connection	O P Q		
	10	External Connection	O P Q		
	11	External Connection	O P Q		
	12				

*2m of nylon wire is enclosed within the main body of the unit.

■ Electric Winch Selection / Simple Quotation Tool



When considering an Electric Winch, check the FA website. There you will find convenient tools for parts selection and simple quotation. Easily select parts according to your preferred configuration from the available options and submit them for quotation.

URL

<https://fa.sus.co.jp/products/gf/winch/estimate.php>



Electric Winch

Optional Parts

[A] Photoelectric Sensor for DW



Item No.
XAK-S058

Transmission-type photoelectric sensor used for the lifting and lowering LS.
Detection Distance: 600mm Cable Length: 2m
Sensor Model: PR-F51N3 (Keyence)

[D] Limit Switch for DW (with GF-S)



Item No.
XAK-S061

[C] comes with a GF-S frame.
Adjustment Range X: 33mm, Z: 43mm

[G] Sensor Cable for DW (2m)



Item No.
XAK-S062

LS cable for the customer to connect the photoelectric sensors, limit switches, etc.

[J] Switch for DW (two buttons & EMG)



Item No.
XAK-S057

Operation Switch + Emergency Stop
Cable Length: 3m

[M] Foot Switch (one switch)



Item No.
XAK-S047

Foot switch for operation. Cable Length: 1m
(Can be used for operating patterns 2 through 7.)

[P] Input Cable to Disable Timer



Item No.
XAR-P08

Use to disable the timer setting in the controller.
Length 0.3m

[R] AC Adapter for DW



Item No.
XAP-B229

Dedicated AC adapter for DW1000
DC24V 1.6A Cable Length: 3m

[B] DW Photoelectric Sensor (with GFS)



Item No.
XAK-S059

[A] comes with a GF-S frame.
Adjustment Range X: 560mm, Y: 66mm

[E] OT Switch for DW



Item No.
XAK-S063

Switch installed outside the lifting and lowering range for use as an emergency stop.
Distance to Activation: Maximum 6mm Cable Length: 2m
Switch Model: D4MC-2000 (OMRON)

[H] OT Switch Cable for DW (2m)



Item No.
XAK-S065

Cable for the customer to connect an emergency stop limit switch, etc. Use a limit switch with a normally closed, non-voltage contact for connecting.

[K] Switch Cable (3m)



Item No.
XAR-P02

Use when lifting and lowering switches are prepared by the customer.
(Use when installing two switches in the same location.)

[N] Motor Extension Cable (2m)



Item No.
XAR-024

Use if you want to install the device farther away from the controller.
Maximum length of 10m. (four pieces)

[Q] Output Cable (6P)



Item No.
XAR-019

Cable to connect the controller output to a PLC, etc.
Length: 0.15m

[S] DC Cable With Plug (0.5m)



Item No.
IFP-A034

Use to supply power to a controller from a DC24V power supply prepared by the customer.

[C] Limit Switch for DW



Item No.
XAK-S060

Limit switch used for the lowering and lifting LS.
Distance to Activation: Maximum 6mm
Cable Length: 2m
Switch Model: D4MC-2000 (OMRON)

[F] OT Switch for DW (with GF-S)



Item No.
XAK-S064

[E] comes with a GF-S frame.
Adjustment Range X: 33mm, Z: 43mm

[I] Switch (two buttons)



Item No.
XAK-S046

Operation Switch
Cable Length: 3m

[L] Switch Cable 2 (3m)



Item No.
XAR-P04

Use when lifting and lowering switches are prepared by the customer.
(Use when installing two switches in the same location.)

[O] 24V Output Cable



Item No.
XAR-P07

Use to connect to a power supply when using a photoelectric sensor, etc. Length: 0.3m

[T] Fishing Gut Wire (2m)



Item No.
GFW-461

Replacement Fishing Gut Wire. ϕ 2

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

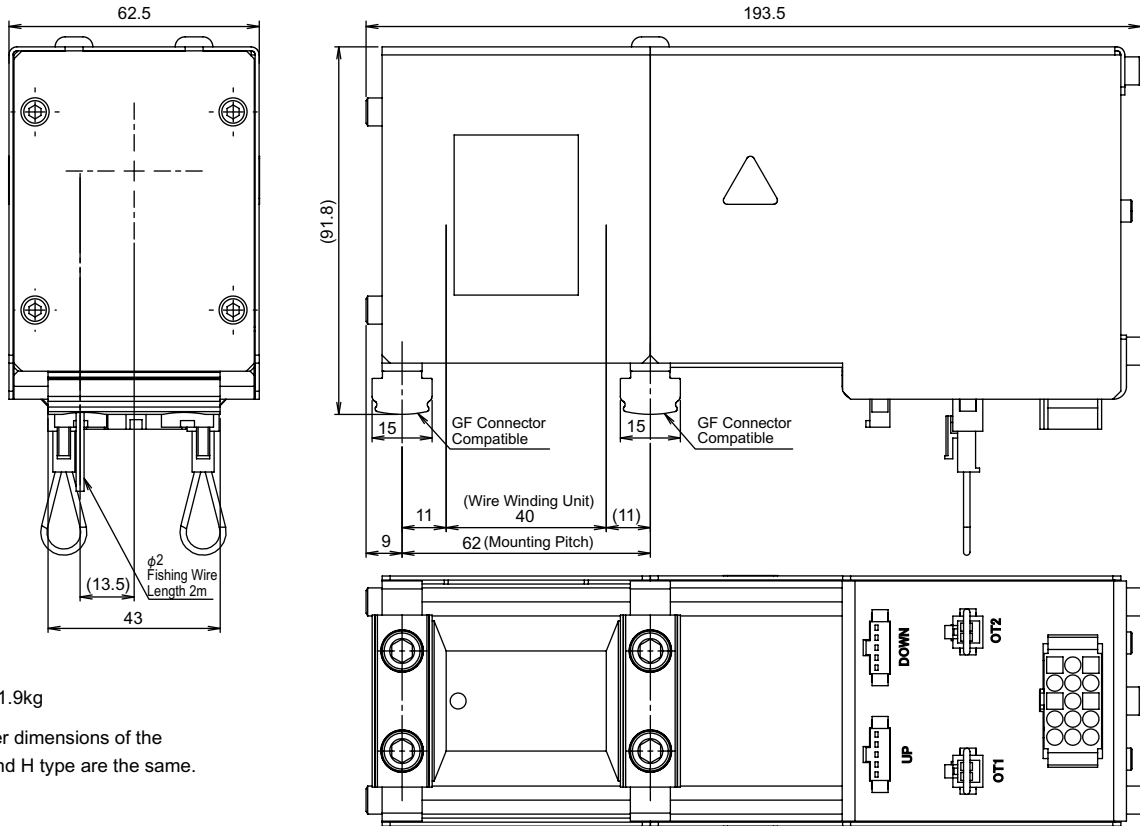
Jig

Technical Data

Electric Winch

GF-N
28mm

Outer Dimensions



Weight: 1.9kg

The outer dimensions of the L type and H type are the same.

Specifications

Model	DW1000L-AC / DW1000L-DC	DW1000H-AC / DW1000H-DC
Maximum Operating Speed *1	40mm/sec	200mm/sec
Load Capacity	15kg	3kg
Movable Distance	1,000mm	
Power Supply Voltage and Capacity	DC24V \pm 10% Maximum 1.2A (AC: with AC adapter DC: with DC cable)	
Driving Force	Geared Stepping Motor	
Fishing Wire	$\phi 2$ (Length of attached wire: 2m)	
Operating Ambient Temperature and Humidity	Temperature 0°C ~40°C / Humidity 85% RH or less / No condensation	
Operating Environment	Indoor area not exposed to direct sunlight	
Operating Atmosphere	No corrosive gas, oil mist, flammable gas, or dust	
Storage Temperature and Humidity	Temperature -10°C ~50°C / Humidity 85% RH or less / No condensation or freezing	

*1 Speed may fluctuate due to elongation of the wire, etc.

Important Notes

- The fishing wire that is wound in this product is 1000mm long. If the length exceeds 1000mm, the wire will overlap during winding, significantly reducing the fishing wire's lifespan.
- The distance from the winding section of this device to the lifted end should be 200mm or more. Be sure to keep the center of the winding section and the center of the load at a perpendicular angle. If the center position is out of alignment, the winding of the fishing wire will be unbalanced, significantly reducing the wire's lifespan.
- Gather and secure the cables for the controller, LS, etc. along the frames of the base to ensure that they will not get caught in the up/down motion during operation.



GF-N 28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data



Drawing Support Software
→ P.22



Design Support Service
→ P.22



Assembled Delivery
→ P.23



RoHS
→ P.227

Electric Stopper

GF-N 28mm

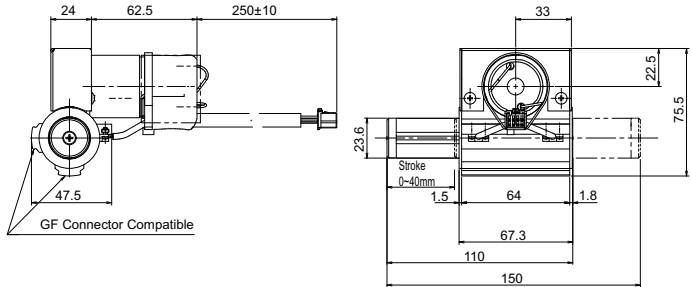
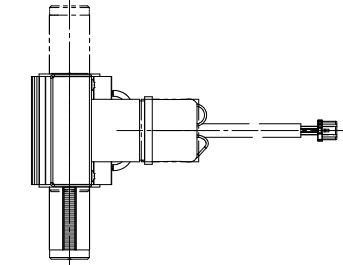
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item**
- Corocon Roller
- Accessory
- Door Part



An electric actuator designed to drive a rod with a DC motor to start and stop objects travelling on a conveyor.

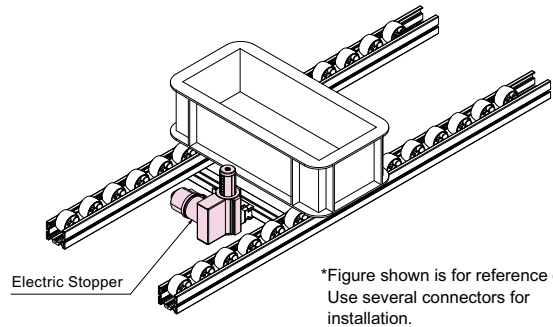
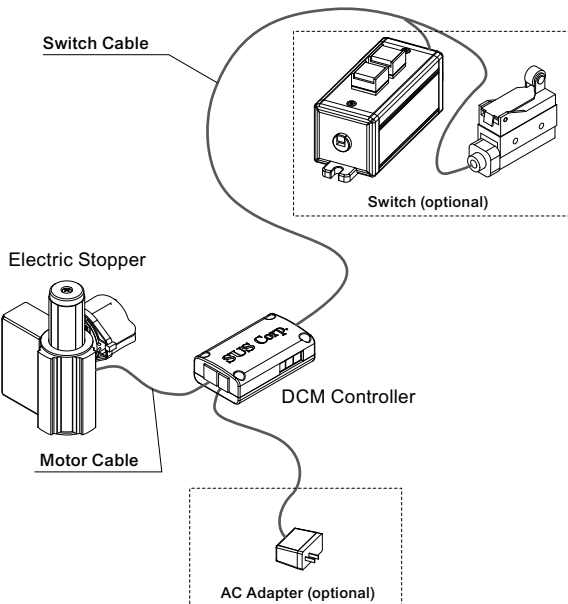
Two GF profile extrusions are located on the side of the main unit, allowing it to easily attach to any GF structure.

■ **Material/Technical Data**
Drive System : DC Motor
Material : Main Unit: Extruded Aluminum
 Controller Case: ABS
Work Weight : 20 kg 5 pieces
 ■ **Kit Contents**
 Electric Stopper
 DCM Controller



Item No.	XAK-S050
Specifications	
Adjustment Range	Minimum 8mm / Maximum 40mm
Rod Movement Speed	10~48mm/sec
Maximum Collision Speed with Objects	Weight up to 20kg / Speed up to 600mm/sec
Power Consumption	Approx. 20W
Motor Lifespan	150,000 or more cycles (with no load on top of the rod)

Basic Configuration



Options

AC Adapter



Item No.
SUC-261

Switch for Electric Stopper (two buttons)



Item No.
XAK-S049

Switch Cable for Electric Stopper (3m)



Item No.
XAR-015

Output Cable for Electric Stopper (0.15m)

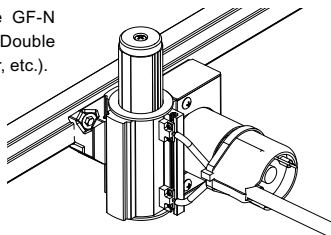


Item No.
XAR-019

*Use when switches are prepared by the customer.

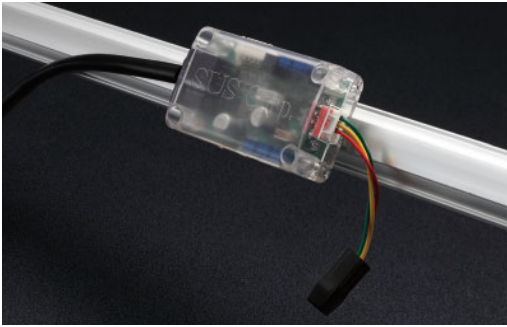
Installation Method

Attach using a 28mm type GF-N connector (Multi Connector, Double Connector, Cross Connector, etc.).

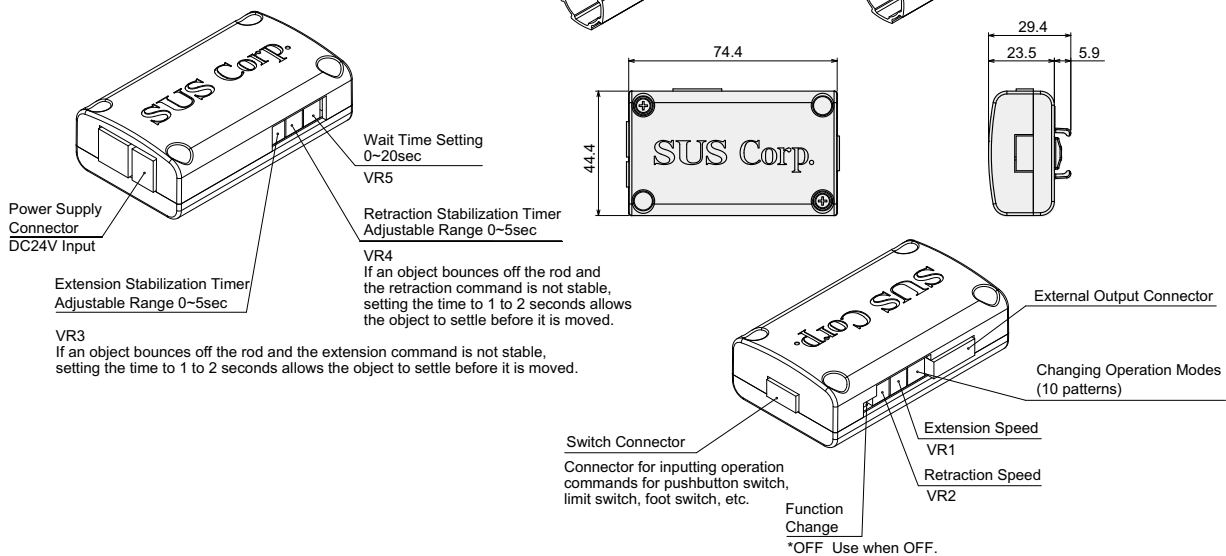


Electric Stopper

DCM Controller



This is the controller for the Electric Stopper.
 Attach to Green Frame with a single-touch joint connector.
 Operation mode can be selected from 10 pre-programmed patterns. (See below)
 Speed and timer settings can also be adjusted.



Operating Mode (10 patterns)

SW1	Operating Details
0	Extend when forward command is ON Retract when reverse command is ON
1	Move until the forward LS is turned ON when the forward command is ON Move until the rear LS is turned ON when the reverse command is ON
2	Extend when the forward command is ON and return to the rear LS when OFF
3	Retract when the reverse command is ON and return to the forward LS when OFF
4	Extend until the forward LS is ON when the forward command is ON, then return to the rear LS after the preset time passes
5	Retract until the rear LS is ON when the reverse command is ON, then return to the forward LS after the preset time passes
6	Extend when the forward command is ON and return to the rear LS when turned OFF While returning, extend again if the forward command is turned ON
7	Retract when the reverse command is ON and return to the forward LS when turned OFF While returning, retract again if the reverse command is turned ON
8	Extend when the forward command is ON and return to the rear LS when turned OFF While returning, extend again if the forward command is turned ON When power is turned ON and the forward command is in the ON position, move until the forward LS is ON When the forward command is in the OFF position and the power is turned ON, move until the rear LS is ON
9	Retract when the reverse command is ON and return to the forward LS when turned off While returning, retract again if the reverse command is turned ON When the power is turned ON and the reverse command is in the ON position, move until the rear LS is ON When the reverse command is in the OFF position and the power is turned ON, move until the forward LS is ON

External Input / Output Connector

Pin No.	Signal Name	
1	Forward LS	Turns ON when the forward LS is ON
2	Middle LS	Not in use
3	Rear LS	Turns ON when the rear LS is ON
4	R D Y	Turns ON when power is turned on. Turns OFF during alarm
5	In Operation	Turn ON during operation
6	C O M	Output Common

Important Notes

- This device cannot be used for positioning applications utilizing the movements of the rod. The rod's operating end (stop position) is not consistent and may vary even when the motor brush is worn out due to extended use.
- A DC brush motor is used. As a result, it may generate external noise which increases over time as the brush wears out. This can affect equipment that handles low level signals such as measuring instruments or radio receivers, and may cause problems if used in the same device.

Starter Roller

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part



Horizontal Transport

Load Capacity
10 kg

Height Adjustable

All Rollers Compatible

Cassette Type Exchange

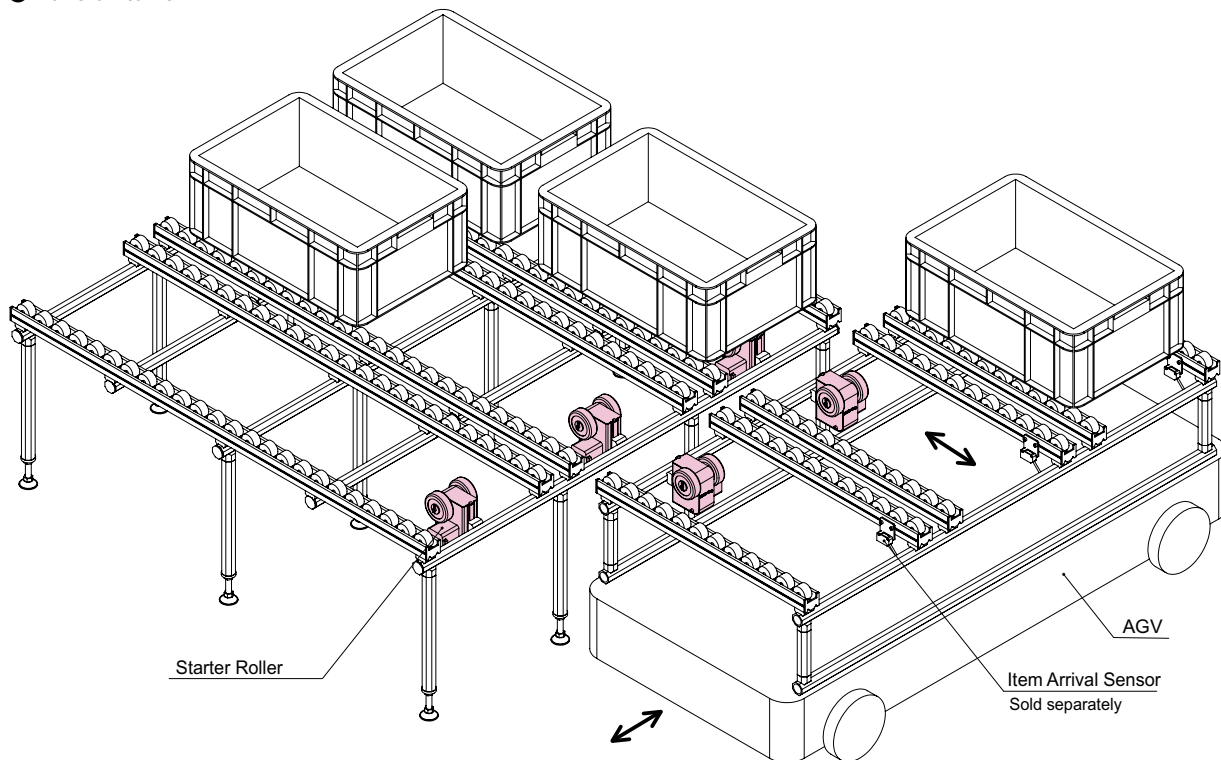
SiO Controllable

Lateral transport without the need for an incline.
Compact electric roller.

- Items weighing up to 10kg can be transported on horizontal rollers. (Load capacity varies depending on the shape and material of the item's bottom face.)
- Compact power source with an outer dimension of 120mm.
- Height adjustable. Compatible with all corocon rollers.
- The roller unit and gear unit are cassette types which can be easily replaced. Maintenance is simple.

Example of Use

● Transfer Items



GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

Installing and Using the Starter Roller

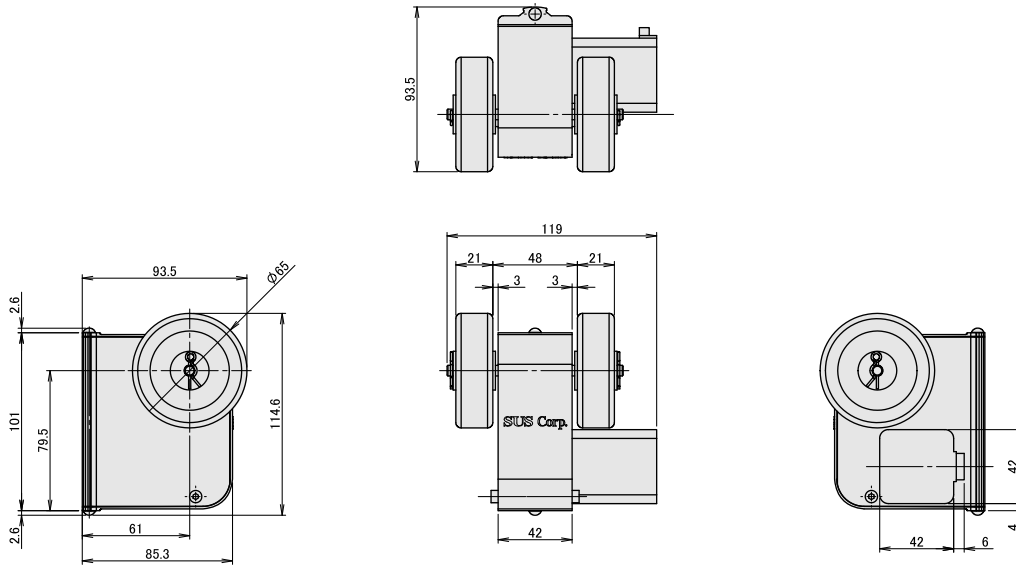
Take note the following points before installing the Starter Roller.

- ① Set the height so that the Starter Roller is 0~0.5mm higher than the corocon rollers.
- ② Do not apply excessive external force or strong impacts to the main unit.
- ③ Do not pull or twist the motor leads, connectors, or sensor cables.
- ④ Do not store the main unit near a strong magnetic field or strong magnetic object for a long period of time.



Starter Roller

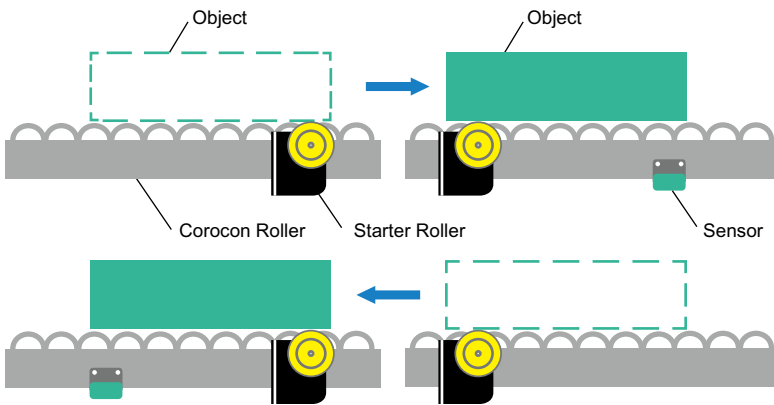
■ Dimensions



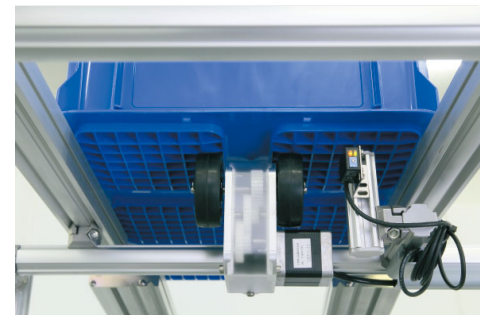
Name	Item No.
Starter Roller	XEM-030

■ Operation

Lateral Transport (forward or backward)



■ Example of Use



■ Specifications

Speed	417mm/s (10000PPS)	334mm/s (8000PPS)	250mm/s (6000PPS)	165mm/s (4000PPS)
Load Capacity	3kg (* 1, * 2)	6kg (* 1, * 2)	10kg (* 1, * 2)	10kg (* 1, * 2)
Acceleration and Deceleration	100ms			
Main Unit	Extruded Aluminum			
Deceleration	Gear Ratio 1/12.2			
Roller	φ 65 Rubber Wheel			
Cover	Polycarbonate			
Motor	Stepping Motor (two phase unipolar)			
Control System	Starter Roller Controller			
Application	Transfer objects across level or slight inclines			

*1: For installation on horizontal rollers. *2: Excluding use with impact.



Drawing Support Software
→ P.22



Design Support Service
→ P.22



Assembled Delivery Service
→ P.23



RoHS
→ P.227

Starter Roller

GF-N
28mm

Settings · Adjustments

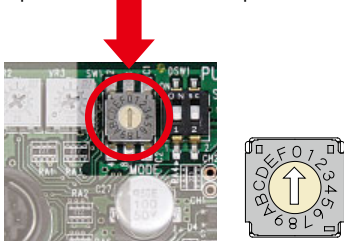
Operating Pattern

Four Operating Patterns

SW1	Operating Details
0	Rotate forward while switch 1 is ON Rotate in reverse while switch 2 is ON
1	Rotate forward when switch 1 is ON and stop when switch 2 is ON Rotate in reverse when switch 2 is ON and stop when switch 1 is ON
2	Rotate forward when switch 1 is ON and stop when switch 1 is ON Rotate in reverse when switch 2 is ON and stop when switch 2 is ON
3	Rotate forward when switch 1 is ON and stop after a set number of rotations Rotate in reverse when switch 2 is ON and stop after a set number of rotations

Selection Method

- Turn the switch with a small flathead screwdriver to select.
- Take care not to touch the components on the circuit board when setting the operation.
- The pattern changes when the power is turned on again.



PC Software (Starter Roller support software setting screen)

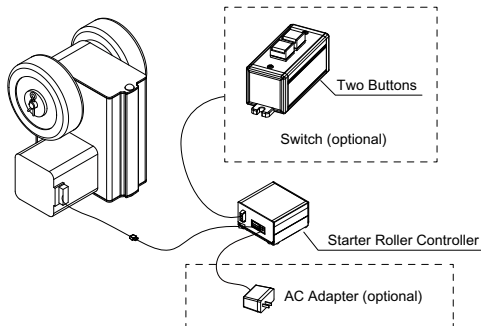
The number of rotations can be set using the PC software "Starter Roller Support Software."



*The "Starter Roller Support Software" can be downloaded for free from the SUS website.

GF-S
19mm

Options



Switch (two buttons)



Item No.
XAK-S046

Extension Motor Cable



Item No.
XAR-P01

Starter Roller Cassette



Item No.
GFA-D31

AC Adapter (DC24V 1A)



Item No.
SUC-261

Switch Cable



Item No.
XAR-P02

Power Unit Switch Cable 2 (3m)



Item No.
XAR-P04

Power Unit Output Cable (2m)



Item No.
SUC-191

*You may use the "Power Unit Output Cable (2m)" to connect the SiO to the Starter Roller.

19
mm

28
mm

43
mm



GF-N 28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data

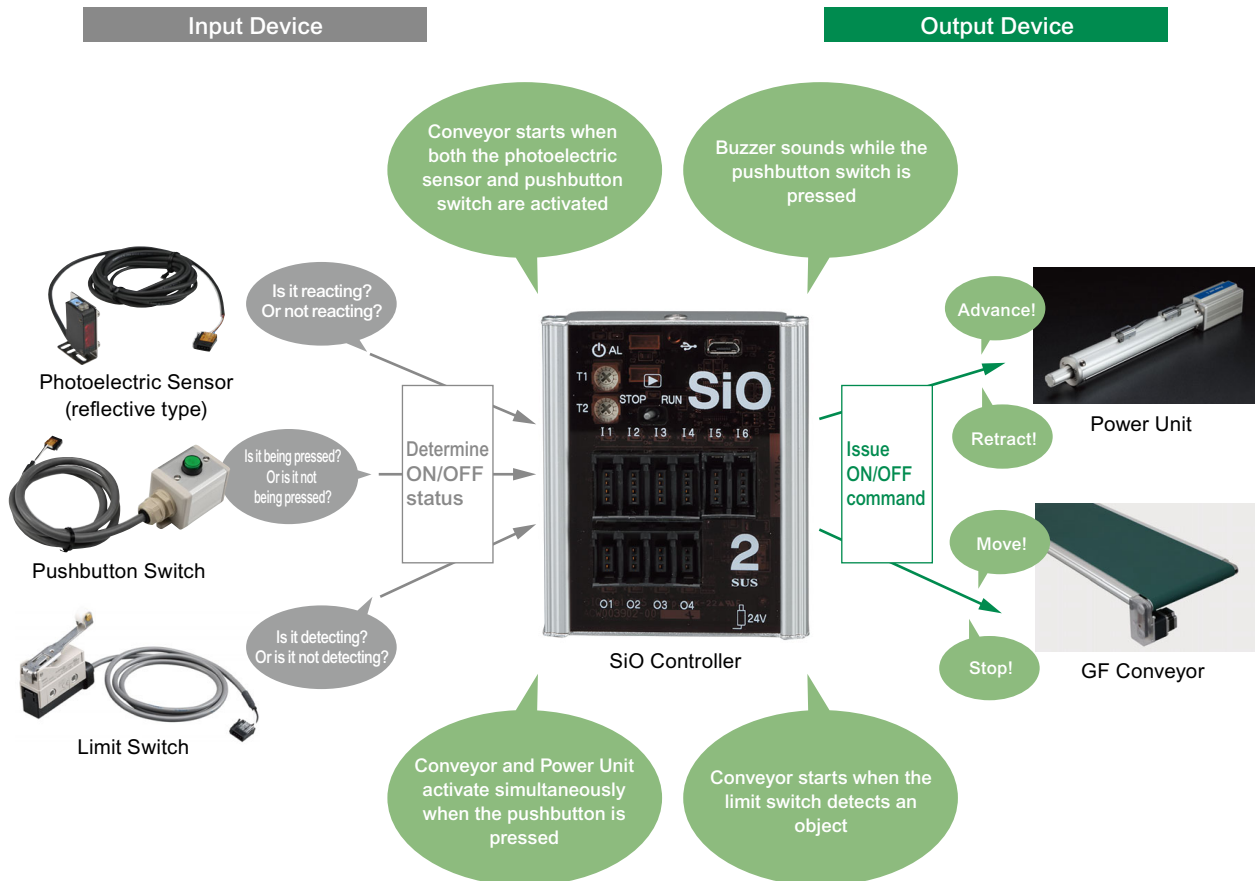
SiO

What is SiO Controller?

Function

You can send an ON/OFF command to an output device by observing the ON/OFF status of an input device.

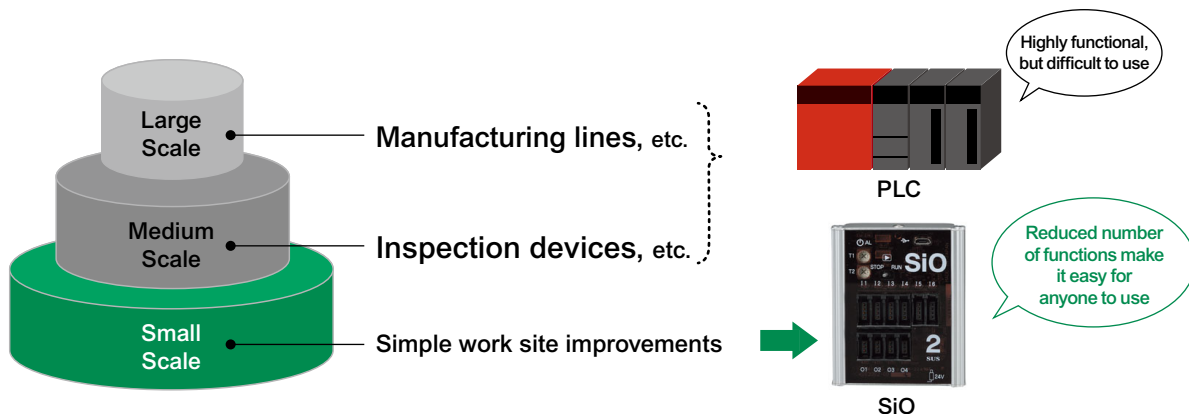
Set output conditions on the SiO Controller. When the conditions are met, a command is issued to the output device.



Applications

Ideal for simple work site improvements or automating karakuri in places where a PLC would be “over-engineering.”

When setting up an automated system in a factory, it used to be common practice to use a PLC (programmable logic controller). By using the SiO Controller, you can make simple improvements to the work site in places that could benefit from automation, but don't call for a full PLC.



How to Quickly Set Up SiO

1

Select Devices

Select the required devices. As options, we offer a large number of input/output devices and extension cables that can be used right out of the box.

Options are on P.103~

Selection From Our Diverse Lineup

Input Devices

Choose the one that best suits your operation, items, etc.



Photoelectric Sensor Transmission Type (SUC-196)



Proximity Sensor (SUC-194)

Output Devices

In addition to buzzers, you can also use electric components such as Power Units.



Buzzer (SUC-206)



Power Unit

Controller

Choose the number of input and output points and other necessary parts according to your situation.



2

Connect

Simply plug the selected input/output device into the SiO Controller. Plug in the AC adapter to turn on the power.



3

Program SiO

Set the conditions for controlling the input/output devices with "SiO Programmer," the free, dedicated software for Windows.

By choosing from drop-down menus of English-language options, you can easily set the required fields.

OUT	CONDITION1			
	1	2	3	4
(Example)	IN1	ON	AND	IN2
OUT1 (Lamp)	INI (Sensor)	OFF	--	--
OUT2	--	--	--	--
OUT3	--	--	--	--
OUT4	--	--	--	--
OUT5	--	--	--	--

4

Start

Write your program data to the SiO Controller and it's ready for use.

SiO

SiO Controller

GF-N
28mm

SiO-N1



Item No.	XAC-052
----------	---------

8 Input/8 Output. DIN rail and GF mounting.

SiO2



Item No.	XAC-046
----------	---------

6 Input/4 Output. DIN rail and GF mounting.

GF-S
19mm

SiO3



Item No.	XAC-050
----------	---------

16 Input/16 Output. DIN rail and GF mounting. This is the maximum number of inputs and outputs.

GF-G
43mm

Bolt
Nut

Jig

Technical
Data



SiO Input Devices

*The products on this page include an e-CON connector.

Connection to SiO-C is also possible by using the e-CON Connector Terminal Block (SUC-162).

Switch Box (one button)



Item No. **SUC-203**

Box with a pushbutton switch.
Cable Length: 1m

Photoelectric Sensor (transmission type)



Item No. **SUC-196**

The sensor detects an object when it blocks the optical axis between the receiver and the transmitter. The transmitter and receiver need to be installed diagonally to align their optical axes.
[Detectable Objects] Non-transparent objects
Cable Length: 2m
[Detection Distance 0.6m]

Photoelectric Sensor (transmission type)



Item No. **SUC-277**

The sensor detects an object when it blocks the optical axis between the receiver and the transmitter. The transmitter and receiver need to be installed diagonally to align their optical axes.
[Detectable Objects] Non-transparent objects
Cable Length: 2m
[Detection Distance 20m]

Photoelectric Sensor (reflective type)



Item No. **SUC-195**

The sensor detects a target when light reflects off the object. Almost all objects, including metals, can be detected.
[Detectable Objects] Objects with a uniform color or shape
Cable Length: 2m
[Detection Distance 0.1m]

Proximity Sensor



Item No. **SUC-194**

The sensor is activated when an object approaches. Can detect objects regardless of cleanliness or shape.
[Detectable Objects] Metal, iron, aluminum, etc.
Cable Length: 2m

Flexible Rod Switch (with cover)



Item No. **SUC-200**

A switch (with cover) to mechanically detect an object.
Cable Length: 2m

Flexible Rod Switch



Item No. **SUC-201**

A switch to mechanically detect an object.
Cable Length: 2m

Limit Switch



Item No. **SUC-193**

A switch to mechanically detect an object.
Cable Length: 2m

Input Cable for Power Unit



Item No. **SUC-192**

Used to detect the forward and rear ends.
Cable Length: 2m

With Power Unit (B) Electric Stopper Input Cable for Electric Winch



Item No. **SUC-198**

Used to detect the forward and rear ends.
Cable Length: 2m

Emergency Stop Switch Box



Item No. **SUC-220**

Switch box for emergency stop. When pressed at the B point, the input turns OFF.
Cable Length: 1m

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

Jig

Technical Data

SiO Output Devices

*The products on this page include an e-CON connector.

Connection to SiO-C is also possible by using the e-CON Connector Terminal Block (SUC-162).

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

Lamp (red)



Item No. **SUC-199**

Red lamp that can be turned on or off.
Cable Length: 1m

Buzzer



Item No. **SUC-206**

Buzzer that can be sounded or silenced.
Cable Length: 1m

SMC Solenoid Valve Cable



Item No. **SUC-202**

SMC SY series solenoid valve control cable.
*Solenoid valve is not included.

Power Unit with Break Electric Winch Output Cable for GF Conveyor



Item No. **SUC-191**

Used to control forward and reverse commands.
Cable Length: 2m

Output Cable For Electric Stopper



Item No. **SUC-197**

Used to control forward and reverse commands.
Cable Length: 2m

Lamp (blue)



Item No. **SUC-288**

Blue lamp that can be turned on or off.
Cable Length: 1m

Lamp (yellow)



Item No. **SUC-289**

Yellow lamp that can be turned on or off.
Cable Length: 1m

Lamp (green)



Item No. **SUC-290**

Green lamp that can be turned on or off.
Cable Length: 1m

Voice Player



Item No. **SUC-280**

Can generate a voice.
Cable Length: 3m

Extension Cable, Input Aggregation/Output Splitter, Individual Connector

Extension Cable

Input Extension Cable (four pins)



Item No. **SUC-210**

Used to extend the length of an input cable.
Cable Length: 2m

Output Extension Cable (three pins)



Item No. **SUC-209**

Used to extend the length of an output cable.
Cable Length: 2m

Input Aggregation / Output Splitter

Input Aggregate Cable



Item No. **SUC-208**

Used to combine signals from two to three input devices into one.
Cable Length: 0.1m

Output Splitter Cable



Item No. **SUC-230**

Used when splitting a signal to output devices.
Cable Length: 0.1m

Individual Connector

Input Connector (four pins)

Quantity: 10 pieces



Item No. **SUC-212**

Can be used with SiO by crimping the wiring on the input device.

Quantity: 10 pieces

For thick line (37104-2206-000FL): 7 pieces
For thin line (37104-4080-G00FL): 3 pieces

Output Connector (three pins)

Quantity: 10 pieces



Item No. **SUC-211**

Can be used with SiO by crimping the wiring on the output device.

Quantity: 10 pieces

For thick line (37103-2206-000FL): 7 pieces
For thin line (37103-4080-G00FL): 3 pieces

Connector with Input Cable (four pins)

Quantity: 4 pieces



Item No. **SUC-286**

e-CON connector with pre-crimped cables.

Quantity: 4 pieces

Connector with Output Cable (three pins)

Quantity: 4 pieces



Item No. **SUC-287**

e-CON connector with pre-crimped cables.

Quantity: 4 pieces

e-CON Crimping Tool



Item No. **SUC-285**

e-CON special crimping tool. e-CON can be crimped with a pair of pliers, etc. This special tool moves in parallel with the pressed section to provide easier and more reliable crimping.

SiO Optional Items

I/O Cable

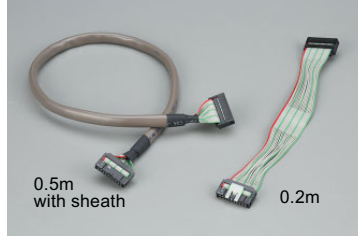
(One-sided connector 2m)



Item No.	P47-115
----------	---------

Cable for wiring SiO and input/output devices.

I/O Cable (Double-sided connector)



Item No.	SUC-118	SUC-117
Length	0.5m	0.2m

Cable to connect to the connector terminal block and the SiO Controller.

e-CON Connector Terminal Block

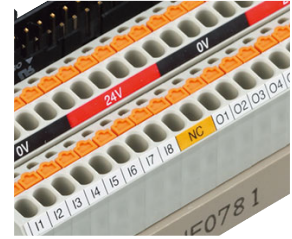


Item No.	SUC-162
----------	---------

Space-saving design with SiO dedicated e-CON terminal block. DIN rail mounting.

* I/O Cable (SUC-118 or SUC-117) and e-CON 24V Splitter Cable (SUC-207) are required to connect to SiO-C.

Connector Terminal Block (spring type)



Item No.	SUC-147
----------	---------

Space-saving design with a special spring-type terminal block for the SiO. DIN rail mounting.

(External Dimensions: W43×D78.8×H46)

* I/O Cable (SUC-118 or SUC-117) and 24V Splitter Cable (SUC-120) are required to connect to SiO-C.

Connector Terminal Block (screw type)



Item No.	SUC-119
----------	---------

Threaded connector terminal block. DIN rail mounting.

* I/O cable (SUC-118 or SUC-117) and 24V splitter cable (SUC-120) are required to connect to SiO-C.
Terminal Screw: M0

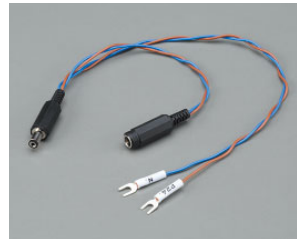
AC Adapter



Item No.	SUC-261
----------	---------

AC adapter for supplying DC24V to the SiO.

24V Splitter Cable



Item No.	SUC-120
----------	---------

Cable to supply power (DC24V) to sensors, etc. from the AC adapter.

e-CON 24V Splitter Cable



Item No.	SUC-207
----------	---------

Used to supply power from the SiO-C to the e-CON Connector Terminal Block (SUC-162).

USB Cable



Item No.	SUC-121
----------	---------

This cable connects the SiO to a PC. It is needed to read and write programs in the software.

Cable with DC Plug



Item No.	IFP-A034
----------	----------

Supplies power to the SiO from an external DC24V power supply.

Large Storage Box



Item No.	SUC-145
----------	---------

Box with DIN rail to store the SiO. (Inner Dimensions: W232×D132×H101)

Small Storage Box



Item No.	SUC-144
----------	---------

Box with a DIN rail to store the SiO. (Inside Dimensions: W126×D126×H101)

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data

SiO

SiO Kits

GF-N
28mm



SiO-N1 Kits

SiO-N1 Starter Kit



Item No. **SIO-L15**

Contents

- ① SiO-N1 Main Unit [XAC-052]
- ② AC Adapter [SUC-261]
- ③ Software CD
- ④ USB Cable [SUC-121]

*Purchase e-CON connection items separately.

SiO-N1 Basic Kit 1



Item No. **SIO-L16**

Contents

- ① SiO-N1 Main Unit [XAC-052]
- ② AC Adapter [SUC-261]

*Purchase e-CON connection items separately.

SiO-N1 Basic Kit 2



Item No. **SIO-L17**

Contents

- ① SiO-N1 Main Unit [XAC-052]
- ② AC Adapter [SUC-261]
- ③ Connector with Input Cable (four pins) [SUC-286]
- ④ Connector with Output Cable (three pins) [SUC-287]

GF-S
19mm



SiO2 Kits

SiO2 Starter Kit



Item No. **SIO-L09**

Contents

- ① SiO2 Main Unit [XAC-046]
- ② AC Adapter [SUC-261]
- ③ Software CD
- ④ USB Cable [SUC-121]

For those using SiO for the first time, this kit includes software, USB cable, AC adapter, and all other necessary items. This product can be used right out of the box.

*Purchase e-CON connection items separately.

SiO2 Basic Kit 1



Item No. **SIO-L10**

Contents

- ① SiO2 Main Unit [XAC-046]
- ② AC Adapter [SUC-261]

Kit with AC100V power supply (using an AC adapter).

*Purchase e-CON connection items separately.

GF-G
43mm

Bolt Nut

Jig

Technical Data



SiO Kits



SiO3 Kits

SiO3 Starter Kit



Item No.	SIO-L13
Contents	
① SiO3 Main Unit [XAC-050]	
② AC Adapter [SUC-261]	
③ Software CD	
④ USB Cable [SUC-121]	

For those using SiO for the first time, this kit includes software, USB cable, AC adapter, and all other necessary items. This product can be used right out of the box.

*Purchase e-CON connection items separately.

SiO3 Basic Kit 1



Item No.	SIO-L14
Contents	
① SiO3 Main Unit [XAC-050]	
② AC Adapter [SUC-261]	

Kit with AC100V power supply (using an AC adapter).

*Purchase e-CON connection items separately.

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

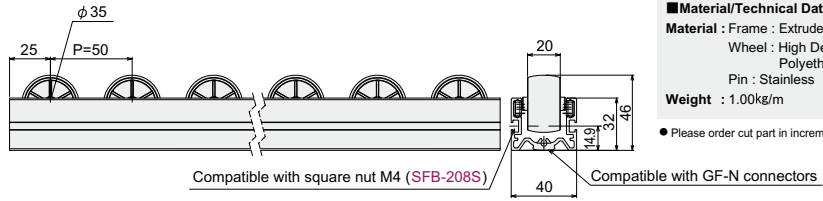
Jig

Technical Data

GF-N Corocon Roller

GF-N
28mm

Aluminum Corocon 3520P50



■ **Material/Technical Data**

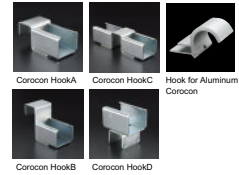
Material : Frame : Extruded Aluminum
Wheel : High Density Polyethylene
Pin : Stainless
Weight : 1.00kg/m

● Please order cut part in increments of 50 mm

- Improves performance and reduces noise.
- Resin pins limit the escape of metallic powder.
- Wheel pitch of 50 mm.

■ **Target Corocon Hook (P113~)**

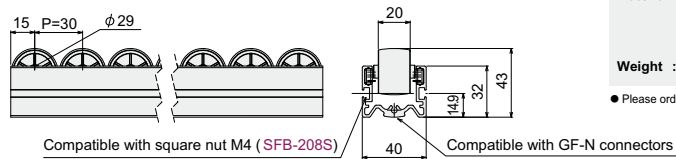
Corocon Hook A (GFC-247)
Corocon Hook B (GFC-248)
Corocon Hook C (GFC-249)
Corocon Hook D (GFC-250)
Hook for Aluminum Corocon (Aluminum) (GFC-229)



Name	Aluminum Corocon 3520P50
	L=4050mm
Item No.	GFC-A48

GF-S
19mm

Aluminum Corocon 2920P30



■ **Material/Technical Data**

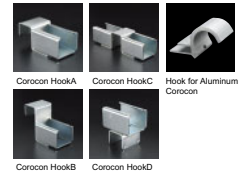
Material : Frame : Extruded Aluminum
Wheel : High Density Polyethylene
Pin : Stainless
Weight : 1.08kg/m

● Please order cut part in increments of 30 mm

- Improves performance and reduces noise.
- Resin pins limit the escape of metallic powder.
- Wheel pitch of 30 mm.

■ **Target Corocon Hook (P113~)**

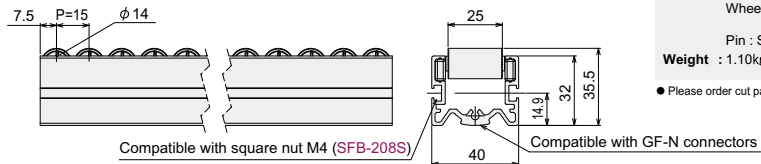
Corocon Hook A (GFC-247)
Corocon Hook B (GFC-248)
Corocon Hook C (GFC-249)
Corocon Hook D (GFC-250)
Hook for Aluminum Corocon (Aluminum) (GFC-229)



Name	Aluminum Corocon 2920P30
	L=4050mm
Item No.	GFC-A51

GF-G
43mm

Aluminum Corocon 1425P15



■ **Material/Technical Data**

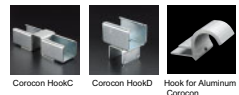
Material : Frame : Extruded Aluminum
Wheel : High Density Polyethylene
Pin : Stainless
Weight : 1.10kg/m

● Please order cut part in increments of 15 mm

- Improves performance and reduces noise.
- Resin pins limit the escape of metallic powder.
- Wheel pitch of 15 mm.

■ **Target Corocon Hook (P113~)**

Corocon Hook C (GFC-249)
Corocon Hook D (GFC-250)
Hook for Aluminum Corocon (Aluminum) (GFC-229)



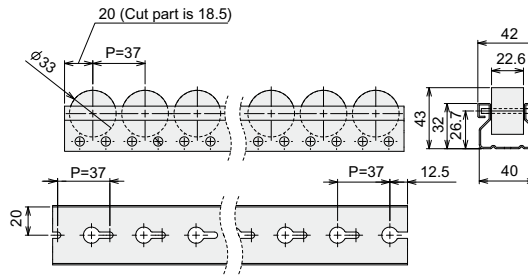
Name	Aluminum Corocon 1425P15
	L=4050mm
Item No.	GFC-A54

GF-N Corocon Roller

Corocon 3323P37



- Wheel made from High Density Polyethylene.
- Wheel pitch of 37 mm provides excellent performance.



■ **Material/Technical Data**

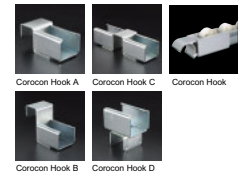
Material : Frame : Steel
Wheel : High Density Polyethylene
Pin : Steel
Weight : 1.4 kg/m
Environment : RoHS10 Compliant

- Cut part in increments of 37 mm
- This is the new name and specs for the former "Corocon Economy Type"

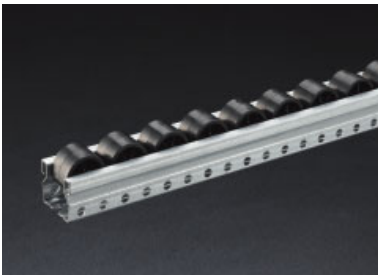
Name	Corocon 3323P37
Item No.	L=3000mm GFC-027

■ **Target corocon hook (P113~)**

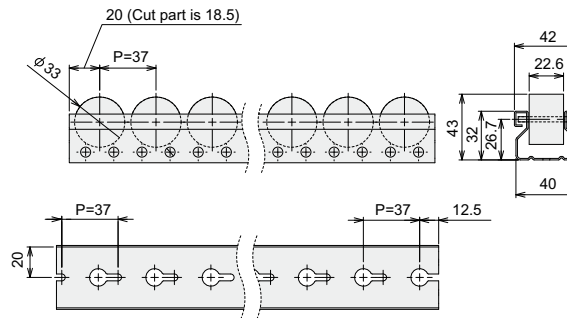
Corocon Hook A (GFC-247)
Corocon Hook B (GFC-248)
Corocon Hook C (GFC-249)
Corocon Hook D (GFC-250)
Corocon Hook (Aluminum) (GFC-200)



Corocon 3323P37 Conductive



- Corocon 3323P37 conductive type.



■ **Material/Technical Data**

Material : Frame : Steel
Wheel : Conductive Polypropylene
Pin : Steel
Weight : 1.4 kg/m
Environment : RoHS10 Compliant
Approx. resistance : 10²~10³Ω (Conductivity level)

- Cut part in increments of 37 mm
- Use either corocon conductive hook A or corocon conductive hook B at the ends

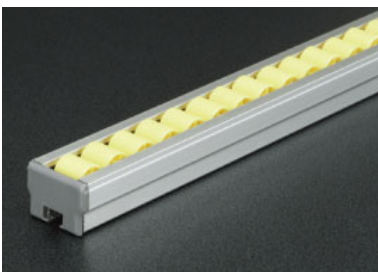
Name	Corocon 3323P37 Conductive
Item No.	L=3000mm GFC-032

■ **Target corocon hook (P113)**

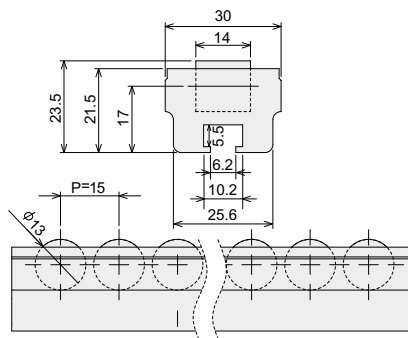
Corocon Hook C (GFC-249)
Corocon Hook D (GFC-250)



Mini Corocon



- Wheel pitch of 15 mm for transporting small objects.



■ **Material/Technical Data**

Material : Frame : Extruded Aluminum
Wheel : ABS
Weight : 0.63 kg/m
Environment : RoHS10 Compliant

- Please order cut part in increments of 15 mm

■ **Target corocon hook (P114,115)**
for small pitch Corocon Hook End (GFC-217)
for small pitch Corocon Hook middle (GFC-210)

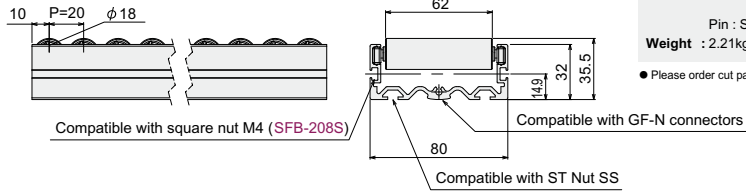


Name	Mini Corocon
Item No.	L=2000mm GFC-005

GF-N Corocon Roller

GF-N
28mm

Aluminum Corocon Wide 1862P20



■ **Material/Technical Data**

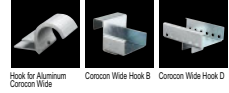
Material : Frame : Extruded Aluminum
Wheel : High Density Polyethylene
Pin : Stainless
Weight : 2.21kg/m

● Please order cut part in increments of 20 mm

- Corocon Wide enhances performance and is quiet.
- Resin pins limit the escape of metallic powder.

■ **Target Corocon Hook (P115~)**

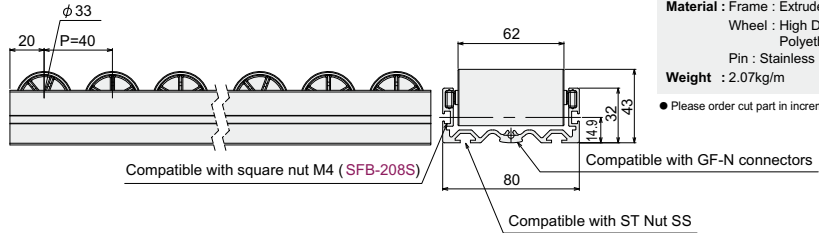
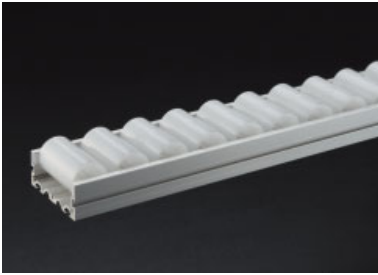
Corocon Wide Hook B (GFC-219)
Corocon Wide Hook D (GFC-221)
Hook for Aluminum Corocon Wide (Aluminum) (GFC-230)



Name	Aluminum Corocon Wide 1862P20
	L=4080mm
Item No.	GFC-A60

GF-S
19mm

Aluminum Corocon Wide 3362P40



■ **Material/Technical Data**

Material : Frame : Extruded Aluminum
Wheel : High Density Polyethylene
Pin : Stainless
Weight : 2.07kg/m

● Please order cut part in increments of 40 mm

- Corocon Wide enhances performance and is quiet.
- Resin pins limit the escape of metallic powder.

■ **Target Corocon Hook (P115~)**

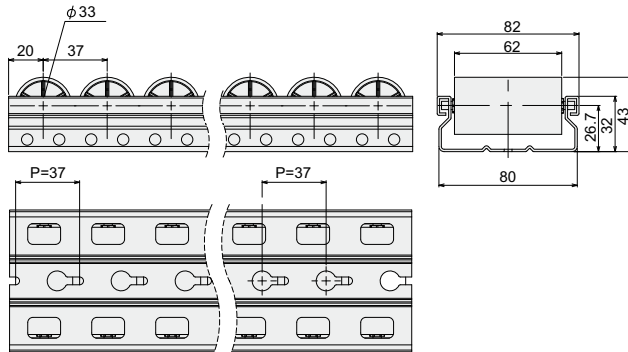
Corocon Wide Hook A (GFC-218)
Corocon Wide Hook B (GFC-219)
Corocon Wide Hook C (GFC-220)
Corocon Wide Hook D (GFC-221)
Hook for Aluminum Corocon Wide (Aluminum) (GFC-230)



Name	Aluminum Corocon Wide 3362P40
	L=4080mm
Item No.	GFC-A57

GF-G
43mm

Corocon Wide



■ **Material/Technical Data**

Material : Frame : Chrome Free Melting Grvanized Steel
Wheel : High Density Polyethylene
Pin : SPCC
Weight : 2.15kg/m
Environment : RoHS10 Compliant

● Please order cut part in increments of 37 mm

- Corocon Wide type.
- Wheel pitch of 37 mm.

■ **Target Corocon Hook (P115~)**

Corocon Wide Hook A (GFC-218)
Corocon Wide Hook B (GFC-219)
Corocon Wide Hook C (GFC-220)
Corocon Wide Hook D (GFC-221)



Name	Corocon Wide
	L=3000mm
Item No.	GFC-022

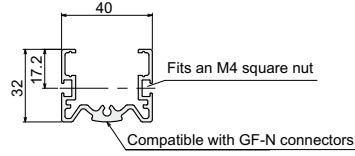
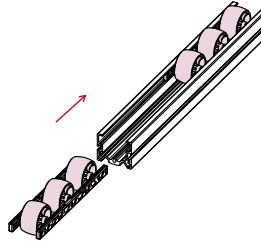


GF-N Corocon Roller

Aluminum Corocon Frame



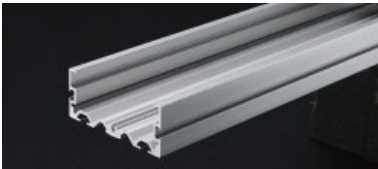
• Frame for corocon roller modules.



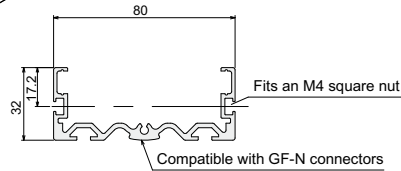
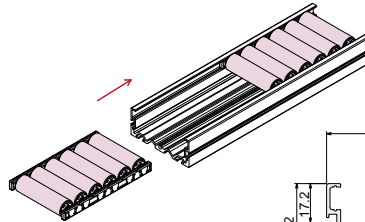
■ **Material/Technical Data**
Material : Extruded Aluminium
Weight : 0.74 kg/m
Environment : RoHS10 Compliant

Name	Aluminum Corocon Frame L=100~4050mm
Item No.	GFC-050

Aluminum Corocon Wide Frame



• Frame for corocon wide roller modules.



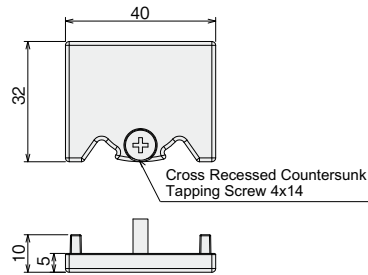
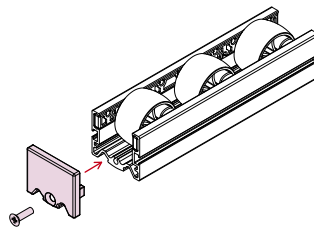
■ **Material/Technical Data**
Material : Extruded Aluminium
Weight : 1.17 kg/m
Environment : RoHS10 Compliant

Name	Aluminum Corocon Wide Frame L=100~4080mm
Item No.	GFC-059

Corocon Cap ADC



• Aluminum die-cast cap for the ends of aluminum rollers.



■ **Material/Technical Data**
Material : Aluminum Diecast
Screw : Stainless
Weight : 14 g
Environment : RoHS10 Compliant

■ **Kit Details**
Cross Recessed Countersunk Tapping Screw 4x14

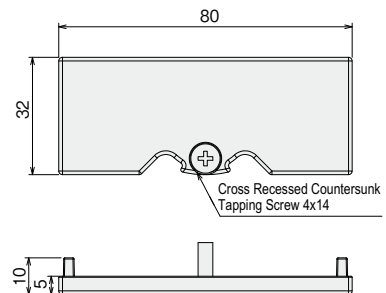
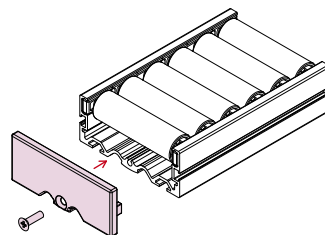
Name	Corocon Cap ADC Kit
Item No.	GFK-N50

■ **Target Corocon (P108)**
Aluminum Corocon 3520P50 (GFC-A50)
Aluminum Corocon 2920P30 (GFC-A53)
Aluminum Corocon 1425P15 (GFC-A56)

Corocon Wide Cap ADC



• Aluminum die-cast cap for the ends of wide aluminum rollers.



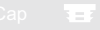
■ **Material/Technical Data**
Material : Aluminum Diecast
Screw : Stainless steel
Weight : 25 g
Environment : RoHS10 Compliant

■ **Kit Details**
Cross Recessed Countersunk Tapping Screw 4x14

Name	Corocon Wide Cap ADC Kit
Item No.	GFK-N51

■ **Target Corocon (P110)**
Aluminum Corocon Wide 1862P20 (GFC-A62)
Aluminum Corocon Wide 3362P40 (GFC-A59)

GF-N 28mm



GF-S 19mm



GF-G 43mm



Bolt Nut

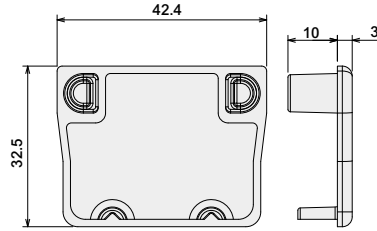
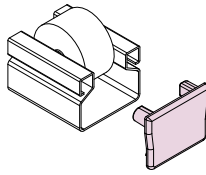
Jig

Technical Data

GF-N Corocon Roller

GF-N
28mm

Corocon End Cap

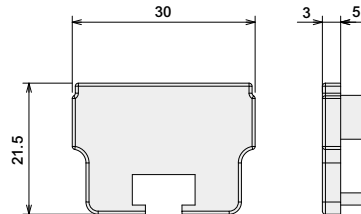
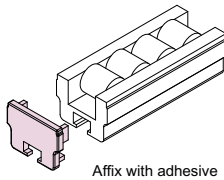


■ **Material/Technical Data**
Material : Nylon
Weight : 5 g
Environment : RoHS10 Compliant

Name	Corocon End Cap
Item No.	GFC-226

GF-S
19mm

Mini Corocon End Cap



■ **Material/Technical Data**
Material : Resin
Weight : 2 g
Environment : RoHS10 Compliant

● Use when cutting mini corocon at the customer's site.

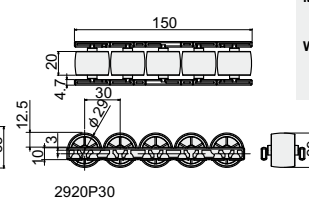
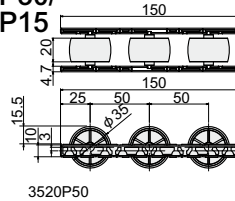
Name	Mini Corocon End Cap
Item No.	GFC-A03

■ **Target Corocon (P109)**
Mini Corocon (**GFC-005**)



GF-G
43mm

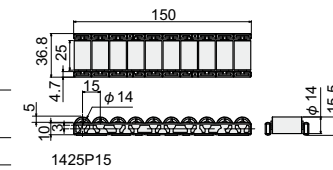
Aluminum Corocon Module 3520P50/ Aluminum Corocon Module 2920P30/ Aluminum Corocon Module 1425P15



■ **Material/Technical Data**
Material : Support : Polyacetal
Wheel : High Density Polyethylene
Pin : Stainless
Weight : 3520P50:38g
2920P30:44g
1425P15:53g

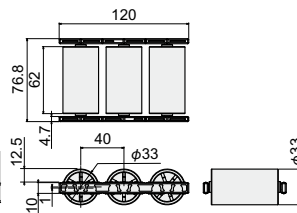
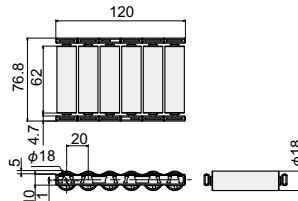
- Corocon rollers inserted into the Aluminum Corocon Frame.
- Easily switch out old modules for new ones during maintenance.

Name	Aluminum Corocon Module 3520P50	Aluminum Corocon Module 2920P30	Aluminum Corocon Module 1425P15
Item No.	GFC-A43	GFC-A44	GFC-A45



Bolt Nut

Aluminum Corocon Wide Module 1862P20/ Aluminum Corocon Wide Module 3362P40



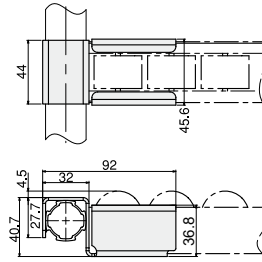
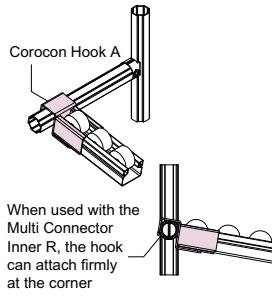
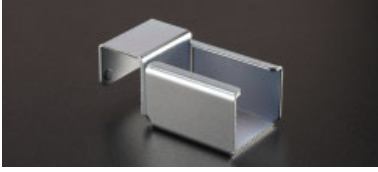
■ **Material/Technical Data**
Material : Support : Polyacetal
Wheel : High Density Polyethylene
Pin : Stainless
Extruded Aluminum(Wide Frame)
Weight : 126g(1862P20)
106g(3362P40)

- Corocon rollers inserted into the Aluminum Corocon Wide Frame.
- Easily switch out old modules for new ones during maintenance.

Name	Aluminum Corocon Wide Module 1862P20	Aluminum Corocon Wide Module 3362P40
Item No.	GFC-A47	GFC-A46

GF-N Corocon Roller

Corocon Hook A



Material/Technical Data
Material : SPHC
Weight : 170g
Environment : RoHS10 Compliant

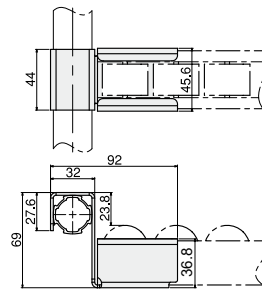
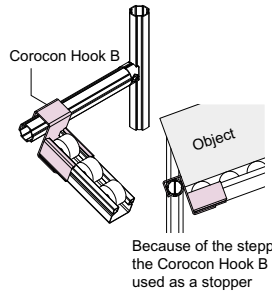
• This product has trivalent unichrome plating. The color tone may vary slightly due to its nature, but there is no effect on quality.



Name	Corocon Hook A
Item No.	GFC-247

Target Corocon (P108~)
 Corocon 3323P37 (GFC-027)
 Aluminum Corocon 3520P50 (GFC-A48)
 Aluminum Corocon 2920P30 (GFC-A51)

Corocon Hook B



Material/Technical Data
Material : SPHC
Weight : 191g
Environment : RoHS10 Compliant

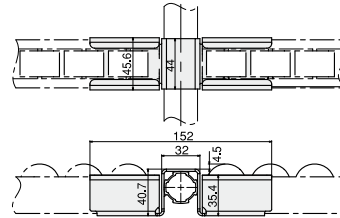
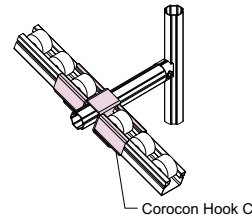
• This product has trivalent unichrome plating. The color tone may vary slightly due to its nature, but there is no effect on quality.



Name	Corocon Hook B
Item No.	GFC-248

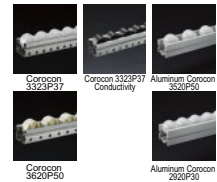
Target Corocon (P108~)
 Corocon 3323P37 (GFC-027)
 Aluminum Corocon 3520P50 (GFC-A48)
 Aluminum Corocon 2920P30 (GFC-A51)

Corocon Hook C



Material/Technical Data
Material : SPHC
Weight : 281g
Environment : RoHS10 Compliant

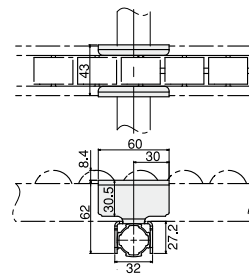
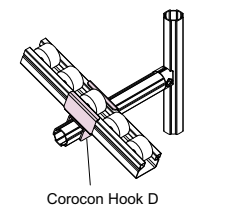
• This product has trivalent unichrome plating. The color tone may vary slightly due to its nature, but there is no effect on quality.



Name	Corocon Hook C
Item No.	GFC-249

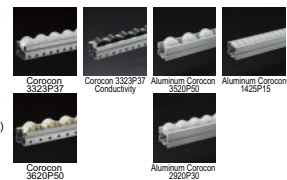
Target Corocon (P108~)
 Corocon 3323P37 (GFC-027)
 Corocon 3323P37 Conductivity (GFC-032)
 Aluminum Corocon 3520P50 (GFC-A48)
 Aluminum Corocon 2920P30 (GFC-A51)

Corocon Hook D



Material/Technical Data
Material : SPHC
Weight : 119g
Environment : RoHS10 Compliant

• This product has trivalent unichrome plating. The color tone may vary slightly due to its nature, but there is no effect on quality.



Name	Corocon Hook D
Item No.	GFC-250

Target Corocon (P108~)
 Corocon 3323P37 (GFC-027)
 Corocon 3323P37 Conductivity (GFC-032)
 Aluminum Corocon 3520P50 (GFC-A48)
 Aluminum Corocon 2920P30 (GFC-A51)
 Aluminum Corocon 1425P15 (GFC-A54)

GF-N Corocon Roller

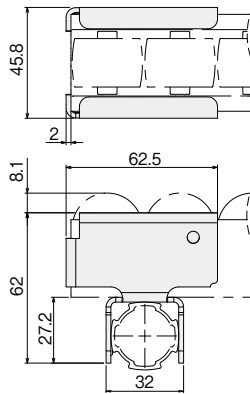
GF-N
28mm

Corocon Hook E



- This hook is installed on top of the Green Frame. It is bent to prevent the corocon from falling out, so a roller conveyor can be mounted all the way to the end of the hook.

Name	Corocon Hook E
Item No.	GFC-255



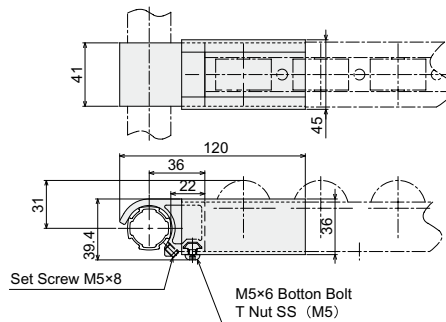
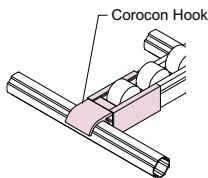
■ **Material/Technical Data**
Material : SPHC
Weight : 123 g
Environment : RoHS10 Compliant

■ **Target Corocon (P108~)**
Corocon 3323P37 (GFC-027)
Aluminum Corocon 3520P50 (GFC-A48)
Aluminum Corocon 2920P30 (GFC-A51)

Corocon Hook



- Corocon Hook aluminum type.



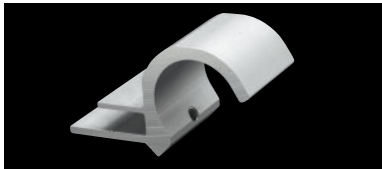
■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 107 g
Environment : RoHS10 Compliant

■ **Target Corocon (P108~)**
Corocon 3323P37 (GFC-027)

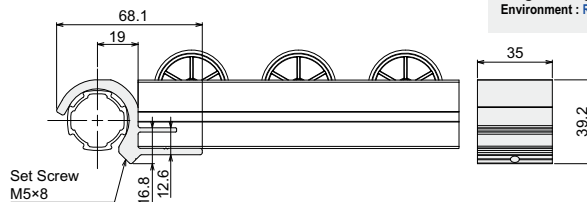
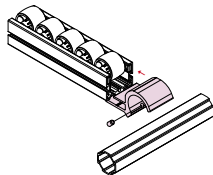


Name	Corocon Hook
Item No.	GFC-200

Aluminum Corocon Hook (Aluminum Type)

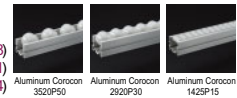


- Hook for Aluminum Corocon.



■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 56 g
Environment : RoHS10 Compliant

■ **Target Corocon (P108)**
Aluminum Corocon 3520P50 (GFC-A48)
Aluminum Corocon 2920P30 (GFC-A51)
Aluminum Corocon 1425P15 (GFC-A54)

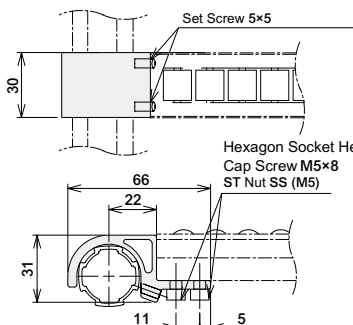
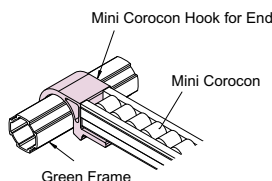


Name	Aluminum Corocon Hook (Aluminum Type)
Item No.	GFC-229

Mini Corocon Hook for End



- Hook to install at the end of the Mini Corocon.



■ **Material/Technical Data**
Material : Extruded Aluminum
Nut, Bolt : Stainless
Weight : 48 g
Environment : RoHS10 Compliant

■ **Product included**
ST Nut SS (M5)×2
Hexagon socket head cap screw M5×8 (Stainless)×2
Set Screw M5X5 (Stainless)×2
Small pitch Corocon Hook end×1

■ **Target Corocon (P109)**
Mini Corocon (GFC-005)



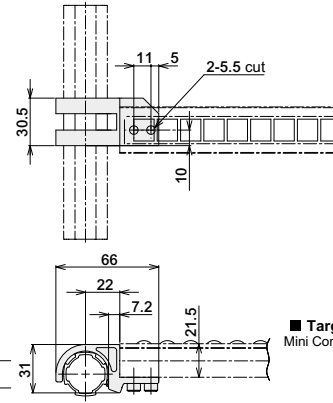
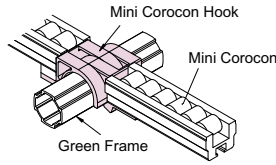
Name	Mini Corocon Hook for End
Item No.	GFC-217

GF-N Corocon Roller

Mini Corocon Hook



● Connect the corocon by latching onto Green Frame N.



■ **Material/Technical Data**
Material : Extruded Aluminum
Nut, Bolt : Stainless
Weight : 48 g
Environment : RoHS10 Compliant

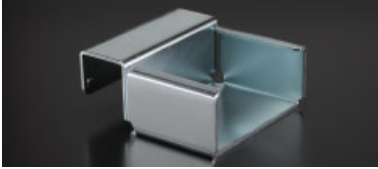
■ **Product included**
 ST Nut SS (M5)×2
 Hexagon socket head cap screw M5×8 (Stainless)×2
 Set Screw M5X5 (Stainless)×2
 Small pitch Corocon Hook (Price)×1

■ **Target Corocon (P109)**
 Mini Corocon (GFC-005)

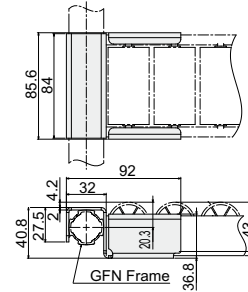
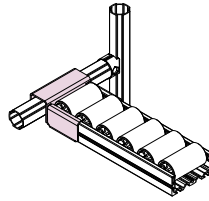


Name	Mini Corocon Hook
Item No.	GFC-201

Corocon Wide Hook A

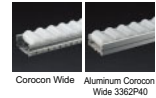


● Hook for Corocon Wide.



■ **Material/Technical Data**
Material : SPHC
Weight : 262 g
Environment : RoHS10 Compliant

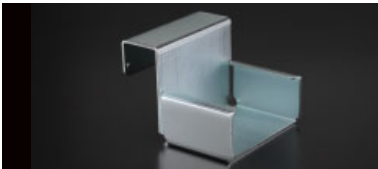
● This product has trivalent unichrome plating. The color tone may vary slightly due to its nature, but there is no effect on quality.



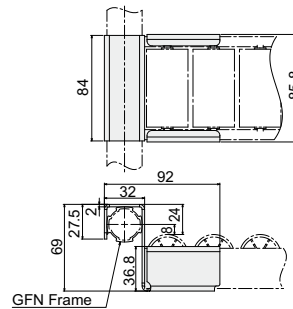
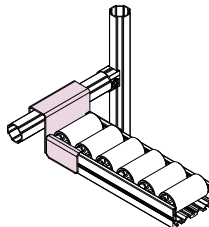
■ **Target Corocon (P110)**
 Corocon Wide (GFC-022)
 Aluminum Corocon Wide 3362P40 (GFC-A57)

Name	Corocon Wide Hook A
Item No.	GFC-260

Corocon Wide Hook B

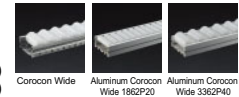


● Hook for Corocon Wide.



■ **Material/Technical Data**
Material : SPHC
Weight : 307 g
Environment : RoHS10 Compliant

● This product has trivalent unichrome plating. The color tone may vary slightly due to its nature, but there is no effect on quality.



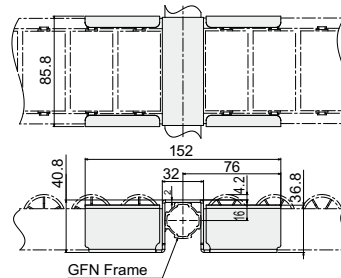
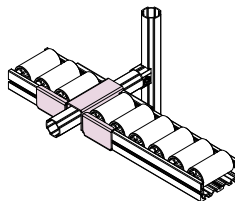
■ **Target Corocon (P110)**
 Corocon Wide (GFC-022)
 Aluminum Corocon Wide 1862P20 (GFC-A60)
 Aluminum Corocon Wide 3362P40 (GFC-A57)

Name	Corocon Wide Hook B
Item No.	GFC-261

Corocon Wide Hook C

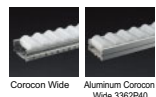


● Hook for Corocon Wide.



■ **Material/Technical Data**
Material : SPHC
Weight : 423 g
Environment : RoHS10 Compliant

● This product has trivalent unichrome plating. The color tone may vary slightly due to its nature, but there is no effect on quality.



■ **Target Corocon (P110)**
 Corocon Wide (GFC-022)
 Aluminum Corocon Wide 3362P40 (GFC-A57)

Name	Corocon Wide Hook C
Item No.	GFC-262

GF-N Corocon Roller

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

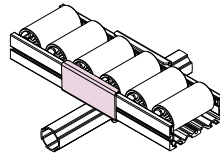
Technical Data

Corocon Wide Hook D



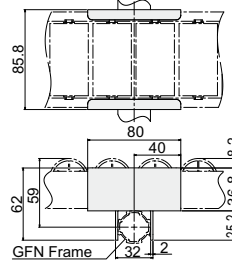
- Hook for Corocon Wide.

The mounting position of the GFC-263 is 2 mm different from that of the old product (GFC-221).



New : GFC-263

Old : GFC-221



Material/Technical Data
Material : SPHC
Weight : 191 g
Environment : RoHS10 Compliant

- This product has trivalent unichrome plating. The color tone may vary slightly due to its nature, but there is no effect on quality.

Name	Corocon Wide Hook D
Item No.	GFC-263

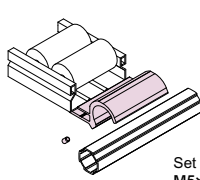
Target Corocon (P110)
Corocon Wide (GFC-022)
Aluminum Corocon Wide 1862P20 (GFC-A60)
Aluminum Corocon Wide 3362P40 (GFC-A57)



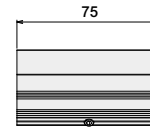
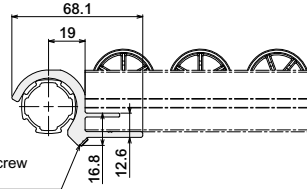
Aluminum Corocon Wide Hook (Aluminum Type)



- Hook for Aluminum Corocon Wide.



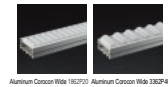
Set Screw
M5x8



Material/Technical Data
Material : Extruded Aluminum
Weight : 119 g
Environment : RoHS10 Compliant

Name	Aluminum Corocon Wide Hook (Aluminum Type)
Item No.	GFC-230

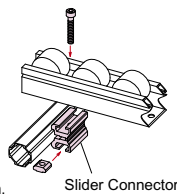
Target Corocon (P110)
Aluminum Corocon Wide 1862P20 (GFC-A60)
Aluminum Corocon Wide 3362P40 (GFC-A57)



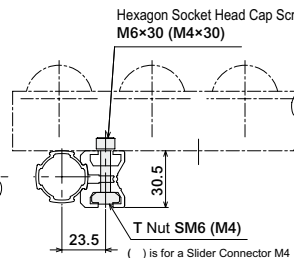
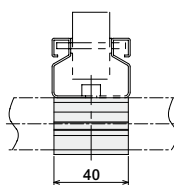
Slider Connector



- For connecting the corocon to a support frame on the bottom.



Slider Connector



Hexagon Socket Head Cap Screw
M6x30 (M4x30)

T Nut SM6 (M4)

Material/Technical Data
Material : Extruded Aluminum
Weight : 51 g (for M6)
63 g (for M4)
Environment : RoHS10 Compliant

Product Included
Slider Connector M6 for ST Nut S M6 (with slide stopper)×1
Hexagon socket head cap screw M6x30 (Trivalent Chrome Plate)×1
install part for slider×1

Slider Connector M4 for ST Nut S M4 (with slide stopper)×1
Hexagon socket head cap screw with flange M4x30×1
install part for slider×1

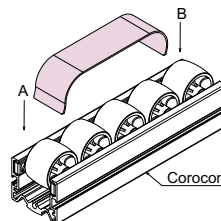
- Use the cross connector to connect to the support frame.

Name	Slider Connector (M6)	Slider Connector (M4)
Item No.	GFJ-A24	GFJ-B02

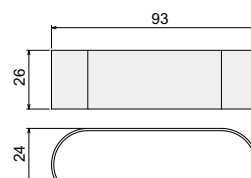
Corocon Stopper P30



- Special stopper for corocon with a 30mm pitch. Controls the spin of the rollers and reduces the speed of objects.



* Install in the order of A → B



Material/Technical Data
Material : SUS304-CSP
Weight : 25 g
Environment : RoHS10 Compliant

Target Corocon (P108)
Aluminum Corocon 2920P30 (GFC-A53)



Name	Corocon Stopper P30
Item No.	GFC-A30

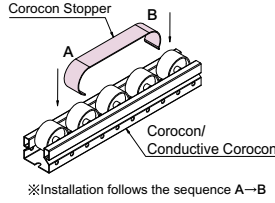


GF-N Corocon Roller

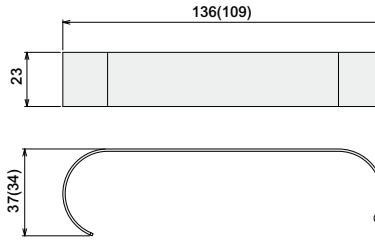
Corocon Stopper



- Special stopper for corocon to control the spin of the rollers and reduce the speed of objects.



※Installation follows the sequence A→B



() is for Corocon Stopper P37

■Material/Technical Data
Material : SUS304-CP
Weight : 35 g
Environment : RoHS10 Compliant

Name	Corocon Stopper P37
Item No.	GFC-A12

■ Target Corocon (P108)
GFC-A12
Corocon 3323P37 (GFC-027)
Corocon 3323P37 Conductive (GFC-032)



GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

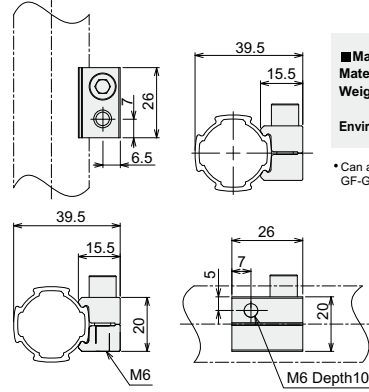
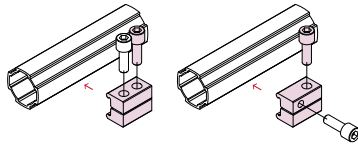
Jig

Technical Data

GF-N Accessory

GF-N 28mm

Connector Piece Compact



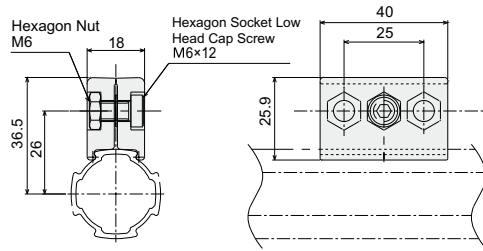
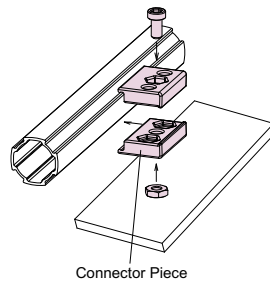
Material/Technical Data
Material : Extruded Aluminum
Weight : 21 g
 21 g (Side)
Environment : RoHS10 Compliant

• Can also grip GF-G (43 mm) frames.

• For installing components and equipment using an M6 bolt.

Name	Connector Piece Compact	Connector Piece Compact (Side)
Item No.	GFJ-B09	GFJ-B18

Connector Piece



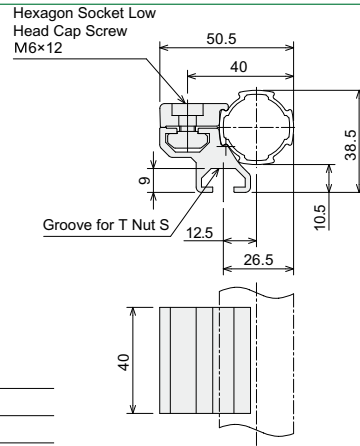
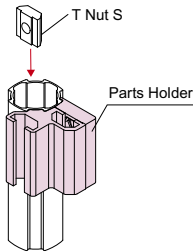
Material/Technical Data
Material : Aluminum Diecast
 Bolt / Nut : Steel
 Bolt / Nut : Stainless (Grey Paint)
Weight : 40 g
 39 g (Grey Paint)
Environment : RoHS10 Compliant

• Can also grip GF-G (43 mm) frames.

• For installing components and equipment using an M6 bolt. M6 nut must be purchased separately.

Name	Connector Piece
Item No.	GFJ-A31

Parts Holder



Material/Technical Data
Material : Extruded Aluminum
Weight : 58.0 g
Environment : RoHS10 Compliant

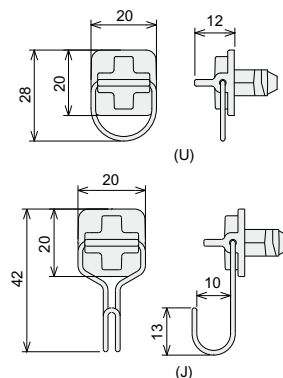
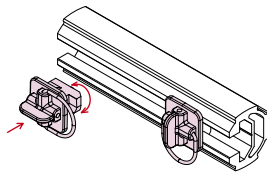
Product Included
 • Hexagon socket low head cap screw M6×12 (UniChrome)×1
 • T Nut S (M6)×1

• Can also grip GF-G (43 mm) frames.

• This part uses special ST Nut S (P169) to install components and equipment. ST Nut S must be purchased separately.

Name	Parts Holder
Item No.	GFA-000

Slot Hook L



Material/Technical Data
Material : Body : Nylon
 Hook : Stainless
Weight : 4 g (U) 5 g (J)
Environment : RoHS10 Compliant
Load Capacity : 1.5 kg

Product included
 Slot Hook L (U type)
 Slot Hook Fitting (U type) × 1,
 Slot Hook (L) × 1
 Slot Hook L (J type)
 Slot Hook Fitting (J type) × 1,
 Slot Hook (L) × 1

• Hook that inserts into the groove of the Green Frame L Slot (GFF-004) and is secured by rotating 90 degrees.

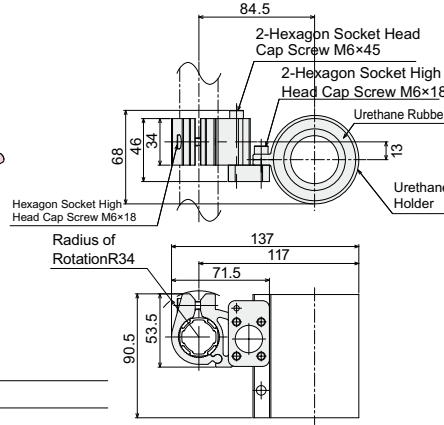
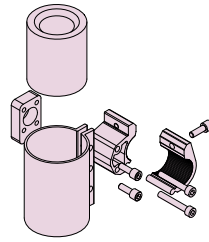
Name	Slot Hook L (U)	Slot Hook L (J)
Item No.	SFK-K33U	SFK-K33J

GF-N Accessory

Impact Holder H Kit



- This part is a housing for impact drivers, etc. that installs on a horizontal frame.



Material/Technical Data
Material: Extruded Aluminum
 Urethane Rubber
Weight : 455 g
Environment : RoHS10 Compliant

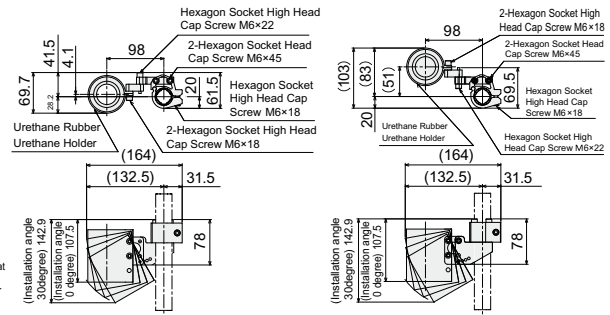
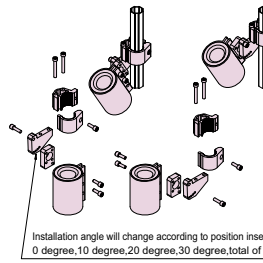
Product Included
 • Urethane Rubber×1
 • Tool Bracket Horizontal type×1
 • Urethane Holder×1
 Hexagon socket high head cap screw M6×18 (Trivalent Chrome Plate)×1

Name	Impact Holder H Kit
Item No.	GFK-803

Impact Holder V Kit



- This part is a housing for impact drivers, etc. that installs on a vertical frame.



Material/Technical Data
Material: Extruded Aluminum
 Urethane Rubber
Weight : 526 g
Environment : RoHS10 Compliant

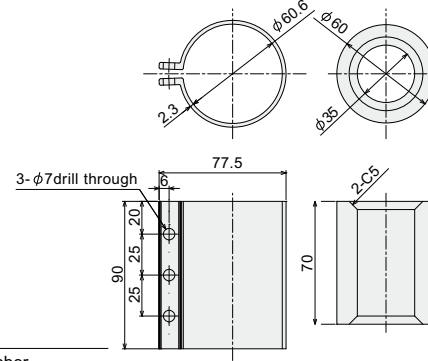
Product Included
 • Urethane Rubber×1
 • Tool Bracket vertical type×1
 • Hexagon socket high head cap screw M6×18 (Trivalent Chrome Plate)×2

Name	Impact Holder V Kit
Item No.	GFK-802

Urethane Holder/Urethane Rubber



- This item is a spare for the Impact Holder Kit.



Material/Technical Data
Urethane Holder
Material : Extruded Aluminum
Weight : 129 g
Environment : RoHS6 Compliant

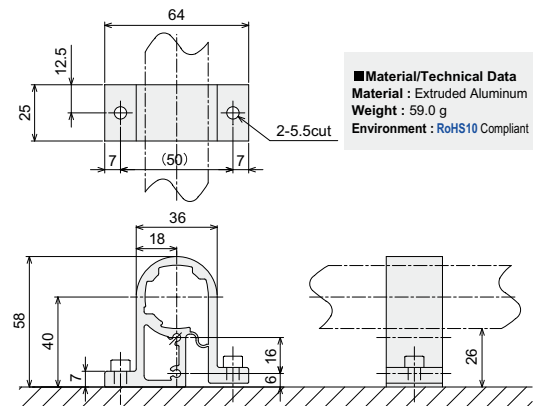
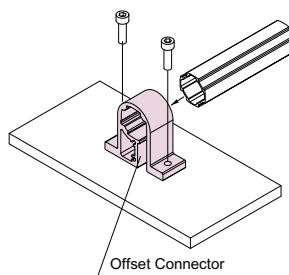
Urethane Rubber
Material : Urethane Rubber
Weight : 143 g
Environment : RoHS10 Compliant

Name	Urethane Holder	Urethane Rubber
Item No.	GFH-013	GFA-A14

Offset Connector



- Use this part to install Green Frame to a wall in the off-set position.



Material/Technical Data
Material : Extruded Aluminum
Weight : 59.0 g
Environment : RoHS10 Compliant

Name	Offset Connector
Item No.	GFJ-A35

GF-N 28mm

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corcon Roller
- Accessory
- Door Part

GF-S 19mm

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corcon Roller
- Accessory
- Door Part

GF-G 43mm

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corcon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data

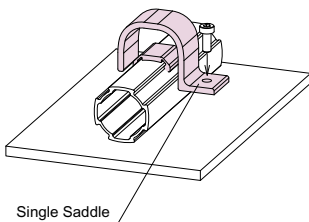
GF-N Accessory

GF-N 28mm

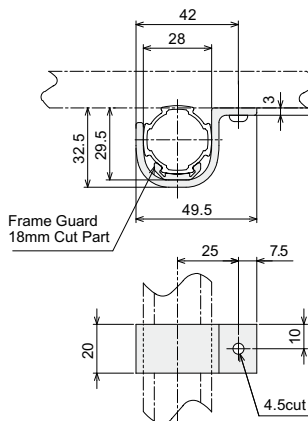
Single Saddle



• Use this part to fix Green Frame on a wall or other flat surface.



Single Saddle



Frame Guard 18mm Cut Part

■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 15.0 g
Environment : RoHS10 Compliant

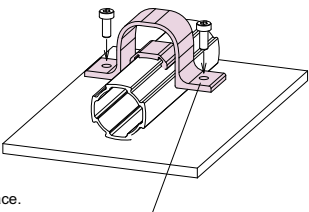
■ **Product Included**
 • Frame Guard 18 mm Cut Part×1
 • Single Saddle x1

Name	Single Saddle
Item No.	GFJ-A25

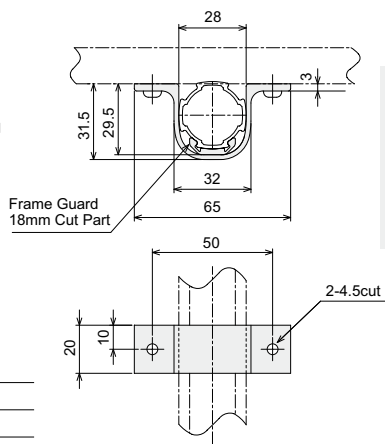
Double Saddle



• Use this part to fix Green Frame on a wall or other flat surface.



Double Saddle



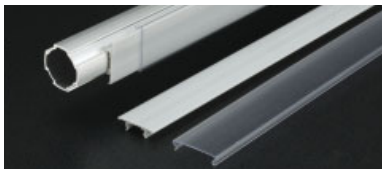
Frame Guard 18mm Cut Part

■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 14.0 g
Environment : RoHS10 Compliant

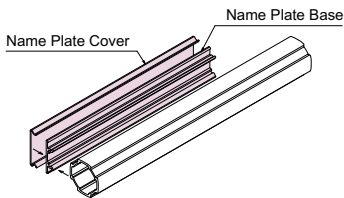
■ **Product Included**
 • Frame Guard 18 mm Cut Part×1
 • Double Saddle x1

Name	Double Saddle
Item No.	GFJ-A27

Name Plate Kit

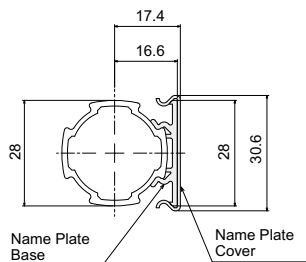


• Name plate snaps securely onto the edge of the frame. Dimensions have been changed from the fixed size (1550 mm) to the specified dimensions.



Name Plate Cover

Name Plate Base



Name Plate Base

Name Plate Cover

■ **Material/Technical Data**
Material : Name Plate : Polypropylene
 Name Plate Cover : ABS

Weight : Name Plate Kit 29.0 g
 Name Plate Base 87.0 g (1550 mm)
 Name Plate Cover 59.0 g (1550 mm)

Environment : RoHS10 Compliant

■ **Kit Details**
 • Name Plate Base×1
 • Name Plate Cover×1

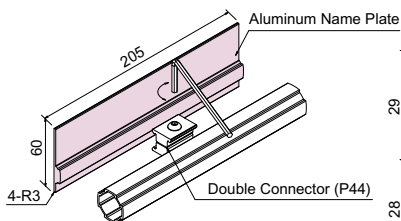
• Can also be mounted on GF-G (43mm) frames.

Name	Name Plate Kit L=300mm	Name Plate Base L=1550mm	Name Plate Cover L=1550mm
Item No.	GFK-J00	GFA-806	GFA-807

Aluminum Name Plate

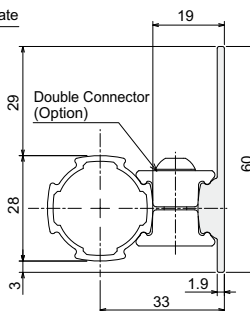


• Can be installed with a Double Connector or Cross Connector.



4-R3

Double Connector (P44)



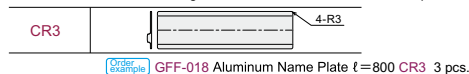
Double Connector (Option)

■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 101 g
 489 g/m (Cut Part)

Environment : RoHS10 Compliant

• Aluminum Plate (GFA-A12) has R3 finished surface. When ordering a specific size (GFF-018), please also specify R3 chamfer separately.
 • Double Connector (P44) • Cross Connector (P42) must be purchased separately.

■ 4 corner R chamfer Target Frame : Aluminum Name Plate Cut part



CR3

4-R3

GFF-018 Aluminum Name Plate ℓ=800 CR3 3 pcs.

Name	Aluminum Name Plate	Aluminum Name Plate L=100~4000mm
Item No.	GFA-A12	GFF-018

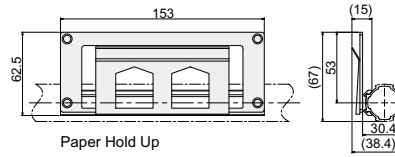


GF-N Accessory

Paper Hold Up



- This part can easily hold a slip of paper, etc.
Can be mounted onto a GF frame with a single-touch joint.



■Material/Technical Data
Material : PP
Weight : 23 g

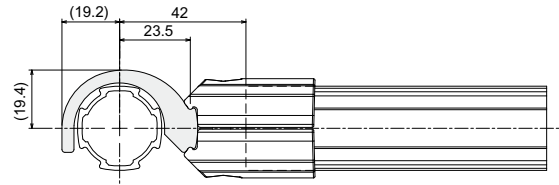
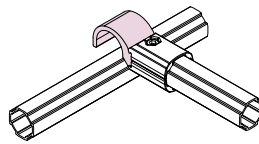
- Compatible with GF-G (43mm) frames.

Name	Paper Hold Up
Item No.	GFA-824

Hook Connector R



- This part latches onto the frame.
• Can hook on at any angle.



■Material/Technical Data
Material : Extruded Aluminum
Weight : 31.0 g
Environment : RoHS10 Compliant

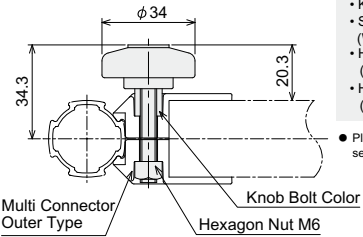
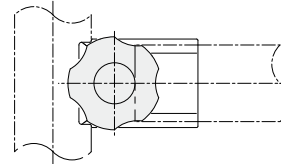
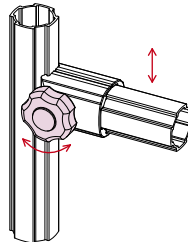
- Please purchase connector separately

Name	Hook Connector R
Item No.	GFJ-A32

Connector Knob Bolt



- Easily install a connector or adjust its position without any tools.



■Material/Technical Data
Material : Bolt, Color : Stainless
Knob : Nylon 6 • Polypropylene
Weight : 21 g

- Product Included
- Knob Bolt color×1
 - Super Knob 5 corner (White)×1
 - Hexagon Bolt M6×35 (Stainless)×1
 - Hexagon Nut M6 (1type) (Stainless)×1

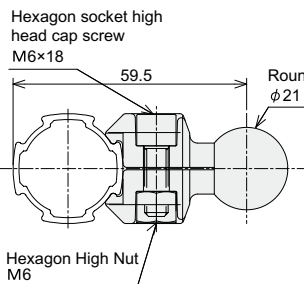
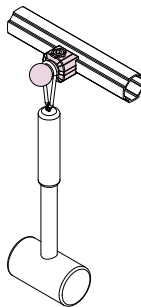
- Please purchase connector separately

Name	Connector Knob Bolt
Item No.	GFJ-A03

Free Connector Fix Side



- Use as a suspension hook.

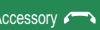
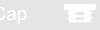


■Material/Technical Data
Material : Body : Aluminum Diecast
Bolt / Nut : Steel
Weight : 48 g
Environment : RoHS10 Compliant

- Can also be mounted on GF-G (43 mm) frames.

Name	Free Connector Fix Side
Item No.	GFJ-A52

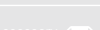
GF-N 28mm



GF-S 19mm



GF-G 43mm



Bolt Nut

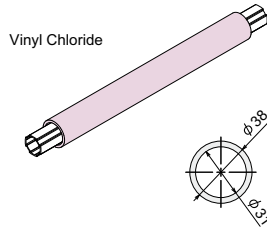
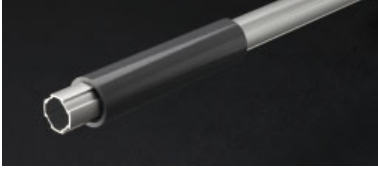
Jig

Technical Data

GF-N Accessory

GF-N
28mm

Resin Pipe

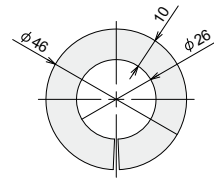
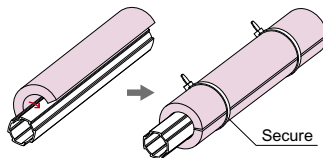


■ **Material/Technical Data**
Material : Vinyl Chloride ($\phi 38$)
Weight : 518 g/m (Vinyl Chloride)
Environment : RoHS10 Compliant

Name	$\phi 38$ Resin Pipe
	L=100~4000 mm
Item No.	GFA-820

Accessory

Frame Cushion



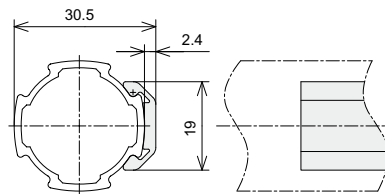
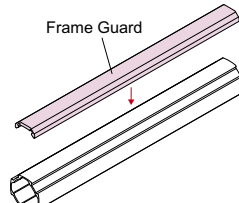
■ **Material/Technical Data**
Material : Expanded Polyethylene
Weight : 150 g/2000 mm
Environment : RoHS10 Compliant

- Absorbs shock from objects when they hit the frame.

Name	Frame Cushion (2000 mm)
Item No.	GFA-819

GF-S
19mm

Frame Guard



■ **Material/Technical Data**
Material : Polypropylene
Weight : 94 g/2000 mm
Environment : RoHS10 Compliant

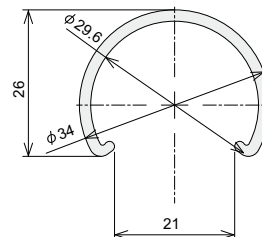
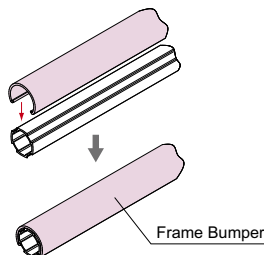
- To protect the frame from damage when the profile is sticking out.
- Five colors make it possible to separate areas or applications by color.

● Use Nipper or Cutter to cut

Name	Frame Guard L=2000mm					
	Gray	Blue	Ivory	Green	Yellow	Red
Item No.	GFA-800G	GFA-800L	GFA-800V	GFA-800M	GFA-800Y	GFA-800R

GF-G
43mm

Frame Bumper



■ **Material/Technical Data**
Material : Low Density Polyethylene
Weight : 200 g/2000 mm
Environment : RoHS10 Compliant

- To protect the frame from damage.

Name	Frame Bumper	
	(White) L=2000mm	(Yellow) L=2000mm
Item No.	GFA-804G	GFA-804Y



GF-N Accessory

Grip Tube



- Use this heat-shrink tube on the handles of trolleys, etc.

■ **Material/Technical Data**
Material : Synthetic Rubber
Weight : 26 g
Environment : RoHS10 Compliant

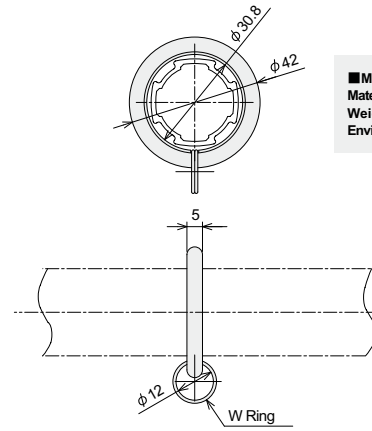
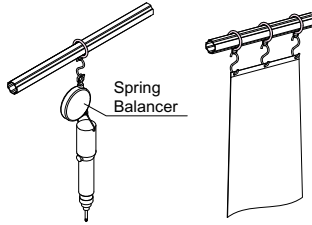
■ **Size**
 35 mm×0.5 mm×500 mm

Name	Grip Tube L=500 mm
Item No.	GFA-B32

Ring Runner



- Use the frame as a rail.
Use with an electric driver or curtain.



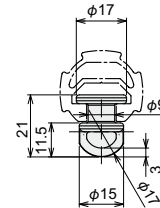
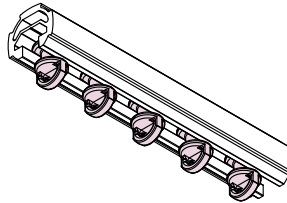
■ **Material/Technical Data**
Material : Steel/Polyacetal
Weight : 17.0 g
Environment : RoHS10 Compliant

Name	Ring Runner
Item No.	GFA-A06

Slot Runner



- For attaching curtains, etc.
- Estimated Load Capacity : 30N



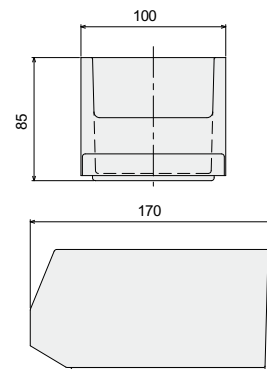
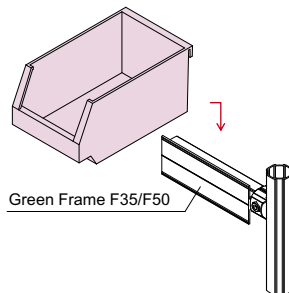
■ **Material/Technical Data**
Material : Polyacetal
Weight : 3 g
Environment : RoHS10 Compliant

Name	Slot Runner
Item No.	GFA-A70

Parts Container



- Hooks onto Green Frame F35/F50 (P28)



■ **Material/Technical Data**
Material : Polypropylene
Weight : 100 g
Environment : RoHS10 Compliant

Name	Parts Container
Item No.	GFA-A07

GF-N 28mm



GF-S 19mm



GF-G 43mm



Bolt Nut

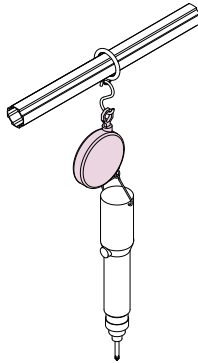
Jig

Technical Data

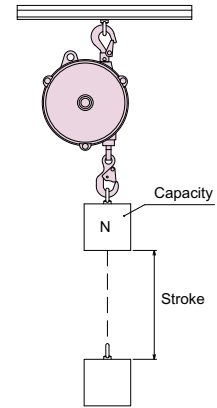
GF-N Accessory

GF-N 28mm

Spring Balancer

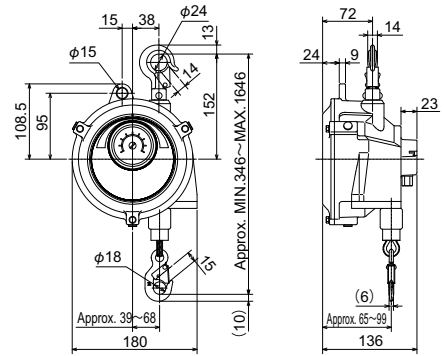


Use with lift table



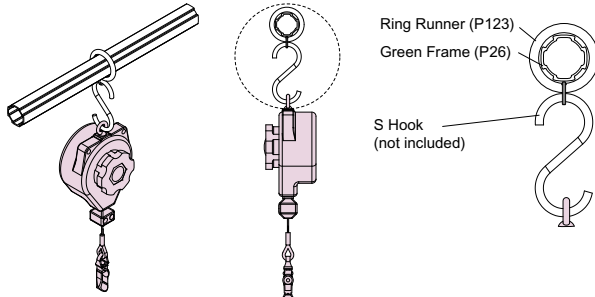
- Pull to extend the wire, let go and it will spring back into place.
- Use for hanging impact drivers and other tools.
- Can also be used as a braking device for mechanical lift tables.

Specifications		Environment: RoHS10 Compliant	
Name	Spring Balancer		
Model	EWF-9	EWF-15	
Item No.	GFA-A60	GFA-A61	
Capacity (kg)	4.5~9.0	9.0~15.0	
Stroke (mm)	1300	1300	
Weight (kg)	3.5	3.8	

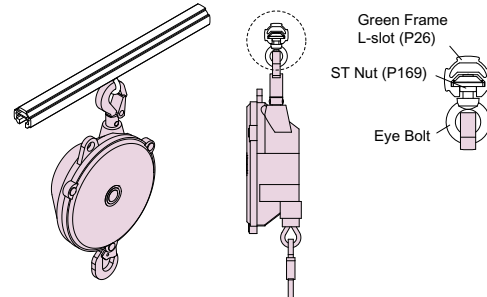


How to mount on the GF Frame

Mount using a ring runner (P123)



Mount using a Green Frame L-slot (P26).



GF-G 43mm

Bolt Nut

Jig

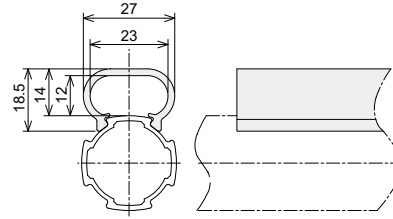
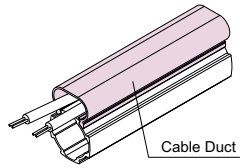
Technical Data

GF-N Accessory

Cable Duct



- Attaches to the profile edge of Green Frame.



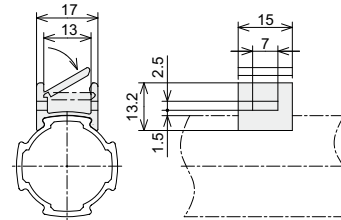
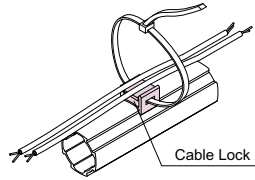
■ **Material/Technical Data**
Material : Polypropylene
Weight : 176 g/pcs
Environment : RoHS10 Compliant

Name	Cable Duct
Item No.	L=2000mm GFA-801

Cable Lock



- Gather cables together and secure them with a zip-tie or similar.
This lock attaches to the profile edge of Green Frame.



■ **Material/Technical Data**
Material : Polypropylene
Weight : 2 g
Environment : RoHS10 Compliant

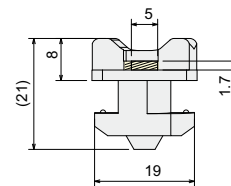
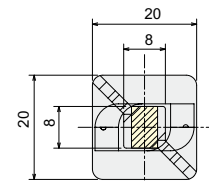
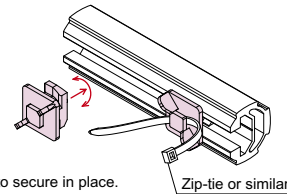
- Zip-tie or similar is prepared by the customer

Name	Cable Lock
Item No.	GFE-010

Cable Clamp



- Insert into the groove of the Green Frame L Slot and rotate to secure in place.
Use a zip-tie or similar to fasten the cable.



■ **Material/Technical Data**
Material : Nylon
Weight : 3 g
Environment : RoHS10 Compliant

- Zip-tie or similar is prepared by the customer.

▨ The shaded area is the position and dimension of the mounting hole for the cable tie.

※ Compatible with ties with a width less than 5 mm and a thickness less than 1.7 mm.

Name	Cable Clamp L (Light Gray) (50 pcs./Pack)
Item No.	C1P-012C

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

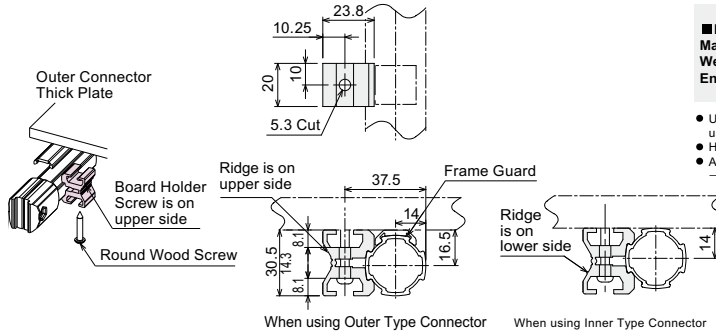
GF-N Door Part

GF-N 28mm

Board Holder



- Use this part to install a work board onto the frame.
- This part can accommodate both an Outer Connector or an Inner Connector by flipping over to the correct side.



■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 18 g
Environment : RoHS10 Compliant

- Use ST Nut S (P169) when using ST Nut (except M6)
- How to Install Board → P223
- Approx size of Board Panel → P180

- When using Inner Type Connector
- When using an Inner Connector, you can secure the board by flipping over the Board Holder.
 - Can not use Nut (M6)

■ **Related Part**
Frame Guard (GFA-800G)
Round Wood Screw 4.1 x 32 (SFB-9C5)



Name	Board Holder
Item No.	GFJ-A22

GF-S 19mm

Plate Connector Flat



Plate Connector Flat Inner Plate Connector Flat Outer

- This plate connector can be used to install a panel onto a GF frame. Choose between the outer and inner types according to the connectors being used.
- Parts for mounting resin plates.

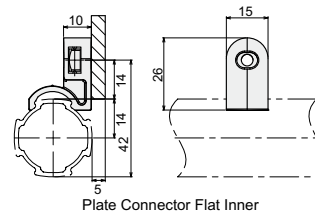
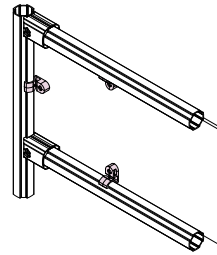


Plate Connector Flat Inner

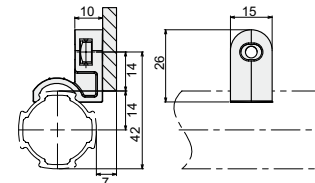


Plate Connector Flat Outer

■ **Material/Technical Data**
Material : PP
Weight : 4 g
Environment : RoHS10 Compliant

■ **Accessories**
M5 Square Nut

- Panel Dimensions / Panel Processing Dimension Guide → P180

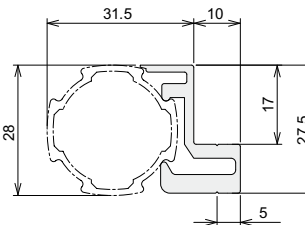
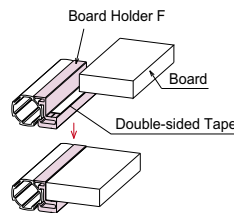
Name	Plate Connector Flat Inner	Plate Connector Flat Outer
Item No.	GFJ-B48	GFJ-B49

GF-G 43mm

Board Holder F



- Install a board of t=17 mm at the same height as the frame.
- Clips onto the profile edge of the frame. If affixed with double-sided tape, no tools are needed for installation.



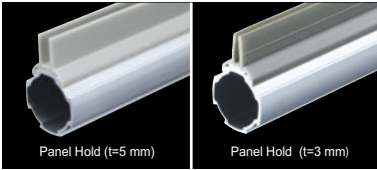
■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 447 g/m
Environment : RoHS10 Compliant

- *Use on all four sides
- How to install board → P223
- Approx. size of Board Panel → P180

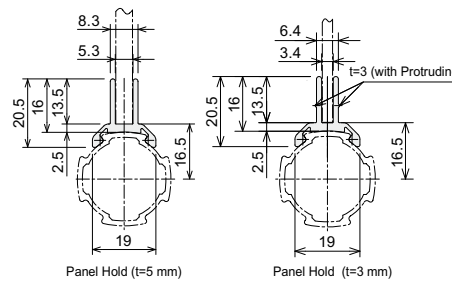
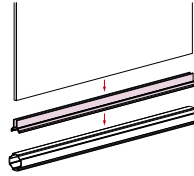
Name	Board Holder F (Cut size part)
	L=100~4000 mm
Item No.	GFJ-A01

GF-N Door Part

Panel Hold (for t=5 / t=3)



- Use this part to install resin panels.
- Install with one touch, without processing the resin panel.

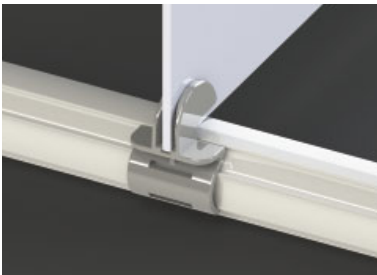


■ Material/Technical Data
Material : Polypropylene
Weight : t=5 83 g/m
t=3 81 g/m
Environment : RoHS10 Compliant

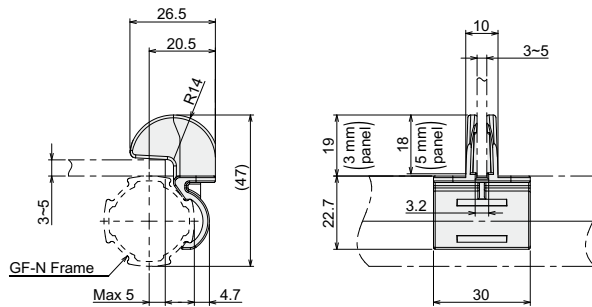
● Approx. size of Panel and Panel Hold (for t=5 / t=3)
→ P181

Name	Panel Hold (for t=5)	Panel Hold (for t=3)
Item No.	GFA-802G	GFA-803G

Partition Connector

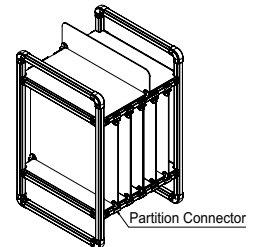


- Create a partition by snapping this connector onto a frame and inserting a panel (t = 3, t = 5).
- Also available for panels with thickness t = 5.



■ Material/Technical Data
Material : PP
Weight : 4 g

*The insertion depth differs by 1mm between 3mm panels and 5mm panels.



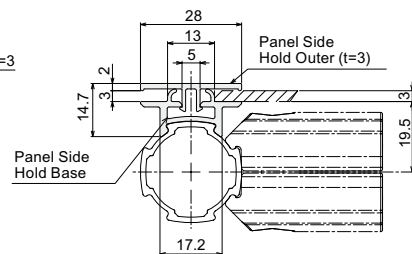
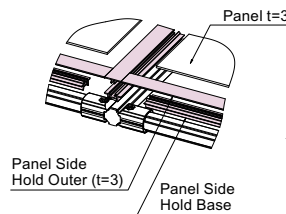
Name	Partition Connector
Item No.	GFJ-E54

*In the case of a cantilever, the recommended height of the panel is 100mm or less, and the mounting pitch should be 500mm or less.

Panel Side Hold



- This part is for mounting resin panels.
- Panels can be mounted on the front of the frame.
- Can be mounted to the frame with one touch, without processing the panel.



■ Material/Technical Data
Material : Polypropylene
Weight : 100 g/2m
165 g/2m
Environment : RoHS10 Compliant

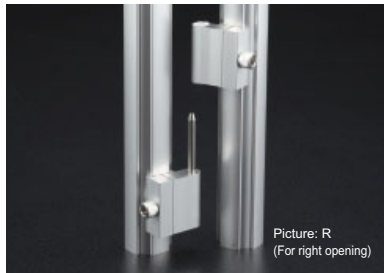
● Approx. size of Panel and Panel Side Hold → P182

Name	Panel Side Hold Outer t3		Panel Side Hold Base	
	Scale L=2000	Cut size part L=2000-199	Scale L=2000	Cut size part L=2000-199
Item No.	GFA-809		GFA-808	

GF-N Door Part

GF-N 28mm

GF Lift-Off Hinge L/R



- Use as a door hinge.
- Use to install an area guard at an angle.

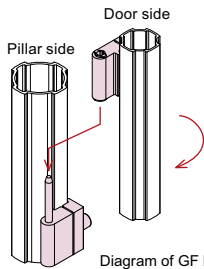
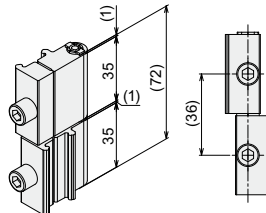
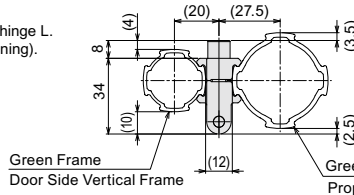


Diagram of GF lift-off hinge L.
Diagram of L (left opening).



Material/Technical Data
Material: Extruded Aluminum
 Pin : Stainless
 Bolt : Steel
Weight : 90 g
Environment: RoHS10 Compliant



R (right opening) is symmetrical with respect to the hinge center line.

Name	GF Lift-Off Hinge L	GF Lift-Off Hinge R
Item No.	GFP-012	GFP-013

GF-S 19mm

GF-G 43mm

Bolt Nut

Jig

Technical Data

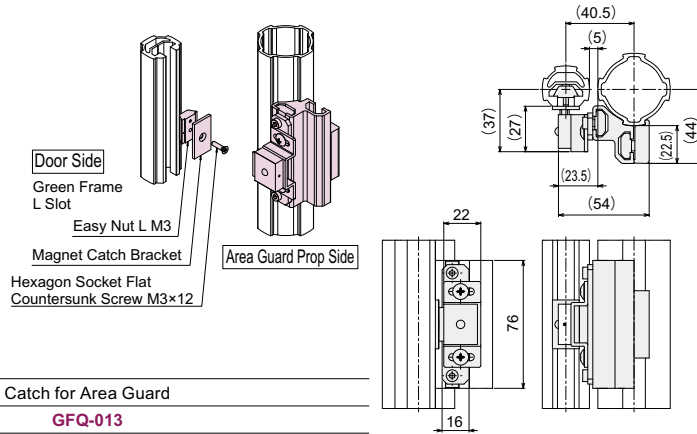


GF-N Door Part

Catch for Area Guard



●Use this for securing area guard doors, etc.



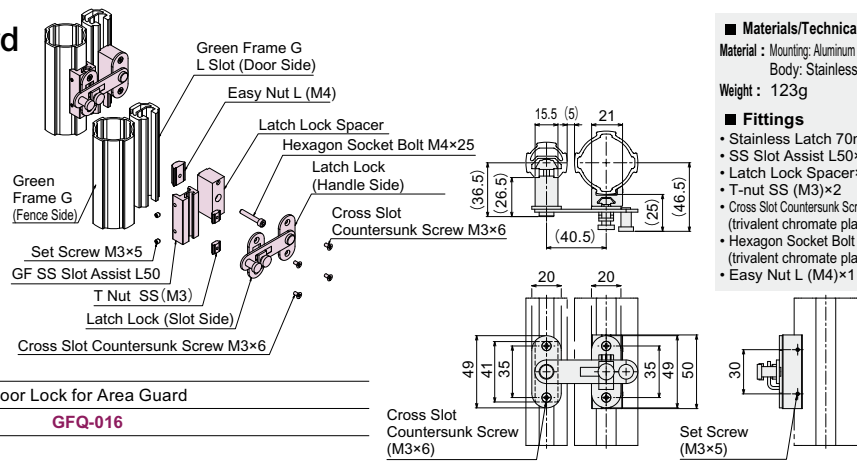
- Materials/Technical Data
Material : Mounting: Aluminum Diecast
Magnet: Ferrite
Housing: Stainless Steel
Weight : 178g
- Fittings
- Connector Piece L×1
 - Parts Holder L76×1
 - Magnet Catch N×1
 - MG20P Bracket×1
 - T-nut S (M6)×1
 - Hexagon Socket Bolt M4×10 (trivalent chromate plating)×2
 - Truss Screw M4×5 (trivalent chromate plating)×2
 - Cross Slot Flat Countersunk Screw M3×12 (trivalent chromate plating)×1
 - Hexagon Socket Low Head Bolt M6×12 (trivalent chromate plating)×1
 - Easy Nut L (M3)×1

Name	Catch for Area Guard
Item No.	GFQ-013

Door Lock for Area Guard



●Use this for securing area guard doors, etc.



- Materials/Technical Data
Material : Mounting: Aluminum Extrusion
Body: Stainless Steel
Weight : 123g
- Fittings
- Stainless Latch 70mm
 - SS Slot Assist L50×1
 - Latch Lock Spacer×1
 - Latch SS (M3)×2
 - Cross Slot Countersunk Screw M3×6 (trivalent chromate plating)×4
 - Hexagon Socket Bolt M4×25 (trivalent chromate plating)×1
 - Easy Nut L (M4)×1

Name	Door Lock for Area Guard
Item No.	GFQ-016

Area Guard

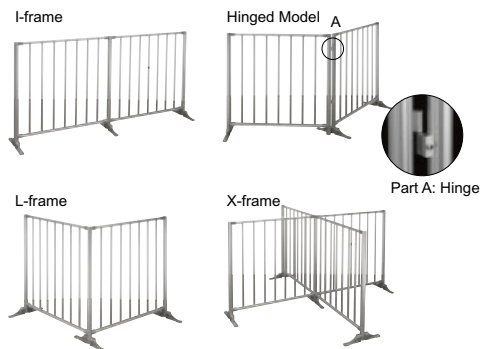
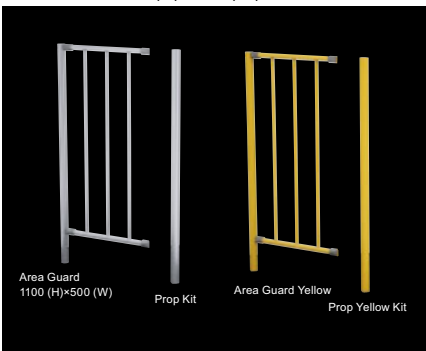
Area Guard 1100 (H)×1000 (W)



Area Guard Door 952.5 (H)×800 (W)



Area Guard 1100 (H)×500 (W)



GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

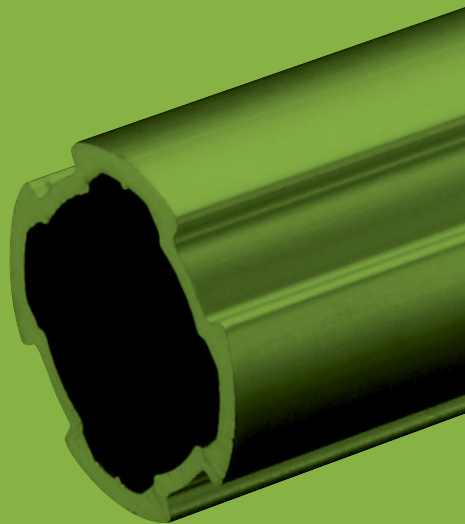
Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data



GREEN FRAME
GF-S
19mm type

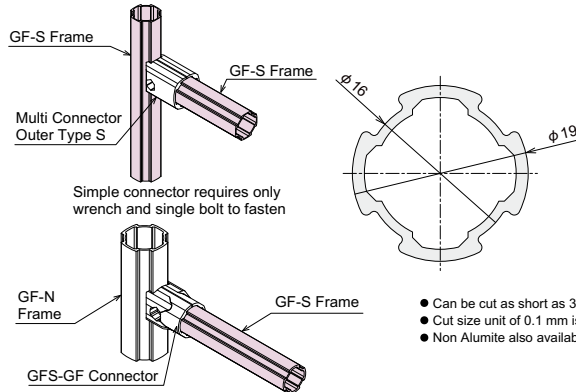
GF-S Frame

Common Specification

Material: Extruded Aluminum Resistance Value : $10^{-9} \sim 10^{-11} \Omega$ (Antistatic Level)
Silver Alumite Treatment Environment : RoHS10 Compliant

GF-N
28mm

Green Frame S



■ **Technical Data**
Section Secondary Moment :
 $I_x=0.27 \times 10^4 \text{ mm}^4$
 $I_y=0.27 \times 10^4 \text{ mm}^4$
Section Coefficient:
 $Z_x=0.28 \times 10^3 \text{ mm}^3$
 $Z_y=0.28 \times 10^3 \text{ mm}^3$
Weight : 0.20 kg/m

- Frame with a diameter of 19 mm.

- Can be cut as short as 30 mm
- Cut size unit of 0.1 mm is available (cutting tolerance is ± 0.5 mm)
- Non Alumite also available (Silver only)

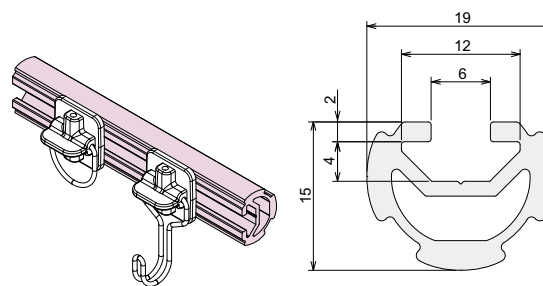
Name	Green Frame S L=100~4000mm	Green Frame S Yellow L=100~4000mm
Item No.	GFF-400	GFF-400Y

■ **Compatible Frame Cap (P134)**
 Inner Cap S **GFA-403**



GF-S
19mm

Green Frame S SS Slot



■ **Technical Data**
Section Secondary Moment :
 $I_x=0.198 \times 10^4 \text{ mm}^4$
 $I_y=0.382 \times 10^4 \text{ mm}^4$
Section Coefficient:
 $Z_x=0.21 \times 10^3 \text{ mm}^3$
 $Z_y=0.40 \times 10^3 \text{ mm}^3$
Weight : 0.30 kg/m

- 19 mm frame with groove.
- Insert ST Nut SS (P169) to install various components.

- Can be cut as short as 30 mm
- Can be cut in increments of 0.1 mm (Cut tolerance is 0.5 mm)
- Non Alumite also available

Name	Green Frame S SS Slot L=100~4000mm
Item No.	GFF-401

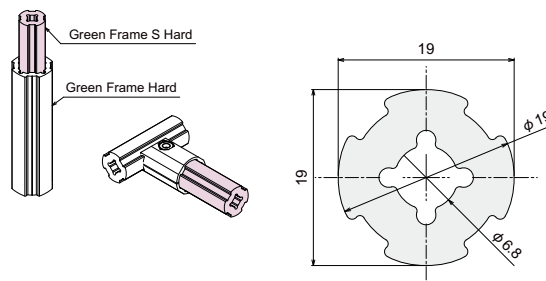
■ **ST Nut (with Slide Stopper Cap) (P169)**
 ST Nut SS M5 **SFK-T03S** ST Nut LSSM3 **SFK-T01S**
 ST Nut SS M4 **SFK-T02S**

■ **Compatible Frame Cap (P134)**
 SS slot Inner Cap **GFA-408**



GF-G
43mm

Green Frame S Hard



■ **Technical Data**
Section Secondary Moment :
 $I_x=0.51 \times 10^4 \text{ mm}^4$
 $I_y=0.51 \times 10^4 \text{ mm}^4$
Section Coefficient:
 $Z_x=0.54 \times 10^3 \text{ mm}^3$
 $Z_y=0.54 \times 10^3 \text{ mm}^3$
Mass Unit : 0.56 kg/m

- High-strength S size frame.
- M8 Tap can be processed at the end (certain adjusters and foot components can be attached easily).

■ **Compatible Frame Cap (P134)**
 GFS Hard Inner Cap **GFA-443**

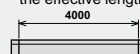


Name	Green Frame S Hard L=100~4000mm
Item No.	GFF-404

In case of specific size (cut from factory)

Order Example
 Item No. or Product Name Length Volume
GFF-400 **l=800** **5 pcs.**

※1 The scale shows the effective length

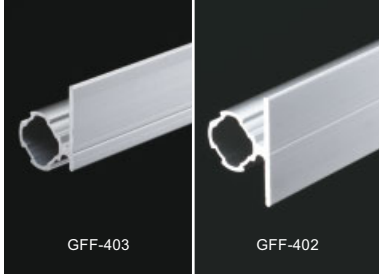


GF-S Frame

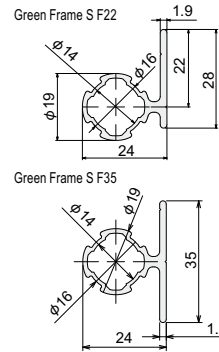
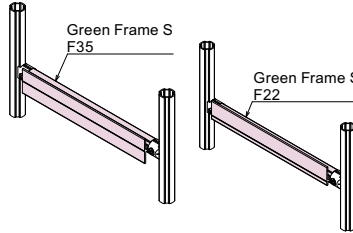
Common Specification

Material: Extruded Aluminum Alumite Treatment Resistance Value $10^9 \sim 10^{11} \Omega$ (Antistatic Level) Environment : RoHS10 Compliant

Green Frame S F22/Green Frame S F35



• Parts container can be attached to the flat plate. The flat area can be used as a "Name Plate."

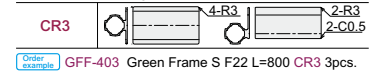


■ Technical Data

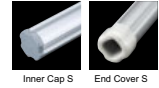
F22
Section Secondary Moment :
 $I_x=0.86 \times 10^4 \text{mm}^4$
 $I_y=0.81 \times 10^4 \text{mm}^4$
Section Coefficient:
 $Z_x=0.69 \times 10^3 \text{mm}^3$
 $Z_y=0.52 \times 10^3 \text{mm}^3$
Mass Unit : 0.36 kg/m

F35
Section Secondary Moment :
 $I_x=0.93 \times 10^4 \text{mm}^4$
 $I_y=0.92 \times 10^4 \text{mm}^4$
Section Coefficient:
 $Z_x=0.53 \times 10^3 \text{mm}^3$
 $Z_y=0.56 \times 10^3 \text{mm}^3$
Mass Unit : 0.40 kg/m

■ 4-R3 processing

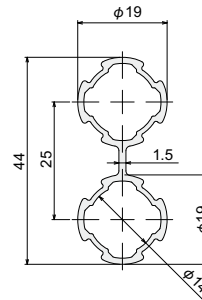
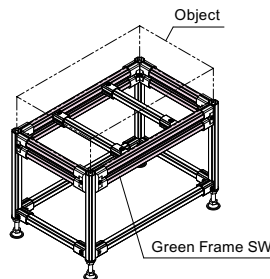
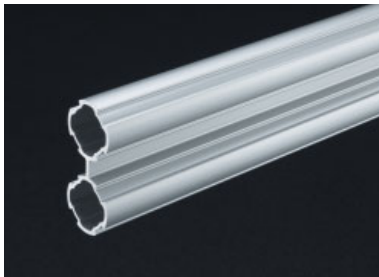


■ Compatible Frame Cap (P134)
Inner Cap S : GFA-403
End Cover S



Name	Green Frame S F22 L=100~4000mm	Green Frame S F35 L=100~4000mm
Item No.	GFF-403	GFF-402

Green Frame S W



■ Technical Data

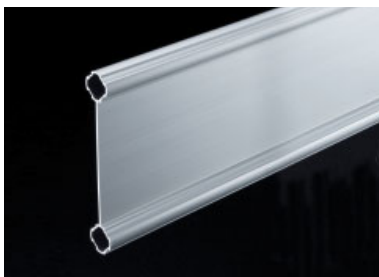
Section Secondary Moment :
 $I_x=2.87 \times 10^4 \text{mm}^4$
 $I_y=0.53 \times 10^4 \text{mm}^4$
Section Coefficient:
 $Z_x=1.30 \times 10^3 \text{mm}^3$
 $Z_y=0.56 \times 10^3 \text{mm}^3$
Mass Unit : 0.41 kg/m

■ Compatible Frame Cap (P134)
Inner Cap S : GFA-403

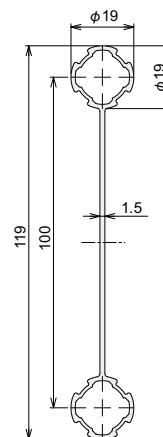
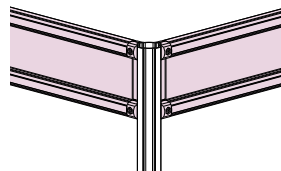


Name	Green Frame S W L=100~4000mm
Item No.	GFF-406

Green Frame S P100



• Added as a partition or for more reinforcement.



■ Technical Data

Section Secondary Moment :
 $I_x=44.58 \times 10^4 \text{mm}^4$
 $I_y=0.53 \times 10^4 \text{mm}^4$
Section Coefficient:
 $Z_x=7.49 \times 10^3 \text{mm}^3$
 $Z_y=0.56 \times 10^3 \text{mm}^3$
Mass Unit : 0.69 kg/m

■ Compatible Frame Cap (P134)
Inner Cap S : GFA-403



Name	Green Frame S P100 L=100~4000mm
Item No.	GFF-405

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

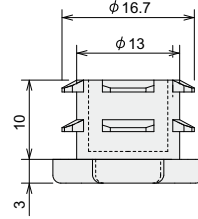
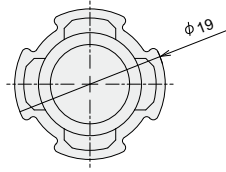
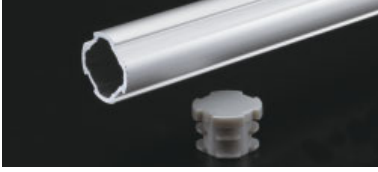
Jig

Technical Data

GF-S Cap

GF-N
28mm

Inner Cap S

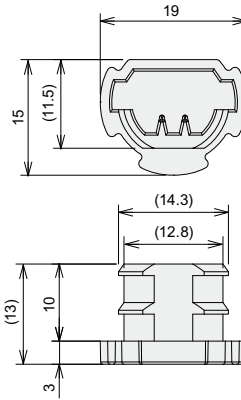


■ **Material/Technical Data**
Material : Polyethylene
Weight : 1 g
Environment : RoHS10 Compliant

Name	Inner Cap S
Item No.	GFA-403

GF-S
19mm

SS Slot Inner Cap



■ **Material/Technical Data**
Material : Low Density Polyethylene
Weight : 1 g
Environment : RoHS10 Compliant

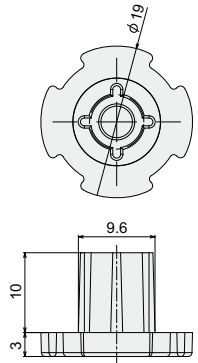
Name	SS Slot Inner Cap
Item No.	GFA-408

GF-G
43mm

GFS Hard Inner Cap



● Special cap for Green Frame S Hard (GFF-404).



■ **Material/Technical Data**
Material : Low Density Polyethylene
Weight : 1 g
Environment : RoHS10 Compliant

Name	GFS Hard Inner Cap
Item No.	GFA-443

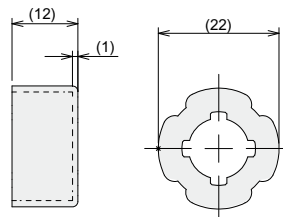
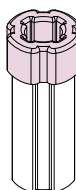
■ **Compatible Frame (P132)**
Green Frame S Hard (GFF-404)

Bolt
Nut

GFS End Cover



● For protecting the end face of a frame.



■ **Material/Technical Data**
Material : Flexible PVC
Weight : 3.1 g
Environment : RoHS10 Compliant


Name	GFS End Cover (Gray)	GFS End Cover (Red)
Item No.	GFA-437G	GFA-437R

GREEN FRAME
GF-S 19_{mm} type

Connector

GF-N
28_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Electric Item 


Corocon Roller 

Accessory 

Door Part 

GF-S
19_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 


Corocon Roller 

Accessory 

Door Part 

GF-G
43_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

Bolt Nut

Jig

Technical Data

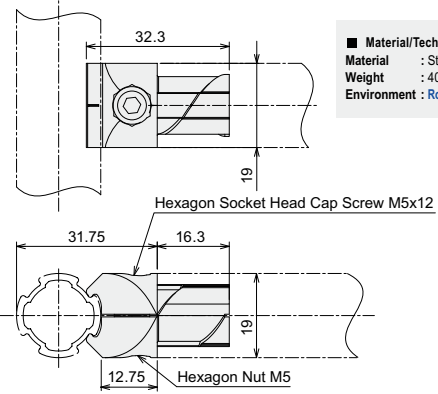
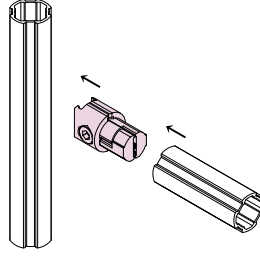
GF-S Connector

GF-N
28mm

Multi Connector S Inner



- Allows connection between frames of the same size.



Material/Technical Data
 Material : Stainless
 Weight : 40 g
 Environment : RoHS10 Compliant

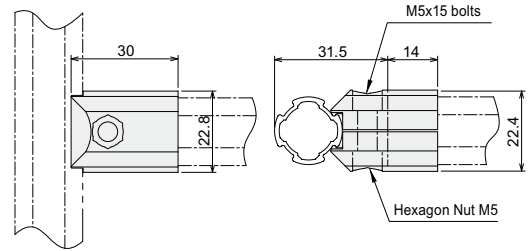
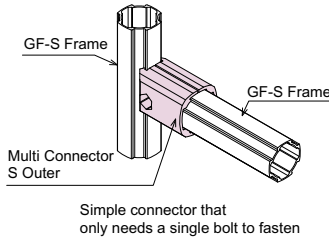
Name	Multi Connector S Inner
Item No.	GFJ-211

GF-S
19mm

Multi Connector S Outer



- Allows connection between frames of the same size.



Material/Technical Data
 Material : Aluminum Diecast
 Weight : 20 g
 Environment : RoHS10 Compliant

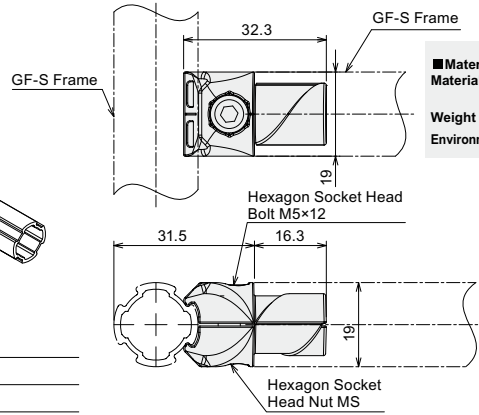
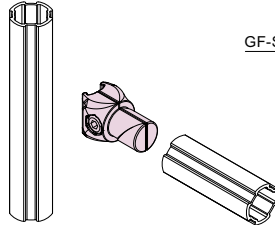
Name	Multi Connector S Outer
Item No.	GFJ-018

GF-G
43mm

Multi Connector SR Inner



- Changes the angle of the frame.



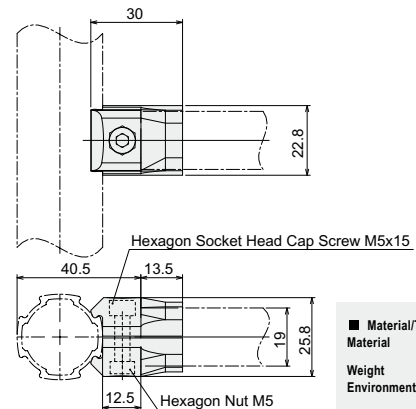
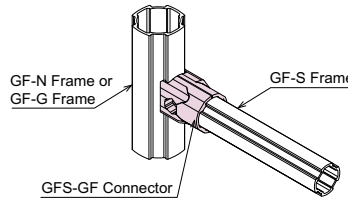
Material/Technical Data
 Material : Aluminium Diecast
 Bolt, Nut : Steel
 Weight : 19 g
 Environment : RoHS10 Compliant

Name	Multi Connector SR Inner
Item No.	GFJ-244

GFS-GF Connector



- This connector joins GF-S (19 mm) Frames and GF-N (28 mm) / GF-G (43 mm) Frames.



Material/Technical Data
 Material : Aluminum Diecast
 Bolt, Nut : Steel
 Weight : 25 g
 Environment : RoHS10 Compliant

Name	GFS-GF Connector
Item No.	GFJ-020



Approx. Frame Size
→ P.175



Connector Strength Data
→ P.202

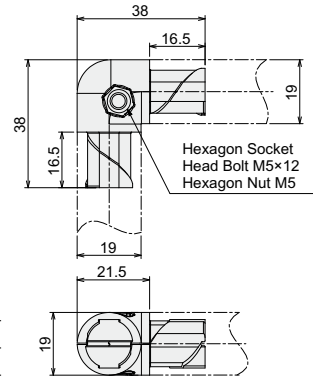
GF-S Connector

Angle Connector S Inner



- This connector has the same outer dimensions as the frame. It is ideal for frames that are not compatible with outer connectors.

Name	Angle Connector S Inner
Item No.	GFJ-C38



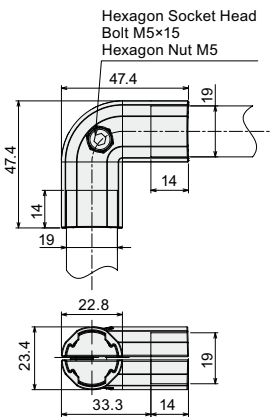
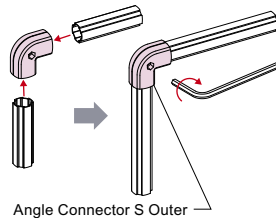
■ **Material/Technical Data**
Material : Aluminium Diecast
Bolt,Nut : Steel
Weight : 29 g
Environment : RoHS10 Compliant

■ **Strength Data**
Sliding Load : 140(N)
Moment Load (vertical) : 3.5(N·m)
Moment Load (horizontal) : 1.6(N·m)

Angle Connector S Outer



- Connect frames at a right angle.



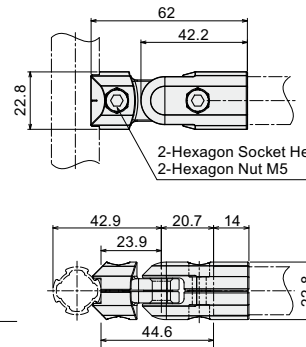
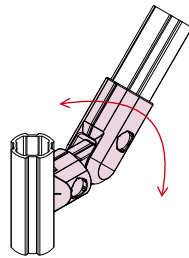
■ **Material/Technical Data**
Material : Aluminium Diecast
Bolt,Nut : Steel
Weight : 40 g
Environment : RoHS10 Compliant

Name	Angle Connector S Outer
Item No.	GFJ-046

Link Connector S V



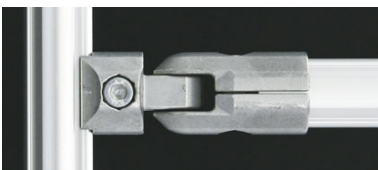
- After connected and tightened with a bolt, it allows for movement similar to an elbow.



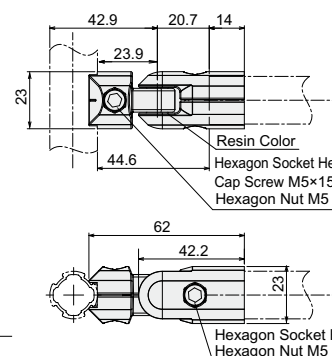
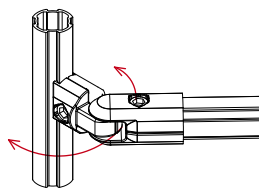
■ **Material/Technical Data**
Material : Aluminium Diecast
Bolt,Nut : Steel
Weight : 47 g
Environment : RoHS10 Compliant

Name	Link Connector S V
Item No.	GFJ-041

Link Connector S H



- Connector can move perpendicular while connected to frames.
- Hinge can move freely even after tightening the bolt.



■ **Material/Technical Data**
Material : Aluminium Diecast
Bolt,Nut : Steel
Weight : 47 g
Environment : RoHS10 Compliant

- Apply oil or another lubricant to the hinge before using in applications with repetitive movement.

Name	Link Connector S H
Item No.	GFJ-C81

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

Jig

Technical Data

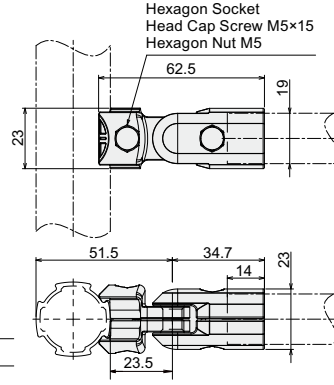
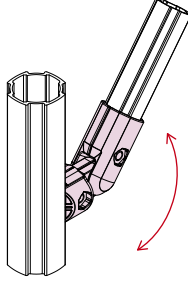
GF-S Connector

GF-N
28mm

Link Connector N-S



- The outer dimension 28 mm GF-N frame can be mounted on the grip side and the external dimension 19 mm GF-S frame can be mounted on the insertion side of this connector, which can be fixed to the frame at any angle.
- Apply grease before using to perform repeated operations.



■ **Material/Technical Data**
Material : Aluminium Diecast
 Bolt,Nut : Steel
Weight : 64 g
Environment : RoHS10 Compliant
 ■ **Strength Data**
 Slide Load : 280(N)
 Sliding Load : 300(N)

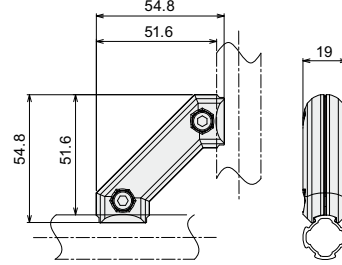
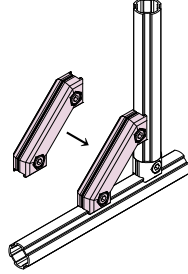
Name	Link Connector N-S
Item No.	GFJ-C39

GF-S
19mm

Point Connector S



- Support connector for Green Frame S frames joined at a 90 degree angle.



■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt,Nut : Steel
Weight : 40 g
Environment : RoHS10 Compliant

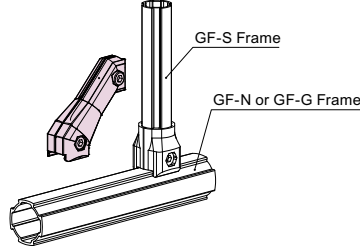
Name	Point Connector S
Item No.	GFJ-A72

GF-G
43mm

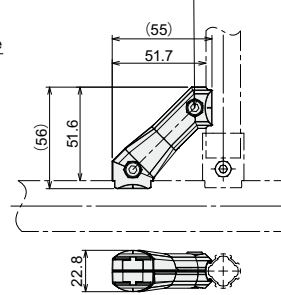
Point Connector N-S



- Reinforces the connection point between GF-S (19mm) and GF-N (28 mm) frames.



- 2. Hexagon Socket Head Bolt M5×15
- 2. Hexagon Nut MS



■ **Material/Technical Data**
Material : Aluminium Diecast
 Bolt,Nut : Steel
Weight : 43 g
Environment : RoHS10 Compliant

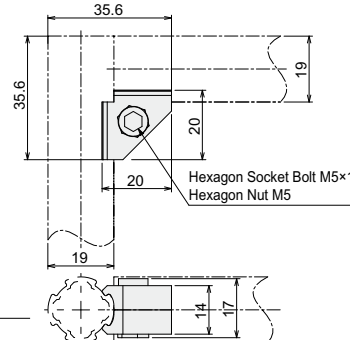
Name	Point Connector N-S
Item No.	GFJ-B89

Bolt Nut

Corner Bracket S



- This bracket for the GF-S (19 mm) grips the side of the frame and links at 90°. It fits inside the frame's external dimension even in places where an inner connector cannot be used.



■ **Material/Technical Data**
Material : Aluminium Diecast
 Bolt,Nut : Steel
Weight : 11 g
Environment : RoHS10 Compliant
 ■ **Strength Data**
 Slide Load : 360(N)
 Moment Load (vertical) : 4.5(N·m)
 Moment Load (horizontal) : 1.2(N·m)

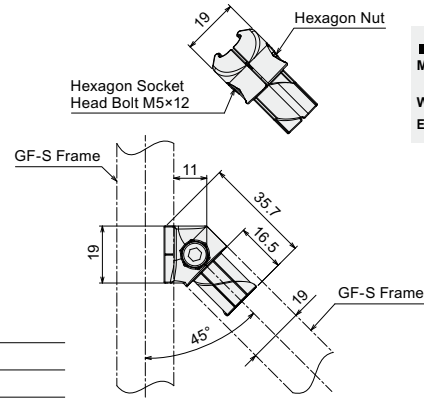
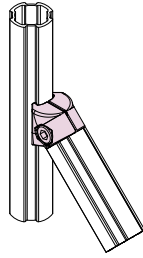
Name	Corner Bracket S
Item No.	GFJ-C53

GF-S Connector

45-Degree Connector S Inner



- Connects at a 45 degree angle.
- Enhances appearance because there is no gap between the connector and the frame surface.



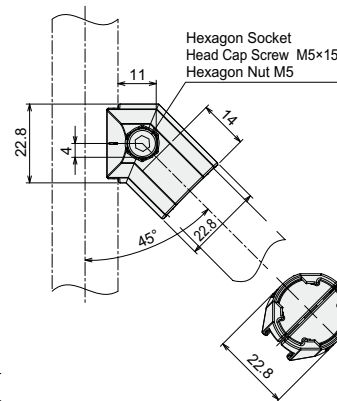
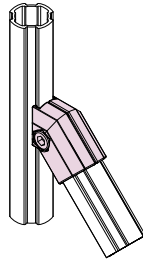
■ Material/Technical Data
Material : Aluminium Diecast
Bolt,Nut : Steel
Weight : 19 g
Environment : RoHS10 Compliant

Name	45-Degree Connector S Inner
Item No.	GFJ-248

45-Degree Connector Outor S



- Connector that produces a 45° angle.



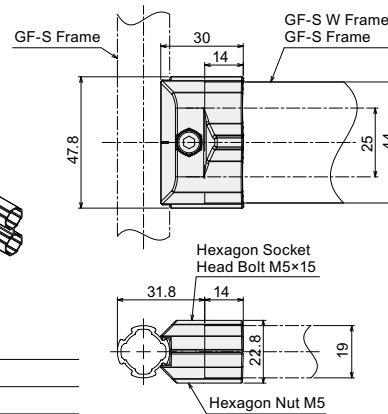
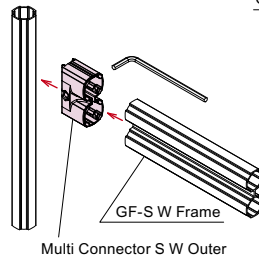
■ Material/Technical Data
Material : Aluminium Diecast
Bolt,Nut : Steel
Weight : 19 g
Environment : RoHS10 Compliant

Name	45-Degree Connector Outor S
Item No.	GFJ-035

Multi Connector S W Outer



- Connector for Green Frame S W.



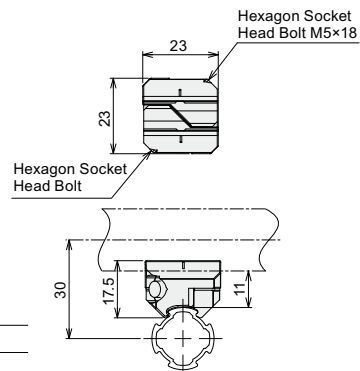
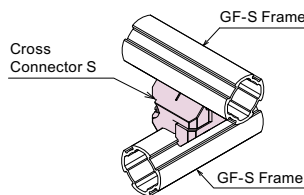
■ Material/Technical Data
Material : Aluminium Diecast
Bolt,Nut : Steel
Weight : 39 g
Environment : RoHS10 Compliant

Name	Multi Connector S W Outer
Item No.	GFJ-044

Cross Connector S



- Connect frames perpendicularly.



■ Material/Technical Data
Material : Aluminium Diecast
Bolt,Nut : Steel
Weight : 18 g
Environment : RoHS10 Compliant

Name	Cross Connector S
Item No.	GFJ-B55

GF-N
28 mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S
19 mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G
43 mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

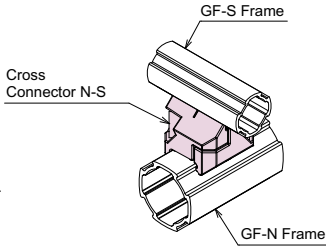
Jig

Technical Data

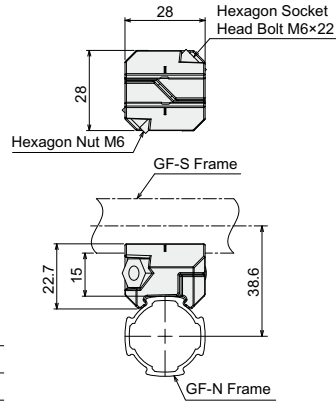
GF-S Connector

GF-N
28mm

Cross Connector N-S



- Connects GF-S (19mm) and GF-N (28mm) perpendicularly.

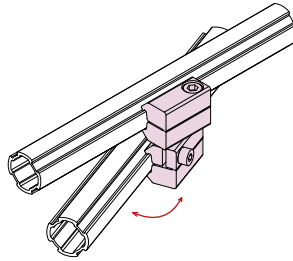


■ **Material/Technical Data**
Material : Aluminium Diecast
 Bolt,Nut : Steel
Weight : 35 g
Environment : RoHS10 Compliant

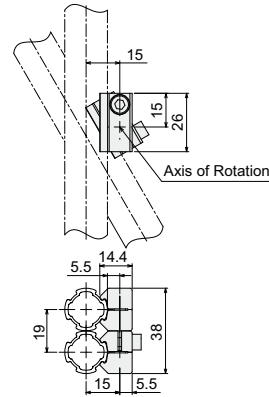
Name	Cross Connector N-S
Item No.	GFJ-B26

GF-S
19mm

Cross Connector Rotate Type S



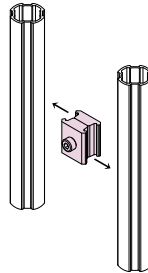
- Freely determine the angle of two intersecting frames with this connector.



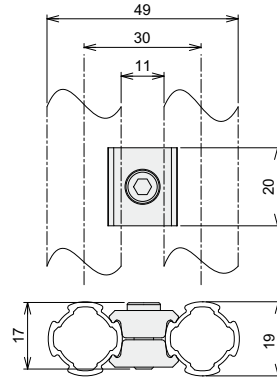
■ **Material/Technical Data**
Material : Extruded Aluminium
 Bolt,Nut : Steel
Weight : 38 g
Environment : RoHS10 Compliant

Name	Cross Connector Rotate Type S
Item No.	GFJ-B77

Double Connector S



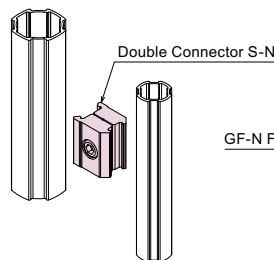
- This connector joins Green Frame S frames side by side.



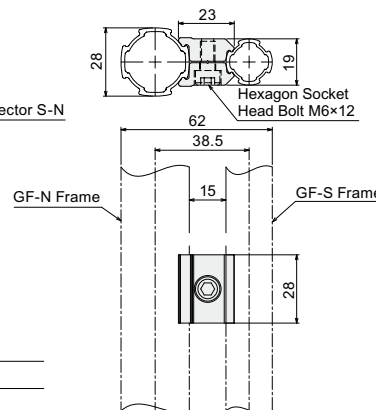
■ **Material/Technical Data**
Material : Extruded Aluminium
 Bolt,Nut : Steel
Weight : 12 g
Environment : RoHS10 Compliant

Name	Double Connector S
Item No.	GFJ-A55

Double Connector N-S



- To connect parallel GF-S (19mm) and GF-N (28mm) frames.



■ **Material/Technical Data**
Material : Extruded Aluminium
 Bolt,Nut : Steel
Weight : 27 g
Environment : RoHS10 Compliant

Name	Double Connector N-S
Item No.	GFJ-B50

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

Bolt Nut

Jig

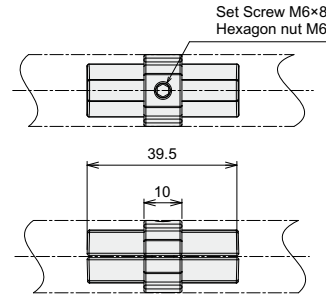
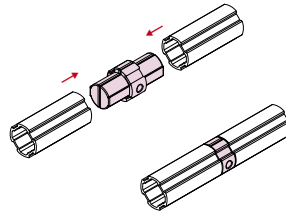
Technical Data

GF-S Connector

Straight Connector S



- Connector used to join the ends of two Green Frame S.



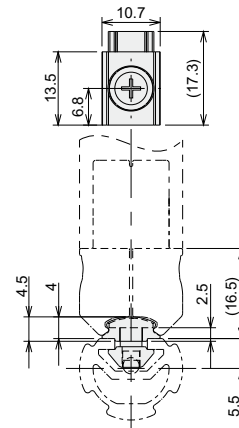
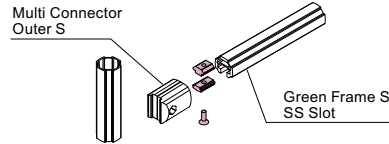
Material/Technical Data	
Material	: SCS13
Set Screw	: Stainless
Weight	: 44 g
Environment	: RoHS10 Compliant

Name	Straight Connector S
Item No.	GFJ-A89

SS Slot Connector Piece



- Insert the connector into the groove of a Green Frame S SS Slot to attach an S series connector, etc.
- Used to reinforce the end of a Green Frame S SS Slot when attaching an outer connector.



Material/Technical Data	
Material	: Extruded Aluminum
Bolt, Nut	: Steel
Weight	: 5 g
Environment	: RoHS10 Compliant
Kit Details	
SS Slot Connector Piece	×1
Cross Recessed Slim Head Small Screw	M4×6×1
Easy Nut SS (M4)×1	

- Use the GF-SF Connector S when connecting a GF-S frame and an SF frame.

Name	SS Slot Connector Piece
Item No.	GFA-619

GF-N 28 mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19 mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43 mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

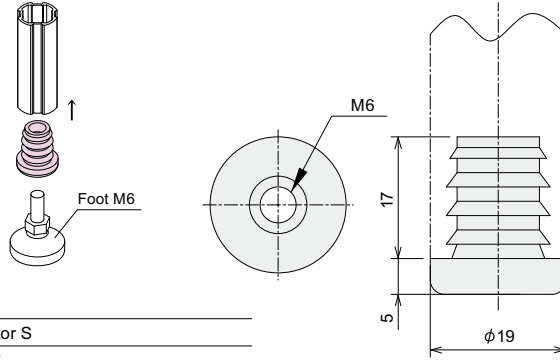
GF-S Foot Components Part

GF-N
28mm

Foot Connector S



- Use to install an adjuster or foot onto the frame.

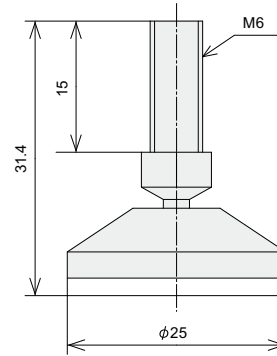


■ **Material/Technical Data**
Material : Nylon
Weight : 4 g
Environment : RoHS10 Compliant

Name	Foot Connector S
Item No.	GFN-E07

GF-S
19mm

Foot M6



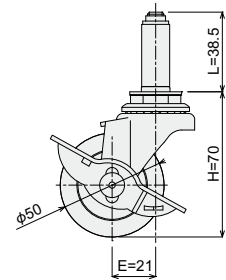
■ **Material/Technical Data**
Material : Shaft Area : Soft Wire Steel
Bottom area : Nylon
Weight : 11 g
Load Capacity : 300 N
Environment : RoHS10 Compliant

Name	Foot M6
Item No.	SFA-601

Frame Caster S Frame ϕ 50 Rubber



- Insert this directly into the frame and tighten it with a thin spanner to crimp the rubber part to the frame and fix it in place.



■ **Material/Technical Data**
Material : Steel Rubber
Load Capacity : 120 N
Environment : RoHS10 Compliant

- A #21 spanner is necessary for mounting.

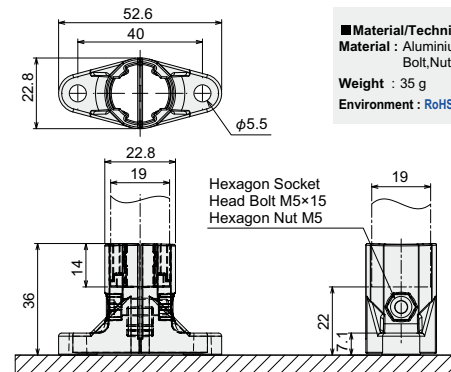
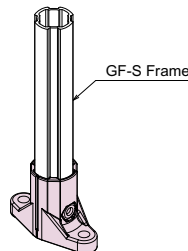
Name	Frame Caster S Frame ϕ 50 Rubber	Frame Caster S Frame ϕ 50 Rubber with Brake
Brake	No Brake	With Brake
Weight	171 g	201 g
Item No.	GFN-647	GFN-648

GF-G
43mm

Stand Connector S



- For fixing frames to a wall or a floor



■ **Material/Technical Data**
Material : Aluminium Diecast
Bolt, Nut : Steel
Weight : 35 g
Environment : RoHS10 Compliant


Name	Stand Connector S
Item No.	GFJ-B45

GREEN FRAME
GF-S 19_{mm} type

Moving Part

GF-N
28_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Electric Item 


Corocon Roller 

Accessory 

Door Part 

GF-S
19_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 


Corocon Roller 

Accessory 

Door Part 

GF-G
43_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

**Bolt
Nut**

Jig

Technical
Data

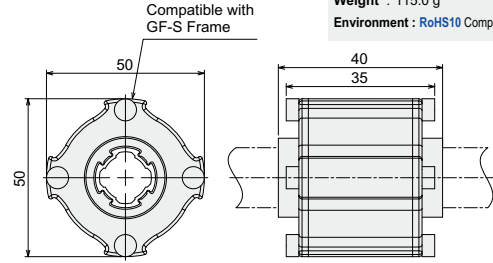
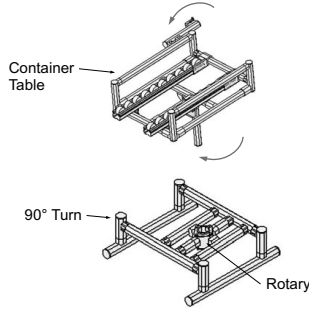
GF-S Moving Part

GF-N
28mm

Rotary Connector S



- Rotates on the frame's axis with bearings.



■ **Material/Technical Data**
Material : Body : Extruded Aluminium
 Cap Part : Aluminium Diecast
 Bearing Part : SUJ2
Weight : 115.0 g
Environment : RoHS10 Compliant

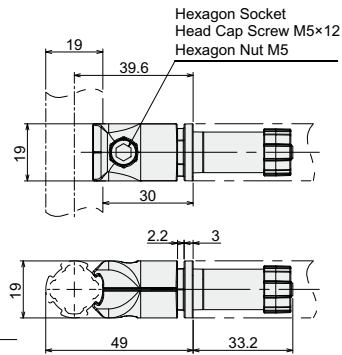
Name	Rotary Connector S
Item No.	GFJ-B83

GF-S
19mm

Pin Connector S



- Part that allows the frame on the insertion side to rotate smoothly.
- Use with both ends supported.
- A thin spanner (GFG-075) is required to secure this connector.



■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt, Nut, Bearing: Steel
Weight : 40 g
Environment : RoHS10 Compliant

*Do not use as a cantilever.

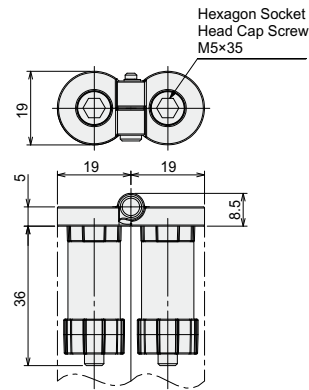
Name	Pin Connector S
Item No.	GFJ-D06

GF-G
43mm

Folding Connector S



- In addition to a folding table, it can also be used as a link in karakuri mechanisms.



■ **Material/Technical Data**
Material : Aluminum Diecast
 Pin : Steel
 Fixed part : Rubber, Resin
Weight : 37 g
Environment : RoHS10 Compliant

- Apply oil or another lubricant to the hinge before using in applications with repetitive movement.

Name	Folding Connector S
Item No.	GFJ-D10

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

Bolt Nut

Jig

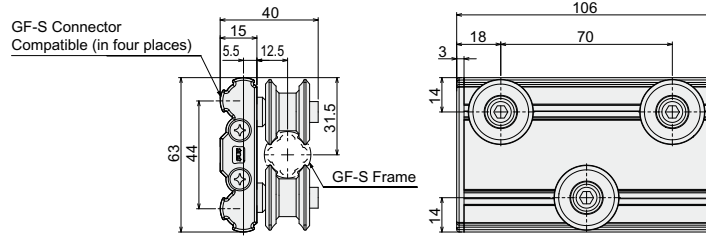
Technical Data

GF-S Moving Part

Roller Slider S



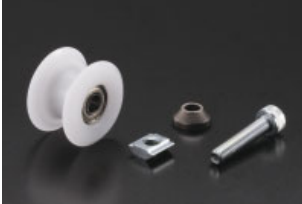
- Allows a GF-S (19 mm) frame to slide smoothly by inserting it between bearing rollers.



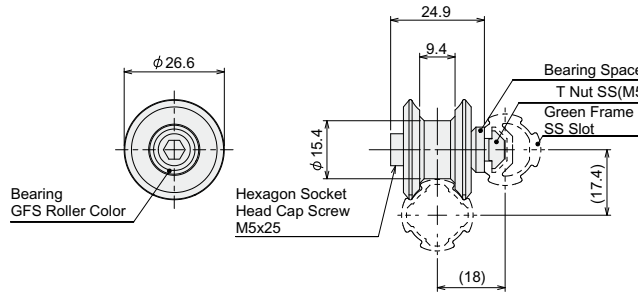
Material/Technical Data
Material : Extruded Aluminum
 Roller, Cap : Resin
 Bolt, Nut : Stainless Steel
Weight : 191 g
Environment : RoHS10 Compliant
Load Capacity : 50 N/pc

Name	Roller Slider S L=100
Item No.	GFW-476

GF Roller S Mounting Kit



- Roller that uses a GF-S (19mm) frame as a rail.



Material/Technical Data
Material : POM
 Bearing, Bolt, Nut : Steel
 Spacer : Stainless Steel
Weight : 20 g
Load Capacity : 25 N/pc
Environment : RoHS10 Compliant

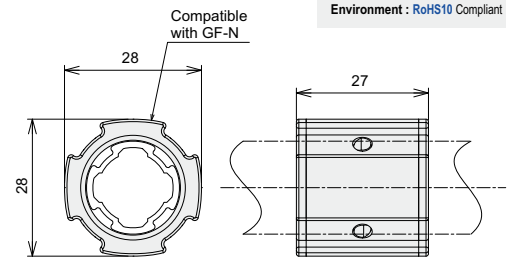
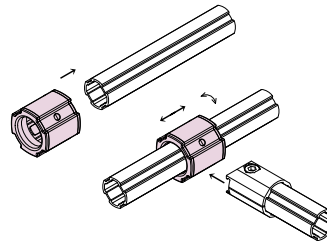
Kit Details
 GF Roller×1
 Bearing×1
 GFS Roller Color×1
 Hexagon socket head cap screw M5x25×1
 GFS Bearing Spacer×1
 T Nut SS(M5)×1

Name	GF Roller S Mounting Kit
Item No.	GFK-961

Hinge Connector S



- Allows rotation or slide movements.



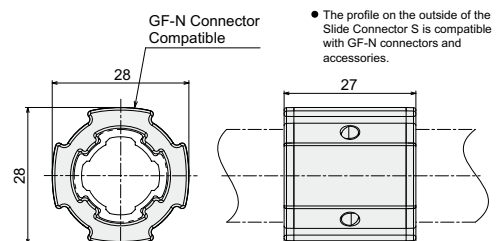
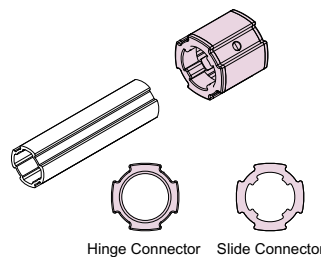
Material/Technical Data
Material : Body : Extruded Aluminum
 Slide Bush : Polyacetal
Weight : 12 g
Environment : RoHS10 Compliant

Name	Hinge Connector S
Item No.	GFJ-A64

Slide Connector S



- Slides without rotating. Provides a more secure motion than a Hinge Connector



Material/Technical Data
Material : Extruded Aluminum
 Slide Bush : POM
Weight : 13 g
Environment : RoHS10 Compliant

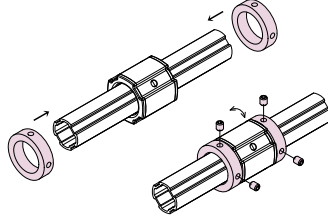
- The profile on the outside of the Slide Connector S is compatible with GF-N connectors and accessories.

Name	Slide Connector S
Item No.	GFJ-B81

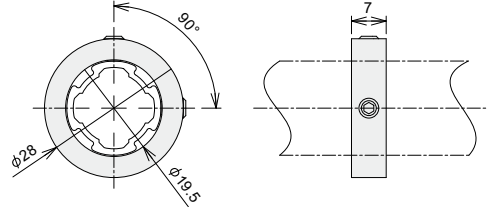
GF-S GF-S Moving Part

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19mm**
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data

Hinge Connector Stopper S



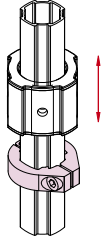
- Use as a stopper for the rotation or slide of Hinge Connector S.



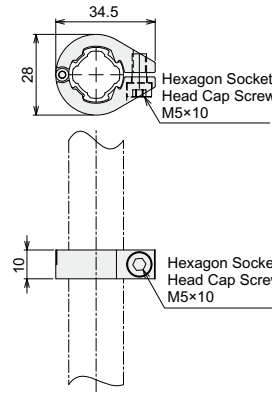
Material/Technical Data
 Material : Extruded Aluminum
 Weight : 7 g
 Environment : RoHS10 Compliant

Name	Hinge Connector Stopper S
Item No.	GFJ-A67

Hinge Connector Stopper S Hard



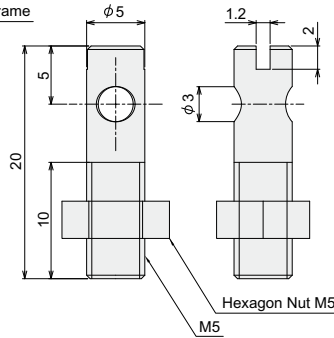
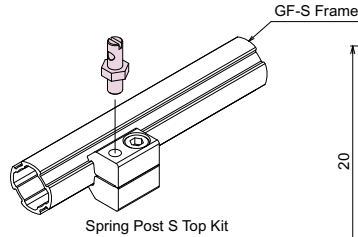
- Has a load capacity approximately 1.5 times (600N) that of the Hinge Connector Stopper S.



Material/Technical Data
 Material : Extruded Aluminum
 Bolt, Nut: Steel
 Weight : 13 g
 Environment : RoHS10 Compliant

Name	Hinge Connector Stopper S Hard
Item No.	GFJ-B95

Spring Post S Top Kit



Material/Technical Data
 Material : Stainless
 Weight : 3.2 g
 Environment : RoHS10 Compliant
Kit Contents
 Spring Post *1pc
 Hexagon Nut M5 *1pc
 Connector Piece *1pc

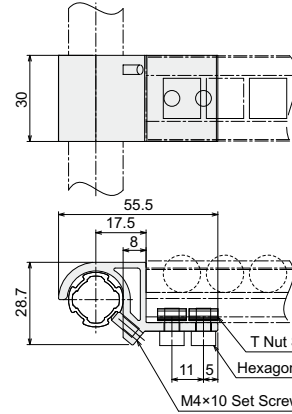
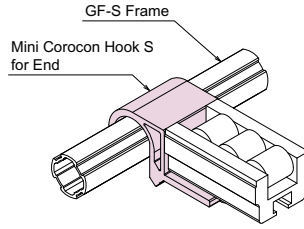
Name	Spring Post S Top Kit
Item No.	GFK-953

GF-S Corocon

Mini Corocon Hook S for End



• Mini Corocon Hook for Green Frame S.

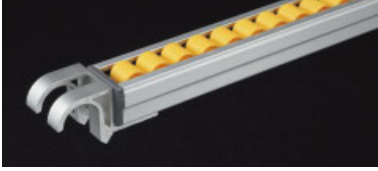


■ **Material/Technical Data**
Material : Extruded Aluminium
 Bolt,Nut : Stainless
Mass Unit : 33 g
Environment : RoHS10 Compliant

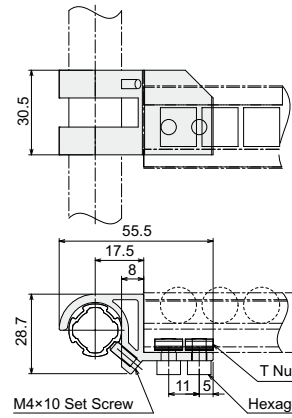
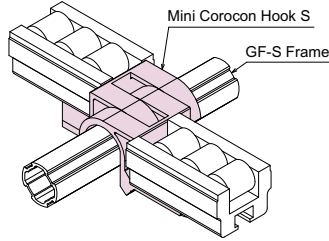
■ **Kit Contents**
 ST Nut SS(M5) for Small Pitch Corocon Hook for End *2pcs
 Hexagon Socket Bolt M5*6 *2pcs
 Set Screw M4*10 *1pc

Name	Mini Corocon Hook S for End
Item No.	GFC-251

Mini Corocon Hook S



• Used at relay points.



■ **Material/Technical Data**
Material : Extruded Aluminium
 Bolt,Nut : Stainless
Mass Unit : 28 g
Environment : RoHS10 Compliant

■ **Kit Contents**
 ST Nut SS(M5) for Small Pitch Corocon Hook for End *2pcs
 Hexagon Socket Bolt M5*6 *2pcs
 Set Screw M4*10 *1pc

Name	Mini Corocon Hook S
Item No.	GFC-253

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

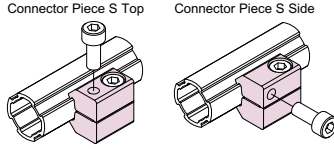
GF-S Accessory

GF-N
28mm

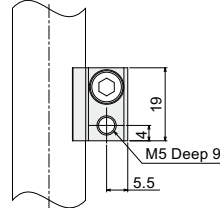
Connector Piece S



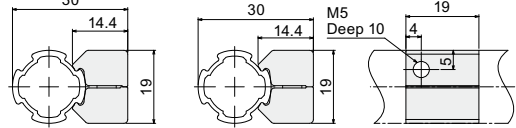
- Allows you to attach items and equipment using an M5 bolt.



Connector Piece S Top



Connector Piece S Side



■ **Material/Technical Data**
 Material : Extruded Aluminium
 Bolt,Nut : Steel
 Weight : 13 g
 Environment : RoHS10 Compliant

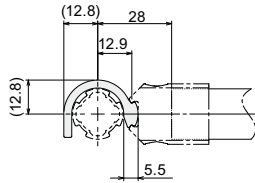
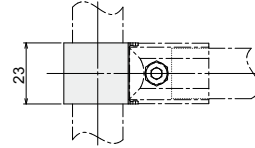
Name	Connector Piece S Top	Connector Piece S Side
Item No.	GFJ-B70	GFJ-B71

GF-S
19mm

Hook Connector S R



- Allows you to hook onto a GF-S (19 mm) frame.
- It can be hooked at any angle.



■ **Material/Technical Data**
 Material : Extruded Aluminium
 Weight : 10 g
 Environment : RoHS10 Compliant

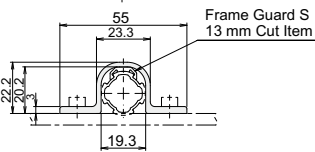
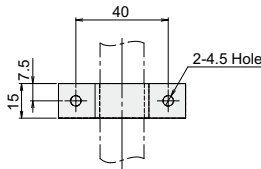
Name	Hook Connector S R
Item No.	GFJ-D15

GF-G
43mm

Double Saddle S



- Affix a GF-S (19 mm) frame to a wall, board, etc.



■ **Material/Technical Data**
 Material : Extruded Aluminum
 Frame Guard : PP
 Weight : 8 g
 Environment : RoHS10 Compliant

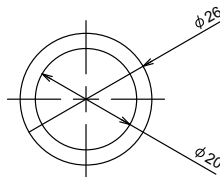
■ **Kit Details**
 Double Saddle S×1
 Frame Guard S 13 mm×1

Name	Double Saddle S
Item No.	GFJ-D16

φ 26 PVC Pipe



- This pipe is used to construct simple rolling conveyors and to protect frames that may interfere with each other during operation.



■ **Material/Technical Data**
 Material : PVC
 Weight : 298 g/m
 Environment : RoHS10 Compliant

Name	φ26 PVC Pipe L=100~4000mm
Item No.	GFA-A89

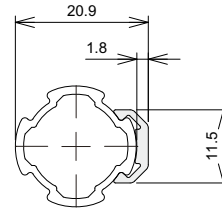
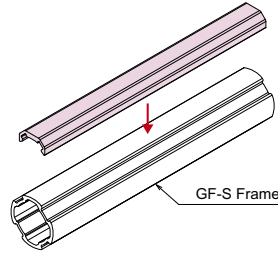


GF-S Accessory

Frame Guard S



- Protects frames from scratches by snapping onto the edge of the frame profile.
- Frames can be color-coded according to area or application.



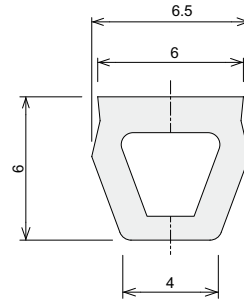
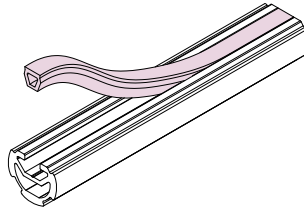
■ **Material/Technical Data**
Material : PP
Weight : 21 g/m
Environment : RoHS10 Compliant

Name	Frame Guard S L=2000 mm
	Gray
Item No.	GFA-813G

Slot Seal SS



- This part covers the groove of Green Frame S SS Slot.



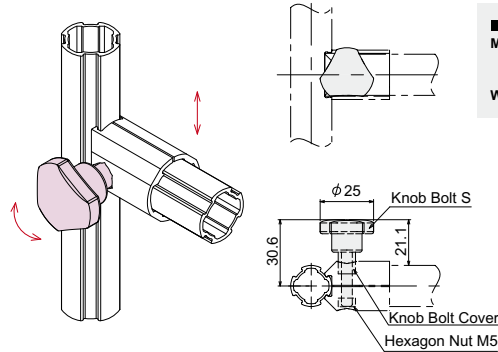
■ **Material/Technical Data**
Material : Elastomer
Weight : 21.0 g/m
Environment : RoHS10 Compliant

Name	Slot Seal SS
	L=5000 mm/pcs
Item No.	SFA-170

Connector Knob Bolt S



- Easily attach connectors or adjust positioning without the need for tools.



■ **Material/Technical Data**
Material : Knob : Resin
 Bolt : Hard Steel
 Color : Stainless
Weight : 14 g

Name	Connector Knob Bolt S
Item No.	GFA-D34

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

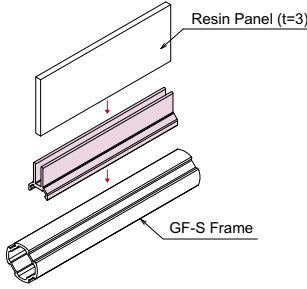
Jig

Technical Data

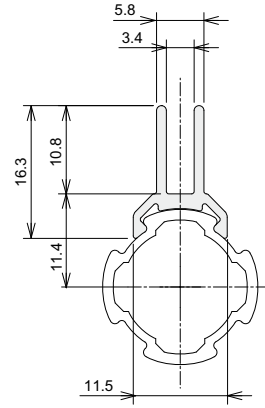
GF-S Door Part

GF-N
28mm

Panel Hold S (t=3)



- Easily install a panel by inserting it into the holder and snapping onto the frame.



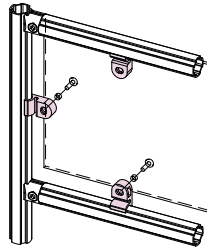
■ **Material/Technical Data**
Material : PP
Weight : 56 g/m
Environment : RoHS10 Compliant

- Refer to Page 181 for the recommended dimensions of panels and Panel Hold S.

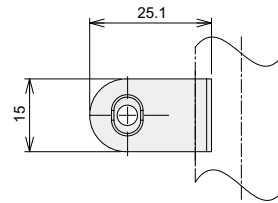
Name	Panel Hold S (t=3)
	L=100~2000 mm
Item No.	GFA-815G

GF-S
19mm

Plate Connector S



- Snap the plate connector S onto the frame and secure the panel with truss head screws.

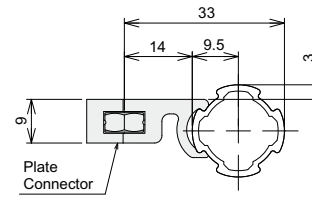


■ **Material/Technical Data**
Material : PP, Nut : Steel
Weight : 3 g
Environment : RoHS10 Compliant

■ **Accessories**
 Hexagon nut (M5)×1

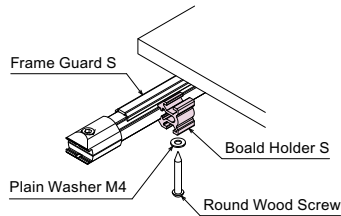
- Refer to Page 181 for the recommended panel dimensions.

Name	Plate Connector S
Item No.	GFJ-A62

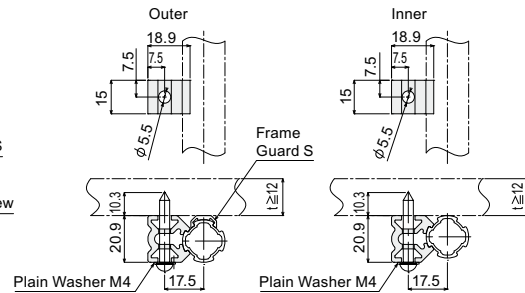


GF-G
43mm

Boald Holder S



- Used to attach a work board, etc. to a frame.
- By flipping over the Board Holder S, this part can accommodate structures that use either inner or outer connectors.



■ **Material/Technical Data**
Material : Extruded Aluminum
Weight : 7 g
Environment : RoHS10 Compliant

- When using ST nuts, use the ST Nut SS (P169).
- Related Parts
 Frame Guard S (GFA-813G)
 Round Wood Screw 4.1×32 (SFB-9C5)
 Plain Washer M4 (SFB-9H2S)

Name	Boald Holder S
Item No.	GFJ-B97

Bolt
Nut

Jig

Technical
Data



Approximate Dimension of Board and Panel Installation
→ P.180

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data



Drawing Support Software
→ P.22



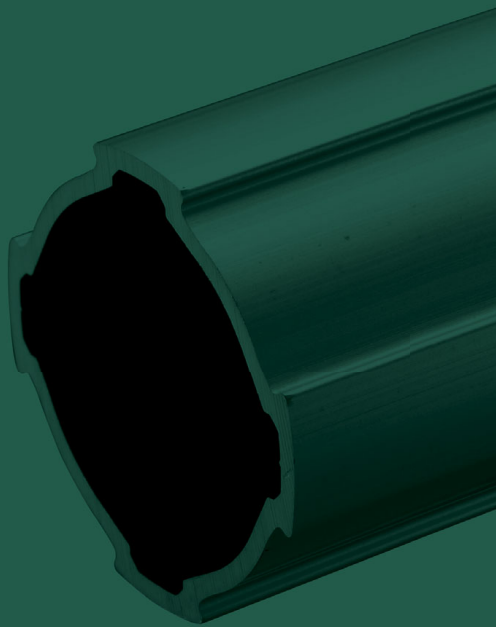
Design Support Service
→ P.22



Assembled Delivery
→ P.23



RoHS
→ P.227



GREEN FRAME
GF-G
43mm type

GF-G Frame

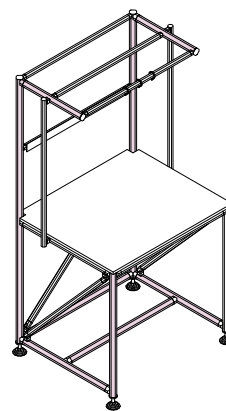
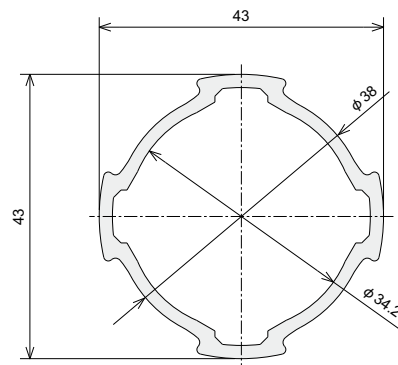
Common Specification

Material: Extruded Aluminum
Silver : Alumite Treatment
Yellow : Painting (munsell 2.5 Y 8/3 Substantially)

Resistance Value : Silver : 10^{10~11} Ω (Antistatic Level)
Environment : RoHS10 Compliant

GF-N
28mm

Green Frame G



- Frame with a diameter of 43 mm.

Name	Green Frame G	Green Frame G Yellow
	L=100~4000mm	L=100~4000mm
Item No.	GFF-200	GFF-200Y

Technical Data

Section secondary moment : $I_x=5.07 \times 10^4 \text{ mm}^4$
 $I_y=5.07 \times 10^4 \text{ mm}^4$

Section coefficient : $Z_x=2.36 \times 10^3 \text{ mm}^3$
 $Z_y=2.36 \times 10^3 \text{ mm}^3$

Weight per Unit : 0.74 kg/m

- Can be cut as short as 30 mm
- Cut size order available in units of 0.1 mm (Cut tolerance is 0.5 mm)
- Available without Alumite (Silver only)

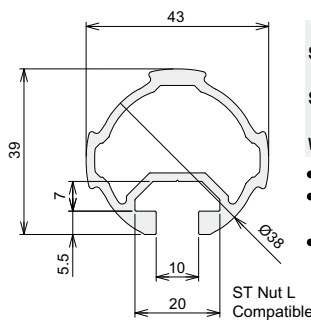
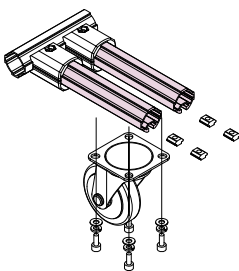
Compatible Frame Cap (P156)
Inner Cap G **GFA-402**



Inner Cap G

GF-G
43mm

Green Frame G L Slot



Technical Data

Section secondary moment : $I_x=5.79 \times 10^4 \text{ mm}^4$
 $I_y=5.21 \times 10^4 \text{ mm}^4$

Section coefficient : $Z_x=2.43 \times 10^3 \text{ mm}^3$
 $Z_y=2.69 \times 10^3 \text{ mm}^3$

Weight per Unit : 0.98 kg/m

- Can be cut as short as 30 mm
- Cut size order available in units of 0.1 mm (Cut tolerance is 0.5 mm)
- Available without Alumite (Silver only)

- 43mm frame with groove (L slot).
- Insert ST Nut L (P169) to install a variety of components.

Dedicated ST Nut (with slide stopper cap) (P169)

ST Nut L M8 **SFK-T11S** ST Nut L M5 **SFK-T09S**
ST Nut L M6 **SFK-T10S** ST Nut L M4 **SFK-T08S**



Compatible Frame Cap (P156)

GF-G L Slot Cap **GFA-409**



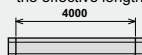
GF-G L Slot Cap

Name	Green Frame G L Slot
	L=100~4000mm
Item No.	GFF-205

In case of specific size (cut from factory)

Item No. or Product Name Length Volume
GFF-200 **ℓ=800** **5 pcs.**

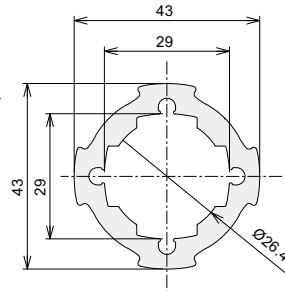
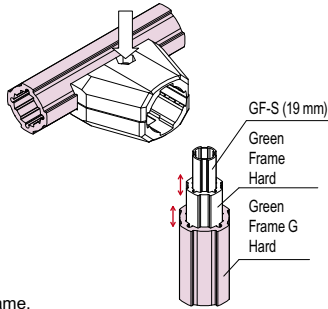
※1 The scale shows the effective length



GF-G Frame

Common Specification	Material: Extruded Aluminum Resistance Value : Silver : $10^{9\sim 11} \Omega$ (Antistatic Level)
	Alumite Treatment Environment : RoHS10 Compliant

Green Frame G Hard



■ Technical Data

Section secondary moment : $I_x = 9.18 \times 10^4 \text{ mm}^4$
 $I_y = 9.18 \times 10^4 \text{ mm}^4$

Section coefficient : $Z_x = 4.27 \times 10^3 \text{ mm}^3$
 $Z_y = 4.27 \times 10^3 \text{ mm}^3$

Weight per Unit : 1.57 kg/m

- Can be cut as short as 30 mm
- Cut size order available in units of 0.1 mm (Cut tolerance is 0.5 mm)
- Available without Alumite (Silver only)

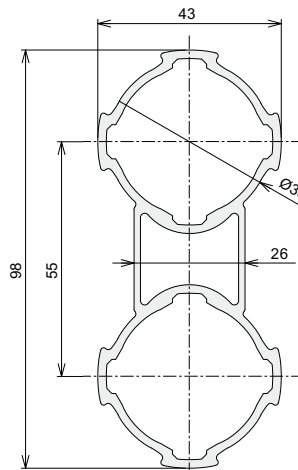
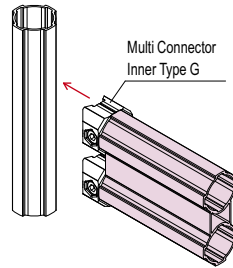
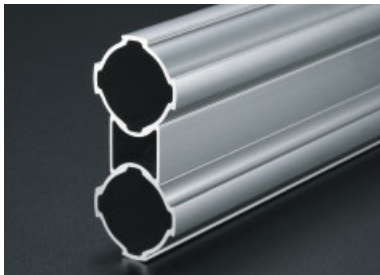
- Suitable for the grip-side of a connector when there is a continuous impact on the joint.
- Flex strength is two times that of regular GF-G Frame.
- Insert GF-N (28mm) frame (P26) and slide to use.

■ Compatible Frame Cap (P156)
GF-G Inner Cap Hard **GFA-426**



Name	Green Frame G Hard L=100~4000mm
Item No.	GFF-209

Green Frame GW



■ Technical Data

Section secondary moment : $I_x = 52.42 \times 10^4 \text{ mm}^4$
 $I_y = 11.47 \times 10^4 \text{ mm}^4$

Section coefficient : $Z_x = 10.07 \times 10^3 \text{ mm}^3$
 $Z_y = 5.33 \times 10^3 \text{ mm}^3$

Weight per Unit : 1.74 kg/m

- Can be cut as short as 30 mm
- Cut size order available in units of 0.1 mm (Cut tolerance is 0.5 mm)
- Available without Alumite (Silver only)

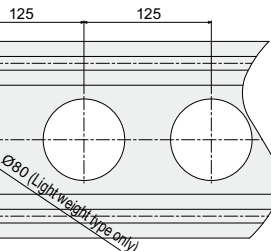
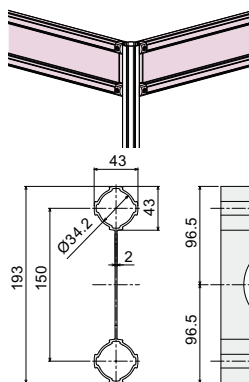
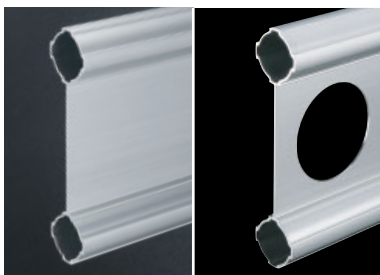
- Use this frame in areas that require extra strength.

■ Compatible Frame Cap (P156)
Inner Cap G **GFA-402**



Name	Green Frame GW
	L=100~4000mm
Item No.	GFF-207

Green Frame G P150



■ Technical Data

Section secondary moment :

High Rigid Type	Light Weight Type
$I_x = 340.49 \times 10^4 \text{ mm}^4$	$I_x = 331.95 \times 10^4 \text{ mm}^4$
$I_y = 10.15 \times 10^4 \text{ mm}^4$	$I_y = 10.15 \times 10^4 \text{ mm}^4$

Section coefficient :

$Z_x = 35.28 \times 10^3 \text{ mm}^3$	$Z_x = 30.4 \times 10^3 \text{ mm}^3$
$Z_y = 4.72 \times 10^3 \text{ mm}^3$	$Z_y = 4.72 \times 10^3 \text{ mm}^3$

Weight per Unit : 2.07 kg/m 1.85 kg/m

- Can be cut as short as 30 mm
- Cut size order available in units of 0.1 mm (Cut tolerance is 0.5 mm)
- Available without Alumite (Silver only)

- Use in a large sized booth.

■ Compatible Frame Cap (P156)
Inner Cap G **GFA-402**



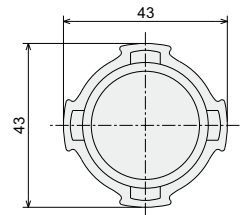
Name	Green Frame G P150	Green Frame G P150 (Lightweight Type)
	L=100~4000mm	L=100~4000mm
Item No.	GFF-201	GFF-202

- For available length (refer on the left)

GF-G Cap

GF-N
28mm

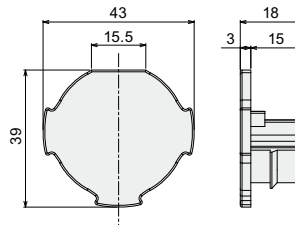
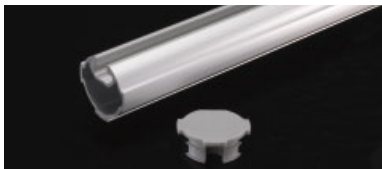
Inner Cap G



■ **Material/Technical Data**
 Material: Polyethylene
 (Light Grey)
 Weight : 7.0 g
 Environment : RoHS10 Compliant

Name	Inner Cap G
Item No.	GFA-402

GF-G L Slot Cap



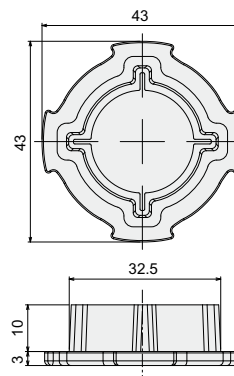
■ **Material/Technical Data**
 Material: Low Density Polyethylene
 Weight : 5 g
 Environment : RoHS10 Compliant

Name	GF-G L Slot Cap
Item No.	GFA-409

Green Frame G Inner Cap Hard



● Special inner cap for Green Frame G Hard (GFF-209).



■ **Material/Technical Data**
 Material : LDPE
 Weight : 5 g
 Environment : RoHS10 Compliant

■ **Target Frame (P155)**
 Green Frame G Hard (GFF-209)

Name	Green Frame G Inner Cap Hard
Item No.	GFA-426

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part

- GF-S
19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part

- GF-G
43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory


- Bolt Nut
- Jig
- Technical Data

GREEN FRAME
GF-G 43mm type

Connector

GF-N
28mm

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Electric Part 


Corocon 

Accessory 

Door Part 

GF-S
19mm

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon 

Accessory 

Door Part 

GF-G
43mm

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon 

Accessory 

Bolt
nut

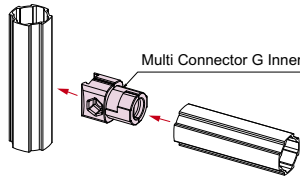
Jig

Technical
Data

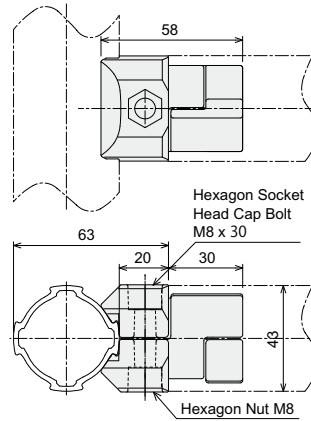
GF-G Connector

GF-N
28mm

Multi Connector G Inner



- This connector has the same outer dimensions as the frame and creates a sleek appearance.



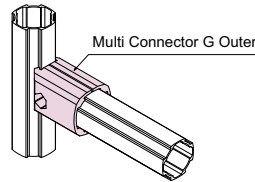
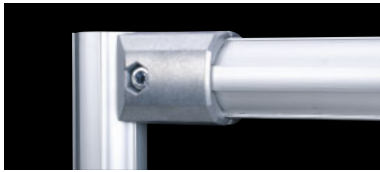
■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut : Steel
Weight : 158 g
Environment : RoHS10 Compliant

- Also compatible with GF-N frames on the grip side. When using adjacent to another connector at 90 degrees, please use Multi Connector G-N Inner.

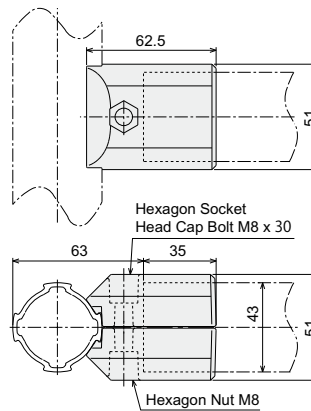
Name	Multi Connector G Inner
Item No.	GFJ-209

GF-S
19mm

Multi Connector G Outer



- Easily join GF-G (43 mm) frames at 90 degrees.
- Requires only one bolt and wrench to secure.



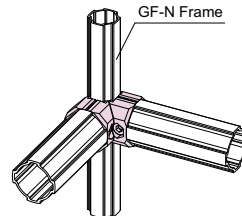
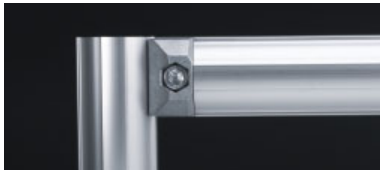
■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut : Steel
Weight : 195 g
Environment : RoHS10 Compliant

- Also compatible with GF-N frames on the grip side. When using adjacent to another connector at 90 degrees, please use Multi Connector G-N Outer.

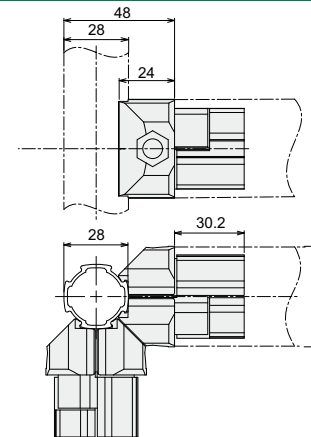
Name	Multi Connector G Outer
Item No.	GFJ-014

GF-G
43mm

Multi Connector G-N Inner



- Use this connector when joining multiple GF-G (43 mm) frames to neighboring GF-G or GF-N (28 mm) frames at 90 degrees.

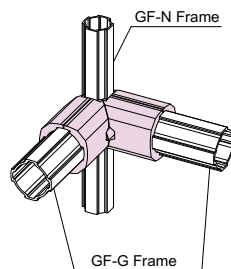


■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut : Steel
Weight : 148 g
Environment : RoHS10 Compliant

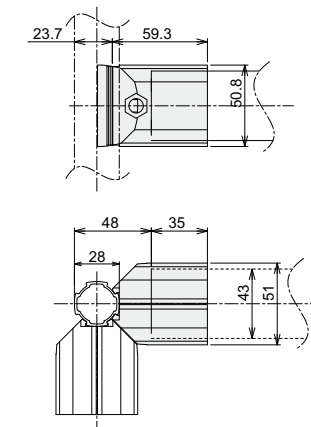
Name	Multi Connector G-N Inner
Item No.	GFJ-224

Bolt
Nut

Multi Connector G-N Outer



- Use this connector when joining multiple GF-G (43 mm) frames to neighboring GF-G or GF-N (28 mm) frames at 90 degrees.



■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut : Steel
Weight : 177 g
Environment : RoHS10 Compliant

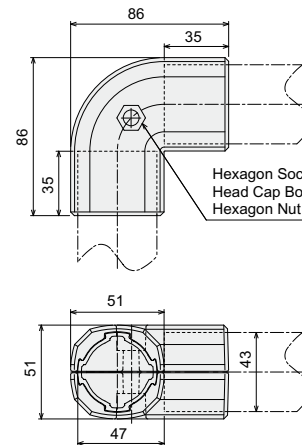
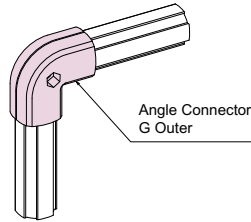
Name	Multi Connector G-N Outer
Item No.	GFJ-022

GF-G Connector

Angle Connector G Outer



- Use at 90 degree L type corners.



■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut : Steel
Weight : 330 g
Environment : RoHS10 Compliant

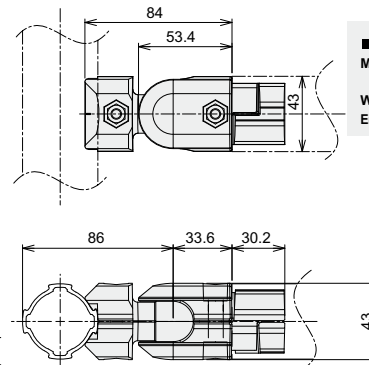
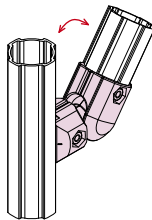
Hexagon Socket Head Cap Bolt M8 x 30
Hexagon Nut M8

Name	Angle Connector G Outer
Item No.	GFJ-016

Free Connector G Inner



- This connector can be adjusted to any angle.
- Lock the angle by tightening the bolt.



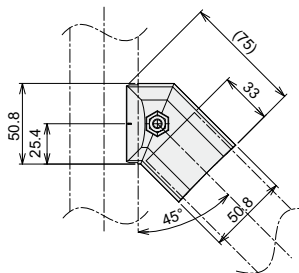
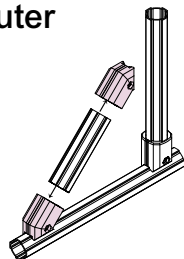
■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut : Steel
Weight : 337 g
Environment : RoHS10 Compliant

Name	Free Connector G Inner
Item No.	GFJ-228

45-Degree Connector G Outer



- This connector creates a 45 degree angle.



■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut : Steel
Weight : 221 g
Environment : RoHS10 Compliant

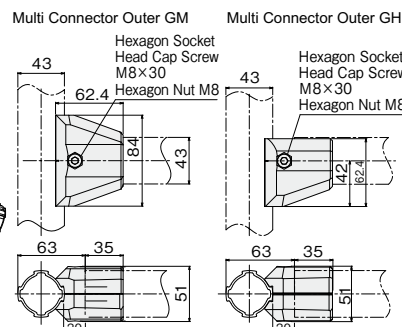
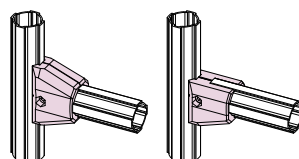
- Compatible with GF-N frames on the grip side.

Name	45-Degree Connector G Outer
Item No.	GFJ-024

Multi Connector Outer GM/GH



- Connector with increased strength against moment loads.



■ **Material/Technical Data**
Material : Aluminum Diecast
Bolt / Nut : Steel
Weight : 311 g (GM)
244 g (GH)
Environment : RoHS10 Compliant

Name	Multi Connector Outer GM	Multi Connector Outer GH
Item No.	GFJ-028	GFJ-031

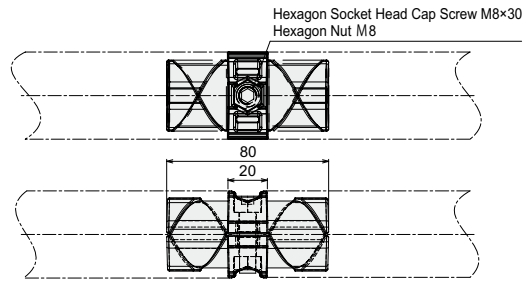
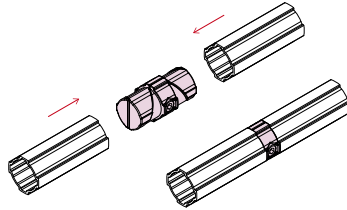
GF-G Connector

GF-N
28mm

Straight Connector G



- Used to connect two GF-G frames end-to-end.



■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt, Nut: Steel
Weight : 205 g
Environment : RoHS10 Compliant

- Do not secure a connector on top of the Straight Connector G

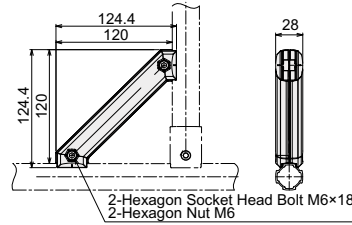
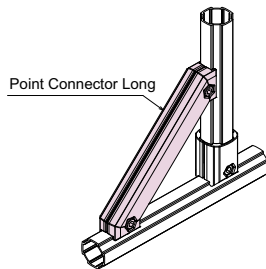
Name	Straight Connector G
Item No.	GFJ-B41

GF-S
19mm

Point Connector Long



- Large type Point Connector able to provide greater reinforcement to structures.
- Used with Multi Connector G Outer (GFJ-014).



■ **Material/Technical Data**
Material : Aluminum Diecast
 Bolt / Nut part : Steel
Weight : 167 g
Environment : RoHS10 Compliant

Name	Point Connector Long
Item No.	GFJ-B80

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

GREEN FRAME
GF-G 43^{mm} type Foot Component

GF-N
28^{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Electric Part 

Corocon 

Accessory 

Door Part 

GF-S
19^{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon 

Accessory 

Door Part 

GF-G
43^{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon 

Accessory 

**Bolt
nut**

Jig

**Technical
Data**

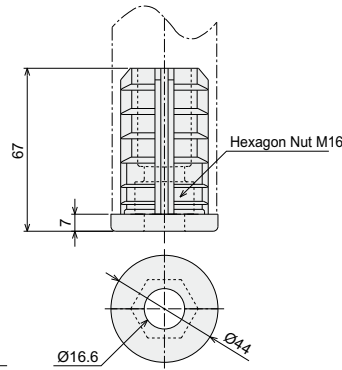
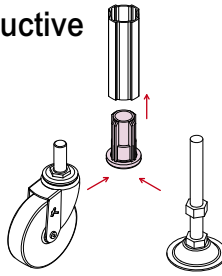
GF-G Foot Component

GF-N
28mm

Foot Connector M 16 G / Conductive



● Use to install M 16 Adjuster or Caster Screw Fitting Type.



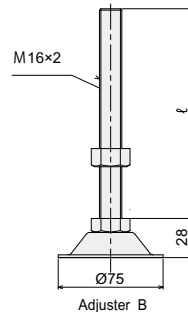
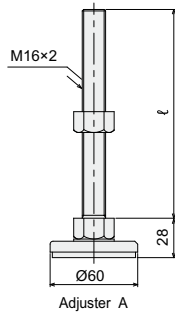
■ **Material/Technical Data**
Material : Nylon
 Conductive Polypropylene (Conductivity)
Weight : 68 g
 76 g (Conductivity)
Environment : RoHS10 Compliant

● Use the Foot Connector M 16 G / Conductive with conductive adjusters or casters

※ Please refer to P101 for caster and adjuster

Name	Foot Connector M 16 G	Foot Connector M 16 G Conductive
Item No.	GFN-E05	GFN-E21

Adjuster



■ **Material/Technical Data**
Material : Adjuster A : SS400
 Adjuster B : SS400
 Adjuster B (Stainless) : SUS 304
Environment : RoHS10 Compliant (Adjuster B)

■ SUS Original Adjuster

Name	Adjuster A			Adjuster B	
	M16-140T	M16-70T	M16-92T	M16-150T	M16-150T (Stainless)
Item No.	SFK-935	SFK-936	SFK-C89	SFK-934	SFK-934S
ℓ (mm)	140	70	92	150	150
Weight (g)	384	283	276	346	349
Load Capacity (N)	5000	5000	5600	5600	5600

■ Adjuster

Name	Adjuster A		Adjuster B	
	M16	M16 Short	M16	M16 (Stainless)
Item No.	SFK-596	SFK-596S	SFK-589	SFK-589S
ℓ (mm)	143	70	150	150
Weight (g)	386	290	375	375
Load Capacity (N)	5000	5000	5600	5600

GF-S
19mm

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

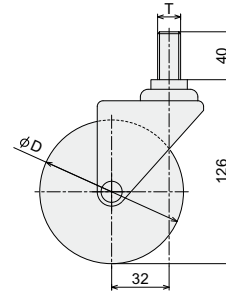
Technical Data

GF-G Foot Component

Caster Screw Fitting Type ϕ 100 Rubber



● This caster is used with the Foot Connector M 16 G



Size/Weight

Environment : RoHS10 Compliant

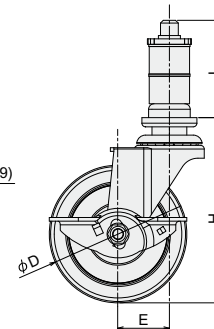
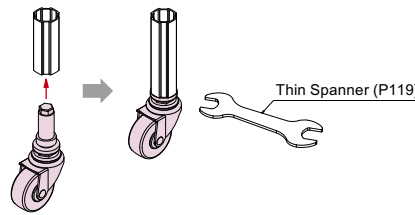
D (mm)	T (mm)	Wheel Material	Body Material		No Brake	With Brake	Load Capacity	Weight (g)	Foot Connector Installation Range
ϕ 100	M16	Rubber	Steel	Item No.	GFN-544	GFN-542	500 N	650 (703)	Foot Connector M 16 G (GFN-E05) Foot Connector M 16 G Conductive (GFN-E21)

● (Number in blue) is weight with Brake. ● Use a thin spanner to install → P171 ※Refer to P. 54 for Free and Fix Caster

Frame Caster G Frame ϕ 100 Rubber Frame Caster G Frame ϕ 125 Rubber



● Insert directly to the frame and use thin spanner to tighten.
The rubber area will compress to the frame and lock.



Size/Weight

Environment : RoHS10 Compliant

D (mm)	Wheel Material	Body Material		No Brake	With Brake	Spanner	Load Capacity	L (mm)	H (mm)	E (mm)	Weight (g)	Frame Installation Range
ϕ 100	Rubber	Steel Rubber	Item No.	GFN-590	GFN-591	21	500 N	57	129	30	660 (720)	Green Frame G (GFF-200) Green Frame GW (GFF-207) Green Frame G P150 (GFF-201)
ϕ 125			Item No.	GFN-598	GFN-599		600 N	57	155	39	680 (740)	

● (Number in blue) is weight with brake ● Use a thin spanner to install → P171

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data

GF-G Foot Component

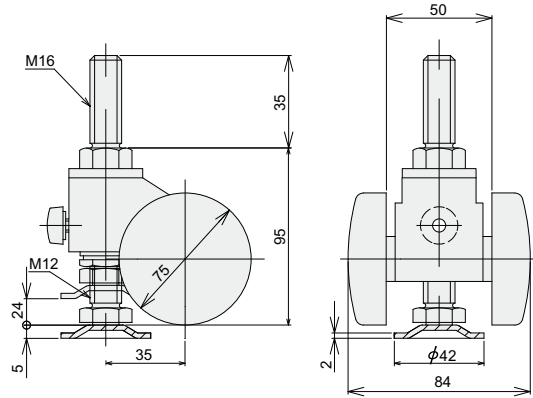
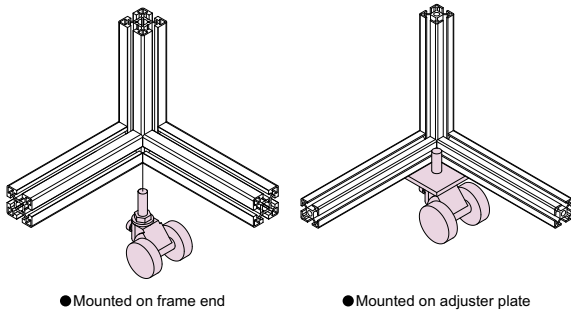
GF-N
28mm

Caspad $\phi 75$ -M16



- Integrated caster and adjuster. Elastomer has a very low running noise, excellent cushioning, and good oil and abrasive resistance.

■ **Material/Technical Data**
Material : Main body:PA
 Metal part:SS400
 Wheel:PA/Elastomer
Weight 400 g
Load capacity : 1176 N
Environment : RoHS10 Compliant



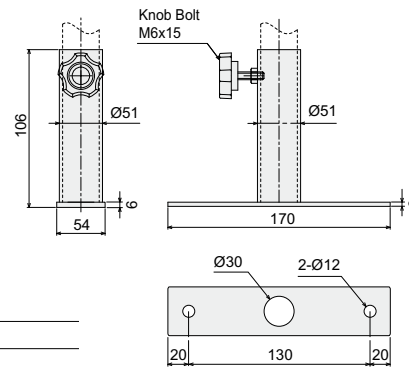
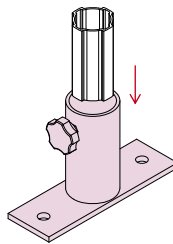
GF-S
19mm

Name	Caspad $\phi 75$ -M16
Item No.	SFA-704

Pipe Stand G



- Use to fix a frame to the floor, etc.



■ **Material/Technical Data**
Material : SPCC
Weight : 782 g
Product Included
 Knob Bolt M6 x 15

Name	Pipe Stand G
Item No.	GFN-E20

Bolt
Nut

Jig

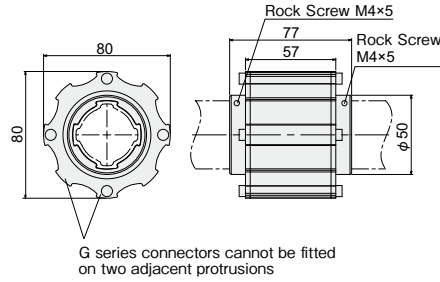
Technical
Data

GF-G MovingPart

Rotary Connector G



- Provides smooth rotation for GF-G (43mm) by including bearings.
- The outside edges are also compatible with GF-N (28mm) items.



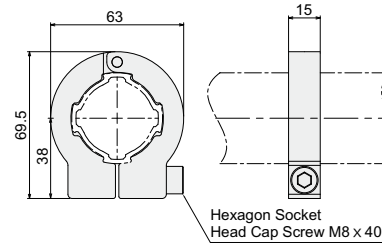
■ **Material/Technical Data**
Material : Extruded Aluminum
 Cap : Aluminum
 Bearing : Steel
Weight : 463 g
Environment: RoHS10 Compliant
 ■ **Strength Data**
Thrust : 1125N
 *Stopper hard G needs to be secured
Radial : 900N
 *Use at 22.5N · m or less

Name	Rotary Connector G
Item No.	GFJ-C84

Stopper Hard G



- Stopper used with rotating parts.



■ **Material/Technical Data**
Material : Extruded Aluminum
 Pin : Stain less
 Bolt : Steel
Weight : 103 g
Environment: RoHS10 Compliant
 ■ **Kit Contents**
 Seopper HardA×1
 Seopper HardB×1
 Parallel pin
 Hexagon socket head cap screw M8×40×1

Name	Stopper Hard G
Item No.	GFJ-C93

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

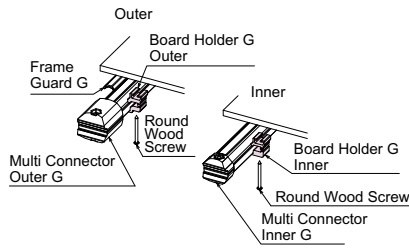
Jig

Technical Data

GF-G Accessory

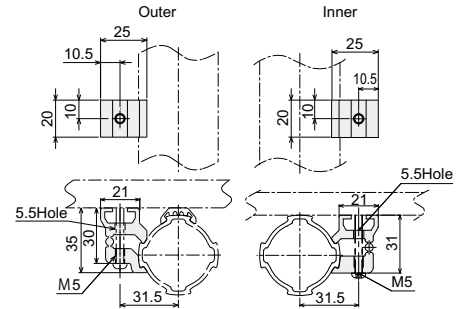
GF-N
28mm

Board Holder G



■ **Material/Technical Data**
Material: Extruded Aluminum
Weight : 21 g (Outer)
 19 g (Inner)
Environment : RoHS10 Compliant

- Attaches a work board, etc. to a frame.
 Board installation instructions / recommended dimensions for the board or panel. →P180

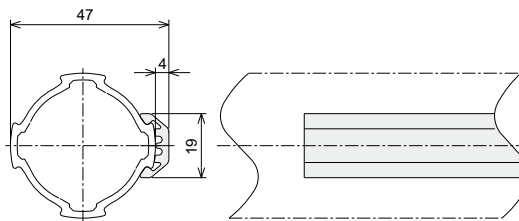


Cross Recessed Round Head Wood Screw 4.1 x 40 (SFB-9B2)

Name	Board Holder G	Board Holder G
	Outer	Inner
Item No.	GFJ-A33	GFJ-A34

GF-S
19mm

Frame Guard G



■ **Material/Technical Data**
Material: PP
Weight : 104 g
Environment : RoHS10 Compliant

- Attaches to the frame to protect it.

• Can be cut with wire cutters, etc.

Name	Frame Guard G ℓ2000mm
	Gray
Item No.	GFA-805G

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt
Nut

Jig

Technical
Data

Bolt and Nut

GF Bolt and Nut

GF Bolt and Nut

Bolt

Environment : RoHS10 Compliant

Hexagon Socket Head Cap Screw



- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part

- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part

- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

- Bolt Nut
- Jig
- Technical Data

Steel	Length(mm)													
Screw Size	5	6	8	10	12	14	15	16	18	20	22	25	30	35
M3		SFB-531	SFB-532	SFB-533	SFB-534				SFB-535		SFB-576	SFB-577	SFB-536	SFB-531A
M4	SFB-54P	SFB-540	SFB-541	SFB-542	SFB-54Q				SFB-546	SFB-543	SFB-54D	SFB-544		
M5		SFB-55E	SFB-550	SFB-551	SFB-55C	SFB-55A	SFB-554		SFB-55B	SFB-555	SFB-552	SFB-553	SFB-556	
M6			SFB-56E	SFB-561	SFB-560	SFB-56B	SFB-562	SFB-569	SFB-56C	SFB-563	SFB-56A	SFB-566	SFB-564	SFB-56P
M8				SFB-58P	SFB-580		SFB-581		SFB-589	SFB-582		SFB-583	SFB-584	SFB-575
M10										SFB-929			SFB-92A	
M12										SFB-522		SFB-521	SFB-5U3	
Screw Size	40	45	50	55	60	70	80	85	90	110	115	120	125	130
M3														
M4		SFB-545												
M5														
M6	SFB-565	SFB-574			SFB-56G									
M8	SFB-588	SFB-58A	SFB-59J	SFB-58H	SFB-58B		SFB-58C							
M10				SFB-52X			SFB-59C							
M12														

Stainless	Length(mm)													
Screw Size	5	6	8	10	12	14	15	16	18	20	22	25	30	35
M3	SFB-53PS	SFB-531S	SFB-532S	SFB-533S	SFB-534S		SFB-53ES	SFB-53RS	SFB-535S	SFB-53HS	SFB-576S	SFB-577S	SFB-536S	SFB-53FS
M4	SFB-54PS	SFB-540S	SFB-541S	SFB-542S	SFB-54QS	SFB-578S	SFB-54RS		SFB-546S	SFB-543S	SFB-54DS	SFB-544S	SFB-5D1S	SFB-54SS
M5		SFB-55ES	SFB-550S	SFB-551S	SFB-55CS	SFB-55AS	SFB-554S		SFB-55BS	SFB-555S	SFB-552S	SFB-553S	SFB-556S	SFB-55ZS
M6		SFB-9D5	SFB-56ES	SFB-561S	SFB-560S	SFB-56BS	SFB-562S	SFB-569S	SFB-56CS	SFB-563S	SFB-56AS	SFB-566S	SFB-564S	SFB-56PS
M8				SFB-58PS	SFB-580S	SFB-58KS	SFB-581S	SFB-58GS	SFB-589S	SFB-582S	SFB-58DS	SFB-583S	SFB-584S	
M10						SFB-59GS				SFB-929S				SFB-594S
M12										SFB-522S		SFB-521S		
Screw Size	40	45	50	55	60	70	80	85	90	110	115	120	125	130
M3	SFB-53VS		SFB-X42	SFB-53GS										
M4	SFB-5D2S	SFB-545S	SFB-54TS											
M5	SFB-55US	SFB-55PS	SFB-55WS	SFB-55QS	SFB-595S		SFB-55XS	SFB-55RS	SFB-55SS	SFB-55YS	SFB-55TS			
M6	SFB-565S	SFB-574S	SFB-56SS		SFB-56GS	SFB-56TS	SFB-56US		SFB-579S					SFB-56VS
M8	SFB-588S	SFB-58AS		SFB-58SS	SFB-58BS	SFB-58TS	SFB-58CS					SFB-58QS	SFB-58RS	SFB-58XS
M10			SFB-596S				SFB-59CS			SFB-5D4S				
M12							SFB-59DS		SFB-523S			SFB-59ES		

Cross Slot Countersunk Bolt



Steel	Length(mm)													
Screw Size	5	6	8	10	12	15	16	18	20	22	25	30	35	45
M3		SFB-530A	SFB-530	SFB-539	SFB-710									
M4		SFB-54A	SFB-54B	SFB-54E	SFB-54F									
M5			SFB-54G	SFB-559	SFB-557									
M6				SFB-54H	SFB-54J	SFB-54K								
Stainless	Length(mm)													
Screw Size	5	6	8	10	12	15	16	18	20	22	25	30	35	45
M3	SFB-9N3S	SFB-9N4S	SFB-530S	SFB-539S		SFB-53QS	SFB-5D3S		SFB-5D6S		SFB-711S	SFB-5G1S		
M4	SFB-9N6S	SFB-54AS	SFB-54BS	SFB-54ES	SFB-54FS	SFB-5D5S			SFB-9N7S	SFB-9N8S	SFB-9N9S		SFB-9P6S	SFB-54ZS
M5			SFB-54GS	SFB-9P0S	SFB-9P1S	SFB-9P2S	SFB-9P3S		SFB-9P4S		SFB-9P5S	SFB-9P7S		
M6				SFB-54HS	SFB-54JS	SFB-54KS		SFB-571S						

*Steel: Trivalent Chromium

GF Bolt and Nut

Hexagon Hole Countersunk Bolt

Steel	Length(mm)										Trivalent Chromium Conversion Coating for Zinc Plating				
Screw Size	6	8	10	12	15	16	18	20	25	30	35	40	45	50	55
M3	SFB-5N3	SFB-53T	SFB-9L6	SFB-53A											
M4	SFB-5N6	SFB-9L7	SFB-055												
M5	SFB-55F	SFB-917		SFB-927	SFB-502			SFB-55G			SFB-55H	SFB-9C6	SFB-9C7		
M6		SFB-56J	SFB-914	SFB-916	SFB-915		SFB-56T	SFB-56D							
M8				SFB-926	SFB-918	SFB-928		SFB-58F							
M10						SFB-920	SFB-501								

Stainless	Length(mm)										Trivalent Chromium Conversion Coating for Zinc Plating				
Screw Size	6	8	10	12	15	16	18	20	25	30	35	40	45	50	55
M3	SFB-5N3S	SFB-53TS	SFB-9L6S	SFB-53AS											
M4	SFB-5N6S	SFB-9L7S	SFB-9L8S		SFB-9L9S			SFB-9P8S							
M5	SFB-55FS	SFB-917S	SFB-559S	SFB-927S	SFB-502S		SFB-9B5S	SFB-55GS	SFB-9M1S	SFB-9M2S	SFB-55HS	SFB-9C6S	SFB-9C7S	SFB-9M7S	
M6		SFB-56JS	SFB-914S	SFB-916S	SFB-915S		SFB-9M3S	SFB-56DS	SFB-56NS	SFB-9M5S	SFB-9M8S	SFB-9M9S	SFB-9N0S		
M8				SFB-926S	SFB-918S	SFB-928S		SFB-58FS	SFB-58JS	SFB-9M6S	SFB-9P9S	SFB-9N1S	SFB-9N2S		SFB-9R7S
M10						SFB-920S									

Truss Screw

Steel	Length(mm)										
Screw Size	5	6	8	10	12	14	15	18	20	30	35
M3	SFB-53U	SFB-538									
M4	SFB-548	SFB-54U	SFB-54C	SFB-924	SFB-925		SFB-54L	SFB-54M	SFB-54N		
M5			SFB-558A	SFB-558	SFB-558B		SFB-558C			SFB-55J	SFB-55K
M6				SFB-56K	SFB-56L		SFB-56M				

Stainless	Length(mm)										
Screw Size	5	6	8	10	12	14	15	18	20	30	35
M3	SFB-53US	SFB-538S	SFB-53JS								
M4	SFB-548S	SFB-54US	SFB-54CS	SFB-924S	SFB-925S		SFB-54VS				
M5		SFB-597S	SFB-55LS	SFB-558S	SFB-55MS	SFB-598S	SFB-55NS				
M6			SFB-56KS	SFB-56LS							

Cross Recessed Round Wood Screw

Stainless	Length(mm)	
Screw Size	32	40
4.1	SFB-9C5	SFB-9B2

Steel	Length(mm)
Screw Size	22
4.1	SFB-9C4

Square Nut

Steel	Item No.
M3	SFB-201
M5	SFB-205
M6	SFB-202
M8	SFB-204

Stainless	Item No.
M4	SFB-208S

Hexagon Socket Button Head Screw

Steel	Length(mm)										Trivalent Chromium Conversion Coating for Zinc Plating				
Screw Size	6	8	10	12	15	18	20	25	30	35					
M5	SFB-55T	SFB-55P	SFB-549		SFB-55D										
M6				SFB-56U			SFB-56F	SFB-567							
M8							SFB-585	SFB-586		SFB-587					

Stainless	Length(mm)										Trivalent Chromium Conversion Coating for Zinc Plating				
Screw Size	6	8	10	12	15	18	20	25	30	35					
M3	SFB-53WS	SFB-X14	SFB-X15	SFB-54NS											
M4		SFB-54WS	SFB-X17	SFB-590S						SFB-X30					
M5		SFB-9R6S	SFB-549S	SFB-5A0S	SFB-5A1S	SFB-5A2S			SFB-5A3S						
M6			SFB-56QS		SFB-56WS		SFB-56XS	SFB-567S	SFB-56RS						
M8					SFB-599S		SFB-58LS	SFB-586S		SFB-587S					
M10									SFB-591S						
M12										SFB-592S					

Hexagon Nut

Steel	Length(mm)
M5	SFB-961
M6	SFB-960
M8	SFB-959
M12	SFB-901

Toothed Washer

Stainless	Length(mm)
M3	SFB-9E1S
M4	SFB-9E2S
M5	SFB-9E3S
M6	SFB-9E4S
M8	SFB-9E5S

ST Nut

- Special nut used for the Green Frame L Slot, Green Frame G L Slot, Green Frame S SS Slot, Parts Holder, SS Slot Assist, Board Holder, etc. (with anti-slip.)



Groove Width 6 mm (Green Frame S SS Slot / SS Slot Assist)

Name	ST Nut SS M5 (with Anti-Skid Cap)	ST Nut SS M4 (with Anti-Skid Cap)	ST Nut SS M3 (with Anti-Skid Cap)
Item No.	SFK-T03S	SFK-T02S	SFK-T01S

Groove Width 8 mm (Board Holder / Part Holder) * Board Holder cannot use M6

Name	ST Nut S M6 (with Anti-Skid Cap)	ST Nut S M5 (with Anti-Skid Cap)	ST Nut S M4 (with Anti-Skid Cap)	ST Nut S M3 (with Anti-Skid Cap)
Item No.	SFK-T07S	SFK-T06S	SFK-T05S	SFK-T04S

Groove Width 10 mm (Green Frame L Slot / Green Frame G L Slot)

Name	ST Nut L M8 (with Anti-Skid Cap)	ST Nut L M6 (with Anti-Skid Cap)	ST Nut L M5 (with Anti-Skid Cap)	ST Nut L M4 (with Anti-Skid Cap)
Item No.	SFK-T11S	SFK-T10S	SFK-T09S	SFK-T08S

Jig

GF Jig

Handy Torque Cutter



■ Material/Technical Data
 Weight : 605 g
 Environment : RoHS10 Compliant

- Convenient for cutting Green Frame.

Name	Handy Torque Cutter
Item No.	GFG-032

Handy Cutter Spare Blade Kit



■ Material/Technical Data
 Weight : 36.0 g
 Environment : RoHS10 Compliant

■ Accessories
 Tube cutter spare blade 3
 Cutter wheel pin 3
 E-ring 3

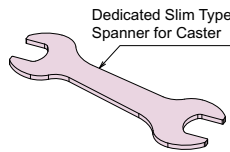
- Disposable blades for the Handy Torque Cutter.

Name	Handy Cutter Spare Blade Kit (3pcs/set)
Item No.	GFK-801

Spanner Slim Type



■ Material/Technical Data
 Weight : 81 g (A)
 92 g (B)
 28 g (E)
 Environment : RoHS10 Compliant



- This tool is for installing the Shaft Screw Caster and Frame Caster.

Name	Spanner A Slim Type for Caster $\phi 50$ $\phi 75$	Spanner B Slim Type for Caster $\phi 100$ $\phi 150$	Spanner E Slim Type for Pin Connector S
Item No.	GFG-000	GFG-001	GFG-075

Stubby Wrench 5mm



Environment : RoHS10 Compliant

- Wrench for a small space.

Name	Stubby Wrench 5mm
Item No.	BFA-003

Deburring Tool



Environment : RoHS10 Compliant

- Tool for deburring the end face of a frame.

Name	Deburring Tool
Item No.	BFG-004

GF-N 28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

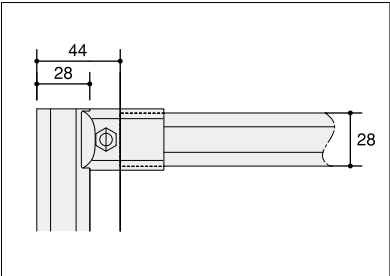
Jig

Technical Data

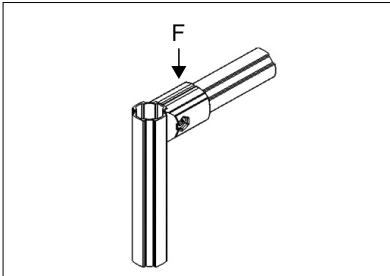
Technical Data

GF Technical Data

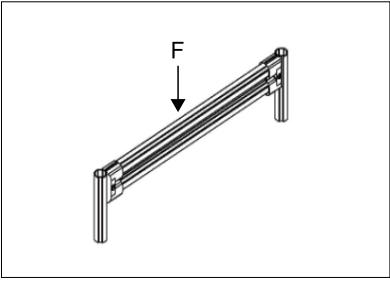
- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Coroon Roller
- Accessory
- Door Part



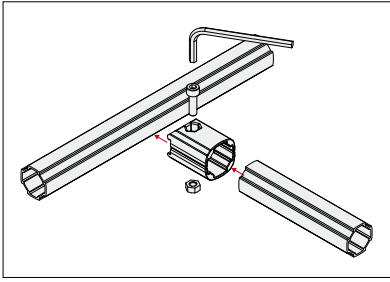
Approximate Dimension → P.176



Connector Strength Data → P.184



Frame Strength Data → P.212



Assembly Method → P.219

- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Coroon Roller
- Accessory
- Door Part

- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Coroon Roller
- Accessory

Bolt Nut

Jig

Technical Data



Approximate Dimension

GF-N 28_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Electric Item 

Corocon Roller 

Accessory 

Door Part 

GF-S 19_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

Door Part 

GF-G 43_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

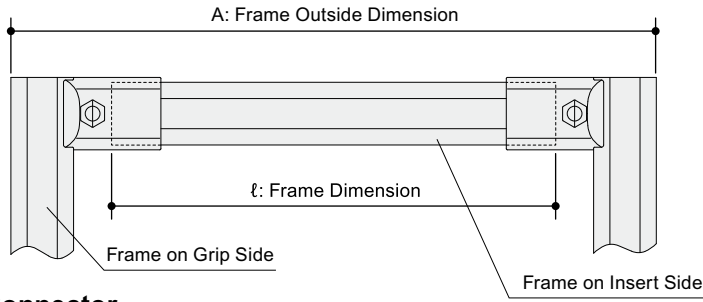
Accessory 

Bolt Nut

Jig

Technical Data

Approximate Dimension of Frame



※Precaution: Outside Dimension of Frame will be different if using Outer Type Connector.

GF-N Connector

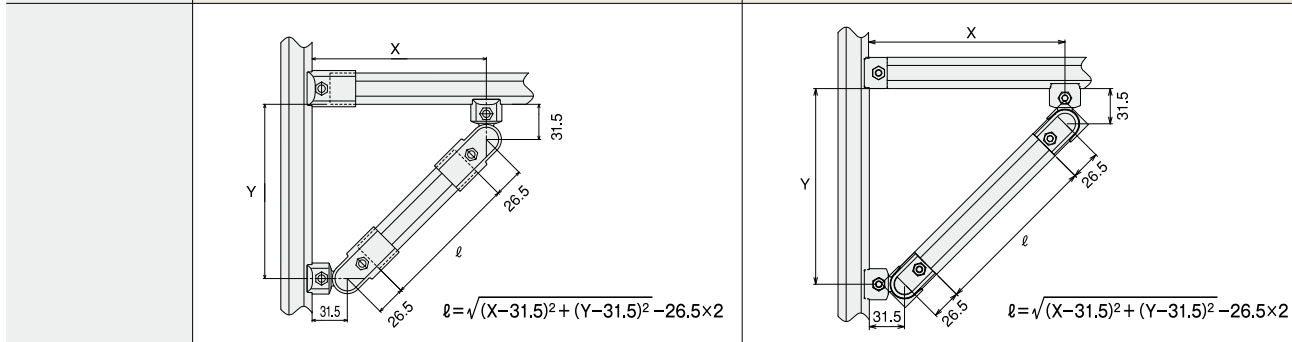
Connector	<ul style="list-style-type: none"> Multi Connector Outer Type Multi Connector Outer Type W 	<ul style="list-style-type: none"> Multi Connector R Outer Multi Connector Outer Hard Multi Connector Long Outer 	<ul style="list-style-type: none"> Multi Connector Inner Type Multi Connector Inner Type R Multi Connector Long Inner Type 	<ul style="list-style-type: none"> Multi Connector Inner Type 2 	
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame Green Frame L Slot Green Frame T 	<ul style="list-style-type: none"> Green Frame W Green Frame Hard 	<ul style="list-style-type: none"> Green Frame Green Frame W Green Frame F35 	<ul style="list-style-type: none"> Green Frame F50 Green Frame Slide Green Frame P100 	<ul style="list-style-type: none"> Green Frame DIN Green Frame F50-2 Green Frame W2 Green Frame P250

Frame on Grip Side	GF-N	$\ell = A - (44 \times 2)$	$\ell = A - (44 \times 2)$
	GF-G	$\ell = A - (59 \times 2)$	$\ell = A - (59 \times 2)$

Connector	<ul style="list-style-type: none"> Angle Connector Outer Type Angle Connector Outer Type E 	<ul style="list-style-type: none"> Angle Connector Inner Type Angle Connector Outer Type DX Angle Connector Inner Type Aluminum Bolt Angle Connector Outer Type DX 3 Way 			
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame Green Frame L Slot Green Frame T 	<ul style="list-style-type: none"> Green Frame W Green Frame Hard 	<ul style="list-style-type: none"> Green Frame Green Frame W Green Frame F35 	<ul style="list-style-type: none"> Green Frame F50 Green Frame Slide Green Frame P100 	<ul style="list-style-type: none"> Green Frame DIN Green Frame F50-2 Green Frame W2 Green Frame P250

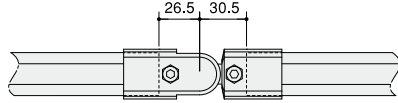
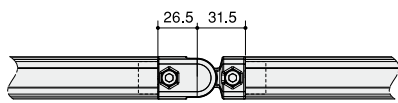
Angle Connector Outer Type	$\ell = A - (30.5 \times 2)$	Angle Connector Outer Type E	$\ell = A - (44 \times 2)$
	Angle Connector Inner Type Angle Connector DX		$\ell = A - (44 \times 2)$

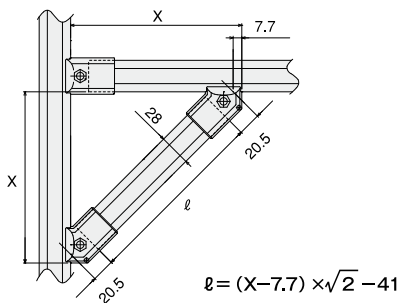
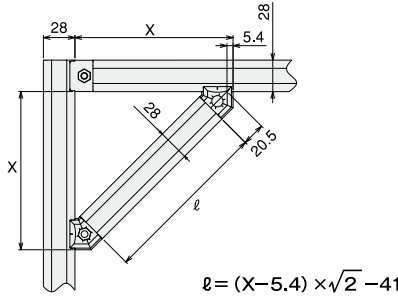
Connector	<ul style="list-style-type: none"> Free Connector Outer Type Free Connector Outer Type V-M / V-M1 	<ul style="list-style-type: none"> Free Connector Outer Type Free Connector Outer Type V-M / V-M1 			
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame Green Frame L Slot Green Frame T 	<ul style="list-style-type: none"> Green Frame W Green Frame Hard 	<ul style="list-style-type: none"> Green Frame Green Frame W Green Frame F35 	<ul style="list-style-type: none"> Green Frame F50 Green Frame Slide Green Frame P100 	<ul style="list-style-type: none"> Green Frame DIN Green Frame F50-2 Green Frame W2 Green Frame P250



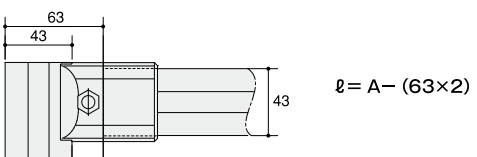
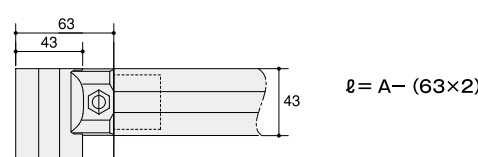
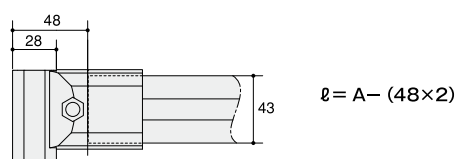
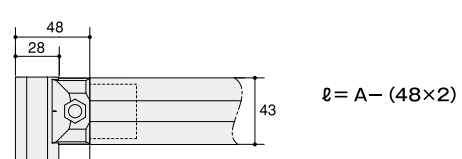
- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data

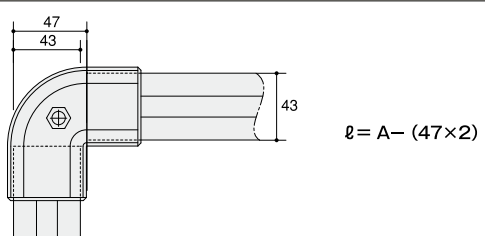
Approximate Dimension of Frame

Connector	<ul style="list-style-type: none"> Free Connector Outer Type H-F Free Connector Outer Type H-M 	<ul style="list-style-type: none"> Free Connector Inner Type H-F Free Connector Inner Type H-M
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame Green Frame L Slot Green Frame T 	<ul style="list-style-type: none"> Green Frame Hard Green Frame F50 Green Frame W Green Frame F35 Green Frame Slide Green Frame P100
		

Connector	45° Connector Outer Type	45° Connector Inner Type
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame Green Frame L Slot Green Frame T 	<ul style="list-style-type: none"> Green Frame Hard Green Frame F50 (Green Frame W) Green Frame Slide (Green Frame P100)
	 $l = (X - 7.7) \times \sqrt{2} - 41$	 $l = (X - 5.4) \times \sqrt{2} - 41$

GF-G Connector

Connector	<ul style="list-style-type: none"> Multi Connector Type G Multi Connector Type GM Multi Connector Type GH 	<ul style="list-style-type: none"> Multi Connector Type G 	
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame G Green Frame G L Slot Green Frame Hard 	<ul style="list-style-type: none"> Green Frame G Rack Beam Green Frame G Rack Beam W Green Frame G Green Frame G W Green Frame P150 	
Frame on Grip Side	GF-G	 $l = A - (63 \times 2)$	 $l = A - (63 \times 2)$
	GF-N	 $l = A - (48 \times 2)$	 $l = A - (48 \times 2)$

Connector	Angle Connector Outer Type G
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame G Green Frame G L Slot Green Frame Hard G
	 $l = A - (47 \times 2)$

GF-N
 28mm

 Frame 

 Cap 

 Connector 

 Foot Component 

 Moving Part 

 Electric Item 

 Corcon Roller 

 Accessory 

 Door Part 
GF-S
 19mm

 Frame 

 Cap 

 Connector 

 Foot Component 

 Moving Part 

 Corcon Roller 

 Accessory 

 Door Part 
GF-G
 43mm

 Frame 

 Cap 

 Connector 

 Foot Component 

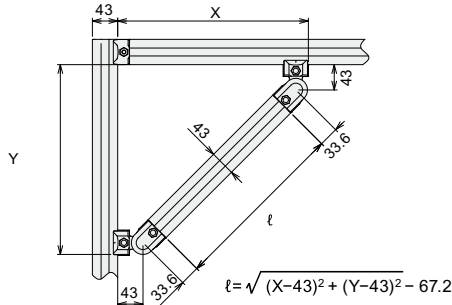
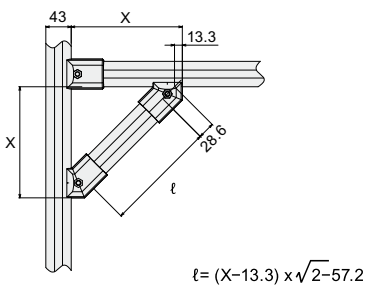
 Moving Part 

 Corcon Roller 

 Accessory 
Bolt Nut
Jig
Technical Data

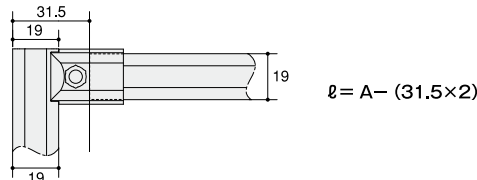
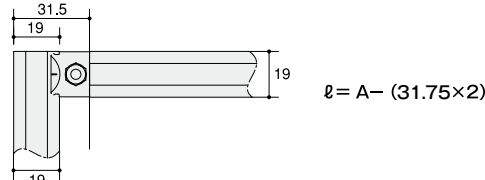
Approximate Dimension of Frame

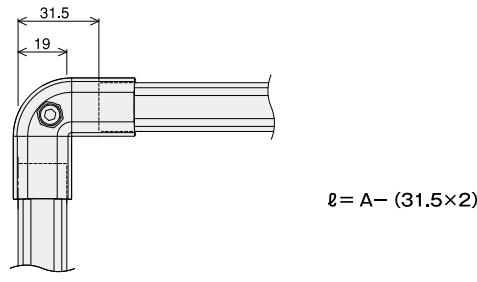
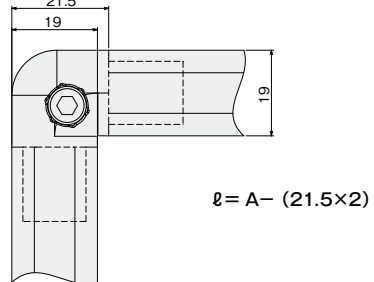
- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part

Connector	<ul style="list-style-type: none"> Free Connector Inner Type G 	<ul style="list-style-type: none"> 45° Connector Outer Type G
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame G Green Frame G W Green Frame P150 	<ul style="list-style-type: none"> Green Frame G Green Frame G L Slot Green Frame Hard G Green Frame G Rack Beam Green Frame G Rack Beam W
	 <p>$l = \sqrt{(X-43)^2 + (Y-43)^2} - 67.2$</p>	 <p>$l = (X-13.3) \times \sqrt{2} - 57.2$</p>

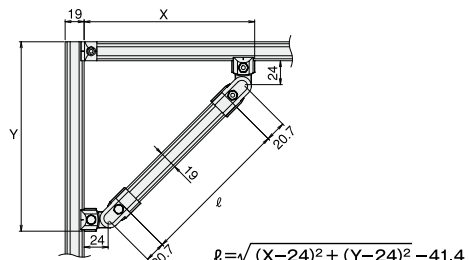
GF-S Connector

- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part

Connector	<ul style="list-style-type: none"> Multi Connector Outer Type S 	<ul style="list-style-type: none"> Multi Connector Inner Type S Multi Connector Inner Type S R
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame S Green Frame SS Slot Green Frame S Hard 	<ul style="list-style-type: none"> Green Frame S Green Frame S W Green Frame S F22 Green Frame S F35 Green Frame S P100
	 <p>$l = A - (31.5 \times 2)$</p>	 <p>$l = A - (31.75 \times 2)$</p>

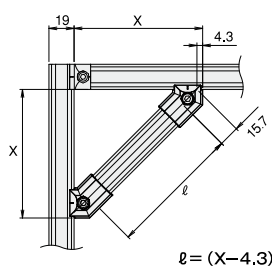
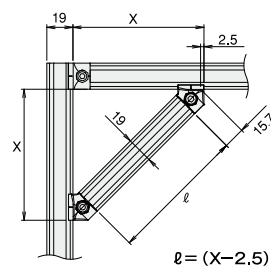
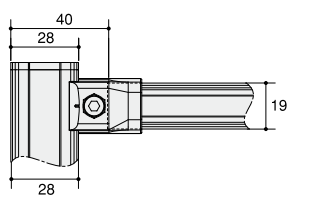
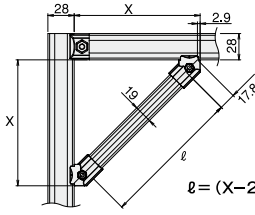
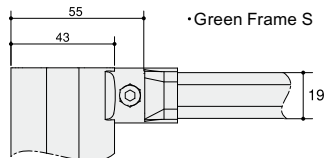
Connector	<ul style="list-style-type: none"> Angle Connector Outer Type S 	<ul style="list-style-type: none"> Angle Connector Inner Type S
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame S Green Frame SS Slot Green Frame S Hard 	<ul style="list-style-type: none"> Green Frame S Green Frame S W Green Frame S F22 Green Frame S F35 Green Frame S P100
	 <p>$l = A - (31.5 \times 2)$</p>	 <p>$l = A - (21.5 \times 2)$</p>

- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

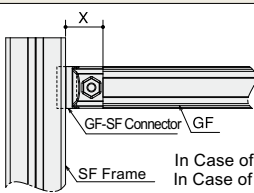
Connector	<ul style="list-style-type: none"> Link Connector S V Link Connector S H
Frame on Insert Side	<ul style="list-style-type: none"> Green Frame S Green Frame SS Slot Green Frame S Hard
	 <p>$l = \sqrt{(X-24)^2 + (Y-24)^2} - 41.4$</p>

- Bolt Nut
- Jig
- Technical Data

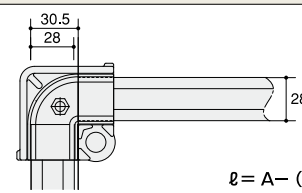
Approximate Dimension of Frame

Connector	· 45° Connector Outer Type S	· 45° Connector Inner Type S
Frame on Insert Side	· Green Frame S · Green Frame S SS Slot · Green Frame S Hard	· Green Frame S (Green Frame S W) · Green Frame S F22 · Green Frame S F35 (Green Frame S P100)
	 <p>$l = (X - 4.3) \times \sqrt{2} - 31.4$</p>	 <p>$l = (X - 2.5) \times \sqrt{2} - 31.4$</p>
Connector	· GFS-GF Connector	· 45° Connector (Outer) N-S
Frame on Insert Side	· Green Frame S · Green Frame S SS Slot · Green Frame S Hard	· Green Frame S · Green Frame S SS Slot · Green Frame S Hard
GF-N	 <p>$l = A - (40 \times 2)$</p>	 <p>$l = (X - 2.9) \times \sqrt{2} - 35.6$</p>
GF-G	 <p>$l = A - (55 \times 2)$</p>	

GF-SF Connector

Connector	· GF-SF Connector
Frame on Insert Side	· Green Frame · Green Frame G
	 <p>In Case of GF-N : X = 25 In Case of GF-G : X = 29</p>

Palette Connector

Connector	· Palette Connector
Frame on Insert Side	· Green Frame · Green Frame L Slot · Green Frame T · Green Frame Hard
	 <p>$l = A - (30.5 \times 2)$</p>

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

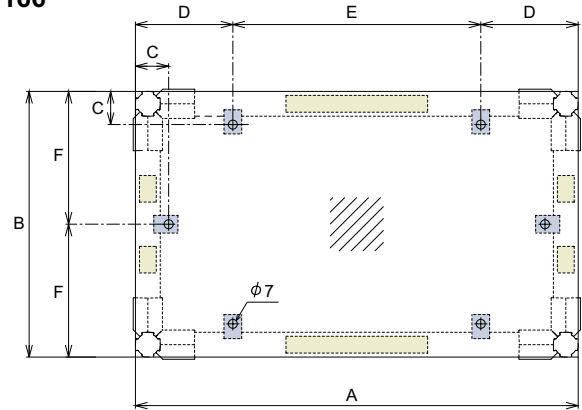
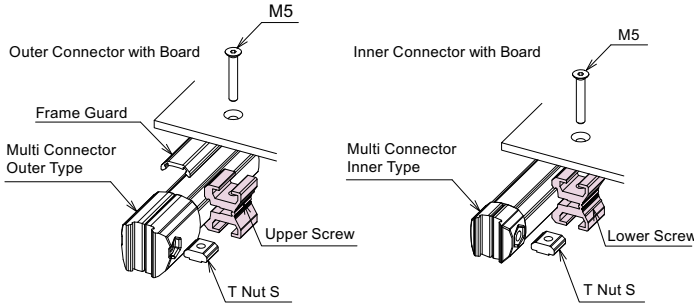
Jig

Technical Data

Approximate Dimension of Board Installation

GF-N
28mm

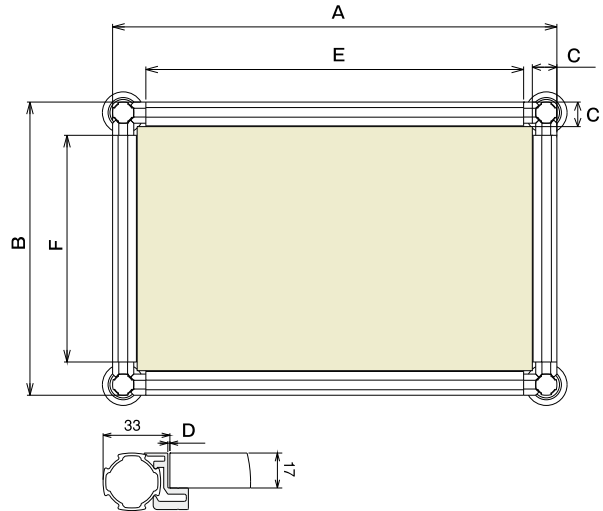
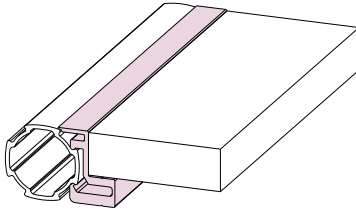
Using Board Holder GF-N:P126 GF-S:P150 GF-G:P166



	Board Size	C	D	E	F
GF-N (28 mm)	A × B	37.5	more than 80 mm	less than 500 mm	between 80mm and 200mm
GF-S (19 mm)	A × B	27	more than 60 mm	less than 500 mm	between 80mm and 200mm
GF-G (43 mm)	A × B	53	more than 120 mm	less than 500 mm	between 80mm and 200mm

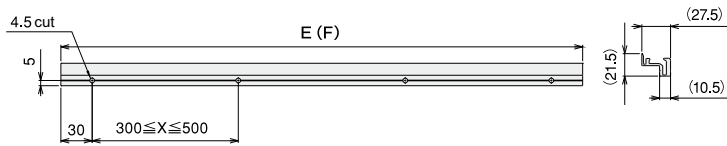
GF-S
19mm

Using Board Holder F P126



	Board Size	C	D	E	F
Multi Connector Outer Type	(A-66) × (B-66)	33	1	A- (68x2)	B- (68x2)
Multi Connector Inner Type	(A-66) × (B-66)	33	1	A- (45x2)	B- (45x2)

Approximate dimension is for drilling a screw in Board Holder F



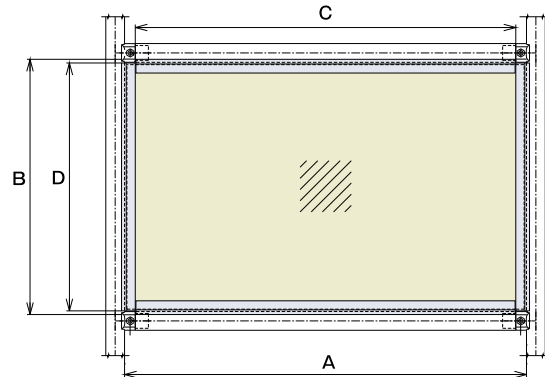
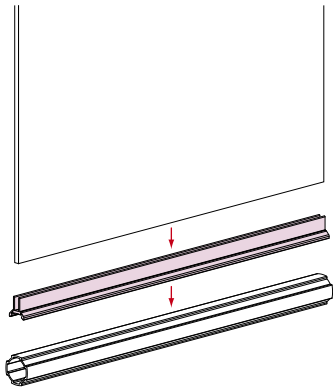
Bolt
Nut

Jig

Technical
Data

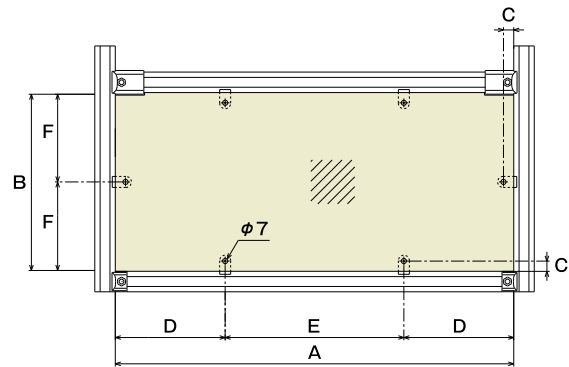
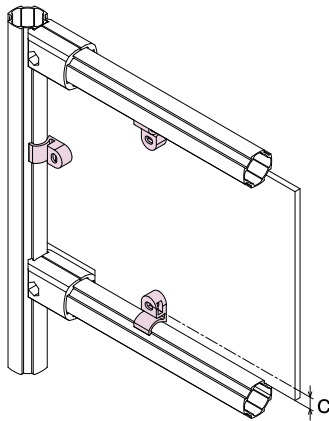
Approximate Dimension of Panel Installation

Using Panel Board GF-N : P127 GF-S : P150

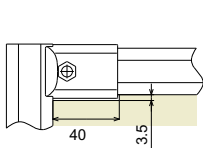


Frame	Connector	Board Size	Panel Board Size	
			C	D
GF-N (28 mm)	Multi Connector Outer Type	(A-7) × (B-7)	A-80	B-7
	Multi Connector Inner Type	(A-7) × (B-7)	A-34	B-2
GF-S (19 mm)	Multi Connector Outer Type S	(A-6) × (B-6)	A-55	B-6
	Multi Connector Inner Type S	(A-6) × (B-6)	A-27.4	B-2

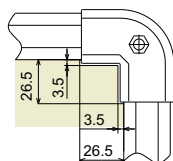
Using Plate Connector GF-N : P126 GF-S : P150



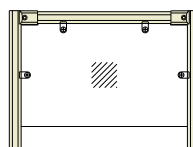
	Board Size	C	D	E	F
GF-N (28 mm)	A × B	14	more than 50 mm	less than 500 mm	between 50mm and 200mm
GF-S (19 mm)	A × B	14	more than 40 mm	less than 500 mm	between 40mm and 200mm
GF-G (43 mm)	A × B	14	more than 80 mm	less than 500 mm	between 80mm and 200mm



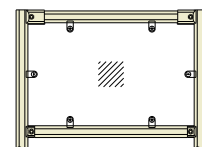
If using Multi Connector Outer Type, then the process above is required



If using Angle Connector Outer, then the process above is required



There is a risk of the panel slipping out.



Secure the panel with frames on all four sides.

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

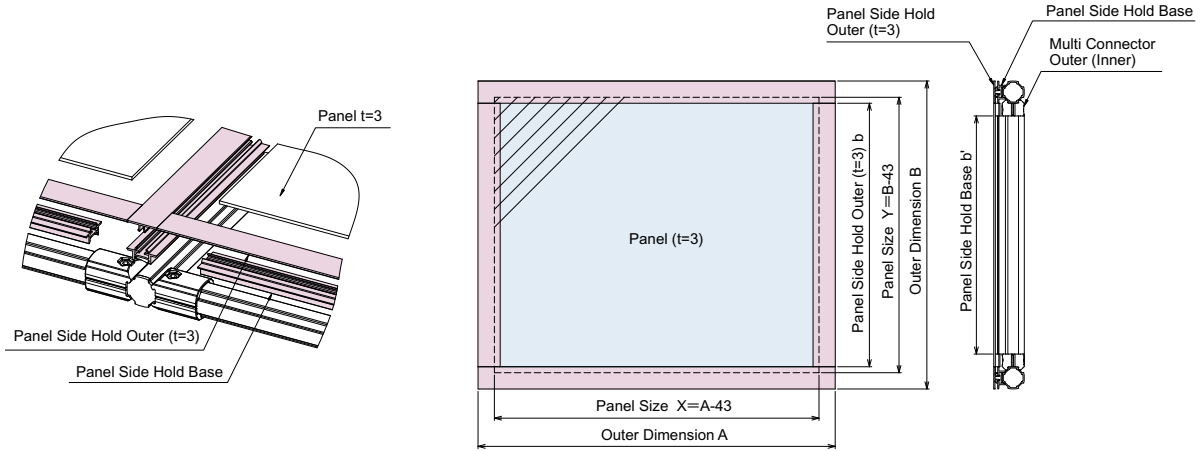
Technical Data

Approximate Dimension of Panel Installation

Please refer to P223 for installation method.

GF-N
28mm

Use a Panel Side Hold P127

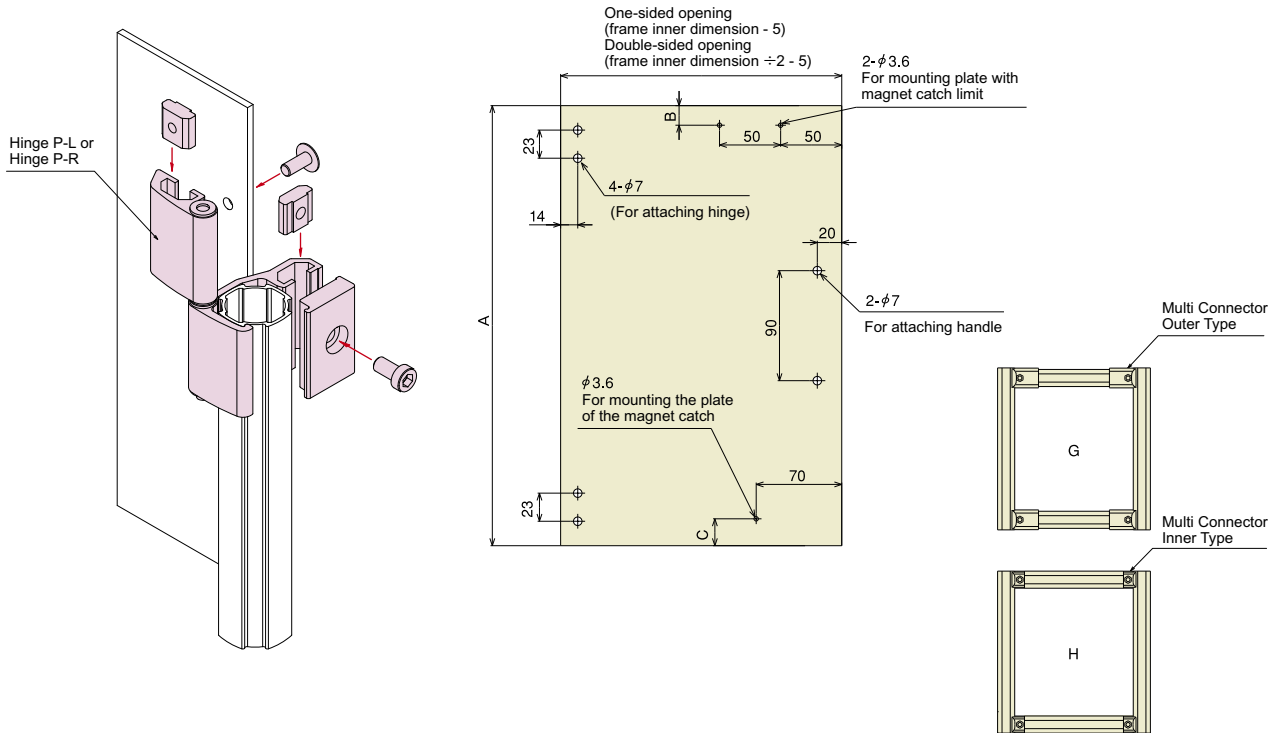


Connector Types	Panel Side Hold Outer (t=3) (b)	Panel Side Hold Base (b')
Multi Connector Outer Type	b = B-57	b' = B-136
Multi Connector Inner Type	b = B-57	b' = B-90

GF-S
19mm

Approximate Dimension of Door Panel

For door panel




	A	B	C
When outer frame is G	Inner frame dimension is 9	14	20
When outer frame is H	Inner frame dimension is 4	16	22

Connector Strength Data Frame Strength Data

GF-N 28_{mm}


Frame 


Cap 


Connector 


Foot Component 

Moving Part 

Electric Item 


Corocon Roller 

Accessory 


Door Part 


GF-S 19_{mm}

Frame 

Cap 


Connector 

Foot Component 

Moving Part 


Corocon Roller 

Accessory 

Door Part 


GF-G 43_{mm}

Frame 


Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

Bolt Nut

Jig

Technical Data

Connector Strength Data (GF-N)

Tightening Torque for Connector 15 N · m

Condition : Apply load where the arrow shows in the drawing.

- Slide Load** : Allowable load on shift direction.
- Pull-out Load** : Allowable load on pulling direction of connector.
- Compression Load** : Allowable load on direction of compression.
- Moment Load** : Allowable moment for distance of length (L) from where connector is connected.
 M (Moment) = F (Force) × L (Length)

Multi Connector Inner Type GFJ-200

Slide Load (N)	800	Pull-out Load (N)	420	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	90	60
						200	45	30
						300	30	20
						500	18	12
						Allowable Moment (N · m)	9	6

Multi Connector Inner Type 2 GFJ-252

Slide Load (N)	700	Pull-out Load (N)	350	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	90	60
						200	45	30
						300	30	20
						500	18	12
						Allowable Moment (N · m)	9	6

Multi Connector Outer Type GFJ-000

Slide Load (N)	800	Pull-out Load (N)	No screw 420 With screw 1500	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	110	55
						200	55	28
						300	37	18
						500	22	11
						Allowable Moment (N · m)	11	5.5

Multi Connector Outer Type Hard GFJ-E55

Slide Load (N)	800	Pull-out Load (N)	No screw 420 With screw 1500	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	110	55
						200	55	28
						300	37	18
						500	22	11
						Allowable Moment (N · m)	11	5.5

Multi Connector Inner Type R GFJ-D24

Slide Load (N)	800	Pull-out Load (N)	420	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	90	60
						200	45	30
						300	30	20
						500	18	12
						Allowable Moment (N · m)	9	6

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part

- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part

- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

- Bolt Nut
- Jig
- Technical Data



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

Multi Connector Outer Type R GFJ-D17

Slide Load (N)	800	Pull-out Load (N)	No screw 300 With screw 1200	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	110	55
						200	55	28
						300	37	18
						500	22	11
						Allowable Moment (N·m)	11	55

L Slot Connector Inner Type GFJ-255

Slide Load (N)	350	Pull-out Load (N)	350	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	30	40
						200	15	20
						300	10	13
						500	6	8
						Allowable Moment (N·m)	3	4

Multi Connector Long Inner Type GFJ-215A

Slide Load (N)	1500	Pull-out Load (N)	600	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	330	120
						200	165	60
						300	110	40
						500	66	24
						Allowable Moment (N·m)	33	12

Multi Connector Long Outer Type GFJ-C94

Slide Load (N)	1350	Pull-out Load (N)	600	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	190	120
						200	95	60
						300	63	40
						500	38	24
						Allowable Moment (N·m)	19	12

Angle Connector Inner Type Aluminum Bolt GFJ-C98

Pull-out Load (N)	280	Moment Load		Length L (mm)	Allowable Load (N)	
		Vertical	Horizontal		Vertical	Horizontal
				100	130	65
				200	65	32.5
				300	43	21
				500	26	13
				Allowable Moment (N·m)	13	6.5

Angle Connector Inner Type GFJ-204

Pull-out Load (N)	280	Moment Load		Length L (mm)	Allowable Load (N)	
		Vertical	Horizontal		Vertical	Horizontal
				100	130	65
				200	65	33
				300	43	22
				500	26	13
				Allowable Moment (N·m)	13	6.5

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

Jig

Technical Data

Connector Strength Data (GF-N)

- GF-N 28_{mm}
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19_{mm}
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43_{mm}
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data

■ Angle Connector Outer Type GFJ-005

Pull-out Load (N)	170

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	200	150
		200	100	75
		300	67	50
		500	40	30
		Allowable Moment (N·m)	20	15

■ Angle Connector Outer Type E GFJ-010

Pull-out Load (N)	210

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	200	150
		200	100	75
		300	67	50
		500	40	30
		Allowable Moment (N·m)	20	15

■ Free Connector Inner Type GFJ-202A Free Connector Inner Type V-M GFJ-B07 Free Connector Inner Type V-M1 GFJ-B91

Slide Load (N)	800	Pull-out Load (N)	170

■ Free Connector Outer Type GFJ-D30

Slide Load (N)	700	Pull-out Load (N)	390

■ Free Connector Outer Type V-M GFJ-B01 Free Connector Outer Type V-M1 GFJ-B90

Slide Load (N)	700	Pull-out Load (N)	390

■ Free Connector Inner Type H-F GFJ-B04 Free Connector Inner Type H-M GFJ-B06

Pull-out Load (N)	170

■ Free Connector Outer Type H-F GFJ-B00 Free Connector Outer Type H-M GFJ-A81

Pull-out Load (N)	390

■ Free Connector Side F GFJ-C77

Slide Load (N)	800

■ Free Connector Side M GFJ-C79

Slide Load (N)	800

■ Flexible Arm Connector GFJ-C47

Slide Load (N)	600	Pull-out Load (N)	150



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

■ Multi Clamper **GFA-B10**

Slide Load (N)	180

Moment Load		Length L (mm)	Allowable Load (N)	
①	②		①	②
		100	95	60
		200	47	30
		300	31	20
		500	19	12
		Allowable Moment (N·m)	9.5	6

■ Point Connector (Drawing also shows Multi Connector Outer Type) **GFJ-A15**

Slide Load (N)	1400

Moment Load	Length L (mm)	Allowable Load (N)	
		Outer Type	Inner Type
	100	400	400
	200	200	200
	300	133	133
	500	80	80
	Allowable Moment (N·m)	40	40

■ Point Connector Long **GFJ-B80**

Slide Load (N)	1150

Moment Load	Length L (mm)	Allowable Load (N)	
		Outer Type	Inner Type
	100	950	950
	200	475	475
	300	317	317
	500	190	190
	Allowable Moment (N·m)	95	95

■ Coner Bracket **GFJ-032** ※Tightening torque 10.8N·m

Slide Load (N)	650

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	160	75
		200	80	38
		300	53	25
		500	32	15
		Allowable Moment (N·m)	16	7.5

■ 45-Degree Connector Inner Type **GFJ-220**

Slide Load (N)	600	Pull-out Load (N)	275

Moment Load	Length L (mm)	Allowable Load (N)
	100	116
	200	58
	300	39
	500	23
	Allowable Moment (N·m)	11.6

■ 45-Degree Connector Outer Type **GFJ-007**

Slide Load (N)	700	Pull-out Load (N)	260

Moment Load	Length L (mm)	Allowable Load (N)
	100	165
	200	83
	300	55
	500	33
	Allowable Moment (N·m)	16.5

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut


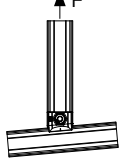
Jig

Technical Data

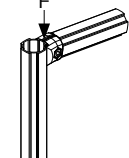
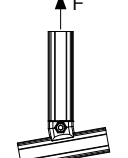
Connector Strength Data (GF-N)

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data

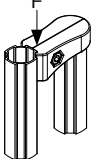
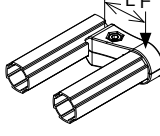
5-Degree Connector Inner Type GFJ-E57

Slide Load (N)	800	Pull-out Load (N)	420	Moment Load	Length L (mm)	Allowable Load (N)	
						Vertical	Horizontal
					100	90	60
					200	45	30
					300	30	20
					500	18	12
					Allowable Moment (N·m)	9	6

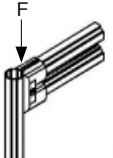
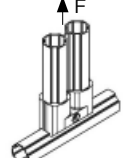
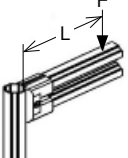
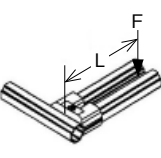
10-Degree Connector Inner Type GFJ-212

Slide Load (N)	800	Pull-out Load (N)	420	Moment Load	Length L (mm)	Allowable Load (N)	
						Vertical	Horizontal
					100	90	60
					200	45	30
					300	30	20
					500	18	12
					Allowable Moment (N·m)	9	6

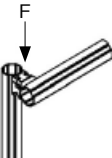
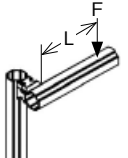
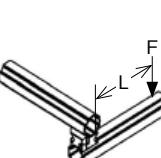
Handle Connector GFJ-D99

Slide Load (N)	280	Moment Load (N)	110
			

Multi Connector Outer Type W GFJ-D28

Slide Load (N)	1000	Pull-out Load (N)	450	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	500	110
						200	250	55
						300	167	37
						500	100	22
						Allowable Moment (N·m)	50	11

Cross Connector Aluminum Bolt GFJ-A11A

Slide Load (N)	800	Moment Load		Length L (mm)	Allowable Load (N)	
		Vertical	Horizontal		Vertical	Horizontal
				100	100	65
				200	50	33
				300	33	22
				500	20	13
				Allowable Moment (N·m)	10	6.5



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

■ Cross Connector Hard GFJ-E12

Slide Load (N)	800

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	200	98
		200	100	49
		300	67	32.7
		500	40	19.6
		Allowable Moment (N·m)	20	9.8

■ Point Connector Cross GFJ-D02 ※ To be used together with the Cross Connector

Slide Load (N)	1000

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	150	260
		200	75	130
		300	50	86
		500	30	52
		Allowable Moment (N·m)	15	26

■ Cross Connector Rotate GFJ-B08

Slide Load (N)	250

■ Double Connector C Kit GFJ-A45

Slide Load (N)	300	Moment Load (N)	400
		Allowable Moment (N·m)	11.4

Moment Load	Length L (mm)	Allowable Load (N)	
Apply on one side		Apply on one side	
	100	85	
	200	43	
		300	28
		500	17
		Allowable Moment (N·m)	8.5

■ Double Connector P15 GFJ-A95 • GFJ-E36

Slide Load (N)	300	Moment Load (N)	400
		Allowable Moment (N·m)	10

Moment Load	Length L (mm)	Allowable Load (N)	
Apply on one side		Apply on one side	
	100	72	
	200	36	
		300	24
		500	14
		Allowable Moment (N·m)	7.2

■ Double Connector P19.5C GFJ-B32

Slide Load (N)	300	Moment Load (N)	400
		Allowable Moment (N·m)	8

Moment Load	Length L (mm)	Allowable Load (N)	
Apply on one side		Apply on one side	
	100	85	
	200	43	
		300	28
		500	17
		Allowable Moment (N·m)	8.5

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

Jig

Technical Data

Connector Strength Data (GF-N)

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data

Double Connector GFJ-A42

Slide Load (N)	300	Moment Load (N)	400	Moment Load Apply on one side	Length L (mm)	Allowable Load (N)
		Allowable Moment (N·m)	11.4			Apply on one side
						100
						200
						300
						500
				Allowable Moment (N·m)		8.5

Double Connector P12 L56 GFJ-D62

Slide Load (N)	600	Moment Load (N)		Moment Load Apply on one side	Length L (mm)	Allowable Load (N)
		Allowable Moment (N·m)	11.4			Apply on one side
						100
						200
						300
						500
				Allowable Moment (N·m)		17

Double Connector P12 L100 GFJ-D65

Slide Load (N)	600	Moment Load (N)		Moment Load Apply on one side	Length L (mm)	Allowable Load (N)
		Allowable Moment (N·m)	11.4			Apply on one side
						100
						200
						300
						500
				Allowable Moment (N·m)		17

Double Connector P15 L56 GFJ-D68

Slide Load (N)	600	Moment Load (N)		Moment Load Apply on one side	Length L (mm)	Allowable Load (N)
		Allowable Moment (N·m)	10			Apply on one side
						100
						200
						300
						500
				Allowable Moment (N·m)		14.4

Double Connector P15 L100 GFJ-D71

Slide Load (N)	600	Moment Load (N)		Moment Load Apply on one side	Length L (mm)	Allowable Load (N)
		Allowable Moment (N·m)	10			Apply on one side
						100
						200
						300
						500
				Allowable Moment (N·m)		14.4

Bridge Connector GFJ-A00

Slide Load (N)	900	Vertical	Horizontal		Vertical	Horizontal	Moment Load	Length L (mm)	Allowable Load (N)
				Allowable Load (N)	180	140			Apply on one side
				Allowable Moment (N·m)	16	12.5			100
								200	
								300	
								500	
								Allowable Moment (N·m)	
								8.5	



Approx. Frame Size
→ P.176



Frame Strength Data
→ P.212

■ Pipe Holder **GFA-001** ※Useful when using $\phi 28$ resin pipe

Slide Load (N)	280	Vertical	Horizontal		Vertical	Horizontal	Moment Load	Length L (mm)	Allowable Load (N)
				Allowable Load (N)	290	370		100	100
								200	50
								300	33
								500	20
				Allowable Moment (N·m)	23.2	30.8			10

■ Parallel Holder **GFJ-A47**

Slide Load (N)	960	Moment Load (N·m)	500	Moment Load	Length L (mm)	Allowable Load (N)
				Apply on one side	100	180
					200	90
					300	60
					500	36
					Allowable Moment (N·m)	18

■ Parallel Holder HS **GFJ-A49**

Slide Load (N)	1370	Moment Load (N)	560	Moment Load	Length L (mm)	Allowable Load (N)
			Allowable Moment (N·m)	20	100	350
					200	175
					300	116
					500	70
					Allowable Moment (N·m)	35

■ Straight Connector Inner Type **GFJ-D01**

Pull-out Load (N)	420	Moment Load	Length L (mm)	Allowable Load (N)
			100	50
			200	25
			300	16
			500	10
			Allowable Moment (N·m)	5

■ Straight Connector Outer Type **GFJ-D13**

Pull-out Load (N)	No screw 420 With screw 1000	Moment Load	Length L (mm)	Allowable Load (N)
			100	50
			200	25
			300	16
			500	10
			Allowable Moment (N·m)	5

■ Straight Connector **GFJ-A17** ※Tightening torque 12N·m

Pull-out Load (N)	500	Moment Load	Length L (mm)	Allowable Load (N)
			100	130
			200	65
			300	43
			500	26
			Allowable Moment (N·m)	13

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

Connector Strength Data (GF-N)

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

■ Straight Joint GFJ-A46

※Please do not use the Straight Joint in this orientation. This image is for reference only.

Pull-out Load (N)	18	Moment Load	Length L (mm)	Allowable Load (N)	
				100	100
				200	50
				300	33
				500	20
				Allowable Moment (N·m)	10

■ L Slot Connector Piece GFA-601 ※When using Multi Connector Outer Type. Tightening torque for L Slot Connector Piece 5N·m

Slide Load (N)	200	Pull-out Load (N)	130	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
								100
								200
								300
								500
								Allowable Moment (N·m)

■ L Slot Connector Piece L50 GFA-B37

Slide Load (N)	500	Pull-out Load (N)	230	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
								100
								200
								300
								500
								Allowable Moment (N·m)

■ L Slot Connector Piece L100 GFA-B39

Slide Load (N)	500	Pull-out Load (N)	230	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
								100
								200
								300
								500
								Allowable Moment (N·m)

- Bolt Nut
- Jig
- Technical Data



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

■ GF-SF Connector Kit for S Slot GFA-603

Slide Load (N)	583

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	101	41
		200	51	21
		300	33	14
		500	20	8
		Allowable Moment (N·m)	10.1	4.1

■ GF-SF Connector Kit for L Slot GFA-607

Slide Load (N)	852

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	115	49
		200	58	25
		300	38	16
		500	23	10
		Allowable Moment (N·m)	11.5	4.9

■ GF-SF Connector Kit for S Slot G type GFA-605

Slide Load (N)	1331

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	317	54
		200	159	27
		300	106	18
		500	63	11
		Allowable Moment (N·m)	31.7	5.4

■ GF-SF Connector Kit for L Slot G type GFA-609

Slide Load (N)	1562

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	281	55
		200	141	28
		300	94	18
		500	56	11
		Allowable Moment (N·m)	28.1	5.5

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt
Nut



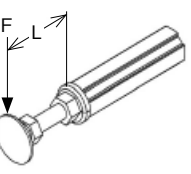
Jig

Technical
Data



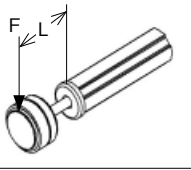
Connector Strength Data (GF-N)

GF-N 28mm

■ Foot Connector M12 Resin Type GFN-E02 (Resin Type) GFN-E17 (Conductive Resin Type)

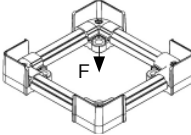
Compression Load (N)	Resin	1250	Pull-out Load (N)	Resin	120	Allowable Moment (N·m)	Resin	62
	Conductive Resin	500		Conductive Resin	120		Conductive Resin	60
								

■ Foot Connector M8 GFN-E01

Compression Load (N)	1200	Pull-out Load (N)	39	Allowable Moment (N·m)	5			
								

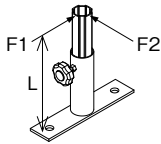
GF-S 19mm

■ Palette Connector GFJ-A13

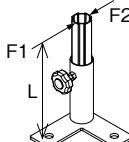
Load Capacity (N)	3250
	

※If using a steel plate, apply load in the middle.

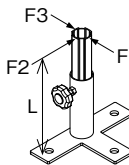
■ Pipe Stand A GFN-E15

Moment Load	Length L (mm)	Allowable Load (N)	
		F1	F2
	500	108	102
	1000	54	51
	1500	36	34
	2000	27	25.5
	Allowable Moment (N·m)	54	51

■ Pipe Stand L GFN-E27

Moment Load	Length L (mm)	Allowable Load (N)	
		F1	F2
	500	114	78
	1000	57	39
	1500	38	26
	2000	28.5	19.5
	Allowable Moment (N·m)	57	39

■ Pipe Stand T GFN-E28

Moment Load	Length L (mm)	Allowable Load (N)		
		F1	F2	F3
	500	132	116	112
	1000	66	58	56
	1500	44	38.5	37
	2000	33	29	28
	Allowable Moment (N·m)	66	58	56

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G 43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

■ Pipe Stand I GFN-E29

Moment Load	Length L (mm)	Allowable Load (N)	
		F1	F2
	500	60	30
	1000	30	15
	1500	20	10
	2000	15	7.5
	Allowable Moment (N·m)	30	15

■ Stand Connector GFJ-A36

Slide Load (N)	600	Pull-out Load (N)	240	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
				Vertical	Horizontal	100	700	500
						200	350	250
						300	233	167
						500	140	100
						Allowable Moment (N·m)	70	50

■ Base Stand GFN-E08

Moment Load	Length L (mm)	Allowable Load (N)
	100	400
	200	200
	300	133
	500	80
	Allowable Moment (N·m)	40

■ Adjuster Caster Connector A GFN-C08

Load Capacity (N)	1900

■ Adjuster Caster Connector B GFN-C09

Slide Load (N)	900

Moment Load	Length L (mm)	Allowable Load (N)
	200	235
	300	157
	500	94
	Allowable Moment (N·m)	47

■ Rotary Connector GFJ-A94

Radial	450	Thrust	750

■ Single Rotary Connector (one piece) GFW-557

Slide Load (N)	400	Pull-out Load (N)	600

■ One Way Clutch GFJ-C19

Moment Load (N)	300
Allowable Moment (N·m)	9

GF-N 28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S 19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G 43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

Jig

Technical Data

Connector Strength Data (GF-N)

GF-N
28mm

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part

■ **Pin Connector GFJ-B58**

Slide Load (N)	800

■ **Folding Connector GFJ-247**

Allowable Moment (N · m)	9

■ **Ratchet Connector H160 GFJ-E50**

Pull-out Load (N)	420	Moment Load		Length L (mm)	Allowable Load (N)
				100	200
				200	100
				300	67
				500	40
				Allowable Moment (N · m)	20

■ **Ratchet Connector V160 GFJ-E65**

Slide Load (N)	1500	Pull-out Load (N)	600	Moment Load		Length L (mm)	Allowable Load (N)
						100	200
						200	100
						300	67
						500	40
						Allowable Moment (N · m)	20

GF-G
43mm

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

Bolt Nut

Jig

Technical Data



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

■ Hinge Connector GFJ-A04

Moment Load	Length L (mm)	Allowable Load (N)
	100	180
	200	90
	300	60
	500	36
	Allowable Moment (N·m)	18

■ Hinge Connector L GFJ-A07

Moment Load	Length L (mm)	Allowable Load (N)
	100	180
	200	90
	300	60
	500	36
	Allowable Moment (N·m)	18

■ Hinge Connector Hard GFJ-A88

Moment Load	Length L (mm)	Allowable Load (N)
	100	640
	200	320
	300	213
	500	128
	Allowable Moment (N·m)	64

■ Hinge Connector Stopper GFJ-A09 ※Tightening torque 1.5N·m

Slide Load (N)	350

■ Hinge Connector Stopper Hard GFJ-A61

Slide Load (N)	750

■ Linear Slider GFW-440

Load Capacity (N)	50
 Lifetime Travel Distance : 120km	

■ GF Roller GFK-948

Load Capacity (N)	150

■ Roller Slider L150 GFW-527

Load Capacity (N)	600

■ Slot Roller L40 Light SFA-809

Load Capacity (N)	150

■ V Roller GFK-949

Load Capacity (N)	10

■ GF Slider FF GFJ-A38

Slide Properties (Using 2 pcs)(N)	10

Slide Properties (Bottom Load)	40

Slide Properties (Top Load)	20

■ GF Slider PF GFJ-A41

Moment Load (N)	110
Allowable Moment (N·m)	2.2

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

Jig

Technical Data

Connector Strength Data (GF-N)

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

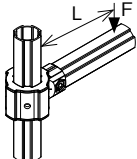
Accessory

Bolt Nut

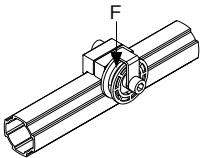
Jig

Technical Data

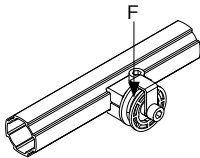
Slide Connector Hard GFJ-C44

Moment Load	Length L (mm)	Allowable Load (N)
	100	640
	200	320
	300	213
	500	128
Allowable Moment (N·m)		64

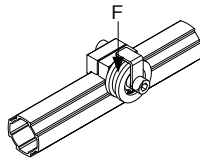
Resin Idler Support Kit A GFK-959

Load Capacity (N)	30
	

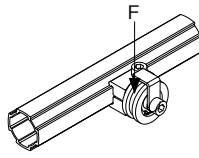
Resin Idler Support Kit B GFK-960

Load Capacity (N)	30
	

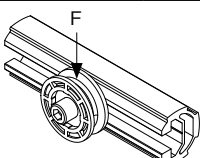
Steel Idler Support Kit A GFK-957

Load Capacity (N)	200
	

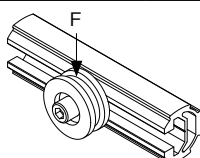
Steel Idler Support Kit B GFK-958

Load Capacity (N)	200
	

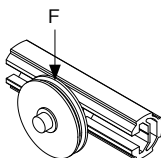
Resin Idler GFA-A30

Load Capacity (N)	30
	

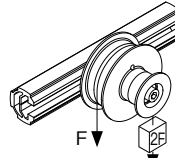
Steel Idler GFW-239

Load Capacity (N)	200
	

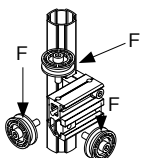
φ48 Idler GFW-263

Load Capacity (N)	300
	


Two Stage Pulley GFK-A18

Load Capacity (N)	100
	

Idler Connector GFK-A19

Load Capacity (N)	200
	

Wire Lock Connector GFJ-D90

Slide Load (N)	500
	

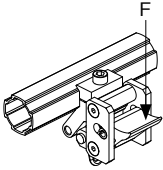


Approx.
Frame Size
→ P.176

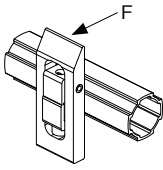


Frame
Strength Data
→ P.212

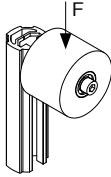
■ Elevator Lock **GFK-N06**

Load Capacity (N)	200
	

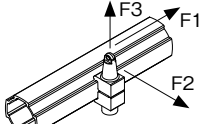
■ Conveyor Anti Back **GFK-N05**

Load Capacity (N)	200
	

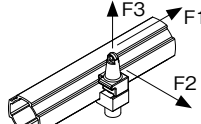
■ $\phi 49$ Guide Roller **GFW-566**

Load Capacity (N)	150
	

■ Spring Post Connector **GFJ-B10**

Load Capacity (N)	100
 <p>All directions : F1, F2, or F3</p>	

■ Spring Post Connector 2 **GFJ-D93**

Load Capacity (N)	100
 <p>All directions : F1, F2, or F3</p>	

GF-N
28_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Electric Item 

Corocon Roller 

Accessory 

Door Part 

GF-S
19_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

Door Part 

GF-G
43_{mm}

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

**Bolt
Nut**

Jig

**Technical
Data**

Connector Strength Data (GF-N)

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

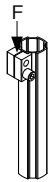
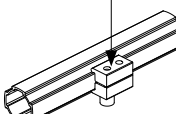
Accessory

Bolt Nut

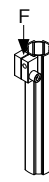
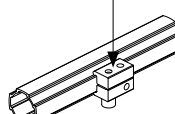
Jig

Technical Data


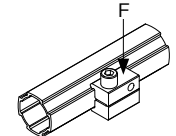
■ Connector Piece Compact **GFJ-B09**

Slide Load (N)	400	Moment Load (N)	500
		Allowable Moment (N·m)	5.75
			

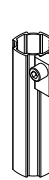
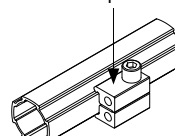
■ Connector Piece Compact (Side) **GFJ-B18**

Slide Load (N)	400	Moment Load (N)	500
		Allowable Moment (N·m)	5.75
			

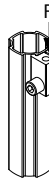
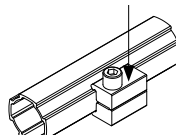
■ Connector Piece Compact (Side) R **GFJ-D77**

Slide Load (N)	400	Moment Load (N)	500
		Allowable Moment (N·m)	5.75
			


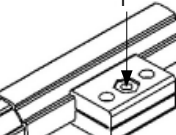
■ Connector Piece Compact Front L **GFJ-D79**

Slide Load (N)	400	Moment Load (N)	500
		Allowable Moment (N·m)	5.75
			


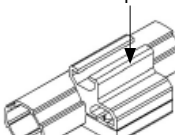
■ Connector Piece Compact Front R **GFJ-D82**

Slide Load (N)	400	Moment Load (N)	500
		Allowable Moment (N·m)	5.75
			

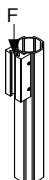
■ Connector Piece **GFJ-A31** ※Tightening torque 10.8N·m

Slide Load (N)	410	Moment Load (N)	500
		Allowable Moment (N·m)	6
			


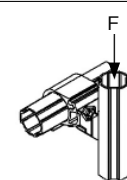
■ Part Holder **GFA-000** ※Tightening torque 10.8N·m

Slide Load (N)	230	Moment Load (N)	260
		Allowable Moment (N·m)	8
			

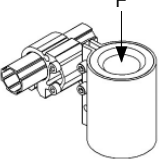
■ SS Slot Assist **GFQ-017**

Slide Load (N)	250
	

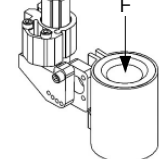
■ Tool Bracket **GFH-003**

Slide Load (N)	340	Allowable Moment (N·m)	22
			

■ Impact Holder Kit H-Type **GFK-803**

Repeating Load (N)	440	Repeating Load : 60,000 cycles (Load 14N : using impact weight in the test) ※Please check the connection once every 10,000 cycles of repeated use. If it has not been used in over two weeks, please check and secure the bolt before using again.
		

■ Impact Holder Kit V-Type **GFK-802**

Repeating Load (N)	400	Repeating Load : 60,000 cycles (Load 14N : using impact weight in the test) ※Please check the connection once every 10,000 cycles of repeated use. If it has not been used in over two weeks, please check and secure the bolt before using again.
		



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

■ Off-set Connector **GFJ-A35**

Slide Load (N)	195	Both Ends Support Because GF strength is less than Off-set Connector, Allowable Load will refer to Frame Strength Data.

■ Single Saddle **GFJ-A25**

Allowable Moment Load (N·m)	1.0

■ Double Saddle **GFJ-A27**

Allowable Moment Load (N·m)	6.5

■ Free Connector Fix Side **GFJ-E49**

Moment Load (N)	300

■ Ring Runner **GFA-A06**

Load Capacity (N)	10

■ Board Holder **GFJ-A22**

Slide Load (N)	250	Moment Load (N)	260
		Allowable Moment (N·m)	13

■ Board Holder F **GFF-A01**

Load Capacity (N)	400

■ Hinge P-L/R **GFP-000/GFP-004**

Allowable Moment (N·m)	4.5

■ Hinge F-L/R **GFP-005/GFP-007**

Allowable Moment (N·m)	4.5

■ GF Slip-joint Hinge L/R **GFP-012/GFP-013**

Allowable Moment (N·m)	3

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data

Connector Strength Data (GF-S) Tightening Torque for Connector 7.4N·m

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data

Multi Connector Inner Type S ADC GFJ-B66

Slide Load (N)	360	Pull-out Load (N)	300	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	30	12
						200	15	6
						300	10	4
						500	6	2
						Allowable Moment (N·m)	3	1.2

Multi Connector Inner Type S GFJ-211

Slide Load (N)	150	Pull-out Load (N)	210	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	60	18
						200	30	9
						300	20	6
						500	12	4
						Allowable Moment (N·m)	6	1.8

Multi Connector Outer Type S GFJ-018

Slide Load (N)	280	Pull-out Load (N)	400	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	30	12
						200	15	6
						300	10	4
						500	6	2
						Allowable Moment (N·m)	3	1.2

Multi Connector Inner Type SR GFJ-244

Slide Load (N)	360	Pull-out Load (N)	300	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	30	12
						200	15	6
						300	10	4
						500	6	2
						Allowable Moment (N·m)	3	1.2

GFS-GF Connector GFJ-020

Slide Load (N)	280	Pull-out Load (N)	500	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	40	25
						200	20	13
						300	13	8
						500	8	5
						Allowable Moment (N·m)	4	2.5



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

GF-N
28_{mm}

Frame

Cap

Connector

Foot
Component

Moving
Part

Electric
Item

Coroon
Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot
Component

Moving
Part

Coroon
Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot
Component

Moving
Part

Coroon
Roller

Accessory

Bolt
Nut

Jig

Technical
Data

■ Angle Connector Inner Type S GFJ-C38

Pull-out Load (N)	140

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	35	16
		200	17	8
		300	11	5
		500	7	3
		Allowable Moment (N·m)	3.5	1.6

■ Angle Connector Outer Type S GFJ-046

Pull-out Load (N)	130

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	90	50
		200	45	25
		300	30	17
		500	18	10
		Allowable Moment (N·m)	9	5

■ Link Connector S V GFJ-041

Slide Load (N)	280	Pull-out Load (N)	300

■ Link Connector S H GFJ-C81

Slide Load (N)	280	Pull-out Load (N)	300

Moment Load	Length L (mm)	Allowable Load (N)
Vertical		
	100	30
	200	15
	300	10
	500	6
	Allowable Moment (N·m)	3

■ Link Connector N-S GFJ-C39

Slide Load (N)	280	Pull-out Load (N)	300

■ Point Connector S GFJ-A72


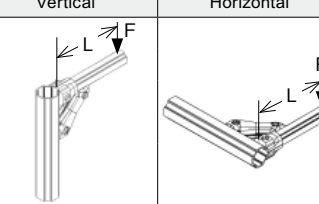
Slide Load (N)	535

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	170	15
		200	85	7.5
		300	57	5
		500	34	3
		Allowable Moment (N·m)	17	1.5

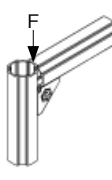
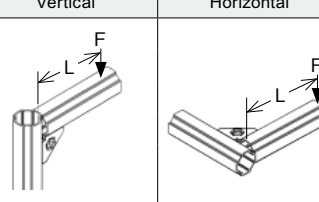
Connector Strength Data (GF-S)

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data


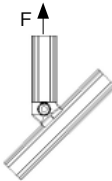
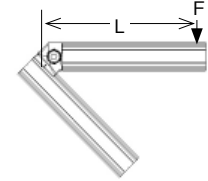
Point Connector N-S GFJ-B89

Slide Load (N)	535	Moment Load		Length L (mm)	Allowable Load (N)	
		Vertical	Horizontal		Vertical	Horizontal
				100	170	40
				200	85	20
				300	57	13
				500	34	8
		Allowable Moment (N·m)		17	4	

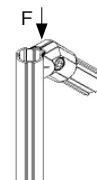
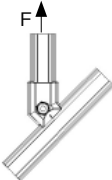
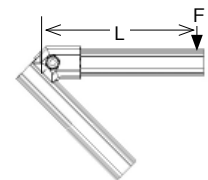
Corner Bracket S GFJ-C53

Slide Load (N)	360	Moment Load		Length L (mm)	Allowable Load (N)	
		Vertical	Horizontal		Vertical	Horizontal
				100	45	12
				200	22.5	6
				300	15	4
				500	9	2.4
		Allowable Moment (N·m)		4.5	1.2	

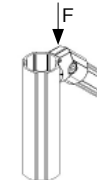

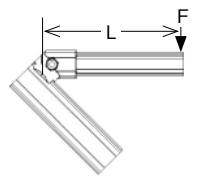
45-Degree Connector Inner Type S GFJ-248

Slide Load (N)	330	Pull-out Load (N)	220	Moment Load	Length L (mm)	Allowable Load (N)			
									100
				200	15				
				300	10				
				500	6				
				Allowable Moment (N·m)		3			

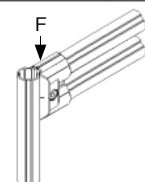

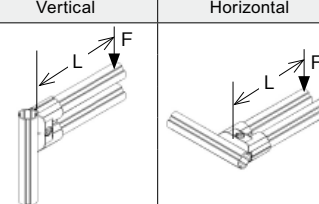
45-Degree Connector Outer Type S GFJ-035

Slide Load (N)	280	Pull-out Load (N)	360	Moment Load	Length L (mm)	Allowable Load (N)			
									100
				200	15				
				300	10				
				500	6				
				Allowable Moment (N·m)		3			

45-Degree Connector Outer Type N-S GFJ-036

Slide Load (N)	280	Pull-out Load (N)	480	Moment Load	Length L (mm)	Allowable Load (N)			
									100
				200	20				
				300	13				
				500	8				
				Allowable Moment (N·m)		4			

Multi Connector Outer Type S W GFJ-044

Slide Load (N)	600	Pull-out Load (N)	540	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	75	30
						200	38	15
						300	25	10
						500	15	6
				Allowable Moment (N·m)		7.5	3	



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

■ Cross Connector S GFJ-B55

Slide Load (N)	280

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	20	20
		200	10	10
		300	7	7
		500	4	4
		Allowable Moment (N·m)	2	2

■ Cross Connector N-S GFJ-B26

Slide Load (N)	650

Moment Load		Length L (mm)	Allowable Load (N)	
Vertical	Horizontal		Vertical	Horizontal
		100	80	30
		200	40	15
		300	27	10
		500	16	6
		Allowable Moment (N·m)	8	3

■ Cross Connector Rotate Type S GFJ-B77

Slide Load (N)	300

■ Double Connector S GFJ-A55

Slide Load (N)	200	Moment Load (N)	90
		Allowable Moment (N·m)	3.3

Moment Load	Length L (mm)	Allowable Load (N)	
Apply on one side		Apply on one side	
	100	20	
	200	10	
		300	6.6
		500	4
		Allowable Moment (N·m)	2

■ Double Connector N-S GFJ-B50

Slide Load (N)	240	Moment Load (N)	259
		Allowable Moment (N·m)	7

Moment Load	Length L (mm)	Allowable Load (N)	
Apply on one side		Apply on one side	
	100	50	
	200	25	
		300	17
		500	10
		Allowable Moment (N·m)	5

■ Double Connector S L40 GFJ-D74

Slide Load (N)	400	Moment Load (N)	90
		Allowable Moment (N·m)	3.3

Moment Load	Length L (mm)	Allowable Load (N)	
Apply on one side		Apply on one side	
	100	40	
	200	20	
		300	13
		500	8
		Allowable Moment (N·m)	4

GF-N 28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S 19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G 43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut


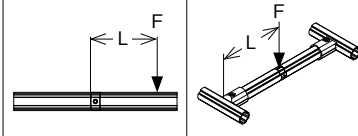
Jig

Technical Data



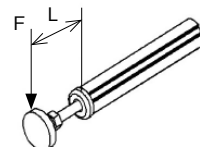
Connector Strength Data (GF-S)

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data

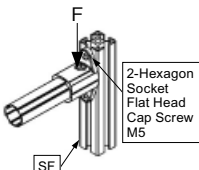
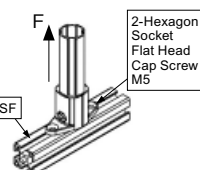
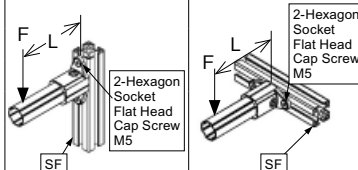
■ Straight Connector S GFJ-A89

Pull-out Load (N)	440	Moment Load		Length L (mm)	Allowable Load (N)	
		Cantilever	Both Ends		Cantilever	Both Ends
				100	108	205
				200	54	103
				300	36	68
				500	22	41
				Allowable Moment (N · m)		10.8

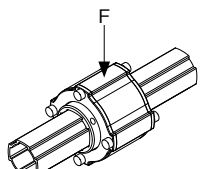
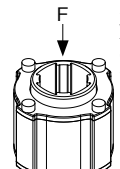
■ Foot Connector S GFN-E07

Compression Load (N)	920	Pull-out Load (N)	80	Moment Load		Length L (mm)	Allowable Load (N)		
							100	11	
						200	6		
						300	4		
						500	2		
								Allowable Moment (N · m)	

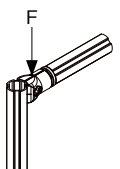
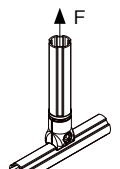
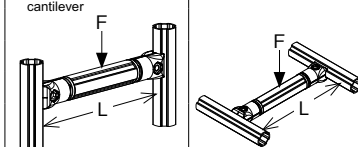
■ Stand Connector S GFJ-B45

Slide Load (N)	780	Pull-out Load (N)	470	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	112	57
						200	56	29
						300	37	19
						500	22	11
						Allowable Moment (N · m)		11.2

■ Rotary Connector S GFJ-B83

Radial	100	Thrust	600
			
		<p>Specifications when using the Hinge Connector Stopper Hard S</p>	

■ Pin Connector S GFJ-D06

Slide Load (N)	500	Pull-out Load (N)	190	Moment Load		Length L (mm)	Allowable Load (N)			
				Vertical	Horizontal		Vertical	Horizontal		
						*Do not use as a cantilever		200	88	88
						300	58.5	58.5		
						400	44	44		
						500	35	35		
						Allowable Moment (N · m)		2.2	2.2	



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

■ Folding Connector S GFJ-D10

Pull-out Load (N)	190

	Moment Load	Length L (mm)	Allowable Load (N)
		100	12
		200	6
		300	4
		500	2.4
	Allowable Moment (N·m)		1.2

■ Roller Slider S L-100 GFW-476

Load Capacity (N)	50

■ GF Roller S Mounting Kit GFK-961

Load Capacity (N)	25

■ Hinge Connector S GFJ-A64

	Moment Load	Length L (mm)	Allowable Load (N)
		100	52
		200	26
		300	17
		500	10.3
	Allowable Moment (N·m)		5.15

■ Hinge Connector stopper S GFJ-A67

Slide Load (N)	400

■ Hinge Connector Stopper Hard S GFJ-B95

Slide Load (N)	600

■ Connector Pieces GFJ-B70
GFJ-B71

Slide Load (N)	260	Moment Load (N)	339
		Allowable Moment (N·m)	2

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt
Nut

Jig

Technical
Data

Connector Strength Data (GF-G) Tightening Torque for Connector 25N · m

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part
- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Bolt Nut
- Jig
- Technical Data

Multi Connector Inner Type G GFJ-209

Slide Load (N)	1700	Pull-out Load (N)	1000	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	500	300
						200	250	150
						300	167	100
						500	100	60
						Allowable Moment (N · m)	50	30

Multi Connector Outer Type G GFJ-014

Slide Load (N)	2500	Pull-out Load (N)	690	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	660	150
						200	330	75
						300	220	50
						500	132	30
						Allowable Moment (N · m)	66	15

Multi Connector Inner Type G-N GFJ-224

Slide Load (N)	1200	Pull-out Load (N)	839	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	410	130
						200	205	65
						300	137	43
						500	82	26
						Allowable Moment (N · m)	41	13

Multi Connector Outer Type G-N GFJ-022

Slide Load (N)	1100	Pull-out Load (N)	561	Moment Load		Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal		Vertical	Horizontal
						100	540	110
						200	270	55
						300	180	37
						500	108	22
						Allowable Moment (N · m)	54	11

Angle Connector Outer G GFJ-016

Pull-out Load (N)		260	Moment Load		Length L (mm)	Allowable Load (N)	
			Vertical	Horizontal		Vertical	Horizontal
					100	1700	90
					200	850	45
					300	567	30
					500	340	18
					Allowable Moment (N · m)	170	9

Free Connector Inner Type G GFJ-228

Slide Load (N)	1000	Pull-out Load (N)	700	Moment Load		Length L (mm)	Allowable Load (N)	
							Vertical	Horizontal
						100	100	
						200	50	
						300	33	
						500	20	
						Allowable Moment (N · m)	10	



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

■ 45-Degree Connector Outer Type G GFJ-024

Slide Load (N)	900	Pull-out Load (N)	600	Moment Load	Length L (mm)	Allowable Load (N)
					100	440
					200	220
					300	147
					500	88
					Allowable Moment (N·m)	44

■ Multi Connector Outer Type GM GFJ-028

Slide Load (N)	1150	Pull-out Load (N)	530	Moment Load	Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal	Vertical	Horizontal
						100	350
						200	175
						300	117
						500	70
					Allowable Moment (N·m)	240	35

■ Multi Connector Outer Type GH GFJ-031

Slide Load (N)	1300	Pull-out Load (N)	800	Moment Load	Length L (mm)	Allowable Load (N)	
				Vertical	Horizontal	Vertical	Horizontal
						100	250
						200	125
						300	83
						500	50
					Allowable Moment (N·m)	150	25

■ Straight Connector G GFJ-B41

Pull-out Load (N)	1000	Moment Load	Length L (mm)	Allowable Load (N)
			100	130
			200	65
			300	43
			500	26
			Allowable Moment (N·m)	13

■ Foot Connector M16G GFN-E05

Compression Load (N)	5800	Pull-out Load (N)	320	Allowable Moment (N·m)	90

■ Foot Connector M16G Conductive GFN-E21

Compression Load (N)	1000	Pull-out Load (N)	100	Allowable Moment (N·m)	60

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data

Connector Strength Data (GF-G)

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

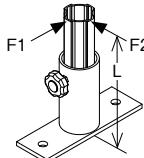
Accessory

Bolt Nut

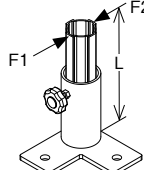
Jig

Technical Data

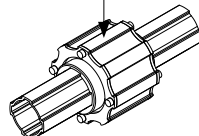
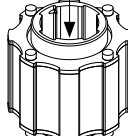
■ Pipe Stand G GFN-E20

Moment Load	Length L (mm)	Allowable Load (N)	
		F1	F2
	500	480	370
	1000	240	185
	1500	160	123
	2000	120	92.5
	Allowable Moment (N·m)	240	185

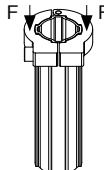
■ Pipe Stand GL GFN-E30

Moment Load	Length L (mm)	Allowable Load (N)	
		F1	F2
	500	420	210
	1000	210	105
	1500	140	70
	2000	105	52.5
	Allowable Moment (N·m)	210	105


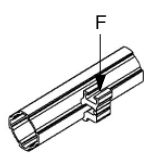
■ Rotary Connector G GFJ-C84

Radial	900	Thrust	1125
Use it with 22.5 Nm or lower 		Value when used with the Stopper Hard G 	


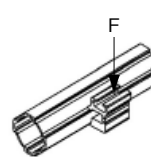
■ Stop Hard G GFJ-C93

Slide Load (N)	1200
	

■ Board holder G Outer Type GFJ-A33

Slide Load (N)	150	Allowable Moment (N·m)	8
			

■ Board Holder G Inner Type GFJ-A34

Slide Load (N)	90	Allowable Moment (N·m)	6
			



Approx.
Frame Size
→ P.176



Frame
Strength Data
→ P.212

GF-N 28_{mm}

Frame

Cap

Connector

Foot
Component

Moving
Part

Electric
Item

Corocon
Roller

Accessory

Door Part

GF-S 19_{mm}

Frame

Cap

Connector

Foot
Component

Moving
Part

Corocon
Roller

Accessory

Door Part

GF-G 43_{mm}

Frame

Cap

Connector

Foot
Component

Moving
Part

Corocon
Roller

Accessory

**Bolt
Nut**

Jig

**Technical
Data**

Frame Strength Data (GF-N)

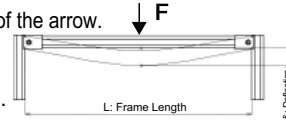
Condition: 1. Secure both ends of the frame and apply a concentrated load in the direction of the arrow.
2. Frame length is an inside dimension including connectors.

Recommended Load: Deflection in the middle of frame is 5/1000 of frame length.

Critical Load: When the frame starts to deform.

※If exceeding the recommended load, please keep it lower than 80% of critical load.

※If the slide load of a connector is smaller than the recommended load and critical load, fill in the slide load of the connector. (in blue)



Calculating Formula

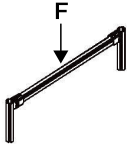
◆ Recommended Load

$$\delta = \frac{FL^3}{48EI}$$

◆ Critical Load

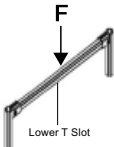
$$\delta = \frac{FL}{4Z}$$

Green Frame GFF-000



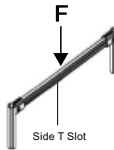
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	779	1162
1000	5	195	581

Green Frame L Slot GFF-004



(Horizontal)

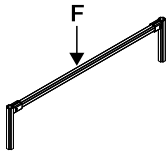
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	799	1400
1000	5	200	994



(Vertical)

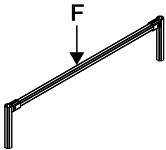
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1300	1344
1000	5	334	672

Green Frame T GFF-017



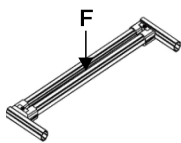
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1155	1600
1000	5	289	861

Green Frame Hard GFF-019



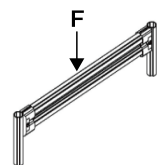
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1350	1600
1000	5	338	1008

Green Frame W GFF-003



(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1552	2310
1000	5	388	1155



(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	2000	2000
1000	5	1958	2000

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

Technical Data



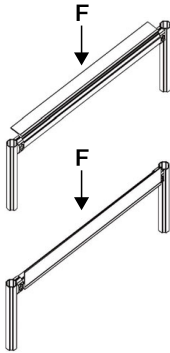
Approx.
Frame Size
→ P.176



Connector
Strength Data
→ P.184

Frame Strength Data (GF-N)

Green Frame F35 GFF-014



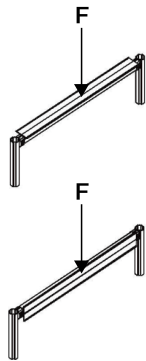
(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1600	1600
1000	5	283	966

(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1600	1540
1000	5	507	770

Green Frame F50 GFF-005



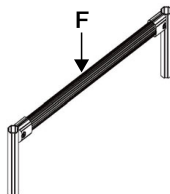
(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1540	1600
1000	5	511	868

(Vertical)

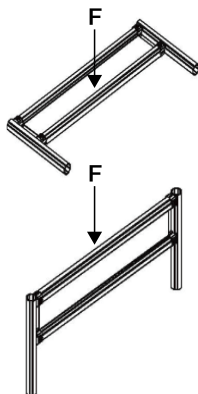
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1600	1600
1000	5	430	854

Green Frame Slide GFF-006



Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	987	1414
1000	5	247	707

Green Frame P100 GFF-001



(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1558	2310
1000	5	390	1155

(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	3200	3200
1000	5	3200	3200

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

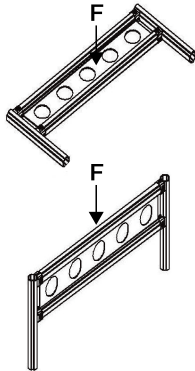
Jig

Technical Data

Frame Strength Data (GF-N / G-G)

GF-N
28mm

■ Green Frame P100 (Light Weight) **GFF-002**



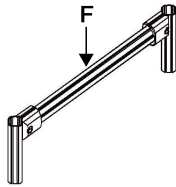
(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1552	2310
1000	5	388	1155

(Vertical)

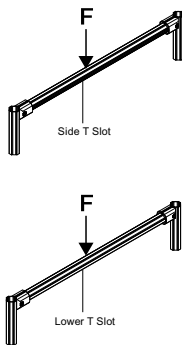
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	3200	3200
1000	5	3200	3200

■ Green Frame G **GFF-200**



Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	851	1652

■ Green Frame G L Slot **GFF-205**



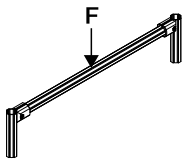
(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	972	1800

(Vertical)

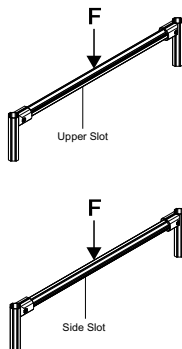
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	875	1701

■ Green Frame G Hard **GFF-209**



Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	1542	1800

■ Green Frame G Rack Beam **GFF-206**



(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	766	1449

(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	888	1722



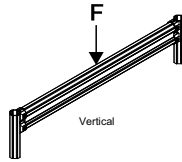
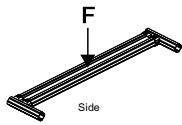
Approx.
Frame Size
→ P.176



Connector
Strength Data
→ P.184

Frame Strength Data (GF-G)

Green Frame GW GFF-207



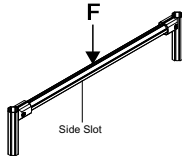
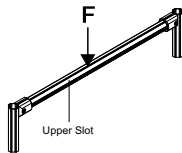
(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	1800	1800

(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	1800	1800

Green Frame G Rack Beam W GFF-208



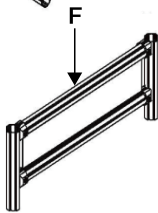
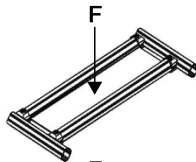
(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	811	1575

(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1800	1800
1000	5	877	1554

Green Frame G P150 GFF-201



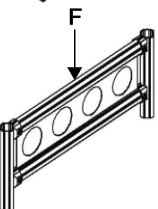
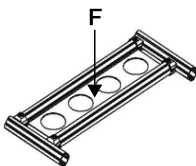
(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	3600	3600
1000	5	1705	3304

(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	3600	3600
1000	5	3600	3600

Green Frame G P150 Lightweight Type GFF-202



(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	3600	3600
1000	5	1705	3304

(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	3600	3600
1000	5	3600	3600

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corcon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corcon Roller

Accessory

Bolt Nut

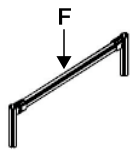
Jig

Technical Data

Frame Strength Data (GF-S)

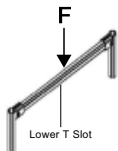
GF-N 28mm

Green Frame S GFF-400



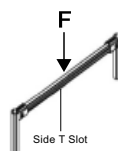
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	181	300
1000	5	45	196

Green Frame S SS Slot GFF-401



(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	257	560
1000	5	64	282

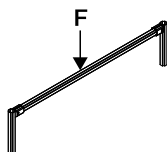


(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	133	252
1000	5	33	126

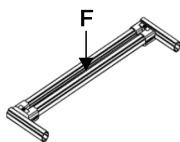
GF-S 19mm

Green Frame S Hard GFF-404



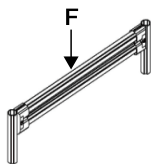
Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	343	560
1000	5	86	378

Green Frame S W GFF-406



(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	356	784
1000	5	89	392

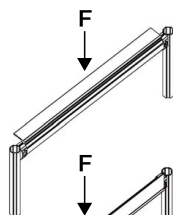


(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	1200	1200
1000	5	482	910

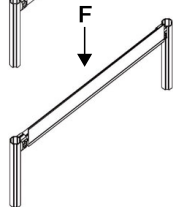
GF-G 43mm

Green Frame S F22 GFF-403



(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	300	300
1000	5	136	300



(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	300	300
1000	5	144	300



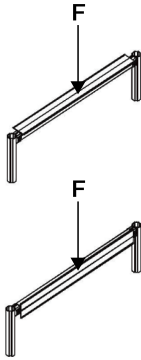
Approx.
Frame Size
→ P.176



Connector
Strength Data
→ P.184

Frame Strength Data (GF-S)

■ Green Frame S F35 GFF-402



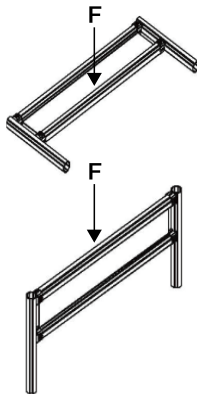
(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	300	300
1000	5	154	300

(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	300	300
1000	5	156	300

■ Green Frame S P100 GFF-405



(Horizontal)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	356	600
1000	5	89	392

(Vertical)

Frame Length (mm)	Allowable Deflection (mm) 5/1000	Recommended Load (N)	Critical Load (N)
500	2.5	600	600
1000	5	600	600

GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt
Nut

Jig

Technical
Data

GF-N
28_{mm}

 Frame

 Cap

 Connector

 Foot Component

 Moving Part

 Electric Item

 Corocon Roller

 Accessory

 Door Part

GF-S
19_{mm}

 Frame

 Cap

 Connector

 Foot Component

 Moving Part

 Corocon Roller

 Accessory

 Door Part

GF-G
43_{mm}

 Frame

 Cap

 Connector

 Foot Component

 Moving Part

 Corocon Roller

 Accessory

**Bolt
Nut**

Jig

**Technical
Data**

Assembly Method

GF-N 28mm

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Electric Item 

Corocon Roller 

Accessory 

Door Part 

GF-S 19mm

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

Door Part 

GF-G 43mm

Frame 

Cap 

Connector 

Foot Component 

Moving Part 

Corocon Roller 

Accessory 

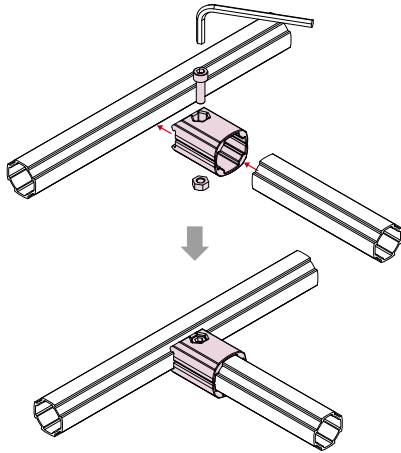
Bolt Nut

Jig

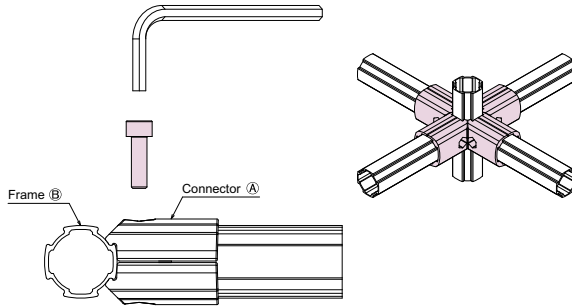
Technical Data

GF Assembly Method

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part



Loosen Connector (A) and attach like a clamp onto the profile edge of Frame (B), then tighten the bolt.

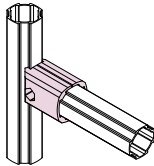


※It's not necessary to fully remove the bolt from the connector to attach it.

90-Degree Connection

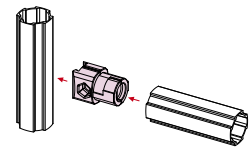
Multi Connector Outer

- Multi Connector Outer P34
- Multi Connector Outer Hard P34
- Multi Connector R Outer P35
- Multi Connector Long Outer P36
- Multi Connector W Outer P42
- Multi Connector G Outer P158
- Multi Connector G-N Outer P158
- Multi Connector GM/GH Outer P159
- Multi Connector S Outer P136
- GFS-GF Connector P136
- Multi Connector SW Outer P139



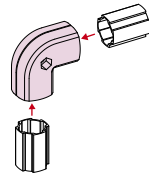
Multi Connector Inner

- Multi Connector Inner P34
- Multi Connector Inner 2 P34
- Multi Connector R Inner P35
- L Slot Connector Inner P35
- Multi Connector Long Inner P35
- Multi Connector G Inner P158
- Multi Connector S Inner P136
- Multi Connector SR Inner P136



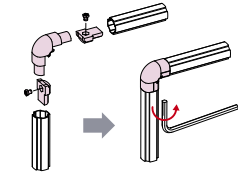
Angle Connector Outer

- Angle Connector Outer P37
- Angle Connector E Outer P37
- Angle Connector G Outer P159



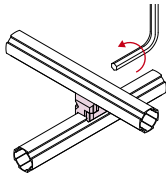
Angle Connector Inner

- Angle Connector Inner P36
- Angle Connector DX P36
- Angle Connector DX (3 way type) P37
- Angle Connector S Inner P137
- Angle Connector S Outer P137



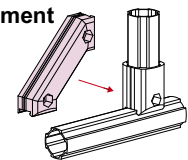
90-Degree Cross Connection

- Cross Connector P42
- Cross Connector Hard P42
- Point Connector Cross P43
- Cross Connector S P139



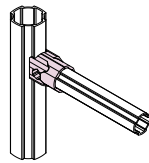
90-Degree Connection Reinforcement

- Point Connector P40
- Point Connector Long P40
- Point Connector S P138
- Point Connector N-S P138



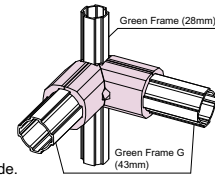
GF-N Frame and GF-S Frame Connection

- GFS-GF Connector P136
- Cross Connector N-S P140
- Double Connector N-S P140



Connect GF-G Frame to GF-N Frame

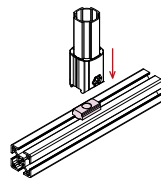
- Multi Connector G-N Outer P158
- Multi Connector G-N Inner P158



※Use in case of the 90-degree connection side-by-side.

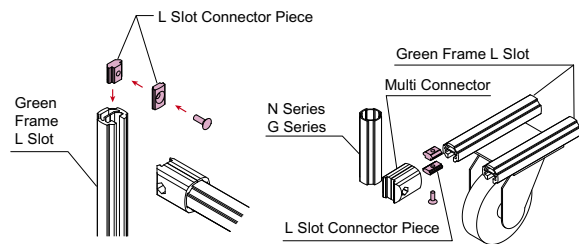
GF Frame and SF Frame Connection

- GF-SF Connector P46
- GF-SF Connector Long P47



Connect frame in the groove of Green Frame L Slot and reinforce when using Multi Connector Outer Type.

- L Slot Connector Piece P46



- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part

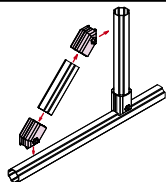
- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

- Bolt Nut
- Jig
- Technical Data

45-Degree Connection

45-Degree Connector

- 45-Degree Connector Outer P41
- 45-Degree Connector Inner P41
- 45-Degree Connector G Outer P159
- 45-Degree Connector S Outer P139
- 45-Degree Connector S Inner P139





Approx.
Frame Size
→ P.176



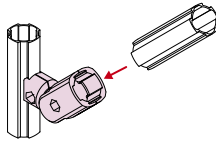
Connector
Strength Data
→ P.184

GF Assembly Method

Free Angle Connection

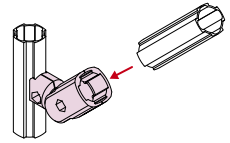
3 Dimensional Free Angle (secure the position by tightening the bolt)

Free Connector Outer P38
Free Connector Inner P37
Free Connector G Inner P159



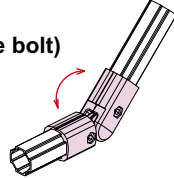
3 Dimensional Free Angle (moves freely after securing the bolt)

Free Connector V-M Outer P38
Free Connector V-M Inner P38



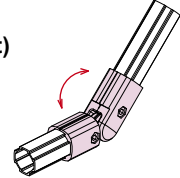
2 Dimensional Free Angle (secure the position by tightening the bolt)

Free Connector H-F Outer P39
Free Connector H-F Inner P38



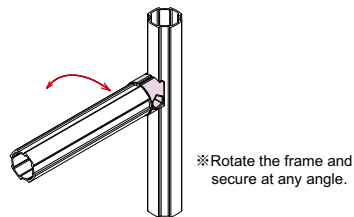
2 Dimensional Free Angle (moves freely after securing the bolt)

Free Connector H-M Outer P39
Free Connector H-M Inner P39
Link Connector P137



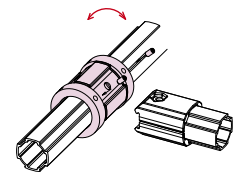
Angle Connector Outer

Multi Connector R Inner P35
Multi Connector R Outer P35
Multi Connector S R Inner P136



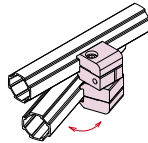
Free Rotation

Hinge Connector P61
Hinge Connector L P62
Hinge Connector Hard P62
Hinge Connector S P145
Rotary Connector P60
Single Rotary Connector P96 P60
Rotary Connector G P165
Hinge Connector Stopper P62
Hinge Connector Stopper Hard P63
Stopper Hard G P165
Hinge Connector Stopper S P146

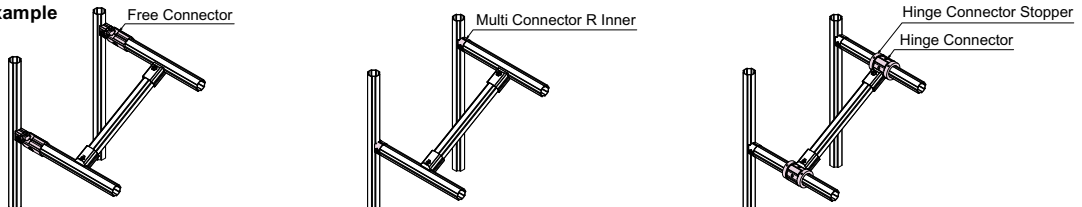


Free Angle Cross (Parallel)

Cross Connector Rotate Type P43
Cross Connector Rotate Type S P140



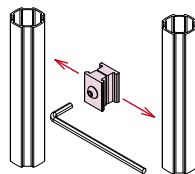
Tilt Connection Example



Parallel Connection

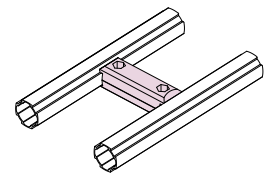
Double Connector

Double Connector P44
Double Connector C Kit P43
Double Connector P15 P43
Double Connector P19.5C Kit P44
Double Connector S P140



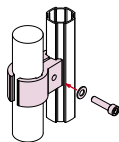
Bridge Connector

Bridge Connector P44



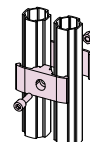
Pipe Holder

Pipe Holder P44



Parallel Holder

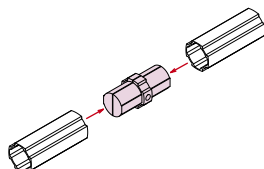
Parallel Holder P45
Parallel Holder HS P45



Tie Connection

Tie Connection

Straight Connector P45
Straight Connector Outer P45
Straight Joint P46
Straight Connector G P160
Straight Connector S P141



GF-N
28_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43_{mm}

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt
Nut

Jig

Technical
Data

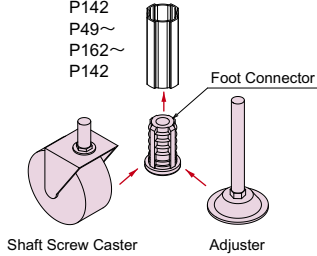
GF Assembly Method (Foot Component)

GF-N
28mm

Foot Component Installation Method

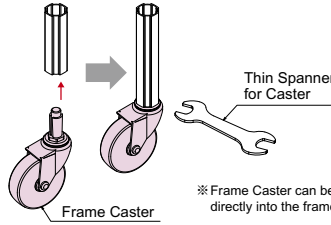
Foot Connector

- Foot Connector M12 Resin P48
- Foot Connector M8 P48
- Foot Connector M16 G / Conductive P162
- Foot Connector S P142
- GF-N Adjuster Caster P49~
- GF-G Adjuster Caster P162~
- Foot for GF-S P142

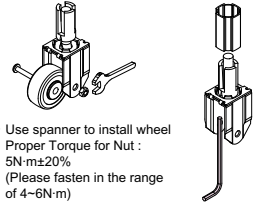


Frame Caster

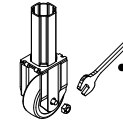
- Each Type of Frame Caster P52/53/163
- Frame Caster Fixed P53
- Spanner Slim Type for Caster P171
- Stubby Wrench P171



- ① Use spanner to remove wheel
- ② Insert frame and lock with wrench



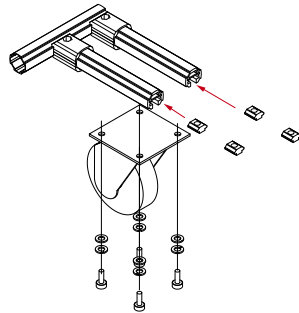
- ③ Use spanner to install wheel
- Proper Torque for Nut :
5N·m±20%
(Please fasten in the range of 4~6N·m)



- If using a Stubby Wrench, there is no need to remove wheel to install frame.

Free Caster Fixed Caster

Free/Fixed Caster P54



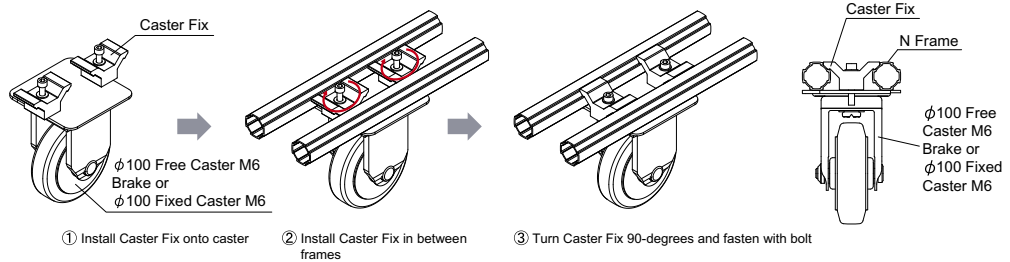
※ To Install onto Green Frame L Slot

φ75 T Nut L M8 (SFK-T11S) / Hexagon Socket Head Cap Screw M8 x15 (SFB-581S) / Flat Washer M8 Small Round Type (SFB-5M8S) 4 pcs each / 1 wheel

φ100/φ150 T Nut L M8 (SFK-T11S) Hexagon Socket Head Cap Screw M8 x18 (SFB-589S) / Flat Washer M8 (SFB-903S) / Spring Washer M8 (SFB-934S) 4 pcs each / 1 wheel is not included.

Caster Fix

- Caster Fix P55
- Caster for Caster Fix P55

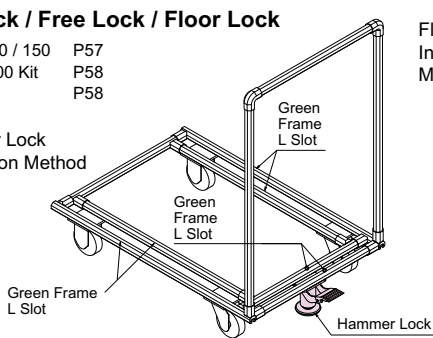


GF-G
43mm

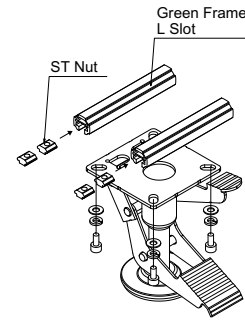
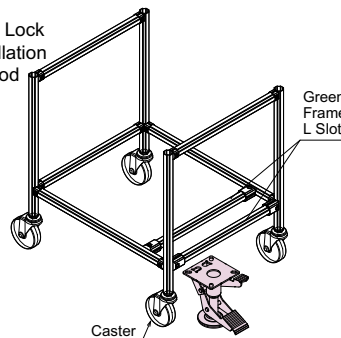
Hammer Lock / Free Lock / Floor Lock

- Hammer Lock 100 / 150 P57
- Free Lock 75 · 100 Kit P58
- Floor Lock P58

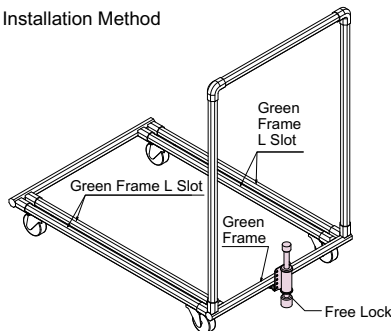
Hammer Lock Installation Method



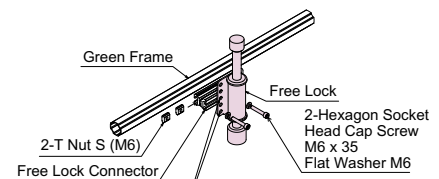
Floor Lock Installation Method



Free Lock Installation Method



Caster φ75 : Install at the bottom hole
Caster φ100 : Install at the 3rd hole from the bottom



GF-S
19mm

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part

- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

- Bolt Nut
- Jig

Technical Data



Approx.
Frame Size
→ P.176



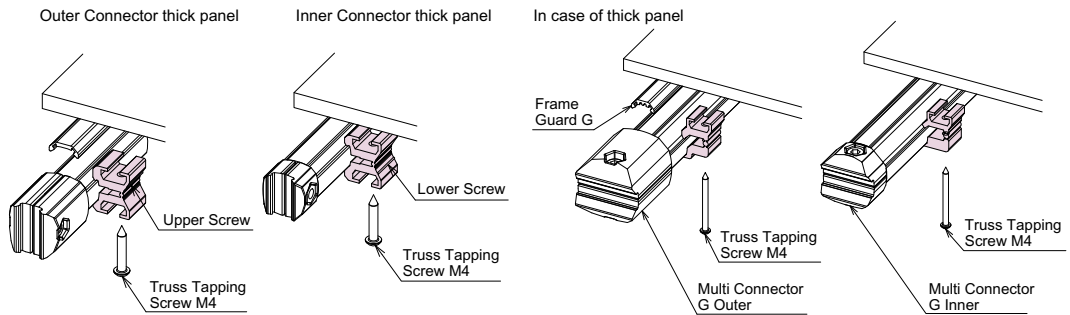
Connector
Strength Data
→ P.184

GF Assembly Method (Board / Panel Installation)

Board Installation Method

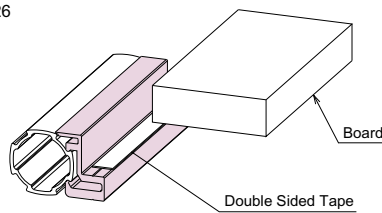
Board Holder

- Board Holder P126
- Board Holder S P150
- Board Holder G P166



Board Holder F

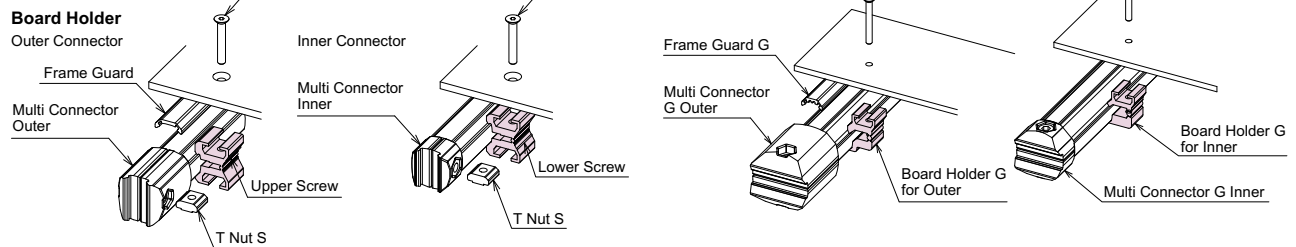
- Board Holder F P126



Panel Installation Method

Board Holder

- Board Holder P126
- Board Holder G P166



Panel Hold

- Panel Hold P127
- Panel Hold S (t=3) P150

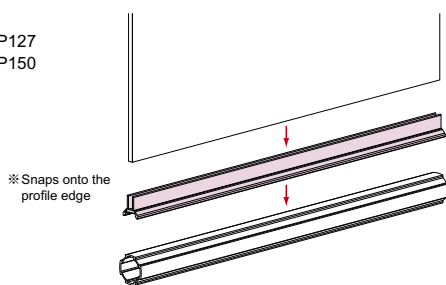
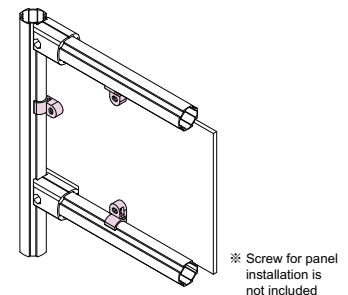


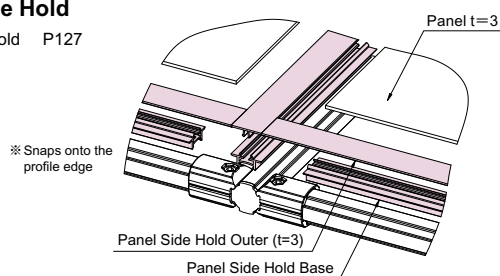
Plate Connector

- Plate Connector Flat P126
- Plate Connector S P150



Panel Side Hold

- Panel Side Hold P127



GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

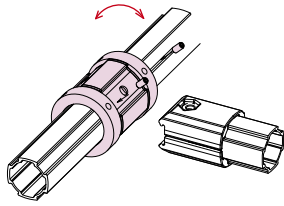
Technical Data

GF Assembly Method (Moving Part)

- GF-N 28mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Electric Item
- Corocon Roller
- Accessory
- Door Part

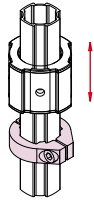
Rotation

Hinge Connector	P61
Hinge Connector L	P62
Hinge Connector Hard	P62
Hinge Connector S	P145
Rotary Connector	P60
Single Rotary Connector	P60
Rotary Connector G	P165



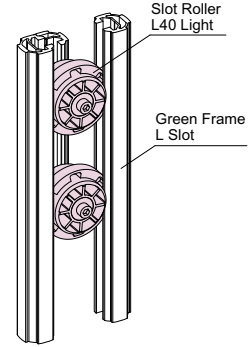
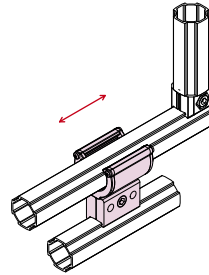
Stopper

Hinge Connector Stopper	P62
Hinge Connector Stopper Hard	P63
Hinge Connector Stopper S	P145
Stopper Hard G	P165



Slide

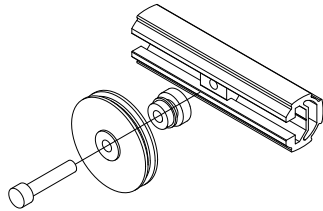
GF Slider	P66
Slide Connector	P66
Slide Connector Hard	P66
Hinge Connector	P61
Hinge Connector L	P62
Hinge Connector Hard	P62
Hinge Connector S	P145
GF Slot Roller L40 Light	P65



- GF-S 19mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory
- Door Part

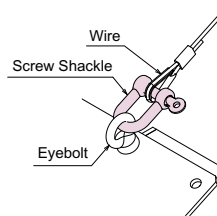
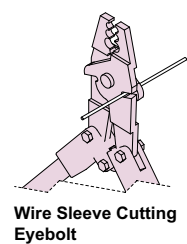
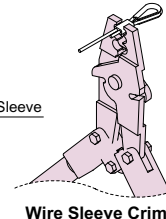
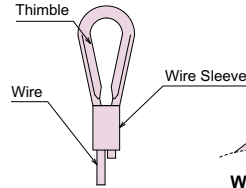
Idler / Slot Roller Installation Method

Idler	P68~
GF Slot Roller	P65



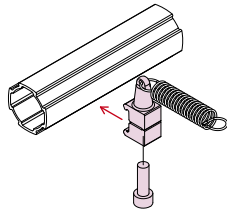
Wire Component Installation Method

Wire Component Part P69~



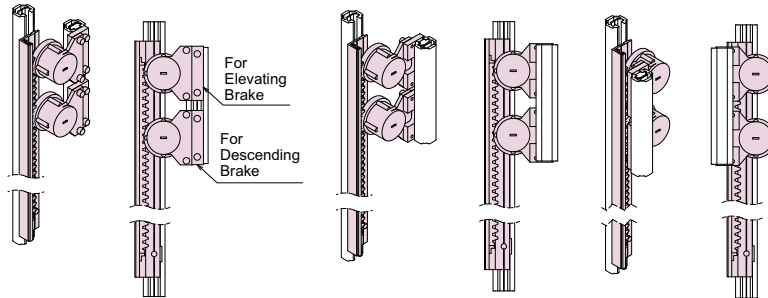
Spring Installation Method

Spring Post Connector	P79
Spring Post Connector 2	P79
Tension Spring Post Kit	P79
Tension Spring	P78



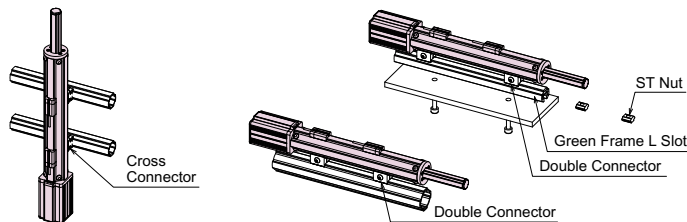
Antistatic Equipment

Brake Assembly Kit	P74
Brake Rack Kit	P74
GF L Slot Rack	P74



How to Mount the Power Unit

Power Unit P80



- GF-G 43mm
- Frame
- Cap
- Connector
- Foot Component
- Moving Part
- Corocon Roller
- Accessory

- Bolt Nut
- Jig

Technical Data



Approx. Frame Size
→ P.176

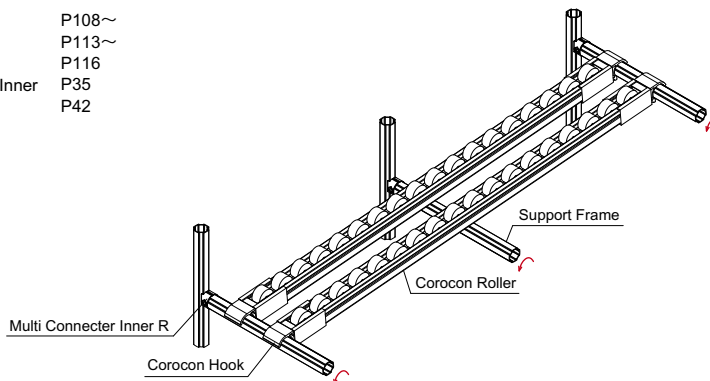


Connector Strength Data
→ P.184

GF Assembly Method (Corocon Roller / Door / Part Installation)

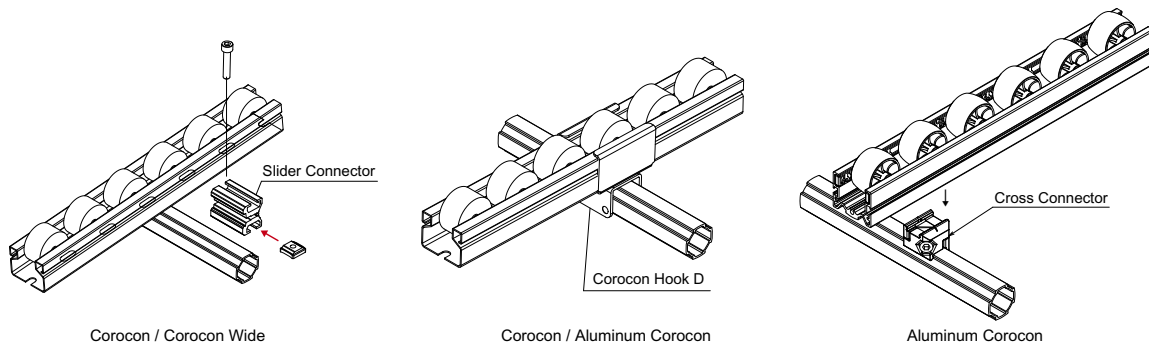
Corocon Roller Installation Method

Corocon Roller	P108~
Corocon Hook	P113~
Slider Connector	P116
Multi Connector R Inner	P35
Cross Connector	P42



※ Use Multi Connector Inner R to connect pillar frames and frames / support frames with the Corocon Hook, then adjust the frame angle to match the tilt of the corocon rollers.

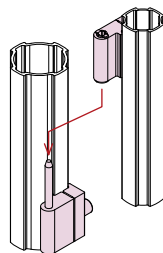
Corocon Roller Support Frame Installation Method



How to Mount a Door

GF Lift-off Hinge	P128
Dimension of Door Panel	P182

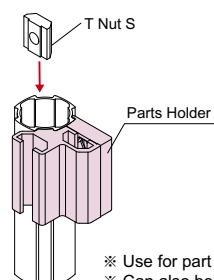
GF Lift-off Hinge



Parts Holder Installation Method

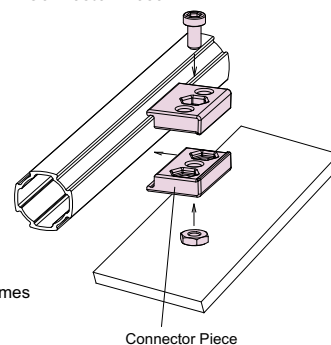
Parts Holder	P118
Connector Piece	P118

Parts Holder



※ Use for part / equipment installation
※ Can also be used with GF-G (43mm) frames

Connector Piece



GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Corocon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Corocon Roller

Accessory

Bolt Nut

Jig

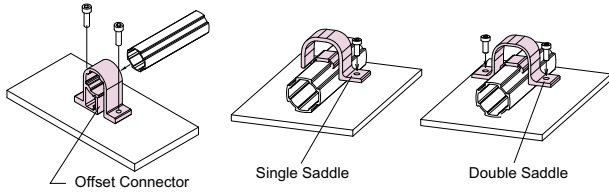
Technical Data

GF Assembly Method (Fix to Wall or Floor / Impact Holder)

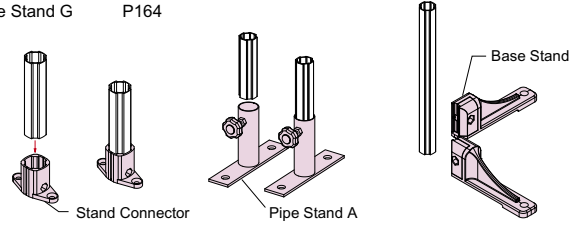
GF-N 28mm

How to Fix to the Wall / Floor

- Offset Connector P119
- Single Saddle P120
- Double Saddle P120
- Double Saddle S P148



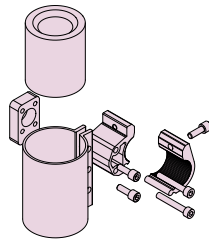
- Pipe Stand P56
- Stand Connector P56
- Base Stand P56
- Pipe Stand G P164



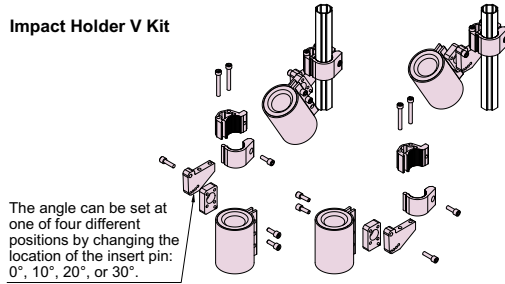
Impact Holder Installation Method

- Impact Holder H Kit P119
- Impact Holder V Kit P119

Impact Holder H Kit



Impact Holder V Kit



GF-S 19mm

GF-G 43mm

Bolt Nut

Jig

Technical Data



Approx.
Frame Size
→ P.176



Connector
Strength Data
→ P.184

Green Procurement

1. Purpose

The purpose of this document is to clearly state prohibited substances designated by laws and ordinances as well as managed substances which are limited in their volume of use, and procure products and services with a lower environmental burden for materials that compose SUS Corporation products and for chemical substances included in these products.

2. Scope of Application

2.1 Scope of Application to Products

- 1) Products designed, manufactured, and sold by SUS Corporation.
- 2) Products commissioned for design and manufacturing to a third party and sold with the SUS Corporation trademark by SUS Corporation.
- 3) Products purchased from another corporation, incorporated into another product and sold as a finished product by SUS Corporation.
- 4) Products which have been commissioned for design and manufacturing by a third party to SUS Corporation.
(Excluding parts and materials designated by the third party.)

2.2 Scope of Application to Parts and Materials

This includes parts, materials, and other items used in products included in "2.1 Scope of Application of Products" above.
These parts and materials are as follows.

- 1) Semi-finished goods (assembly parts including functional units, modules, circuit board assemblies, etc.)
- 2) Parts (electric parts, component parts, screws, semiconductor devices, printed circuit boards, etc.)
- 3) Accessories for using devices (electric cables, harnesses, AC adapters, etc.)
- 4) Component materials of secondary materials (adhesive tape, solder material, bonding agent, etc.) used in the product
- 5) Documents such as instruction manuals
- 6) Packing materials, packing parts, etc. (bags, cushioning, sheets, wrapping, cardboard, tape, cable ties, labels, printer ink, paint, etc.)

3. For regulated substances which are subject to SUS Corporation green procurement standards, see the list on the SUS Corporation homepage.
<http://www.sus.co.jp/procurement/>

RoHS

RoHS, short for "2002/95/EC (Directive on the restriction of the use of certain hazardous substances in electrical equipment)", is a directive regarding the use of specified hazardous substances in electrical and electronic equipment promulgated by the European Union Council & Parliament directive on January 27, 2003.

In principle RoHS prohibits the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE) (maximum permissible concentrations are 0.01% by weight for cadmium, and 0.1% by weight for the other 5 substances), and it was enforced in July 2006.

Several items concerning target products and application exclusions were revised by the June 8, 2011 European Union Council & Parliament directive "2011/65/EU (Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment <recast>).

Description on RoHS Compliance Products

According to the publication of revised RoHS directives, our products are, from July 22, 2019, targeted of 10 substances compared to the 6 substances before revision.

RoHS10 Compliance Products · · · Products confirmed that revised RoHS directives are followed. Can continuously be used as RoHS compliance products after July 22, 2019.

RoHS6 Compliance Products · · · Conform to former RoHS directives (restricted 6 substances) only.
Or products that are investigated for conformity to revised RoHS directives.

REACH SVHC

REACH is a regulation on the registration, evaluation, authorization, and restriction of chemicals in the European Union (EU) which was voted on by the European Council in December 2006 and after being published in the official gazette, came into force in June 2007. The name of the regulation is an acronym for "Registration, Evaluation, Authorization, and Restriction of Chemicals". REACH mandates that manufacturers and importers register and evaluate their products when manufacturing or importing chemicals in the EU, and requires relevant authorities to make restrictions, such as giving permission for substances of very high concern (SVHC) or prohibiting substances of even greater risk. Entities that do not fulfill the obligations required by REACH cannot manufacture or launch chemicals within the EU. SVHCs are periodically added as "candidates for authorization", and ultimately it is expected that approximately 1,000 chemical substances will be covered by the year 2020.

GF-N
28mm

Frame

Cap

Connector

Foot Component

Moving Part

Electric Item

Coroon Roller

Accessory

Door Part

GF-S
19mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Door Part

GF-G
43mm

Frame

Cap

Connector

Foot Component

Moving Part

Coroon Roller

Accessory

Bolt Nut

Jig

Technical Data

SUS America, Inc.

1822 Brummel Avenue, Elk Grove Village, IL 60007, USA

TEL : +1-847-350-1525

<http://www.susamericainc.com/>

Thailand

System Upgrade Solution BKK Co., Ltd.

Head Office,

Amata Nakorn Industrial Estate 700/71 Moo 5, T. Klongtamru

A. Muang, Chonburi 20000, Thailand

TEL : +66-38-457069

<http://www.susbkk.co.th/>

Singapore

SUS(Singapore) Pte. Ltd.

19 Tannery Road 347730, Singapore

TEL : +65-6842-4348

China

SUS (Suzhou) Co., Ltd.

Block 25A# Industrial Workshop, Chuangtou industrial area,

Suzhou Industrial Park, Suzhou 215122, China

TEL : +86-512-82253336

India

Standard Units Supply (India) Pvt. Ltd.

43/1 Padasalai Street, Ayanambakkam, Chennai - 600095,

Tamil Nadu, India

TEL & FAX : +91-44-49524482

Vietnam

Standard Units Supply (Vietnam) Co., Ltd.

Workshop X6, Hai Thanh leasing workshop area, Hai Thanh

Ward, Duong Kinh Dist., Hai Phong Vietnam

TEL : +84-313-632 403 ~ 404

Philippines

Standard Units Supply Philippines Corporation

Building R1-D Lot 13 Phase 1B, First Philippine Industrial Park

Special Economic Zone, Tanauan City 4232, Batangas Province

Philippines

TEL : +63-43-430-0290 ~ 0299

