



ALL STAINLESS STEEL PRODUCTS

2025 Spring Edition

ASANO



Working with stainless steel, utilizing reliable technologies

Asano Metal Industry has investigated the potential of stainless steel in a wide variety of fields such as ocean, fisheries, construction, and civil engineering, and produced many products.

Among our products, the variation and specialty of stainless steel products such as blocks, fishing gear, and ship equipment have been popular and highly evaluated by Japanese customers for many years.

Progress that has been made and progress to be made in the future.

Asano Metal Industry is your partner. We fabricate products that satisfy customers' requirements to a high level in a range of product fields.

We will continue to be a future-oriented pioneer producing products that are constantly relevant and leading edge utilizing our system that provides reassuring safe quality and rapid delivery. Furthermore, we will strive to keep advancing based on our philosophy of "making constant improvements".



Material description

●Casting articles made of stainless steel

| Material | Corresponding materials | Characteristics and usage |
|----------|-------------------------|---|
| SCS1 | SUS410 | Higher in strength than SCS13, but lower in corrosion resistance. Used for rollers and machine parts. |
| SCS2 | SUS420J1 | Higher in hardness than SCS1, due to tempering. Used for paper production and water purification systems. |
| SCS11 | SUS329J1 | Dual-phase steel. Excellent in abrasion resistance and corrosion resistance. Used for sea water pumps and other industrial parts. |
| SCS13 | SUS304 | The most widely used material. Used for valves, pumps, construction materials, and other industrial parts. |
| SCS14 | SUS316 | Higher in corrosion resistance than SCS13. Used for valves, pumps, food processing machines, and other industrial parts. |
| SCS16 | SUS316L | Higher in intergranular corrosion resistance than SCS14. Used for chemical and medical machine parts. |
| SCS18 | SUS310S | Excellent in hot corrosion resistance. Used for chemical machine parts. |
| SCS24 | SUS630 | High strength, excellent in abrasion resistance. Corrosion resistant. Used for paper production parts and machine parts. |

●Stainless heat-resistant steel

| Material | Corresponding materials | Characteristics and usage |
|----------|-------------------------|---|
| SCH2 | — | Used for fire grates of incinerators. |
| SCH11 | — | Used for fire grates of incinerators, fittings for kilns, and industrial furnace parts. |
| SCH13 | (SUS309S) | General heat-resistance steel. Used for furnace floors, fittings in furnaces, and industrial furnace parts. |
| SCH22 | (SUS310S) | Excellent in heat resistance and high thermal resistance. Used for heat resistant rollers, furnace stands, skid rails, and crematory furnace parts. |

Precautions for products

- ① Products listed in this catalog are for business, not domestic, use. Please handle carefully. Use the products for the intended purposes only. Otherwise, unexpected accidents may result.
- ② Please note that there are some tolerances in the values of the dimensions indicated for each product.
- ③ Do not exceed the working load. The working load in this catalog indicates the load for safety usage. Do not give sudden shocks to the products, as this may deform or break them.
- ④ Do not use the products to support human lives, such as suspending human bodies or using over head.
- ⑤ If there are abnormalities, including deformations, cracks, or wearing, stop use of the products immediately and replace.
- ⑥ Loose screws and defective springs may cause accidents. Please check the products before use.
- ⑦ Use the products properly. Excessive twisting and bending may reduce the strength, and may lead to breakage.
- ⑧ Do not modify the products by welding or deforming. Otherwise, unexpected accidents may result.
- ⑨ Avoid prolonged contact of stainless products with dissimilar metals, as this may lead to corrosion.
- ⑩ Do not use the products in environments exposed to acids, alkalis, or sudden temperature changes, as those may reduce the strength of the products.





All Stainless Steel Products Designed in Japan

Trusted technology that responds
to professional needs

004 Fishing Gear & Ship Equipment

050 Stainless Steel Block

076 Rigging Hardware & Wire Rope

Fishing Gear & Ship Equipment

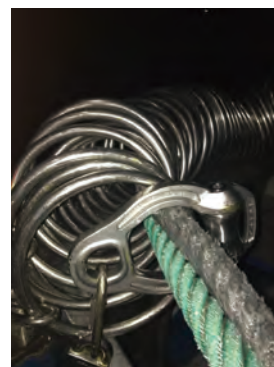
FEATURE 01

Adoption of special stainless steel that meets the demands of the fishing industry

ASANO's fishing gear uses special stainless steel with superior corrosion- and abrasion-resistant characteristics. This type of stainless steel is ideal for tools that are used by the fishing industry and that are always exposed to seawater. We analyze the characteristics of raw materials, such as hardness and tenacity, and manufacture products suitable for locations and intended purposes of products based on our experience of developing metal fittings.



Purse Ring Type 0
(P025)



FEATURE 02

Well-thought out practicality and functionality

We utilize free designing via casting and manufacture products that fit easily into human hands as that are easy on ropes and nets. These products are derived from ASANO's monodzukuri (manufacturing) and are suitable for demanding professional work environments. For example, the Snap Hook is compact and fits snugly into the hand, while its round shape is easy on ropes. However, its interlock system provides a high working load limit of 1.3 tons.



Snap Hook
(P010)



FEATURE 03

Strength and sophisticated form enabled by 3D design technology

Ship equipment is an important part of on-board operations. The 3-Way Roller has been made stronger by integrating the main body design into a single piece. In addition, the larger diameter of the roller shaft enables it to handle large loads. The curved body prevents ropes from becoming caught. ASANO's outstanding 3D design technology is utilized to achieve this beautiful finish.



3-Way Roller
(P044)





FEATURE 04

User oriented rapid product development

ASANO always cares about users' feedback. Based on the valuable opinions obtained not only from users in Japan, but also from fishermen and sales shops abroad, the processes from designing shapes suitable for various tasks to calculating ideal strength values are executed, and products are manufactured while confirming the shapes using 3D printed samples. Development using feedback from the workplace and development speed are our fundamentals.



FEATURE 05

Pioneer of fishing industry products

ASANO started manufacturing stainless steel fishing gear and ship equipment in 1977. Among many products the company has created, ASANO's legacy product, the "Auto Shackle", was developed ahead of other companies over 20 years ago. Its functions proved innovative and the product has received overwhelming support. Recently, Type II and III have been developed to meet an expanding range of requirements. These products are actively used for tasks where connection and release actions are required.



Auto Shackle (P012 ~019)

FEATURE 06

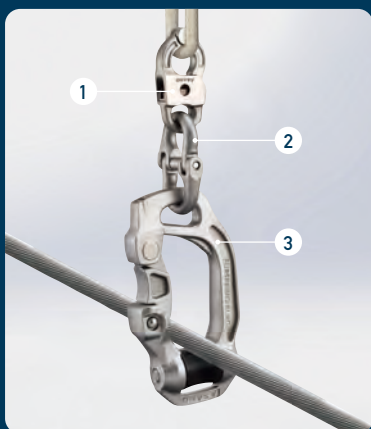
Products appreciated on the world's oceans

The variation and special features of ASANO's products have proven popular among many customers in Japan, and highly evaluated by fishermen in particular for years. Currently, our products are being exhibited in overseas exhibitions and used by fishermen for round haul net fishing and longline fishing in the oceans of various countries around the world such as America, Spain, Norway, Mexico, and Australia.



● Usage examples of fishing gear for a purse seine

A



- ① Auto Shackle[P013]
- ② Purse Coupling[P030]
- ③ Purse Ring Type BL 60 [P026]

This example shows a combination with a size-60 Purse Ring, the smallest model in ASANO's product lineup. The gate is equipped with a button mechanism to prevent unintended release.

B



- ④ Auto Shackle Type III [P012]
- ⑤ Coupling[P030]
- ⑥ Purse Ring Type BL 100 [P028]

This example shows a combination with a size-13 Coupling where the inner ring diameter is larger, to increase degree of freedom for the connecting part. Size-16 Couplings are also available.

C



- ① Auto Shackle[P013]
- ② Purse Coupling[P030] (Sub ring)
- ⑦ Purse Ring Type O 120 [P025]

The Purse Ring Type O and Purse Couplings are made of special stainless steel, which features excellent abrasion and corrosion resistance.

D



- ① Auto Shackle[P013]
- ② Purse Coupling[P030]

This example shows a combination with an Auto Shackle, one of ASANO's longest-selling items, and a Purse Coupling. The Auto Shackle can quickly be connected and released, for increased productivity at work sites.

E



- ⑧ Purse Auto Shackle [P019]
- ⑨ Flat Ring[P031]

This example shows a combination with a Flat Ring, which has its sides flattened. The flat sides allow these rings to stack neatly, greatly improving their manageability on board.

F



- ⑩ Purse Ring Type O-IIA [P022]

Equipped with one gate at the top and one in the center that uses the same mechanism as ASANO's auto shackle, which enables quick release and secure connection. Each gate can be released from two directions, from the front and the side.

G



11 Purse Ring Type O-II
[P024]

By adopting the quick release mechanism of an Auto Shackle on the top gate, the Purse Ring Type O-II makes it incredibly simple to connect a fishing net.

H



4 Auto Shackle Type III
[P012]

5 Coupling[P030]

12 Purse Ring Type O 180
[P025]

This example shows a combination of an Auto Shackle with a size-180 Purse Ring Type O, designed to allow large-diameter ropes and large rope knots to pass through.

I



13 Snap Hook Type B
[P009]

The Snap Hook Type B has a unique two-chamber mechanism, enabling connections with a smaller number of metal fittings. The center bar prevents deformation when loads are applied, and helps the hook withstand heavy working loads.

J

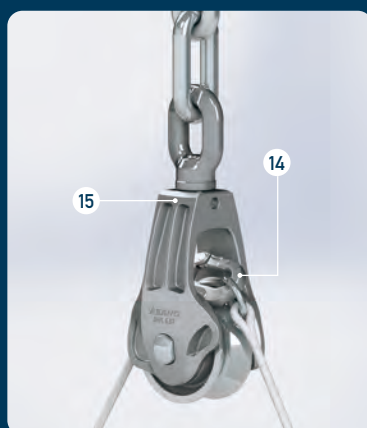


14 Snap Hook[P010]

2 Purse Coupling
[P030]

This example shows a combination with a Snap Hook, which features an interlocking mechanism for a high working load limit despite its compact size. Its shape is designed to be gentle on ropes.

K

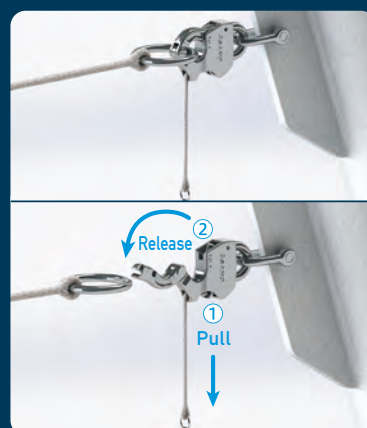


14 Snap Hook[P010]

15 Tough Hanging Roller Type II [P058]

The Tough Hanging Roller Type II has a large space between the body and the sheave to allow small fittings such as Snap Hook to pass through.

L



16 Auto Shackle Type II
[P017]

17 Auto Shackle Type IIS
[P017]

18 Purse Auto Shackle Type II [P018]

These models feature a gate that can be released by pulling a cord attached to the side of the main body. The gate can be operated with no need for a tool, enabling quick, convenient operation.



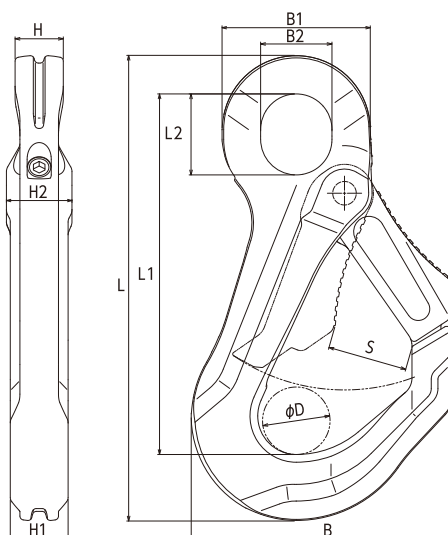
Product features



The 40 mm gate opening can accommodate large-diameter ropes. The hook part, with its interlocking mechanism, securely engages with the body to allow for heavy loads.



The gate is normally closed. It is designed to open when pressed inward by hand, and to close when released. This one-handed operation makes it easier to work in rough sea conditions. The knurls on the gripping side of the gate help prevent slipping.



The spring to close the gate can be replaced, if it no longer functions properly due to aging, to the lock pin becoming worn, or other causes.

Snap Hook Type C



This hook is designed for use at various connection points in pots fishing and on boats.

| No. | Size | S (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | B1 (mm) | B2 (mm) | H (mm) | H1 (mm) | H2 (mm) | D (mm) | Set screw | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|---------|------|-----------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|--------------|-----------------------------|------------------------|------------------------------|
| AK18330 | 35 | 40 | 242 | 187 | 42 | 135 | 77 | 37 | 25 | 30 | 34 | 35 | M12 | 6 | 2.5 | 3.0 |

* Material: Special stainless steel, Spring/set screw = SUS304, Lock pin = copper alloy

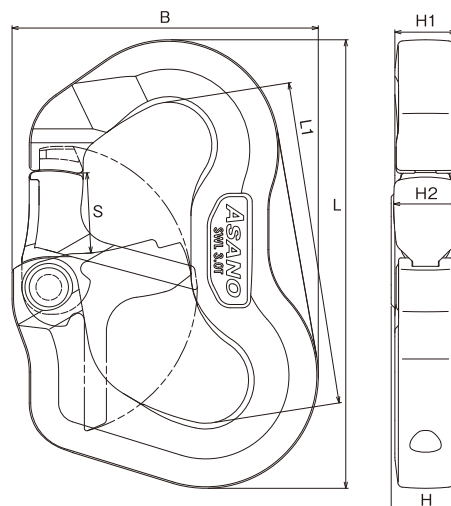


Snap Hook Type B



| No. | Size | S (mm) | L (mm) | L1 (mm) | B (mm) | H (mm) | H1 (mm) | H2 (mm) | Unit weight (kg) | Working load limit (t) |
|---------|------|-----------|-----------|------------|-----------|-----------|------------|------------|------------------------|------------------------------|
| AK18320 | 30 | 31 | 183 | 132 | 125 | 28 | 25 | 26 | 2.0 | 3.0 |

* Material: Special stainless steel, Spring = SUS304, Lock pin = copper alloy, Set screw = SUS304



Smooth rigging

The product is equipped with an originally developed two room mechanism and ensures smooth rigging of ropes and nets. Ropes and rings up to 30mm in diameter are supported.

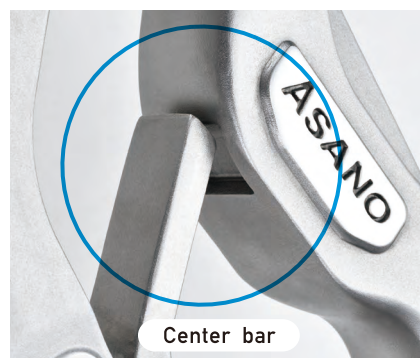
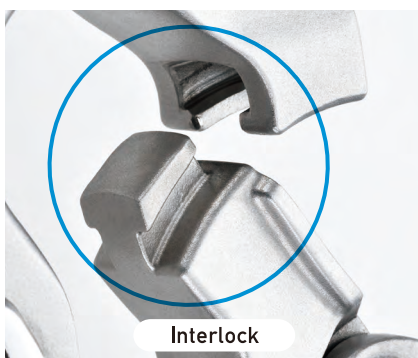


● Rigging step



Working load limit of three tons for safe operations

An interlock system in which the main body is engaged with the gate has been introduced to create a high working load limit. In addition, the intermediate center bar enters the main body securely. This alleviates deformation that may occur during pulling, and helps improve working load limit.



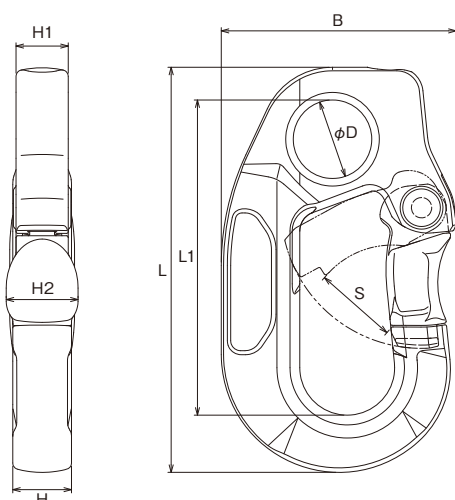


Snap Hook



| No. | Size | S (mm) | L (mm) | L1 (mm) | B (mm) | H (mm) | H1 (mm) | H2 (mm) | D (mm) | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|-----------|------------|-----------|-----------|------------|------------|-----------|-----------------------|-------------------------------|
| AK18315 | 1SH | 25 | 124 | 96 | 72 | 18 | 16 | 22 | 24 | 600 | 1,300 |
| AK18316 | 2SH | 28 | 143 | 110 | 81 | 20 | 18 | 24 | 27 | 900 | 1,800 |
| AK18317 | 3SH | 32 | 177 | 128 | 109 | 22 | 20 | 30 | 30 | 1,600 | 2,500 |

* Material: Special stainless steel, Spring = SUS304, Lock pin = copper alloy,
Set screw = SUS304



Product features

Adopts an interlock system

A large working load limit is achieved with its palm size. An interlock system is employed for greater strength. The hook part firmly supports the load.



Good operability is ensured by smooth movement of the gate and the wide opening.

The rounded gate fits well with fingers and ropes.

Combination example

Purse Coupling (P030)
+ Snap Hook

The friction on the ropes can be reduced by using a Purse Coupling for connection rather than directly attaching a rope to the Snap Hook.



⚠ Usage precautions

Your fingers may be caught between the body and the gate when opening and closing the gate due to the structure of the product. Wear gloves and take care that your fingers do not get caught.

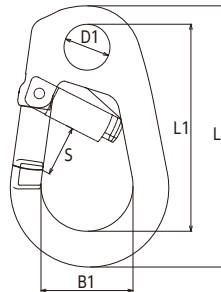


Snap Ring Type IL



| No. | Size | L (mm) | L1 (mm) | B1 (mm) | S (mm) | D1 (mm) | Unit weight (kg) | Working load limit (kg) |
|---------|------|--------|---------|---------|--------|---------|------------------|-------------------------|
| AK18302 | 3SR | 256 | 203 | 90 | 50 | 45 | 3.7 | 1,500 |

* Material: Special stainless steel, Spring = SUS304, Lock pin = HBsB, Set screw = SUS304



Snap Ring



Size:3SR WLL:0.75t

Snap Ring Type IL



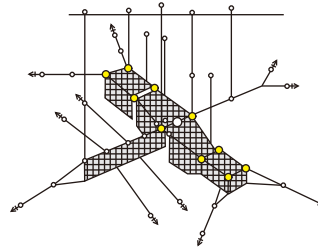
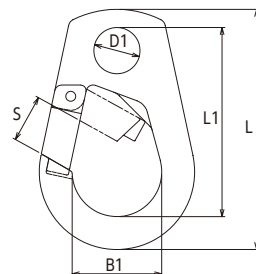
Size:3SR WLL:1.5t

Snap Ring



| No. | Size | L (mm) | L1 (mm) | B1 (mm) | S (mm) | D1 (mm) | Unit weight (kg) | Working load limit (kg) |
|--------|------|--------|---------|---------|--------|---------|------------------|-------------------------|
| AK4230 | 1SR | 167 | 135 | 64 | 32 | 33 | 1.4 | 450 |
| AK4231 | 2SR | 205 | 161 | 80 | 40 | 39 | 2.2 | 700 |
| AK4232 | 3SR | 240 | 187 | 94 | 53 | 45 | 3.2 | 750 |

* Material: Special stainless steel, Spring = SUS304, Lock pin = HBsB, Set screw = SUS304



● Snap Ring locations for a fixed fishing net

Swivel Snap Hook Type II



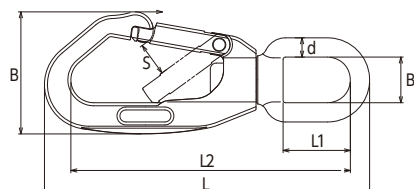
size 16

size 19

Please refer to P083 for the product features

| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | B1 (mm) | S (mm) | Unit weight (kg) | Working load limit (kg) |
|-------------|------|--------|--------|---------|---------|--------|---------|--------|------------------|-------------------------|
| AK12465 | 16 | 16 | 270 | 56 | 232 | 101 | 38 | 28 | 1.6 | 1,000 |
| NEW AK12466 | 19 | 21 | 340 | 68 | 277 | 137 | 42 | 30 | 3.57 | 1,600 |

* Material: Special stainless steel, Swivel pin/spring = SUS304
* Do not use under conditions of constant rotation.





Inserting a tool such as a spike (P085) into the hole of the main body will enable the gate to be easily released.

Auto Shackle Type III



| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | Hex. wrench dia. (mm) | Unit weight (g) | Working load limit (t) |
|---------|------|-----------|-----------|------------|------------|------------|-----------|------------|------------|------------|-----------------------------|-----------------------|------------------------------|
| AK18235 | M | 11 | 112 | 20 | 80 | 29 | 58 | 23.5 | 28 | 48 | 5 | 370 | 0.8 |
| AK18236 | L | 14 | 139 | 29 | 99 | 32 | 72 | 32 | 30 | 63 | 6 | 860 | 1.3 |

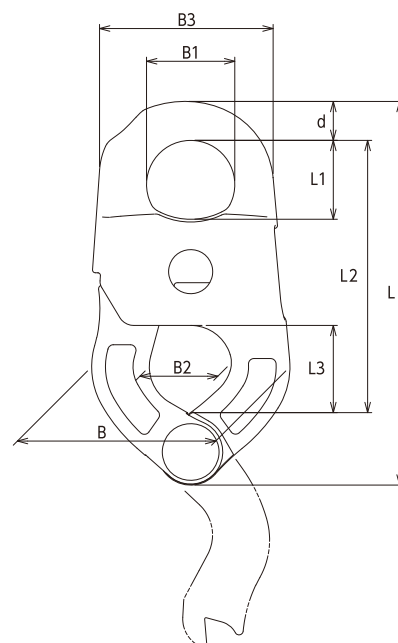
* Material: Special stainless steel

* This product is a fishing gear. Do not use it as a hanging hook for cargo handling.

* The gate may open unintentionally due to physical shock.

* Spare springs and screws are available (sold separately). Please contact us.

* If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.



Applications include connecting with purse rings for round haul nets. See P006-007 for details on example combinations.



If the performance of the spring deteriorates due to certain factors such as aging, it can be replaced with a new one by removing the socket head screw at the top of the Auto Shackle using a hexagon wrench.

⚠ Caution

- Since the screw may become loose, periodically check it before use.
- When replacing the spring, also replace the screw with a new one.
- After replacing the spring, apply a screw locking agent such as Locktite to the screw, and then tighten it.



Related product

Light Spike SG
P085



The gate can be easily released by inserting a spike.

Auto Shackle



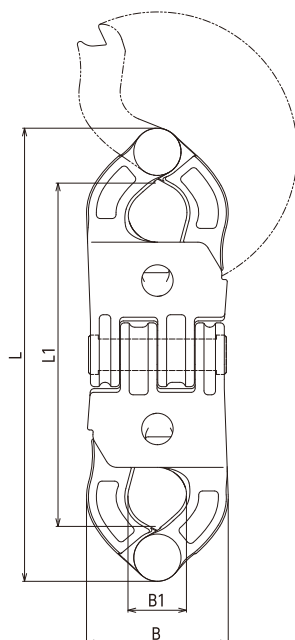
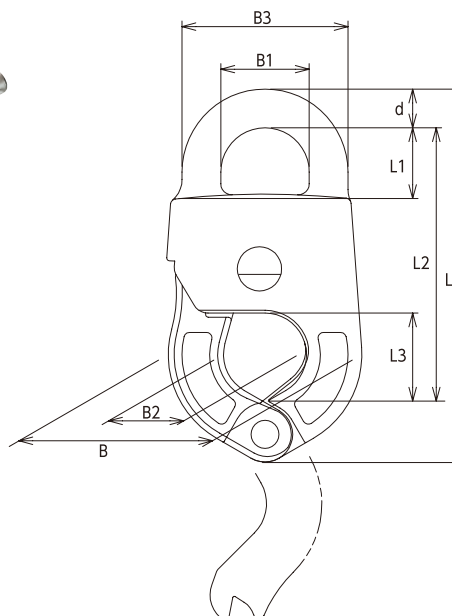
| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | Unit weight (g) | Working load limit (t) |
|--------|------|-----------|-----------|------------|------------|------------|-----------|------------|------------|------------|-----------------------|------------------------------|
| AK2195 | L | 14 | 135 | 24 | 98 | 32 | 70 | 32 | 30 | 60 | 730 | 1.3 |

* Material: Special stainless steel

* This product is a fishing gear. Do not use it as a hanging hook for cargo handling.

* The gate may open unintentionally due to physical shock.

* If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.



Double Auto Shackle



This model combines two Auto Shackles, with gates at both ends to ensure smooth connecting and releasing.

| No. | Size | L (mm) | L1 (mm) | B (mm) | B1 (mm) | Unit weight (g) | Working load limit (t) |
|---------|------|-----------|------------|-----------|------------|-----------------------|------------------------------|
| AK18246 | L | 230 | 174 | 72 | 30 | 1,860 | 1.3 |

* Material: Special stainless steel

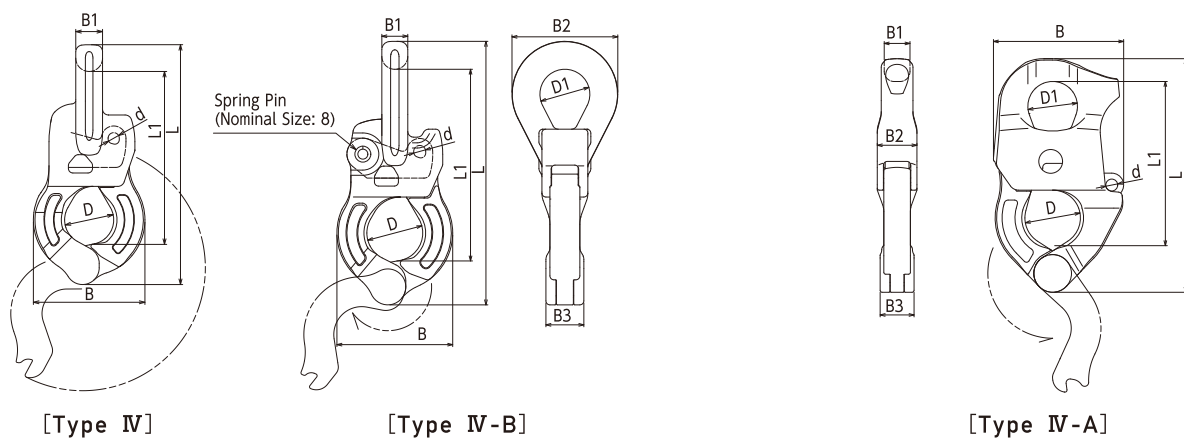
* This product is a fishing gear. Do not use it as a hanging hook for cargo handling.

* The gate may open unintentionally due to physical shock.

* If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.



The shackles are connected by a $\phi 16$ shaft that allows the Double Auto Shackle to bend freely, without sacrificing durability, to reduce undue load during use.



Auto Shackle Type IV/IV-B/IV-A



Hooks designed for use with aquaculture nets. The gate can be operated from above the surface of the water, reducing the amount of underwater operation necessary.

| No. | Type | Size | D (mm) | D1 (mm) | d (mm) | L (mm) | L1 (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | Unit weight (g) | Working load limit (kg) |
|---------|------|------|-----------|------------|-----------|-----------|------------|-----------|------------|------------|------------|-----------------------|-------------------------------|
| AK18250 | IV | S | 22 | 15 | 5 | 108 | 78 | 50 | 12 | 39 | 17 | 350 | 600 |
| AK18257 | IV-B | M | 28 | 25 | 6 | 132 | 96 | 58 | 13 | 53 | 19 | 510 | 900 |
| AK18254 | IV-A | M | 28 | 25 | 6 | 118 | 83 | 66 | 13 | 20 | 17 | 460 | 900 |

* Material: Special stainless steel, Spring pin/spring/screw = SUS304

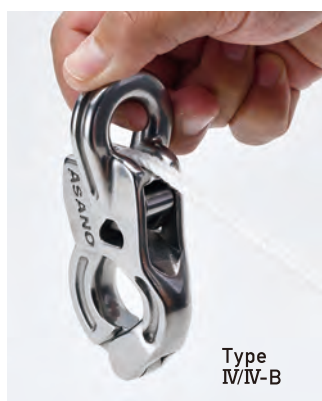
* This product is fishing gear. Do not use it as a hanging hook for cargo handling.

* The gate may open unintentionally due to physical shock.

* If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.

Gate release operation

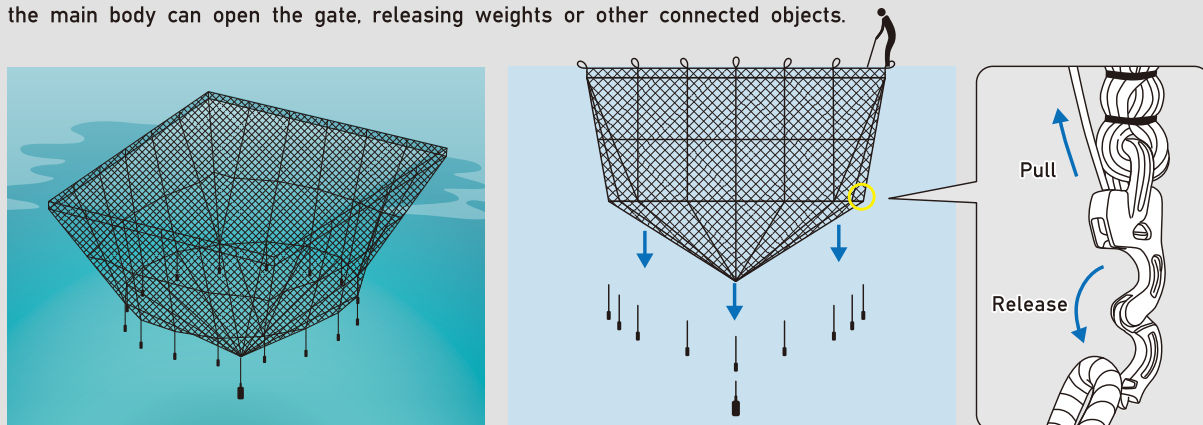
By incorporating the basic concepts of ASANO's Auto Shackle series — "quick release" and "secure rigging" — the gate can be remotely released by pulling on a rope attached to the main body.



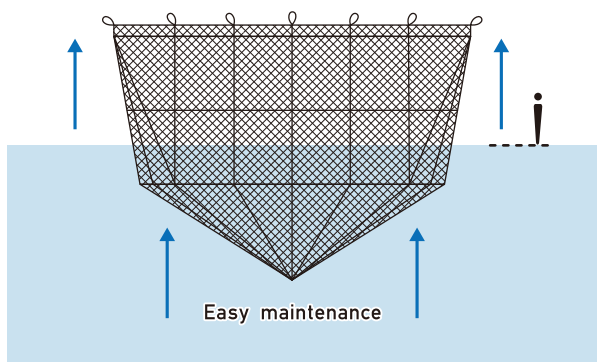
Product features

Assumed location of use

The Auto Shackle Type IV series was developed to be used as a connecting part for equipment such as aquaculture nets and weights. Instead of underwater operation to release connected nets and weights, which has conventionally been required each time, pulling a rope attached to the main body can open the gate, releasing weights or other connected objects.

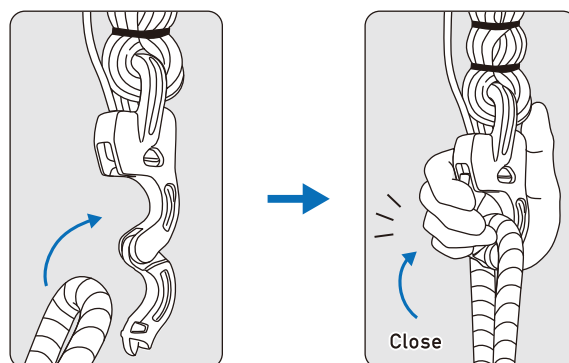


Easy to raise and lower the net



The simplified process of releasing nets and weights allows nets to be lifted and lowered as necessary for cleaning or other purposes, ensuring proper maintenance frequency.

Secure gate opening and closing



The opened gate can be easily and securely closed by hand. This facilitates reconnection of the net and weights, which leads to further improvements to work efficiency.

Spring replaceable (for Types IV-B and IV-A only)

If the performance of the gate spring deteriorates, due to aging or other reasons, it can be replaced with a new one. For Type IV-B (left), the spring can be replaced by removing the spring pin in the main body using a tool such as a punch. For Type IV-A (right), replacement can be performed by removing the screw on top using a hexagonal wrench.



Auto Shackle Type ⅡA/Ⅱ/ⅡS (P017)

Purse Auto Shackle Type Ⅱ/ⅡS (P018)

Product features

Strong, sturdy structure

The Type ⅡS (right) is a stronger version of the Type Ⅱ (left). Various parts of the Type ⅡS, such as the hinge, have been thickened and enlarged, for a stronger structure to handle heavier loads.

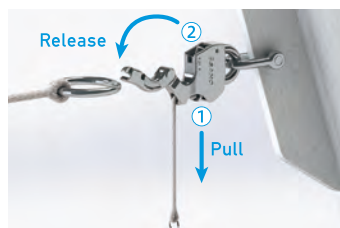


Shock-absorbing structure

The Type ⅡS (right) has an indent in its body to absorb the impact to the arm when the gate opens forcefully.



Gate release operation

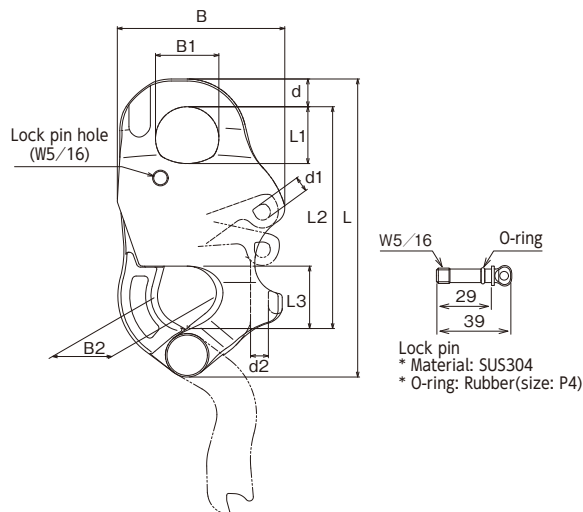


The gate can be released by attaching a rope to the main body and pulling it. With the built-in rope guide, the rope can be pulled from various directions and still release the gate. The gate can also be released easily by inserting a spike, or other pointed tool, into the hole in the side of the main body.

Gate locking feature



The gate can be locked by inserting and screwing a lock pin (sold separately) into the lock pin socket in the main body.



The performance of the gate spring can deteriorate due to aging or other reasons; for Type IIA, the spring can be replaced with a new one by removing the screw on top using a hex wrench.

NEW Auto Shackle Type II A



| No. | Size | d (mm) | d1 (mm) | d2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | B (mm) | B1 (mm) | B2 (mm) | Hex. wrench dia. (mm) | Unit weight (g) | Working load limit (t) |
|---------|------|-----------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|-----------------------------|-----------------------|------------------------------|
| AK18232 | L | 14 | 7 | 9 | 150.5 | 28 | 112 | 32 | 85 | 32 | 30 | 6 | 1,100 | 2.0 |

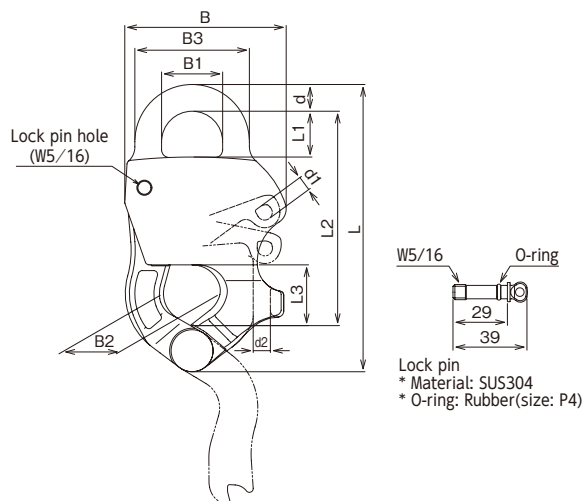
- * Material: Special stainless steel, Spring/screw = SUS304
- * This product is a fishing gear. Do not use it as a hanging hook for cargo handling.
- * The gate may open unintentionally due to physical shock. Be sure to use a lock pin when sudden loads on connecting objects or the hardware are expected, or when the gate does not need to be opened for a long time.
- * The lock pin is sold separately.
- * If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.



● Lock pin (sold separately)

AK18231B9

The lock pin has an O-ring for loosening prevention to prevent it from falling off.



Auto Shackle Type II/Type IIS



| No. | Type | Size | d (mm) | d1 (mm) | d2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | Unit weight (g) | Working load limit (t) |
|---------|------|------|-----------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|-----------------------|------------------------------|
| AK18231 | II | L | 14 | 7 | 9 | 148 | 24 | 112 | 32 | 85 | 32 | 30 | 60 | 1,100 | 2.0 |
| AK18241 | IIS | L | 16 | 7 | 9 | 164 | 25 | 112 | 32 | 88 | 32 | 30 | 64 | 1,330 | 2.8 |

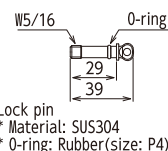
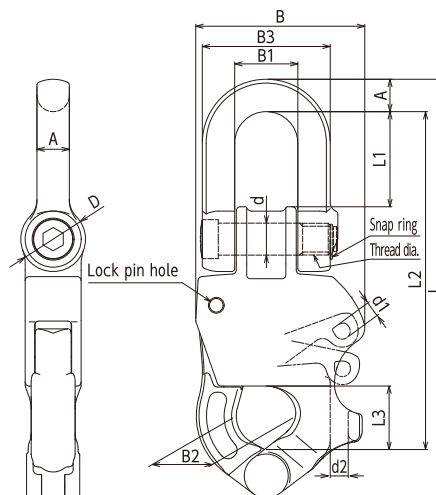
- * Material: Special stainless steel
- * This product is a fishing gear. Do not use it as a hanging hook for cargo handling.
- * The gate may open unintentionally due to physical shock. Be sure to use a lock pin when sudden loads on connecting objects or the hardware are expected, or when the gate does not need to be opened for a long time.
- * The lock pin is sold separately.
- * If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.



● Lock pin (sold separately)

AK18231B9

The lock pin has an O-ring for loosening prevention to prevent it from falling off.



Lock pin
* Material: SUS304
* O-ring: Rubber(size: P4)

Purse Auto Shackle Type II PAT.



| No. | Size | D (mm) | d (mm) | d1 (mm) | d2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | Thread dia. | Hex. wrench dia. (mm) | Snap ring size (mm) | Unit weight (g) | Working load limit (t) |
|---------|------|-----------|-----------|------------|------------|-----------|------------|------------|------------|-----------|-----------|------------|------------|------------|----------------|-----------------------------|---------------------------|-----------------------|------------------------------|
| AK18265 | L | 32 | 16 | 7 | 9 | 210 | 48 | 169 | 32 | 16 | 85 | 32 | 30 | 64 | W5/8 | 10 | 10 | 1,700 | 2.0 |

- * Material: Special stainless steel, Pin = SUS316, Snap ring = SUS316
- * This product is a fishing gear. Do not use it as a hanging hook for cargo handling.
- * The gate may open unintentionally due to physical shock. Be sure to use a lock pin when sudden loads on connecting objects or the hardware are expected, or when the gate does not need to be opened for a long time.
- * The lock pin is sold separately.
- * If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.

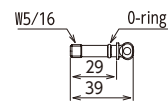
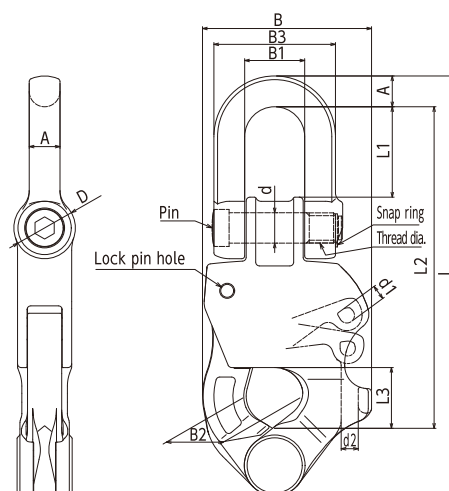


O-ring

- Lock pin
(sold separately)

AK18231B9

The lock pin has an O-ring for loosening prevention to prevent it from falling off.



Lock pin
* Material: SUS304
* O-ring: Rubber(size: P4)

Purse Auto Shackle Type IIS PAT.



| No. | Size | D (mm) | d (mm) | d1 (mm) | d2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | Thread dia. | Hex. wrench dia. (mm) | Snap ring size (mm) | Unit weight (g) | Working load limit (t) |
|---------|------|-----------|-----------|------------|------------|-----------|------------|------------|------------|-----------|-----------|------------|------------|------------|----------------|-----------------------------|---------------------------|-----------------------|------------------------------|
| AK18270 | L | 32 | 16 | 7 | 9 | 221 | 48 | 169 | 32 | 16 | 89 | 32 | 30 | 64 | W5/8 | 10 | 10 | 1,880 | 2.0 |

- * Material: Special stainless steel, Pin = SUS316, Snap ring = SUS316
- * This product is a fishing gear. Do not use it as a hanging hook for cargo handling.
- * The gate may open unintentionally due to physical shock. Be sure to use a lock pin when sudden loads on connecting objects or the hardware are expected, or when the gate does not need to be opened for a long time.
- * The lock pin is sold separately.
- * If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.



O-ring

- Lock pin
(sold separately)

AK18231B9

The lock pin has an O-ring for loosening prevention to prevent it from falling off.



Product features

Pin loosening prevention mechanism

Fixing is performed with a screw and a snap ring. This efficiently prevents loosening of the pin.



Moderate curved shape

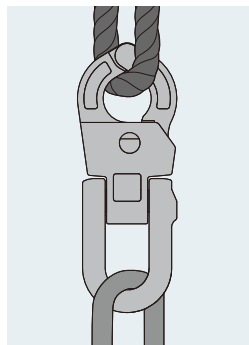
The curved shape is gentle on the ropes. It prevents damage to ropes to improve their service life.



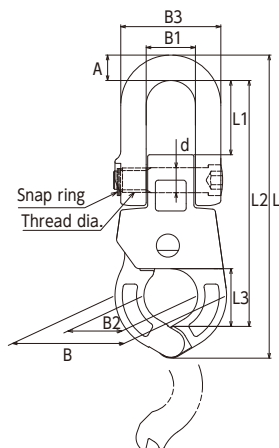
Purse Auto Shackle



| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | D (mm) | Thread dia. | Hex. wrench dia. (mm) | Snap ring size (mm) | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|-----------|------------|------------|------------|-----------|-----------|------------|------------|------------|-----------|----------------|-----------------------------|---------------------------|-----------------------|-------------------------------|
| AK18200 | M | 13 | 158 | 39 | 128 | 30 | 13 | 58 | 26 | 28 | 52 | 26 | W1/2 | 8 | 8 | 630 | 800 |
| AK18201 | L | 16 | 194 | 48 | 156 | 32 | 16 | 70 | 32 | 30 | 64 | 32 | W5/8 | 10 | 10 | 1,345 | 1,300 |



This provides excellent convenience when you repeatedly connect and disconnect with ropes and rings.

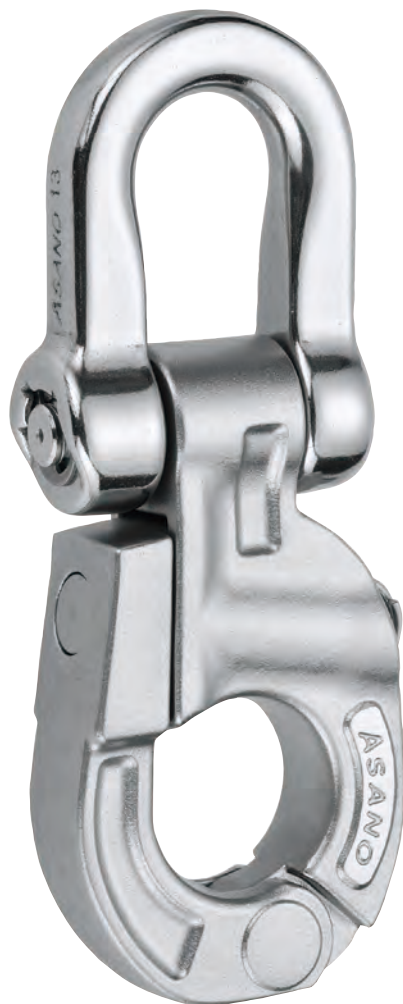


- * Material: Special stainless steel, Pin = SUS316, Snap ring = SUS316
- * This product is a fishing gear. Do not use it as a hanging hook for cargo handling.
- * The gate may open unintentionally due to physical shock.
- * If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.

Easy gate release

The gate can be easily released by inserting a spike.





Purse Snap Shackle Type II PAT.

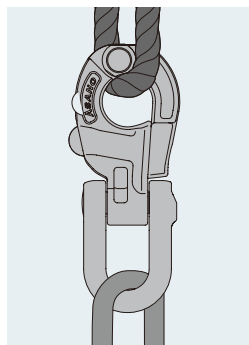


| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | A (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | D (mm) | Thread dia. | Hex. wrench dia. (mm) | Snap ring size (mm) | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|-----------|------------|------------|-----------|-----------|------------|------------|------------|-----------|----------------|-----------------------------|---------------------------|-----------------------|-------------------------------|
| AK18225 | M | 13 | 159 | 39 | 127 | 13 | 62 | 26 | 30 | 52 | 26 | W1/2 | 8 | 8 | 840 | 800 |

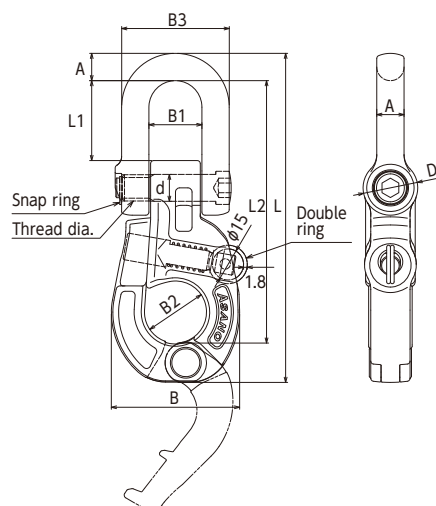
* Material: Special stainless steel, Shackle pin = SUS316, Snap ring = SUS316, Lock pin = special stainless steel, Double ring (wire diameter $\Phi 1.8$, inner diameter $\Phi 15$) = SUS304

* This product is a fishing gear. Do not use it as a hanging hook for cargo handling.

* If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as a released load hitting the surrounding objects or people.



This provides excellent convenience when you repeatedly connect and disconnect with ropes and rings.



Product features

Remote release operation by rope

The gate can be widely opened by attaching a rope and pulling it. A great advantage is that the gate can be released by remote control.



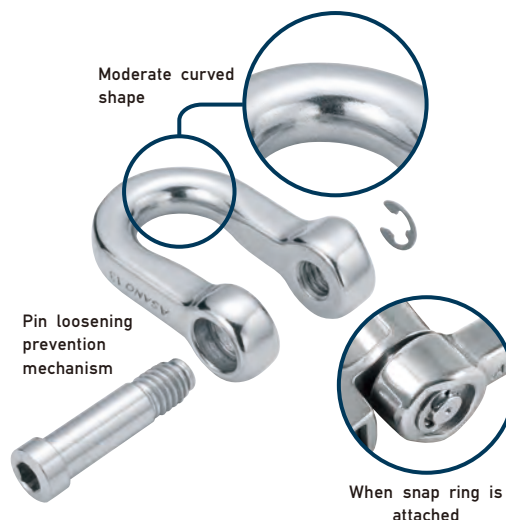
Significantly increased strength

When the gate is closed, the tab at the tip of the gate securely enters the body to support the load.



Pin loosening prevention mechanism and moderate curved shape

Fixing is performed with a screw and a snap ring to prevent the pin from falling off. The moderate curve inside the body prevents damage to ropes.





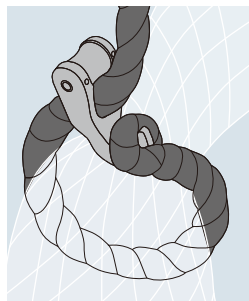
Choker Hook-R

High
Stainless 1

High
Stainless 2

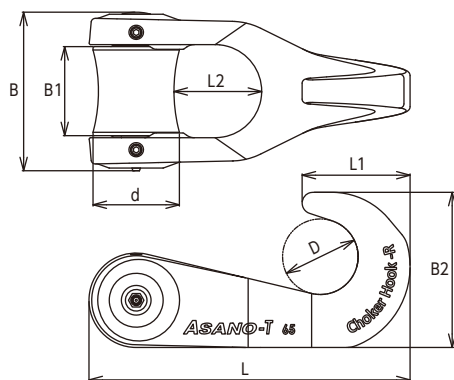
| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | B1 (mm) | B2 (mm) | D (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|---------|------|-----------|-----------|------------|------------|-----------|------------|------------|-----------|-----------------------------|------------------------|------------------------------|
| AK18101 | 65 | 64 | 238 | 80 | 65 | 117.5 | 66 | 115 | 56 | 4 | 6.0 | 3.4 |

* Material: Special stainless steel, Roller pin = SUS316, Bush = bronze



The choker hook is designed for round haul net fishing. It allows smooth narrowing because the roller reduces friction of ropes.

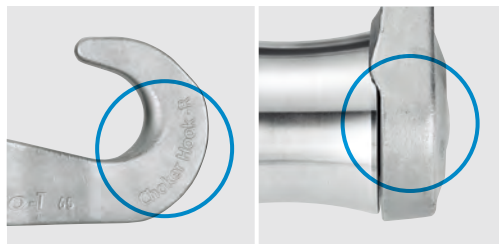
Special stainless steel is used, with excellent strength and durability.



Product features

Increased thickness of the hook and roller support part

The strength of the hook is increased. The thickness of the body that supports the roller pin is also increased. They serve to support stable rotation of the roller.



Prevents ropes from being caught or wound up

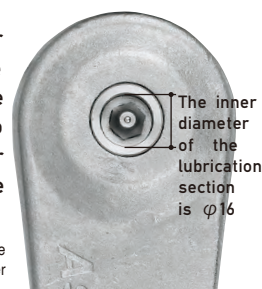
The projection of the grease nipple on the roller shaft edge is restrained to prevent nets and ropes from being caught. In addition, the inside of the body protrudes to prevent ropes from being caught.



How to lubricate

Lubricate the roller shaft through the grease nipple on the side of the body to maintain good roller rotation. Use a grease gun to lubricate.

* Use a grease gun with a nozzle size that is smaller than the inner diameter of the lubrication section.



How to remove the roller

Use a hexagon wrench to remove the roller.

* When reinstalling a roller, apply ThreeBond MEC thread lock (No. 2446) or similar adhesive to the thread.





Special stainless steel roller model



The center gate has a 65 mm opening. This enables easy insertion and removal of the purse line (45mm opening for size 60×75)

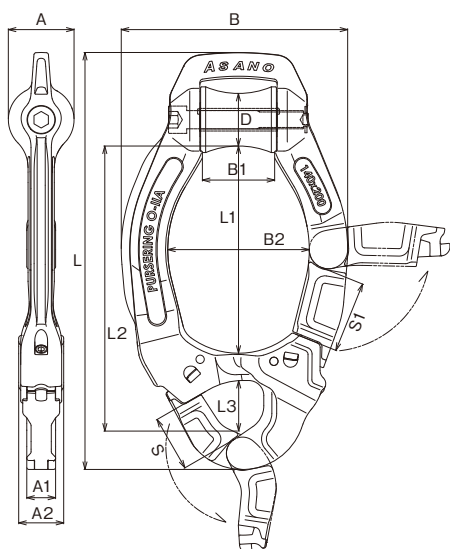
NEW

Purse Ring Type O-IIA



| No. | Size | Roller | D (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | A1 (mm) | A2 (mm) | B (mm) | B1 (mm) | B2 (mm) | S (mm) | S1 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|---------|---------|-------------------------|--------|--------|---------|---------|---------|--------|---------|---------|--------|---------|---------|--------|---------|-----------------------|------------------|------------------------|
| AK18405 | 60×75 | special stainless steel | 41 | 266.5 | 77 | 166.5 | 45 | 45 | 28.5 | 40.5 | 140 | 41.5 | 60 | 45 | 45 | 6·14 | 4.2 | 2.5 |
| AK18406 | 60×75 | alloy steel | 41 | 266.5 | 77 | 166.5 | 45 | 45 | 28.5 | 40.5 | 140 | 41.5 | 60 | 45 | 45 | 6·14 | 4.2 | 2.5 |
| AK18400 | 140×200 | alloy steel | 52 | 412.5 | 205 | 282 | 50 | 65 | 28.5 | 44.5 | 224 | 71.5 | 140 | 50 | 65 | 6·14 | 8.4 | 3.0 |

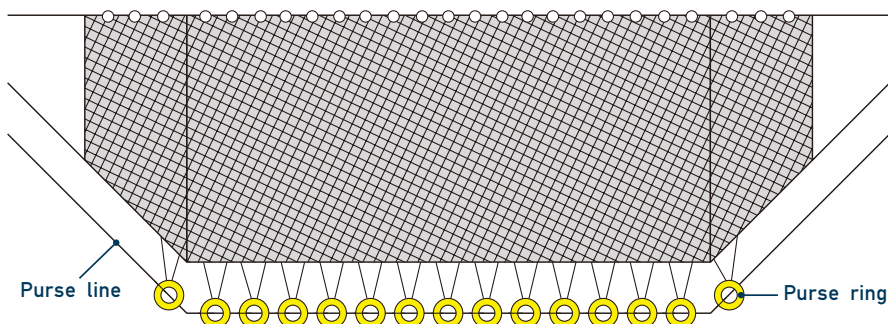
* Material: Special stainless steel, Roller = special stainless steel (AK18405)/ alloy steel (AK18406-AK18400) shaft/spring/set screw = SUS304, Bush = copper alloy



Featuring a hard alloy steel roller, designed for use with metal wire ropes. The large-diameter roller and shaft contribute to a longer product life.

Product features

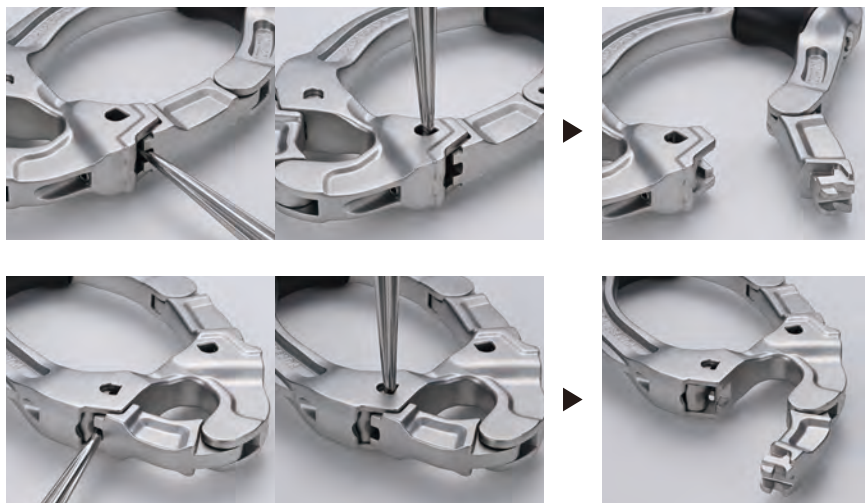
● = Purse Ring Type O-IIA Assumed location of use



As shown in the picture below, the Purse Ring Type O-IIA can be used effectively in places where connecting and releasing are required. This purse ring helps reduce the number of metal fittings needed to connect a fishing net to the purse line. The extremely simple operating process allows for quicker and more efficient connection and release.



Each gate can be operated from two directions



This product incorporates gates with the same mechanism as ASANO's Auto Shackle, which enables quick release and secure rigging, one at the top and one in the center. Each gate can be released from two directions: front and side.

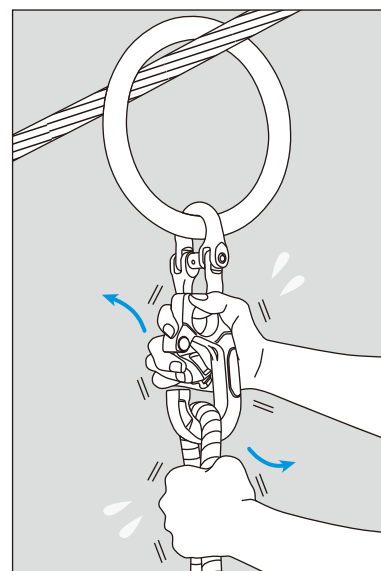
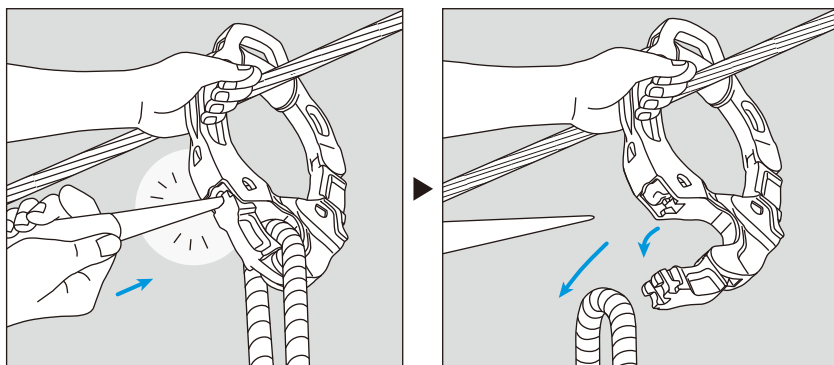
Related product

Light Spike SG
P085



Safe and efficient release operation

Simple gate opening and closing operations improve safety and efficiency for on-board work, even in rough seas. The troublesome task of lifting up the rope to get it out, ordinarily required with conventional hooks at the connecting points (pictured to the right), is no longer necessary.





Alloy steel
roller model

Product features

Gate can be released
from two directions



This Purse Ring is equipped with an Auto Shackle gate mechanism for easy gate release. In addition, the gate spring can be replaced as necessary as it wears out.

Related product

Light Spike SG
P085



Two roller materials available

The alloyed steel roller features a hard surface for use with metallic ropes. The stainless steel rollers are suitable for use with fiber ropes.



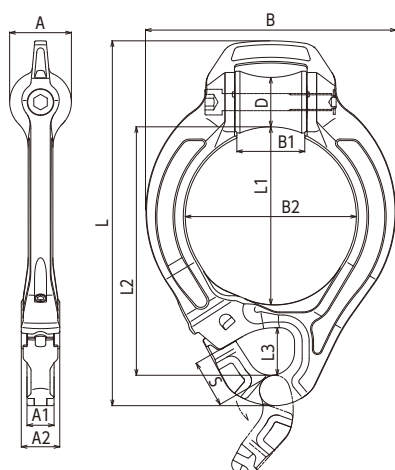
Purse Ring Type O-II



| No. | Size | Roller | D (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | A1 (mm) | A2 (mm) | B (mm) | B1 (mm) | B2 (mm) | S (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|---------|------|----------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|-----------------------------|------------------------|------------------------------|
| AK18298 | 180 | special stainless steel | 52 | 384 | 187 | 261.5 | 50 | 65 | 28.5 | 40.5 | 263 | 71.5 | 180 | 50 | 6·14 | 7.1 | 3.0 |
| AK18299 | 180 | alloy steel | 52 | 384 | 187 | 261.5 | 50 | 65 | 28.5 | 40.5 | 263 | 71.5 | 180 | 50 | 6·14 | 7.1 | 3.0 |

* Material: Special stainless steel, Roller shaft/set screw = SUS304, Bush = copper alloy, Roller = special stainless steel (AK18298) / alloy steel (AK18299)

* For AK18298, textile ropes are recommended for use due to the material of the rollers (special stainless steel). If metal wire ropes are used, the roller may be scratched depending on the operating conditions such as the load.



Simple to connect

This Purse Ring helps reduce the number of metal fittings needed to connect a fishing net to the purse line. The incredible simplicity of the process helps make connecting and releasing more efficient.





size 120 with
special stainless
steel roller

Alloyed steel roller model
also available, for use
with metallic ropes.



size 180 with
alloy steel roller

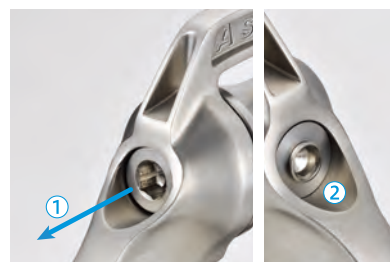
Product features

Carefully designed roller edges



The edges of the roller cover the main body, to prevent the body and purse line from rubbing against each other. The body is also shaped to prevent ropes and nets from getting caught.

Replaceable roller



Worn rollers can be replaced using a hex key. To replace a roller, remove the roller shaft (M18) ①. The end of the roller shaft ② is tightly fixed through crimping. After replacement, fix the end of the roller shaft (M18) again by crimping before use.

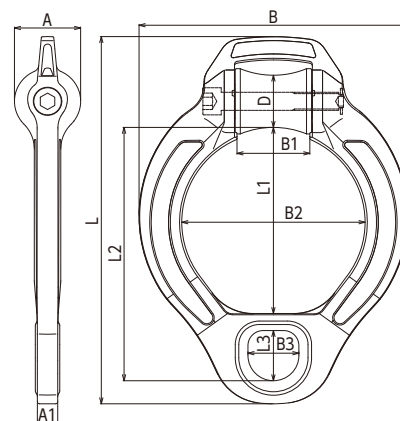
Purse Ring Type 0



| No. | Size | Roller | D (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | A1 (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|---------|------|-------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|------------|------------|-----------------------------|------------------------|------------------------------|
| AK18291 | 120 | special stainless steel | 52 | 295 | 120 | 187 | 50 | 65 | 20 | 189 | 71.5 | 120 | 50 | 4·14 | 4.4 | 3.0 |
| AK18292 | 120 | alloy steel | 52 | 295 | 120 | 187 | 50 | 65 | 20 | 189 | 71.5 | 120 | 50 | 4·14 | 4.4 | 3.0 |
| AK18293 | 180 | special stainless steel | 52 | 366 | 186 | 253 | 50 | 65 | 20 | 264 | 71.5 | 180 | 50 | 14 | 6.2 | 3.0 |
| AK18294 | 180 | alloy steel | 52 | 366 | 186 | 253 | 50 | 65 | 20 | 264 | 71.5 | 180 | 50 | 14 | 6.2 | 3.0 |

* Material: Special stainless steel, Roller shaft/spring/set screw = SUS304, Bush/lock pin = copper alloy, Roller = special stainless steel (AK18291-AK18293) / alloy steel (AK18292-AK18294)

* For AK18291 and AK18293, textile ropes are recommended for use due to the material of the rollers (special stainless steel). If metal wire ropes are used, the roller may be scratched depending on the operating conditions such as the load.





special stainless steel roller model



Alloy steel roller model is also available for use with metal wire rope.

Product features

Unique gate design

The gate can be opened by pressing the button down. An interlocking system, which enables the hook part to be securely locked into the body, has been employed, to generate a high working load.



The roller part that makes the difference

The shape of the roller edge part covers the body to prevent the purse line from rubbing against it. The roller can be removed and replaced.

To replace the roller,

- ① Remove the hexagonal socket head set screw (M8).
- ② Remove the roller shaft (M16).

After reinstalling the roller, apply ThreeBond MEC thread lock (No. 2446) or similar adhesive to the thread of ①.



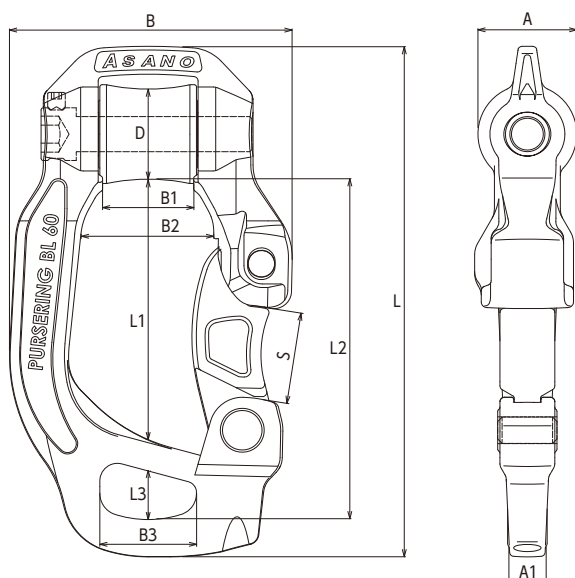
Purse Ring Type BL (Size 60)



| No. | Size | Roller | D (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | A1 (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | S (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|---------|------|-------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|------------|------------|-----------|-----------------------------|------------------------|------------------------------|
| AK18280 | 60 | special stainless steel | 41 | 232.5 | 119 | 155 | 22 | 45 | 16 | 129 | 41.5 | 60 | 44 | 41.5 | 4-6-8-14 | 2.5 | 2.5 |
| AK18281 | 60 | alloy steel | 41 | 232.5 | 119 | 155 | 22 | 45 | 16 | 129 | 41.5 | 60 | 44 | 41.5 | 4-6-8-14 | 2.5 | 2.5 |

* Material: Special stainless steel, Roller shaft/spring/set screw = SUS304, Bush/lock pin = copper alloy, Roller = special stainless steel(AK18280) / alloy steel (AK18281)

* For AK18280, textile ropes are recommended for use due to the material of the rollers (special stainless steel). If metal wire ropes are used, the roller may be scratched depending on the operating conditions such as the load.



Replaceable spring

If the performance of the spring deteriorates due to certain factors such as aging, the built-in spring can be replaced by removing the screw.





Product features

Example combination



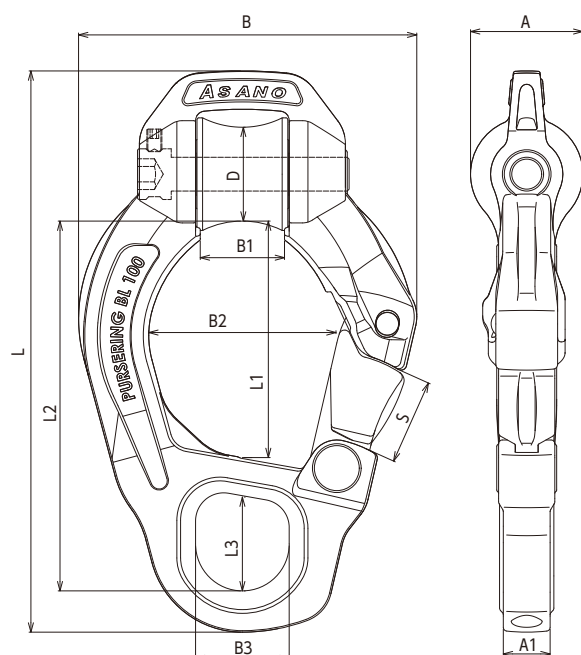
Purse seine fishing demands toughness from equipment, particularly when connecting the net to the purse line at the bottom of the net.

Purse Ring Type BL (Size100)



| No. | Size | D (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | A1 (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | S (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|---------|------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|------------|------------|-----------|-----------------------------|------------------------|------------------------------|
| AK18285 | 100 | 50 | 299 | 126 | 197 | 50 | 60 | 25 | 181 | 45 | 100 | 50 | 45 | 4・8・14 | 5.5 | 3.5 |

* Material: Special stainless steel, Roller = alloy steel,
Roller shaft/spring/set screw= SUS304, Bush/lock pin = copper alloy



Opening/closing the gate

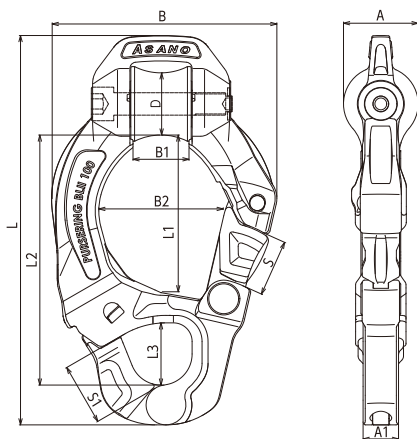


The BL in the name stands for “button lock”: it features a gate locked with a button, to prevent unintentional underwater release. This Purse Ring is made of special stainless steel for excellent seawater resistance, to help prevent the lock button from rusting and getting stuck.



Related product

Light Spike SG
P085



Product features

Gate release can be operated from two sides



The Auto Shackle mechanism facilitates gate release operation. The gate spring can be replaced if it has deteriorated due to aging or other causes.

Unique gate design

The gate can be opened when the button is pressed down, which prevents unintended release underwater. The hook part's interlocking structure engages with the body to securely hold the load.



Simple to connect

This Purse Ring helps reduce the number of metal fittings needed to connect a fishing net to the purse line. The incredible simplicity of the process helps make connecting and releasing more efficient.



Purse Ring Type BL-II



| No. | Size | D (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | A1 (mm) | B (mm) | B1 (mm) | B2 (mm) | S (mm) | S1 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|---------|------|--------|--------|---------|---------|---------|--------|---------|--------|---------|---------|--------|---------|-----------------------|------------------|------------------------|
| AK18288 | 100 | 50 | 313 | 127 | 201 | 50 | 60 | 28.5 | 181 | 45 | 100 | 45 | 50 | 6·8·14 | 6.1 | 3.0 |

* Material: Special stainless steel, Roller shaft/spring/set screw = SUS304, Bush/lock pin = copper alloy, Roller = alloy steel

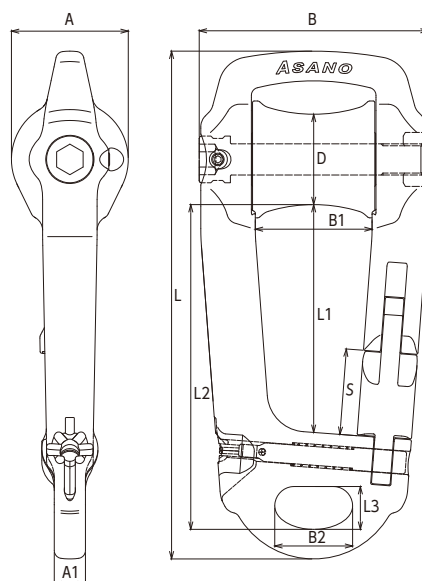


Purse Ring



| No. | Size | D (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | A1 (mm) | B (mm) | B1 (mm) | B2 (mm) | S (mm) | Double ring | Unit weight (kg) | Working load limit (t) |
|---------|------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|------------|-----------|---------------------------|------------------------|------------------------------|
| AK18275 | 80 | 58 | 326 | 146 | 209 | 28 | 75 | 20 | 147 | 75 | 50 | 55 | φ2 x Inner diameter 25 | 7.4 | 2.5 |

* Material: Special stainless steel, Roller = alloy steel, Roller shaft (bolt, nut)/set screw/spring/double ring = SUS304, Lock pin = special stainless steel



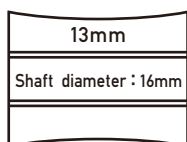
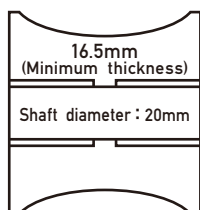
Product features

Large-diameter roller and large-diameter shaft

The large-diameter roller and the large-diameter shaft enlarge the volume and surface area to prevent cracks and lengthen service life. The easy-to-disassemble shaft consists of a bolt and nut, and is double-locked with a rivet and set screw.

ASANO roller

Other rollers



Roller edge part, roofed body

The roller edge part covers the body to prevent this part of the body and wire ropes (purse line) from rubbing against each other. Moreover, the roofed body makes it hard for nets and ropes to get caught.



Opening/closing gate

You can open the gate by inserting a round bar about φ6 to the hole of the lock pin end. You can keep the lock released by inserting the round bar, as shown below or by pulling the ring on the lock pin end and rotating the lock pin so that the ring is in the diagonal groove.





Combination example

This is rigging hardware designed for fishing gear used for round haul nets. Use it to connect an Auto Shackle (P013) and a Purse Ring. The large inner diameter of the ring improves the degree of freedom for the connecting part. Special stainless cast steel is used for the body, with excellent strength and durability.



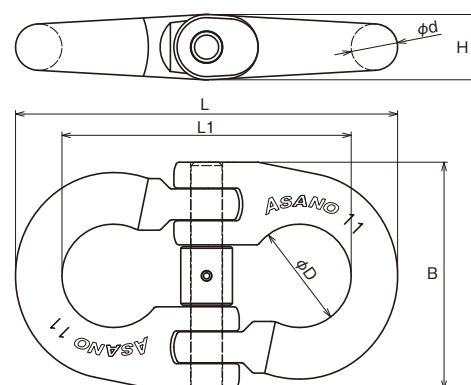
Purse Coupling



| No. | Size | d (mm) | L (mm) | L1 (mm) | B (mm) | H (mm) | D (mm) | Unit weight (g) | Working load limit (t) |
|---------|------|-----------|-----------|------------|-----------|-----------|-----------|-----------------------|------------------------------|
| AK18153 | 11 | φ13.5 | 111 | 84 | 66 | 19 | φ30 | 420 | 1.86 |

* Material: Special stainless steel, Pin = SUS316, Sleeve = SUS316, Spring = SUS304

* Do not use it for general cargo handling.

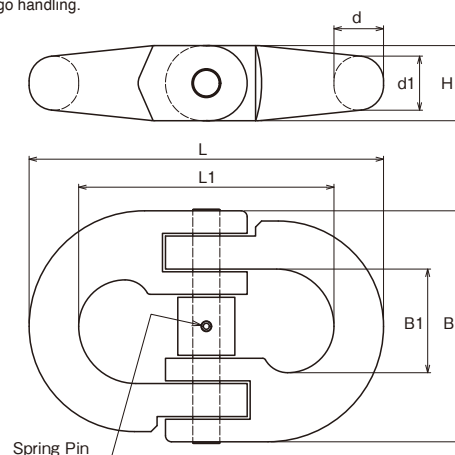


Coupling

| No. | Size | d (mm) | d1 (mm) | L (mm) | L1 (mm) | B (mm) | B1 (mm) | H (mm) | Spring Pin No. | Unit weight (g) | Working load limit (t) |
|---------|------|-----------|------------|-----------|------------|-----------|------------|-----------|-------------------|-----------------------|------------------------------|
| AK18165 | 13 | 16.5 | 18 | 118 | 85 | 77 | 34.5 | 25 | 3×18 | 850 | 3.3 |
| AK18166 | 16 | 21.5 | 22 | 145 | 102 | 99.5 | 43.5 | 32 | 4.5×22 | 1,700 | 5.0 |

* Material: SUS316, Spring pin: SUS304

* Do not use it for general cargo handling.



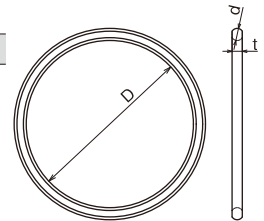


This ring is pressed to make the side flat. The flattened design improves durability compared to conventional ring. And they also bundle nicely to save space.

Flat Ring

| No. | Size | d (mm) | D (mm) | t (mm) | Unit weight (g) | Working load limit (kg) |
|----------|--------|-----------|-----------|-----------|-----------------------|-------------------------------|
| AK18372F | 13×180 | 13 | 180 | 11 | 630 | 280 |

* Material: SUS304



[Bright polished]



[Unpolished]

Round Ring, Casted (Bright / Unpolished)

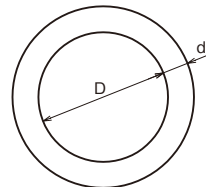
[Bright polished]

| No. | Size | d (mm) | D (mm) | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|-----------|-----------------------|-------------------------------|
| AK7031B | 10 | 10 | 60 | 138 | 200 |
| AK7032B | 12 | 12 | 80 | 261 | 300 |
| AK7033B | 13 | 13 | 100 | 377 | 500 |
| AK7034B | 16 | 16 | 60 | 374 | 800 |
| AK7035B | 16L | 16 | 150 | 838 | 400 |

[Unpolished]

| No. | Size | d (mm) | D (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|-----------|-----------------------|-------------------------------|
| AK7031 | 10 | 10 | 60 | 138 | 200 |
| AK7032 | 12 | 12 | 80 | 261 | 300 |
| AK7033 | 13 | 13 | 100 | 377 | 500 |
| AK7034 | 16 | 16 | 60 | 374 | 800 |
| AK7035 | 16L | 16 | 150 | 838 | 400 |

* Material: SCS14 (equivalent to SUS316)



Dragnet Fitting



[Body]

| No. | Size | L (mm) | H (mm) | D (mm) | D1 (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|-----------|-----------|------------|-----------------------|-------------------------------|
| AK4400 | S | 200 | 92 | 16 | 13 | 1,400 | 1,200 |
| AK4401 | M | 250 | 110 | 20 | 16 | 2,400 | 1,700 |
| AK4402 | L | 300 | 130 | 23 | 18 | 3,700 | 2,400 |

* Material: Special stainless steel

[Spring]

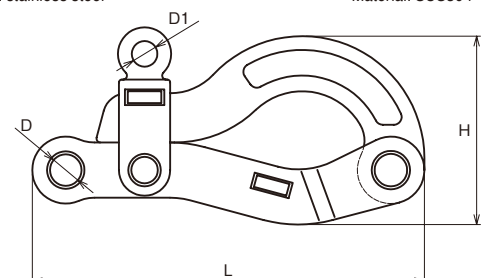
| No. | Size |
|----------|------|
| AK4400B6 | S |
| AK4401B6 | M |
| AK4402B6 | L |

* Material: SUS304



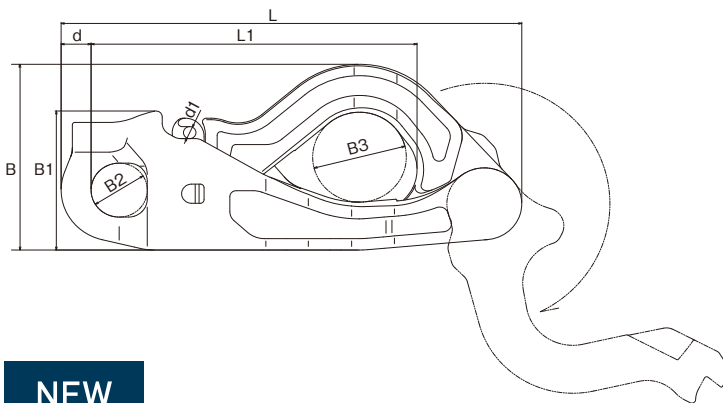
Separately
sold spring

When a separately
sold spring is installed





Arm shape designed to smoothly release the rope when the gate opens.



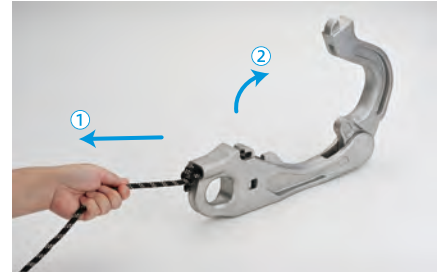
NEW

Auto Shackle Type SB



| No. | Size | d (mm) | d1 (mm) | L (mm) | L1 (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | Set screw | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|---------|------|-----------|------------|-----------|------------|-----------|------------|------------|------------|--------------|-----------------------------|------------------------|------------------------------|
| AK18171 | S | 14 | 8 | 200 | 149 | 92 | 86 | 25 | 32 | M10 | 5 | 1.7 | 1.5 |
| AK18172 | M | 16 | 8 | 250 | 191 | 118 | 99 | 30 | 46 | M10 | 5 | 2.8 | 2.0 |
| AK18173 | L | 20 | 10 | 301 | 233 | 132 | 110 | 40 | 56 | M12 | 6 | 4.3 | 2.5 |
| AK18174 | XL | 24 | 10 | 369 | 261 | 155 | 116 | 45 | 75 | M12 | 6 | 6.3 | 3.0 |

- * Material: Special stainless steel, Spring/set screw = SUS304, Lock pin = copper alloy
- * The gate may open unintentionally due to physical shock.
- * This product is fishing gear. Do not use it as a hanging hook for cargo handling.
- * If the gate is released while a load is applied, the entire unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as the released load hitting nearby objects or people.
- * Please contact us for information on when AK18171 and AK18172 will be available.



The gate can be released by pulling the rope attached to the body. This allows it to be operated even from a distance.



Designed to allow the protruding part of the body to engage with the groove on the arm, to withstand large loads. In addition, the back of the arm features a long slit, to absorb shock when the gate is released abruptly.

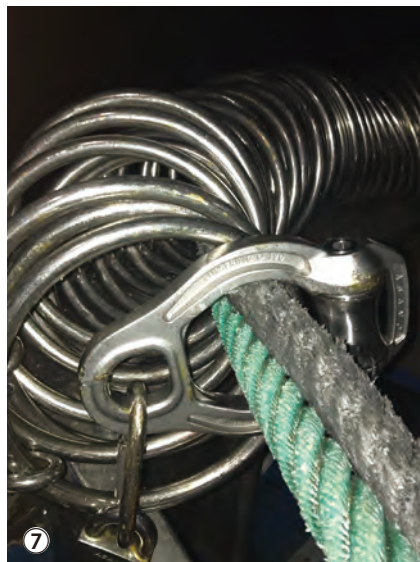
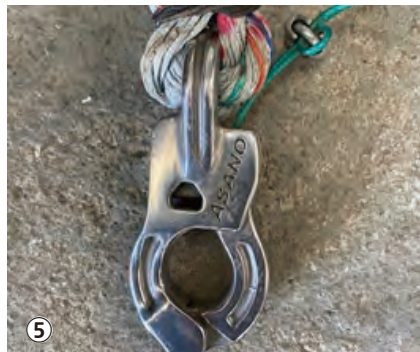
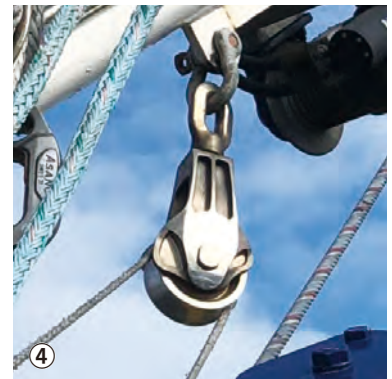
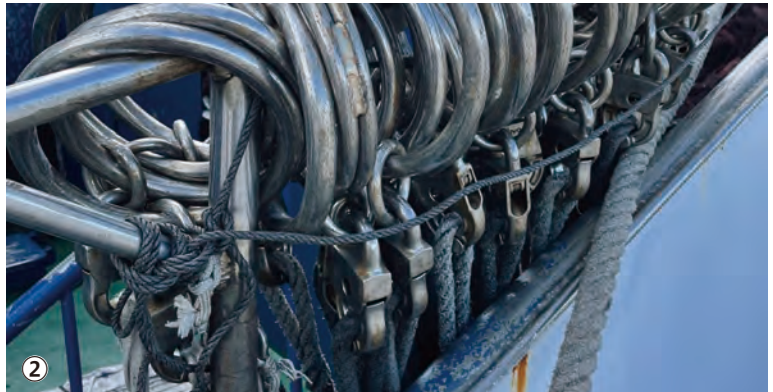
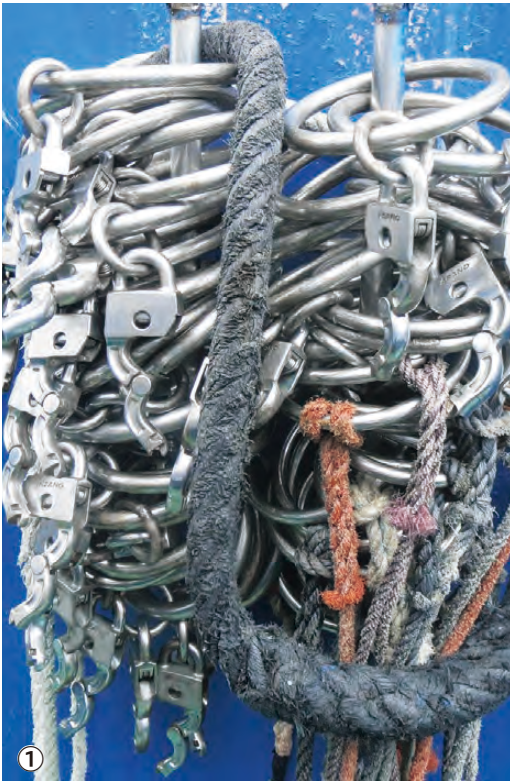


The body is designed with flat sides, to allow for welding to the deck or other parts of a ship.



ASANO, Around the World.

More and more people are using ASANO products — not only in Japan, but all over the world. Here are some examples of our products being put to use in the world's oceans.



①Auto Shackle (P013) ②Auto Shackle (P013) ③Snap Hook (P010) ④Tough Hanging Roller Type II (P058)
 ⑤Auto Shackle Type IV (P014) ⑥AK Hook Type G (P036) ⑦Purse Ring Type O (P025) ⑧Auto Shackle (P013)



This newly developed Auto Shackle is designed specifically for use in loading and unloading fish from fishing boats. Our proprietary Auto Shackle mechanism, which enables quick release and secure rigging, allows multiple ropes to be held properly. Strong yet compact, this product is easy to handle onboard, even in rough seas.

Replaceable spring

If the performance of the spring deteriorates due to aging or other factors, it can be replaced with a new one, by removing the screw above it using a hex wrench.



NEW

Tender Auto Shackle



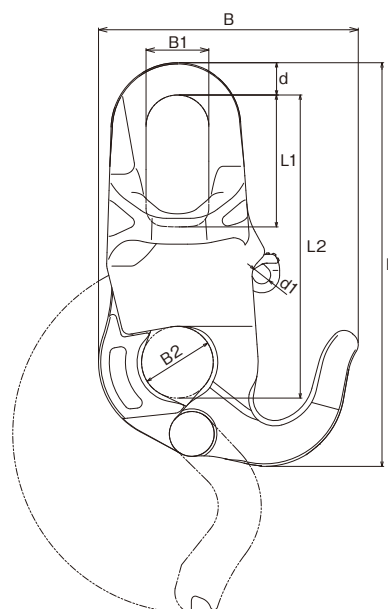
| No. | Size | d (mm) | d1 (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | B1 (mm) | B2 (mm) | Unit weight (kg) | Working load limit (body) (t) | Working load limit (hook) (t) |
|---------|------|-----------|------------|-----------|------------|------------|-----------|------------|------------|------------------------|-------------------------------------|-------------------------------------|
| AK18243 | L | 18 | 10 | 225 | 74 | 169 | 145 | 35 | 40 | 2.7 | 2.0 | 1.0 |

* Material: Special stainless steel, Spring/set screw = SUS304

* This product is fishing gear. Do not use it as a hanging hook for cargo handling.

* If the gate is released while a load is applied, the main unit may be subjected to strong impact and the product may be damaged, or an accident may occur, such as the released load hitting nearby objects or people.

* The gate may open unintentionally due to physical shock.



Product features



The combination of our proprietary Auto Shackle mechanism and the hook at the back makes the process of attaching and detaching ropes easier.

A The gate with the Auto Shackle mechanism enables quick release and secure rigging.

B The hook on the back can hold working loads of up to 1 ton.

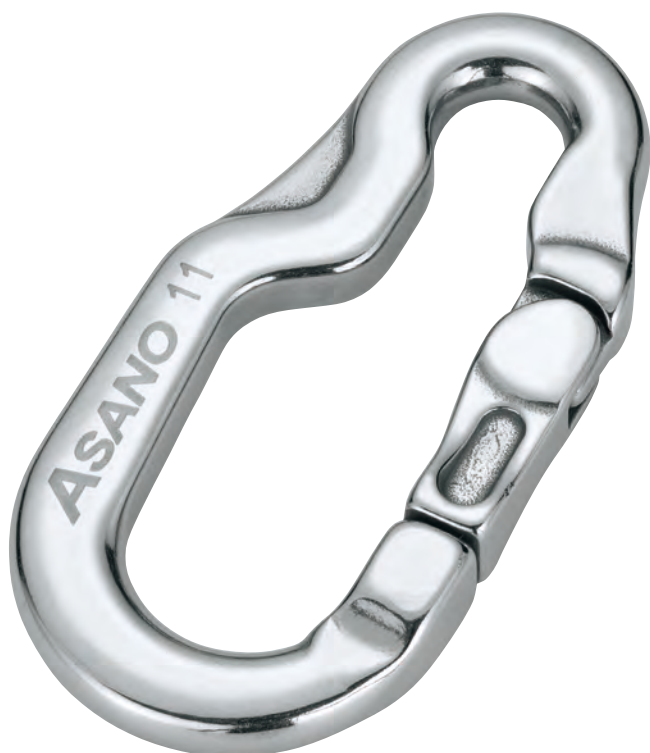
C The body has “ear” loops on both sides for tying on rope.



Gate
Opened



The gate can be opened by pulling a rope attached to the body, or by pressing the stopper with the thumb. The bumps on the stopper prevent the thumb from slipping when pressing it in. The opened gate can be easily and securely closed by hand.



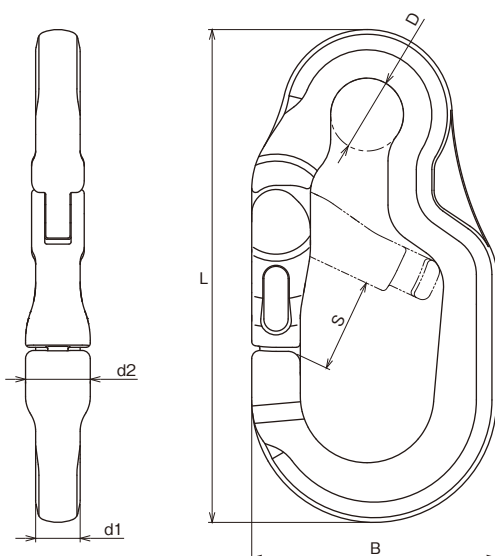
AK Hook Type G



Hooks designed for connecting during gill net fishing. Various functions have been incorporated by taking intended purposes into account.

| No. | Size | d1 (mm) | d2 (mm) | L (mm) | B (mm) | S (mm) | D (mm) | Unit weight (g) | Working load limit (kg) |
|---------|------|------------|------------|-----------|-----------|-----------|-----------|-----------------------|-------------------------------|
| AK18325 | 11 | 11 | 16 | 122 | 60.5 | 23 | 18 | 290 | 400 |

* Material: Special stainless steel, Spring = SUS304



Product features

Ideal functions for gill net fishing

① Round shape of the main body

The edge inside the main body is round and easy on ropes. In addition, the entire body is round, which prevents it from standing up on the reel and helps facilitate easy storage of the net when it is wound up.

② Robust casted design

As the product is designed to be casted with a high degree of freedom, the body thickness does not have to be uniform unlike wire materials, and sections to which a larger load is applied are made thicker to optimize product capacity. In addition, special stainless steel materials with superior abrasion and corrosion resistance are used.

③ Pin improves working load limit

A pin with a larger $\phi 4.5$ mm diameter compared with the conventional AK Hook product, is used. The adjustment is performed in accordance with the strength of the main body.

Safe interlock design

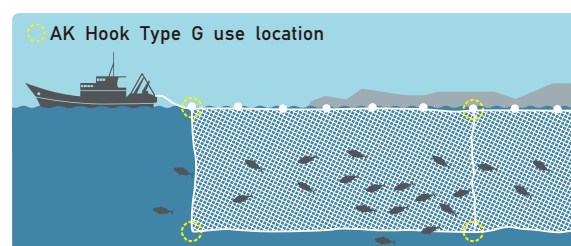
The interlock system is used for the gate section. When the main body is engaged with the gate, a high working load limit is achieved. In addition, by taking the interference with the rope and fishing net into account, edges have been eliminated to as great a degree as possible to prevent entanglement.



AK Hook Type G



Conventional AK Hook



Assumed location of use

This product can be used at rigging locations during gill net fishing as shown in the illustration above.



Chokkiri
AK6400



P.chokkiri
AK6401



S.morippa
AK6402



Morippa
AK6403



Toku-morippa
AK6404



Shark-morippa
AK6405



Minimorippa L
AK6407



Minimorippa M
AK6408

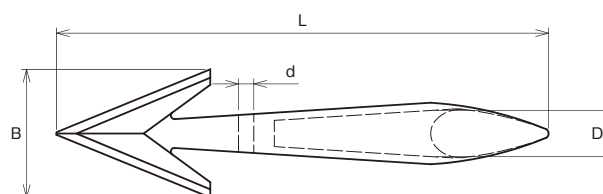


Minimorippa S
AK6409

Harpoon Head (Morippa & Chokkiri)



| Type | No. | L (mm) | B (mm) | d (mm) | D (mm) | Unit weight (g) |
|---------------|--------|-----------|-----------|-----------|-----------|--------------------|
| Chokkiri | AK6400 | 93 | 27 | 3 | 9 | 23 |
| P.chokkiri | AK6401 | 96 | 25 | 3 | 9 | 18 |
| S.morippa | AK6402 | 90 | 22 | 3 | 8 | 23 |
| Morippa | AK6403 | 100 | 32 | 3 | 10 | 28 |
| Toku-morippa | AK6404 | 104 | 36 | 3 | 9 | 30 |
| Shark-morippa | AK6405 | 167 | 54 | 6 | 14 | 212 |
| Minimorippa L | AK6407 | 68 | 17 | 2 | 7 | 11 |
| Minimorippa M | AK6408 | 57 | 13 | 1.4 | 5 | 6 |
| Minimorippa S | AK6409 | 47 | 11 | 1.4 | 4.6 | 5 |



* Material: Special stainless steel

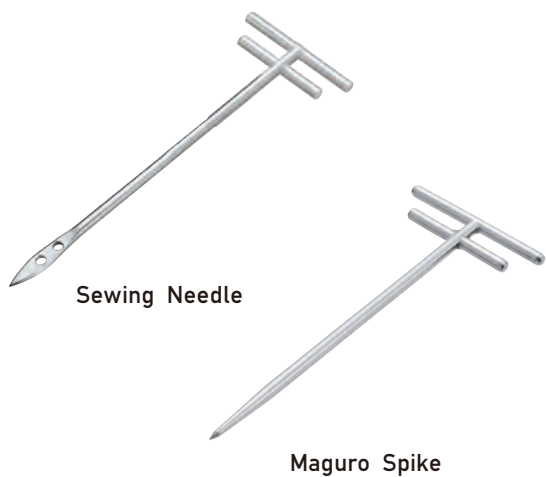
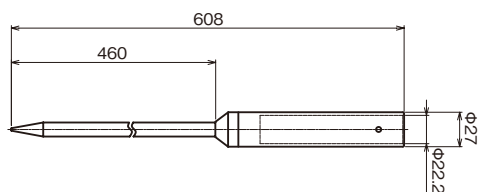
* Note: The point and/or edges are sharpened.
Handle with caution.



Spear Head

| No. | Unit weight (g) |
|--------|-----------------|
| AK3110 | 480 |

* Material: SUS304
* Note: The point and/or edges are sharpened. Handle with caution.

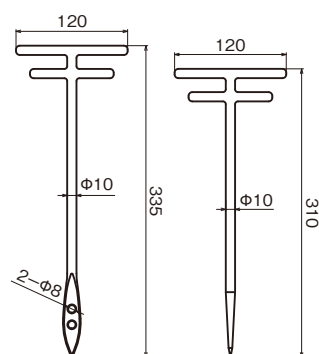


Sewing Needle

Maguro Spike

Sewing Needle / Maguro Spike

| Product name | No. | Unit weight (g) |
|---------------|--------|-----------------|
| Sewing needle | AK4270 | 300 |
| Maguro spike | AK6060 | 300 |



* Material: SUS304
* Note: The point and/or edges are sharpened. Handle with caution.

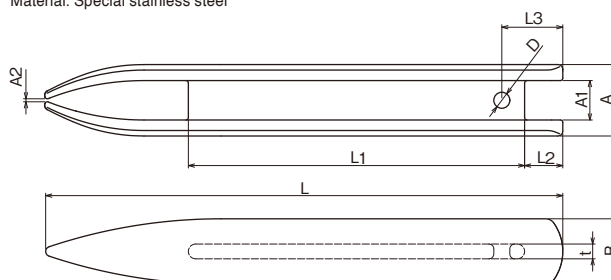


Needle



| No. | Size | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | A (mm) | A1 (mm) | A2 (mm) | B (mm) | D (mm) | t (mm) | Unit weight (g) |
|---------|------|--------|---------|---------|---------|--------|---------|---------|--------|--------|--------|-----------------|
| AK18055 | 200 | 210 | 136.5 | 15.5 | 24.8 | 29 | 16 | 1.2 | 26.5 | 6.5 | 6 | 500 |

* Material: Special stainless steel

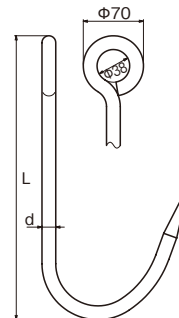


Gaff



| No. | Size | d (mm) | L (mm) | Unit weight (g) |
|--------|------|-----------|-----------|--------------------|
| AK6300 | S | 16 | 330 | 1,040 |
| AK6301 | M | 16 | 450 | 1,200 |
| AK6302 | L | 16 | 550 | 1,400 |

* Material: SUS304



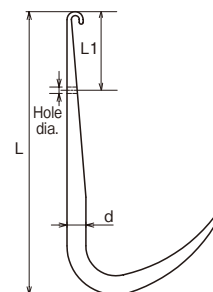
Gaff Head



| No. | Size | d (mm) | L (mm) | L1 (mm) | Hole dia. (mm) | Unit weight (g) |
|--------|------|-----------|-----------|------------|-------------------|--------------------|
| AK4120 | 6 | 6 | 137 | 30 | 3.5 | 45 |
| AK4121 | 7 | 7 | 145 | 32 | 3.5 | 60 |
| AK4122 | 8 | 8 | 155 | 36 | 4 | 80 |
| AK4123 | 9 | 9 | 165 | 47 | 4 | 100 |
| AK4124 | 10 | 10 | 170 | 50 | 4 | 130 |
| AK4125 | 12 | 12 | 180 | 50 | 4 | 200 |

* Material: Special stainless steel

* Note: The point and/or edges are sharpened. Handle with caution.



Gaff Head Type II

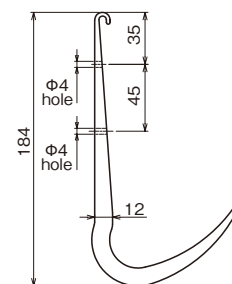


| No. | Size | Unit weight (g) |
|--------|------|--------------------|
| AK4135 | 12 | 190 |

- The tip is thicker and stronger than the Gaff Head above.
- The back of the stem is curved, and fits stably with the rod.

* Material: Special stainless steel

* Note: The point and/or edges are sharpened. Handle with caution.



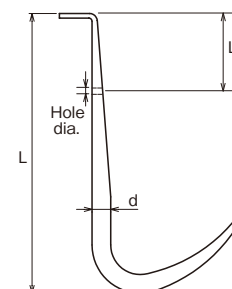
Owase Gaff Head



| No. | Size | d (mm) | L (mm) | L1 (mm) | Hole dia. (mm) | Unit weight (g) |
|--------|------|-----------|-----------|------------|-------------------|--------------------|
| AK3400 | 6 | 6 | 160 | 60 | 4 | 45 |
| AK3401 | 7 | 7 | 170 | 60 | 4 | 60 |
| AK3402 | 8 | 8 | 180 | 65 | 4 | 80 |
| AK3403 | 9 | 9 | 190 | 75 | 4 | 100 |
| AK3404 | 10 | 10 | 200 | 80 | 4 | 130 |
| AK3405 | 12 | 12 | 205 | 80 | 4 | 200 |

* Material: SUS304

* Note: The point and/or edges are sharpened. Handle with caution.



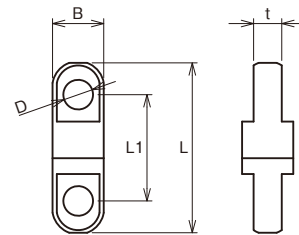


Heavy Swivel

| No. | Size | L (mm) | L1 (mm) | B (mm) | D (mm) | t (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|------------|-----------|-----------|-----------|-----------------------|-------------------------------|
| AK2361 | 7 | 23.5 | 14 | 7 | 3.5 | 4 | 4 | 80 |
| AK2363 | 9 | 31.5 | 19.5 | 9 | 5 | 5 | 9 | 130 |
| AK2364 | 10.5 | 35.5 | 21.5 | 10.5 | 6 | 6 | 13 | 150 |

* Material: SUS303

* Do not use under conditions of constant rotation.

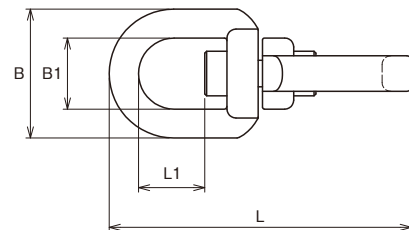


Maguro Sarukan Swivel Type M

| No. | Size | L (mm) | L1 (mm) | B (mm) | B1 (mm) | Unit weight (g) |
|--------|------|-----------|------------|-----------|------------|-----------------------|
| AK2236 | 3S | 30.5 | 6.3 | 13.5 | 7.5 | 6 |
| AK2237 | 2S | 34 | 7.5 | 14.5 | 8 | 8 |
| AK2238 | S | 42 | 10.5 | 18 | 10 | 12 |

* Material: SCS13 (equivalent to SUS304)

* Do not use under conditions of constant rotation.

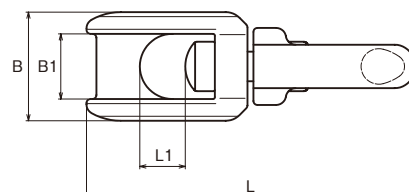


Maguro Sarukan Swivel, Course Type

| No. | Size | L (mm) | L1 (mm) | B (mm) | B1 (mm) | Unit weight (g) |
|--------|------|-----------|------------|-----------|------------|-----------------------|
| AK2247 | 3S | 33.5 | 4.6 | 11 | 6.6 | 8 |
| AK2248 | 2S | 39.3 | 7 | 14.5 | 9 | 12 |

* Material: SCS14 (equivalent to SUS316), Pin = SUS316

* Do not use under conditions of constant rotation.





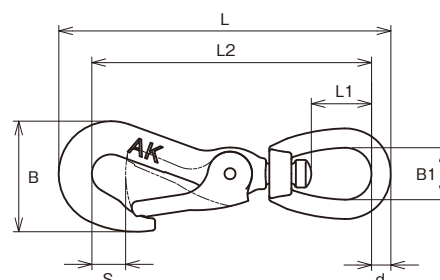
Tuna Swivel Snap



| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | B1 (mm) | S (mm) | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|-----------|------------|------------|-----------|------------|-----------|-----------------------|-------------------------------|
| AK12450 | T0 | 3.5 | 60 | 11 | 51 | 20 | 9 | 6 | 17 | 40 |
| AK12451 | T1 | 4.5 | 69 | 11 | 57 | 26 | 12 | 5 | 32 | 60 |

* Material: Special stainless steel, Swivel = SCS13 (equivalent to SUS304)

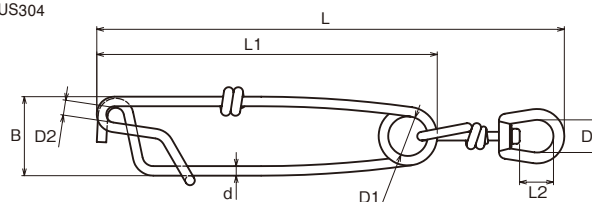
* Do not use under conditions of constant rotation.



Branch Hanger

| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | D (mm) | D1 (mm) | D2 (mm) | Unit weight (g) | Remark |
|--------|------|-----------|-----------|------------|------------|-----------|-----------|------------|------------|-----------------------|----------------|
| AK6021 | 2 | 2 | — | 85 | — | 21 | — | 7.5 | 2 | 8 | Without swivel |
| AK6022 | 2.6 | 2.6 | — | 100 | — | 23 | — | 9 | 2 | 18 | Without swivel |
| AK6023 | 3.5 | 3.5 | — | 126 | — | 28 | — | 13.5 | 2 | 40 | Without swivel |
| AK6030 | 2.6 | 2.6 | 135 | 100 | 9 | 22 | 10 | 9 | 2 | 25 | With swivel |
| AK6031 | 3.5 | 3.5 | 172 | 124 | 9 | 29 | 10 | 14 | 2 | 54 | With swivel |

* Material: SUS304

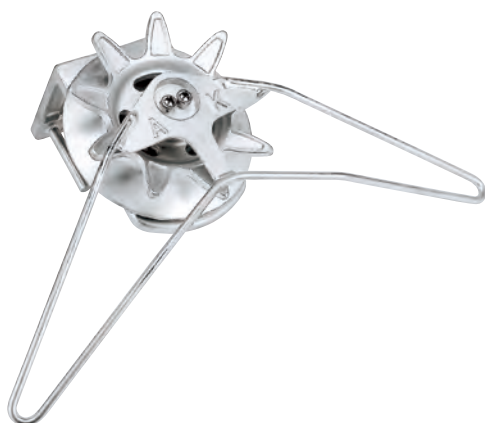
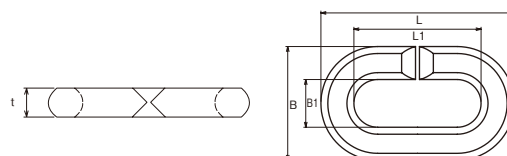


Available in combination with swivels (P079)

Strong C-Link

| No. | Size | L (mm) | L1 (mm) | B (mm) | B1 (mm) | t (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|------------|-----------|------------|-----------|-----------------------|-------------------------------|
| AK4205 | 13 | 77 | 50 | 49 | 20 | 11.4 | 170 | 200 |
| AK4206 | 16 | 97 | 64 | 57 | 24 | 14 | 320 | 390 |
| AK4207 | 19 | 115 | 76 | 67 | 28 | 16.6 | 540 | 520 |
| AK4208 | 22 | 134 | 88 | 79 | 33 | 19.3 | 840 | 690 |
| AK4209 | 25 | 152 | 100 | 89 | 37 | 22 | 1,230 | 880 |
| AK4210 | 28 | 168 | 111 | 96 | 41 | 24.5 | 1,650 | 1,050 |

* Material: SUS304



Guide Roller

| No. | Size | Roller dia. (mm) |
|--------|------|---------------------|
| AK7775 | M | 254 |
| AK7776 | L | 300 |

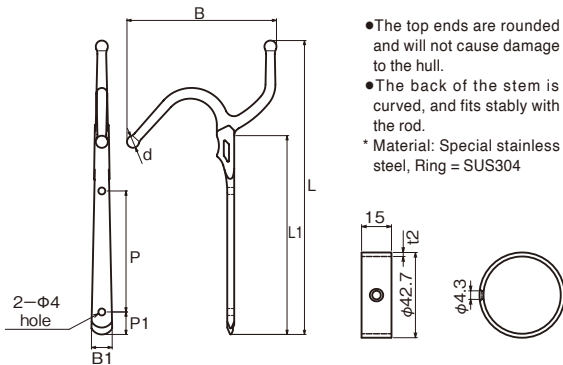
* Material: SCS13 (equivalent to SUS304)
Bolt/rod = SUS304



Boat Hook, Round Point



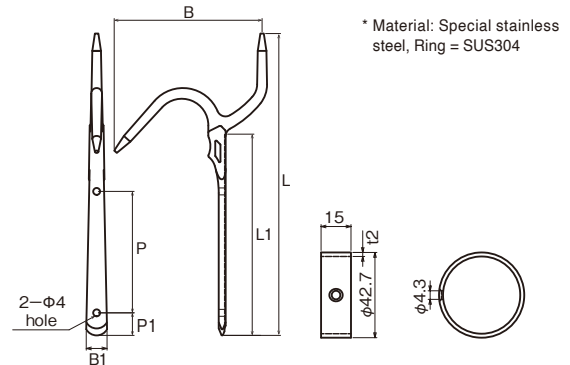
| No. | Size | d (mm) | L (mm) | L1 (mm) | P (mm) | P1 (mm) | B (mm) | B1 (mm) | Unit weight (g) |
|--------|------|-----------|-----------|------------|-----------|------------|-----------|------------|-----------------------|
| AK5910 | 7 | 7 | 170 | 116 | 70 | 13 | 87 | 12 | 72 |
| AK5911 | 9 | 9 | 192 | 120 | 70 | 13 | 116 | 13 | 120 |
| AK5912 | 12 | 12 | 231 | 138 | 80 | 14 | 143 | 17 | 262 |



Boat Hook, Sharp Point



| No. | Size | L (mm) | L1 (mm) | P (mm) | P1 (mm) | B (mm) | B1 (mm) | Unit weight (g) |
|--------|------|-----------|------------|-----------|------------|-----------|------------|-----------------------|
| AK5925 | 7 | 174 | 116 | 70 | 13 | 85 | 12 | 66 |
| AK5926 | 9 | 194 | 120 | 70 | 13 | 112 | 13 | 120 |
| AK5927 | 12 | 235 | 138 | 80 | 14 | 139 | 17 | 250 |

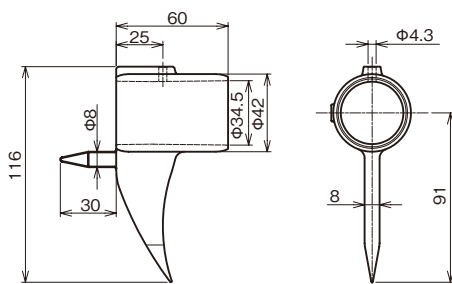


Kentobi Hook Head



| No. | Unit weight (g) |
|--------|--------------------|
| AK5915 | 300 |

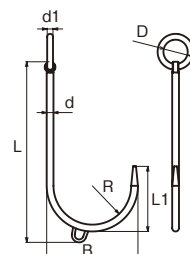
* Material: Special stainless steel



Mooring Hook

| No. | Size | d (mm) | d1 (mm) | L (mm) | L1 (mm) | B (mm) | D (mm) | R (mm) | Unit weight (g) |
|--------|----------|-----------|------------|-----------|------------|-----------|-----------|-----------|--------------------|
| AK6310 | 12×R62.5 | 12 | 9 | 280 | 124.5 | 149 | 50 | 62.5 | 540 |
| AK6311 | 12×R80 | 12 | 9 | 350 | 132 | 184 | 50 | 80 | 620 |
| AK6312 | 14×R80 | 14 | 12 | 350 | 134 | 188 | 55 | 80 | 810 |
| AK6313 | 16×R80 | 16 | 12 | 350 | 136 | 192 | 55 | 80 | 1,090 |
| AK6314 | 19×R80 | 19 | 12 | 350 | 139 | 198 | 55 | 80 | 1,380 |

* Material: SUS304

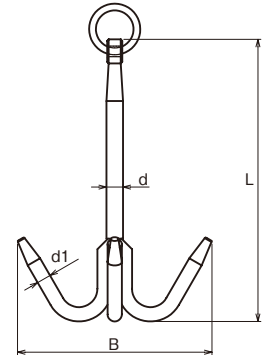




Subaru Hook Anchor

| No. | Size | d (mm) | d1 (mm) | L (mm) | B (mm) | Unit weight (kg) |
|--------|------|-----------|------------|-----------|-----------|---------------------|
| AK4220 | S | 12 | 9 | 200 | 140 | 0.35 |
| AK4221 | M | 16 | 12 | 240 | 190 | 0.90 |
| AK4222 | L | 19 | 16 | 315 | 220 | 1.80 |
| AK4223 | LL | 22 | 19 | 375 | 250 | 3.00 |

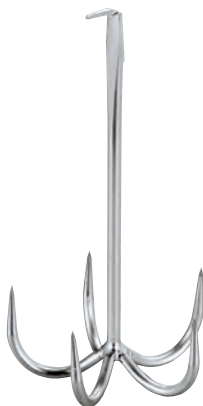
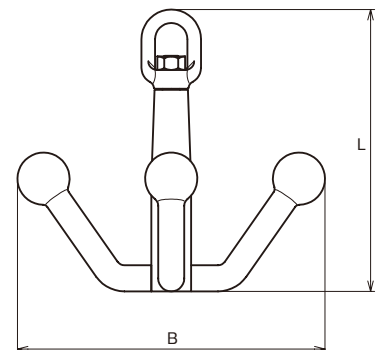
* Material: SUS304



Hotate Subaru Hook Round Point

| No. | Size | L (mm) | B (mm) | Unit weight (kg) |
|--------|------|-----------|-----------|---------------------|
| AK5593 | S | 217 | 202 | 2.14 |
| AK5594 | M | 230 | 260 | 3.54 |
| AK5595 | L | 270 | 280 | 5.52 |

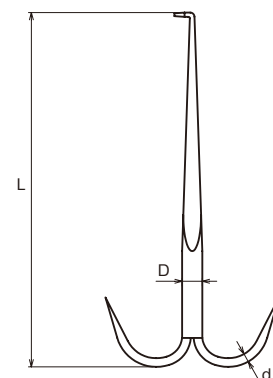
* Material: SUS304, Hook/swivel = SCS13
 * Do not use in parts subject to constant rotation.



Hayasuke Gaff Head

| No. | Size | d (mm) | L (mm) | D (mm) | Unit weight (g) |
|--------|------|-----------|-----------|-----------|--------------------|
| AK4225 | S | 5 | 165 | 6 | 80 |
| AK4226 | L | 6 | 250 | 14 | 255 |

* Material: SUS304

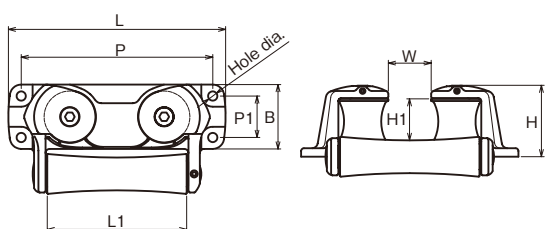




3-Way Roller

| No. | Size | L (mm) | L1 (mm) | B (mm) | P (mm) | P1 (mm) | W (mm) | H (mm) | H1 (mm) | Hole dia. (mm) | Hex. wrench dia. (mm) | Unit weight (kg) |
|---------|------|-----------|------------|-----------|-----------|------------|-----------|-----------|------------|----------------------|-----------------------------|------------------------|
| AK19001 | 150 | 152 | 97 | 45 | 134 | 29 | 30 | 50 | 29 | 6.5 | 2・2.5・6 | 1.1 |
| AK19002 | 200 | 204 | 132 | 60 | 182 | 42 | 46 | 66 | 40 | 9 | 2.5・3・8 | 2.5 |
| AK19003 | 250 | 255 | 177 | 75 | 229 | 54 | 60 | 74 | 42 | 11 | 2.5・3・14 | 4.36 |
| AK19004 | 300 | 306 | 206 | 90 | 272 | 62 | 72 | 94 | 52 | 11 | 3・3・17 | 6.7 |

* Material: Special stainless steel, Shaft = SUS304, Bush = nylon



Product features



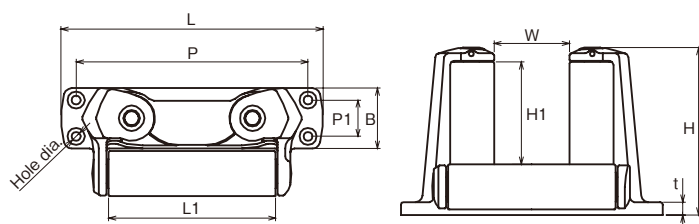
The body is an integrated type with curved lines. This prevents ropes from being caught.



Deck End Roller

| No. | Size | L (mm) | L1 (mm) | B (mm) | P (mm) | P1 (mm) | W (mm) | H (mm) | H1 (mm) | t (mm) | Hole dia. (mm) | Hex. wrench dia. (mm) | Roller dia. (mm) | Unit weight (kg) |
|---------|------|-----------|------------|-----------|-----------|------------|-----------|-----------|------------|-----------|----------------------|-----------------------------|------------------------|------------------------|
| AK19010 | 260 | 260 | 166 | 60 | 230 | 36 | 75 | 166 | 101.5 | 13 | 9 | 2.5・3・14 | 45 | 7.3 |
| AK19011 | 320 | 320 | 208 | 75 | 280 | 45 | 90 | 199 | 122 | 15 | 11 | 3・3・17 | 55 | 13.6 |

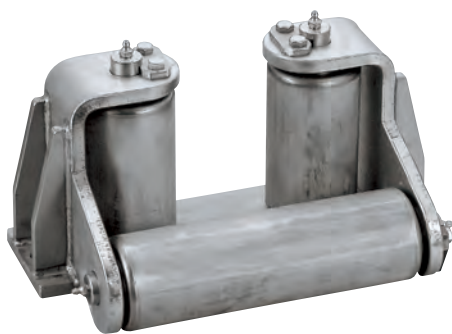
* Material: Special stainless steel, Roller/shaft = SUS304, Bush = nylon



Product features



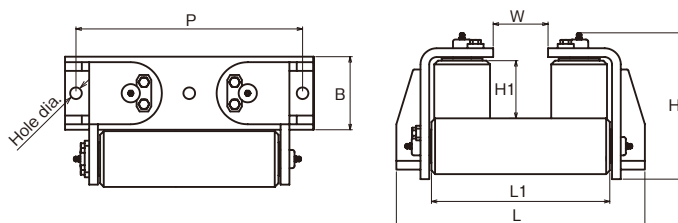
The body is an integrated type with curved lines. This prevents ropes from being caught.



Deck End Roller JIS Type

| No. | Size | L (mm) | L1 (mm) | B (mm) | P (mm) | W (mm) | H (mm) | H1 (mm) | Hole dia. (mm) | Roller dia. (mm) | Unit weight (kg) | Remark |
|--------|------|-----------|------------|-----------|-----------|-----------|-----------|------------|----------------------|------------------------|------------------------|-----------|
| AK3312 | 340 | 340 | 234 | 100 | 310 | 83.7 | 187 | 74 | 16 | 76.3 | 20 | JISF2020A |
| AK3313 | 450 | 450 | 300 | 125 | 400 | 122.9 | 218 | 100 | 16 | 89.1 | 33 | JISF2004A |

* Material: SUS304, Bush = HBsB



size 100



size 150~200

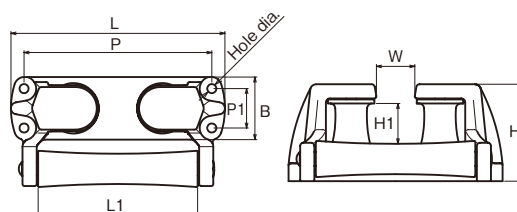
3-Way Roller (Aluminum)

| No. | Size | L (mm) | L1 (mm) | B (mm) | P (mm) | P1 (mm) | W (mm) | H (mm) | H1 (mm) | Hole dia. (mm) | Unit weight (kg) |
|--------|------|-----------|------------|-----------|-----------|------------|-----------|-----------|------------|-------------------|------------------------|
| AK3950 | 100 | 143 | 88 | 44 | 126 | — | 18 | 73.5 | 27 | 9 | 0.6 |
| AK3951 | 150 | 158 | 110 | 50 | 138 | 28 | 22 | 96 | 42 | 9 | 0.92 |
| AK3952 | 200 | 212 | 157 | 62 | 186 | 39 | 38 | 96 | 40 | 9 | 1.43 |

* Material: AC7A, Roller = nylon, Shaft/pin = SUS304

* Surface treatment / anodized aluminum

* For size 100, one screw hole is provided in each side.

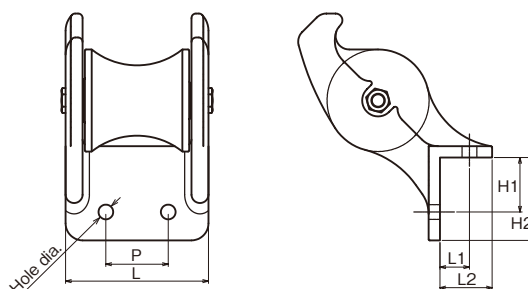


Anchor Roller (Aluminum)

| No. | Size | L (mm) | L1 (mm) | L2 (mm) | P (mm) | H1 (mm) | H2 (mm) | Hole dia. (mm) | Roller dia. (mm) | Unit weight (g) |
|--------|------|-----------|------------|------------|-----------|------------|------------|-------------------|------------------------|--------------------|
| AK3090 | 50 | 81 | 17 | 35 | 34 | 35 | 55 | 10 | 60 | 600 |
| AK3091 | 70 | 103 | 16 | 36 | 44.5 | 35 | 60 | 10 | 70 | 1,000 |
| AK3092 | 90 | 126 | 26 | 46 | 55 | 48 | 73 | 13 | 90 | 1,700 |

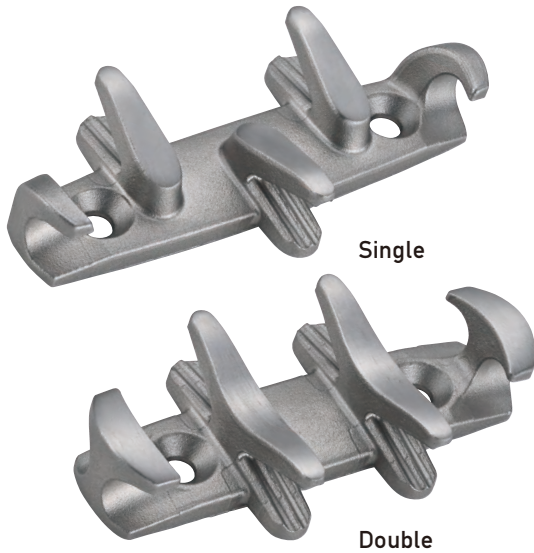
* Material: AC7A, Roller = nylon, Shaft/pin = SUS304

* Surface treatment / anodized aluminum



NEW

Rope Gripper



Single

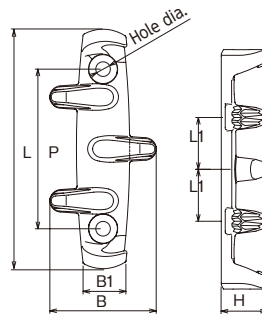
Double

| No. | Type | Max. rope dia. (mm) | L (mm) | L1 (mm) | B (mm) | B1 (mm) | P (mm) | H (mm) | Hole dia. (mm) | Unit weight (g) |
|--------|--------|---------------------|--------|---------|--------|---------|--------|--------|----------------|-----------------|
| AK1320 | Single | 10 | 90 | 19.5 | 40 | 16 | 60 | 17 | 5.5 | 80 |
| AK1321 | Double | 10 | 85 | 26 | 40 | 21 | 49 | 17 | 5.5 | 90 |

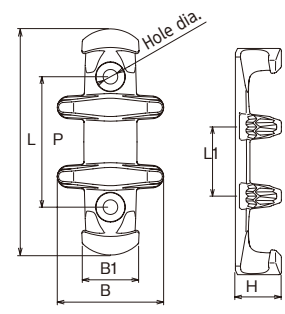
* Material: SCS13 (equivalent to SUS304)

* Screw hole diameter: $\varnothing 5.5$ (screws not included)

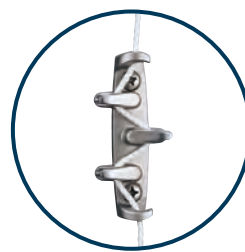
[Single]



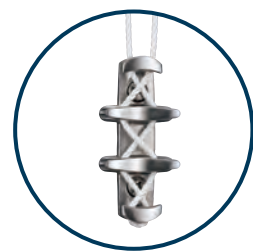
[Double]



Single



Double



Fix a rope easily and quickly

Just fit the rope into the hooks. There is no need to wrap the rope around and around, like with a cleat. The back surface has an R30.25 finish, and can be attached to either curved or flat surfaces.



size 150



size 200~300

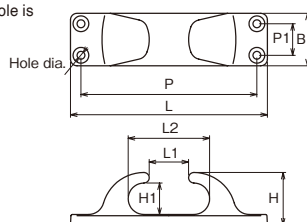


Fairleader

| No. | Size | L (mm) | L1 (mm) | L2 (mm) | B (mm) | P (mm) | P1 (mm) | H (mm) | H1 (mm) | Hole dia. (mm) | Unit weight (g) |
|--------|------|--------|---------|---------|--------|--------|---------|--------|---------|----------------|-----------------|
| AK5700 | 150 | 150 | 31 | 62 | 40 | 130 | - | 40 | 24 | 8.5 | 380 |
| AK5701 | 200 | 200 | 40 | 84 | 50 | 180 | 30 | 54 | 33 | 8.5 | 960 |
| AK5702 | 250 | 250 | 50 | 102 | 60 | 220 | 34 | 65 | 39 | 11 | 1,600 |
| AK5703 | 300 | 300 | 62 | 124 | 65 | 270 | 35 | 80 | 48 | 13 | 2,830 |

* Material: SCS14 (equivalent to SUS316)

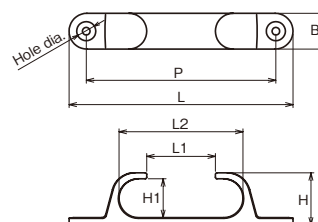
* For size 150, one screw hole is provided in each side.



Straight Chock

| No. | Size | L (mm) | L1 (mm) | L2 (mm) | B (mm) | P (mm) | H (mm) | H1 (mm) | Hole dia. (mm) | Unit weight (g) |
|--------|------|--------|---------|---------|--------|--------|--------|---------|----------------|-----------------|
| AK5730 | 5" | 130 | 33 | 60 | 24 | 105.7 | 27 | 16 | 5 | 198 |
| AK5731 | 6" | 150 | 47 | 83 | 24 | 127 | 35 | 27 | 6.4 | 205 |

* Material: SCS14 (equivalent to SUS316)



size 100

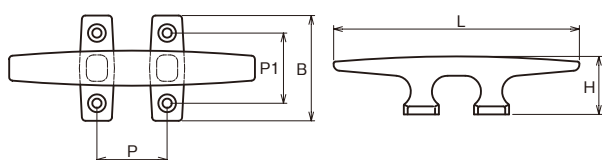


Cleat

size 140~260

| No. | Size | L (mm) | B (mm) | P (mm) | P1 (mm) | H (mm) | Hole dia. (mm) | Unit weight (g) |
|--------|------|-----------|-----------|-----------|------------|-----------|-------------------|--------------------|
| AK3700 | 100 | 100 | 16 | 30 | — | 24 | 5 | 120 |
| AK3701 | 140 | 140 | 60 | 40 | 40 | 33 | 5 | 310 |
| AK3702 | 180 | 180 | 70 | 50 | 50 | 40 | 6 | 540 |
| AK3703 | 220 | 220 | 85 | 60 | 60 | 48 | 6 | 930 |
| AK3704 | 260 | 260 | 100 | 70 | 70 | 55 | 8 | 1,250 |

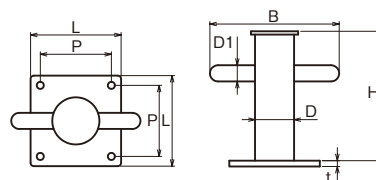
* Material: SCS14 (equivalent to SUS316)



Crossbit

| No. | Size | L (mm) | B (mm) | P (mm) | H (mm) | t (mm) | D (mm) | D1 (mm) | Hole dia. (mm) | Unit weight (g) |
|--------|------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-------------------|--------------------|
| AK3769 | 125 | 80 | 125 | 55 | 125 | 6 | 42.7 | 16 | 10 | 820 |
| AK3770 | 150 | 100 | 150 | 70 | 150 | 6 | 48.6 | 19 | 11 | 1,300 |
| AK3771 | 200 | 140 | 200 | 110 | 200 | 9 | 60.5 | 25 | 11 | 3,300 |
| AK3772 | 250 | 190 | 250 | 150 | 250 | 10 | 76.3 | 28 | 13 | 5,800 |
| AK3773 | 300 | 200 | 300 | 160 | 300 | 12 | 89.1 | 32 | 13 | 8,500 |

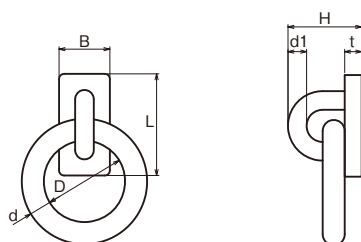
* Material: SUS304



Ring Plate Type B

| No. | Size | d (mm) | d1 (mm) | D (mm) | L (mm) | B (mm) | H (mm) | t (mm) | Unit weight (g) | Working load limit (t) |
|---------|------|-----------|------------|-----------|-----------|-----------|-----------|-----------|--------------------|---------------------------|
| AK19100 | 0.5t | 13 | 11 | 48 | 60 | 30 | 44 | 10 | 400 | 0.5 |
| AK19101 | 1t | 19 | 16 | 70 | 80 | 40 | 61 | 12 | 1,110 | 1.0 |
| AK19102 | 1.5t | 22 | 19 | 80 | 100 | 50 | 71 | 14 | 1,780 | 1.5 |

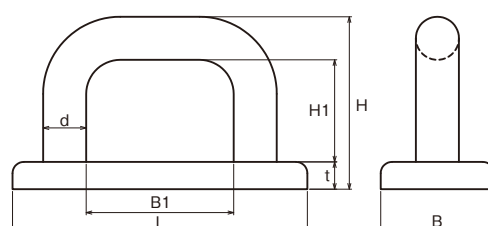
* Material: SUS304



Eye Plate Type D

| No. | Size | d (mm) | L (mm) | B (mm) | B1 (mm) | H (mm) | H1 (mm) | t (mm) | Unit weight (g) | Working load limit (t) |
|---------|------|-----------|-----------|-----------|------------|-----------|------------|-----------|--------------------|---------------------------|
| AK19110 | 19 | 19 | 130 | 50 | 65 | 76 | 45 | 12 | 980 | 0.5 |
| AK19111 | 22 | 22 | 150 | 62 | 75 | 86 | 50 | 14 | 1,590 | 1.0 |
| AK19112 | 28 | 28 | 200 | 80 | 100 | 104 | 60 | 16 | 3,150 | 2.0 |

* Material: SUS304

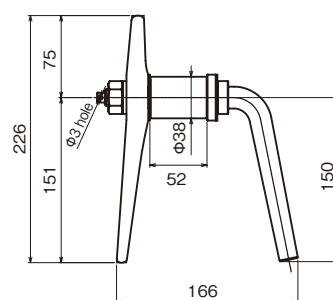




Door Clip Type B

| No. | Unit weight (g) |
|--------|-----------------|
| AK4900 | 1,550 |

* Material: SUS304,
Inner handle = SCS13

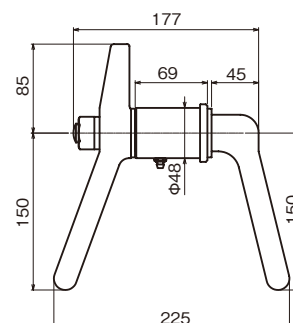


Door Clip Type JIS

| No. | Unit weight (g) |
|--------|-----------------|
| AK4903 | 3,070 |

* Material: SUS304 Inner, outer handle = SCS14 (equivalent to SUS316) Bush/washer/grease nipple = brass

* Weathertight door clip B type (JIS F 2316)

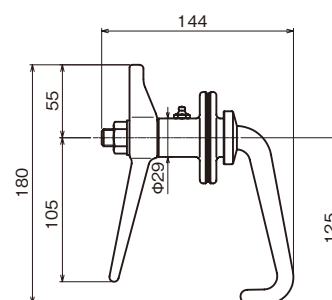


Door Clip Type N

| No. | Unit weight (g) |
|--------|-----------------|
| AK4901 | 1,000 |

* Material: SCS14 (equivalent to SUS316), Nut/screw = SUS304

* Available for door boards up to 4mm thick.

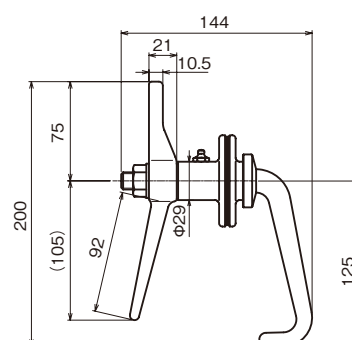


Door Clip Type N(S)

| No. | Unit weight (g) |
|--------|-----------------|
| AK4906 | 1,020 |

* Material: SCS14 (equivalent to SUS316), Nut/screw = SUS304

* Available for door boards up to 4mm thick.



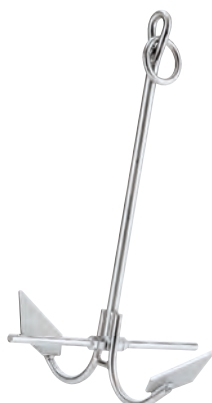
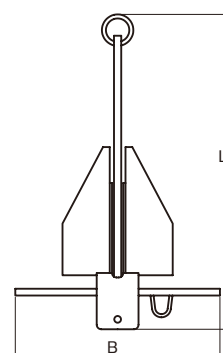


Danforth Anchor

| No. | L (mm) | B (mm) | Unit weight (kg) |
|--------|-----------|-----------|---------------------|
| AK3082 | 440 | 370 | 3.5 |
| AK3083 | 520 | 400 | 5 |
| AK3084 | 600 | 450 | 7 |

* Material: SUS304

* This product is made to order.

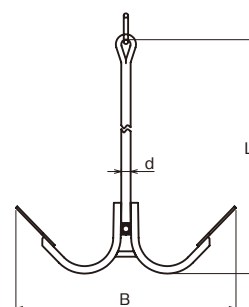


Kedge Anchor

| No. | d (mm) | L (mm) | B (mm) | Unit weight (kg) |
|--------|-----------|-----------|-----------|---------------------|
| AK3030 | 22 | 540 | 419 | 3.5 |
| AK3031 | 22 | 700 | 508 | 5 |
| AK3032 | 25 | 870 | 573 | 7 |
| AK3033 | 28 | 990 | 653 | 10 |
| AK3034 | 28 | 1,150 | 697 | 12 |
| AK3035 | 32 | 1,260 | 815 | 15 |
| AK3036 | 36 | 1,500 | 875 | 20 |

* Material: SUS304

* This product is made to order.

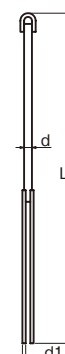


Four-Forked Anchor for Free Forming

| No. | d (mm) | d1 (mm) | L (mm) | Unit weight (kg) |
|--------|-----------|------------|-----------|---------------------|
| AK3040 | 19 | 8 | 798 | 1.6 |
| AK3041 | 22 | 8 | 821 | 2 |
| AK3042 | 23 | 8 | 983 | 2.5 |
| AK3043 | 25 | 8 | 995 | 3 |
| AK3044 | 28 | 8 | 1,021 | 3.5 |
| AK3045 | 32 | 8 | 1,175 | 5 |
| AK3046 | 36 | 9 | 1,282 | 7 |
| AK3047 | 40 | 10 | 1,506 | 10 |

* Material: SUS304

* This product is made to order.



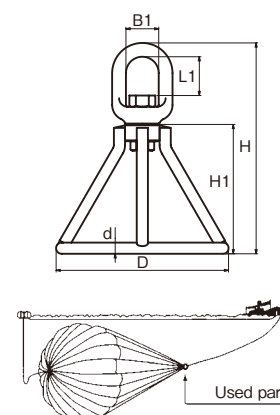
Sea Anchor

| No. | Size | d (mm) | L1 (mm) | B1 (mm) | H (mm) | H1 (mm) | D (mm) | Unit weight (kg) | Working load (mm) |
|---------|------|-----------|------------|------------|-----------|------------|-----------|---------------------|----------------------|
| AK4101 | 6 | 5 | 17 | 16 | 93 | 60 | 75 | 0.12 | 130 |
| AK4102 | 8 | 6 | 20 | 20 | 122 | 75 | 100 | 0.24 | 250 |
| AK4103 | 9 | 8 | 22 | 22 | 136 | 85 | 115 | 0.4 | 290 |
| AK4104 | 10 | 9 | 27 | 24 | 154 | 95 | 125 | 0.64 | 300 |
| AK4105 | 13 | 10 | 35 | 31 | 196 | 120 | 160 | 1.07 | 600 |
| AK4106 | 16 | 13 | 45 | 38 | 244 | 150 | 200 | 2.09 | 1,000 |
| AK4107 | 19 | 16 | 50 | 42 | 294 | 180 | 235 | 3.6 | 1,600 |
| AK4108 | 22 | 19 | 52 | 47 | 328 | 205 | 275 | 5.7 | 2,100 |
| AK4109 | 25 | 22 | 67 | 63 | 380 | 235 | 310 | 9 | 2,600 |
| AK18050 | 28 | 25 | 73 | 70 | 430 | 260 | 345 | 13.4 | 3,200 |

* Material: SUS304, Swivel = SCS13(equivalent to SUS304)

* Do not use under conditions of constant rotation.

* AK18050 is made to order.

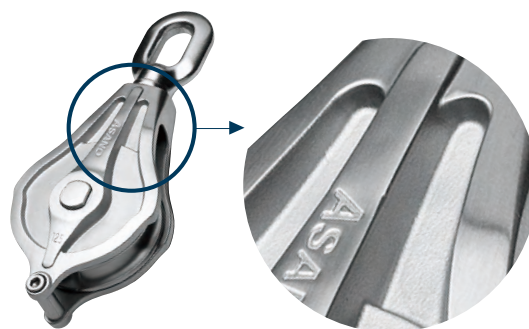


Stainless Steel Block

FEATURE 01

Best balance of strength and lightweight properties

Many of ASANO's blocks use stainless steel casting-integrated bodies. The carefully crafted main bodies, e.g. ribs, are created in sections requiring strength, to which force is applied so that such sections develop strength, lightness, and compact characteristics simultaneously. This stainless steel pulley block provides the best balanced combination of functionality and safety based on our manufacturing experience and technologies, which satisfies professional requirements.

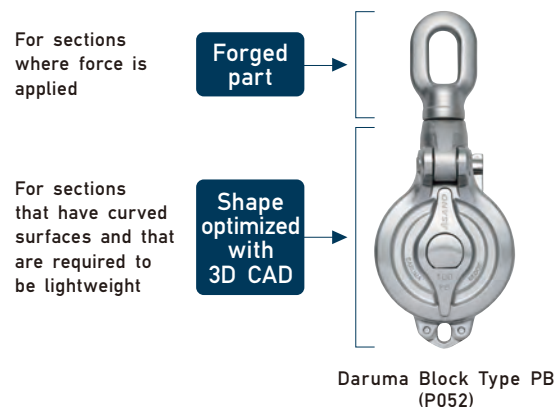


AK Block Type PB II (P060)

FEATURE 02

Combinations of parts suited to product characteristics

ASANO excels at designing products with unique shapes with high degrees of freedom. For blocks, the shape of the main body, which requires a light weight and a curved surface for practical use, is optimized with a 3D CAD system; the swiveling sections, which must be particularly strong for suspension and other uses, are made with forged parts. As a result, these difficult-to-combine requirements — compact and lightweight, yet incredibly strong — have been achieved at a high level.

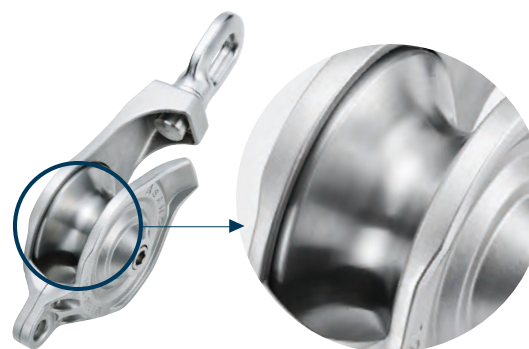


Daruma Block Type PB (P052)

FEATURE 03

Design that prevents nets and ropes from becoming entangled and damaged

A structure in which both ends of the sheave are fitted into the main body eliminates the clearance between the sheave and main body and prevents ropes and nets from getting caught. ASANO has paid extremely high attention to detail in this original design that does not damage tools. In addition, for blocks with wide sheaves, sufficient space is provided between the main body and sheave to allow thick ropes to easily pass through.



Wide Sheave Wani-Block (P072)



FEATURE

04

Smooth sheave rotation and captive pin

The high speed rotation performance of the sheave is important depending on where the block is used. ASANO's blocks containing bearings have shield bearings to ensure smooth rotation even after the blocks have been used for an extended period of time. In addition, the end of the bolt that secures the sheave pin are caulked in order to securely fix the bolt. This prevents bolts from unexpectedly coming loose and sheaves from coming off.



Hanging Roller Type PB (P070)

FEATURE

05

Superior seawater resistance thanks to special stainless steel



Realizing that many blocks are used in extreme environments such as on ships and at harbors, many block products are manufactured from special stainless steel. This special stainless steel is highly resistant to seawater, and offers superior corrosion- and abrasion-resistant characteristics. This extends the product life which subsequently reduces costs.

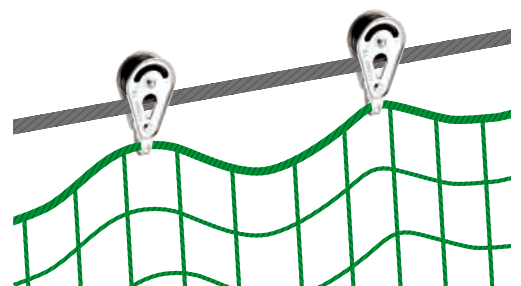


FEATURE

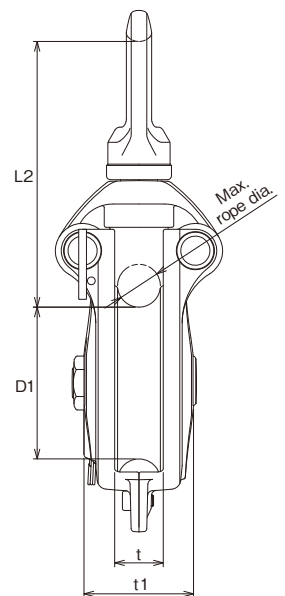
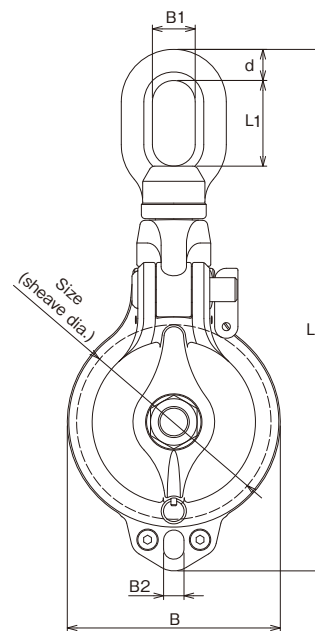
06

Compact block with an important role

ASANO's blocks are not only used at sea. The blocks also play important roles on land. The block lineup includes compact products such as the "AK Block Type S" and the "Mini-Block". These products have been used for partition nets in gymnasiums and safety nets laid on the ground. When these blocks are used, nets can be easily opened and closed.



Mini-Block



Daruma Block Type PB, Single Sheave (with Bearing)



| No. | Size (sheave dia.) (mm) | No. of sheaves | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|--------|-------------------------------|-------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|-----------------------------|----------------|------------------------|------------------------------|
| AK1691 | 100 | 1 | 22 | 16 | 268 | 44 | 137 | 78 | 110 | 22 | 10.5 | 25 | 56 | 5 | 6304 | 2.6 | 1.6 |

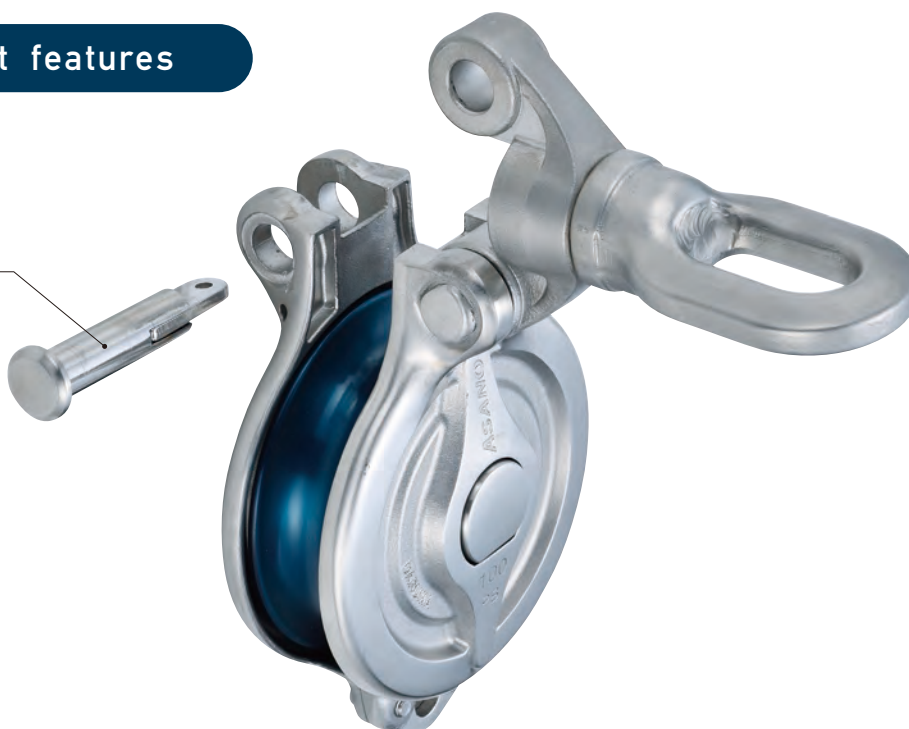
* Material: Special stainless steel, Sheave = SCS1 (equivalent to SUS410), Sheave pin/swivel/swivel pin/toggle pin/stopper pin = SUS304

* The working load does not apply to the becket part. * The working load conforms to the working load of the bearings.

* This product contains two steel bearings with rubber seals.

Product features

Toggle pin

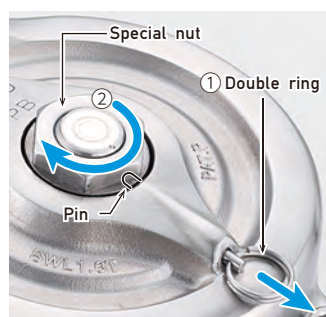


Measures against loose nuts

- The invented special nut offers loose nut preventive function.

- ① Pull the double ring.
- ② Turn the special nut while pulling the ring.

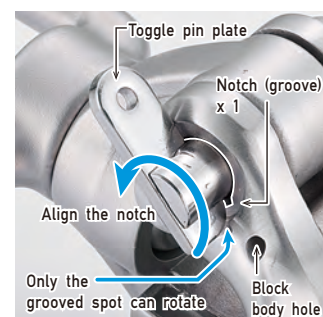
*The pin will be released only by pulling the double ring. The pin will be caught when turning the special nut without pulling it. Be sure to keep pulling when turning.



Measures against toggle pin release

- The toggle pin can be removed only when the toggle pin plate is aligned with the notch (groove). This is to prevent the unintended release of the toggle pin.

- Vibrations may cause unintentional position alignment. To prevent this, bind the holes on the toggle pin plate and block body with a wire.



V sheave type

The V-shaped sheave is developed for the wire rope. The wire rope fits well because of this V-shaped groove.



[V sheave type]

| No. | Size (sheave dia.) (mm) | No. of sheaves | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|--------|-------------------------------|-------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|-----------------------------|----------------|------------------------|------------------------------|
| AK1690 | 75 | 1 | 16 | 14.5 | 214 | 38 | 111 | 59 | 83 | 19 | 8.5 | 21 | 45 | 4 | 6202 | 1.3 | 0.7 |
| AK1696 | 100 | 1 | 16 | 16 | 268 | 44 | 134 | 84 | 110 | 22 | 10.5 | 25 | 56 | 5 | 6304 | 2.6 | 1.6 |

* Material: Special stainless steel, Sheave = SCS1 (equivalent to SUS410), Sheave pin/swivel/swivel pin/toggle pin/stopper pin = SUS304

* The working load does not apply to the becket part. * The working load conforms to the working load of the bearings.

* This product contains two steel bearings with rubber seals.



[Single sheave]

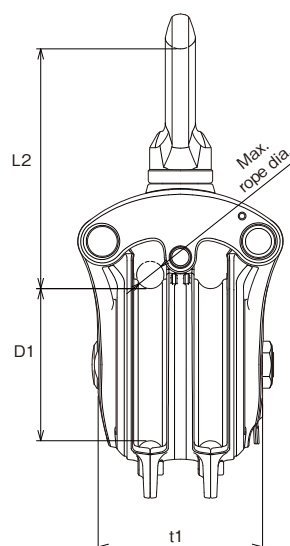
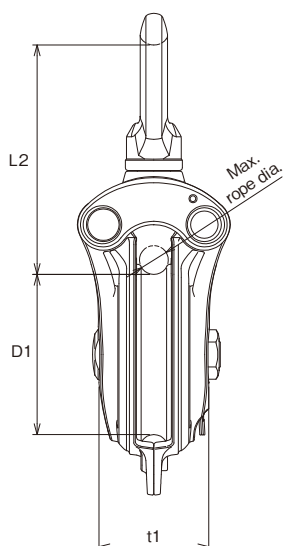
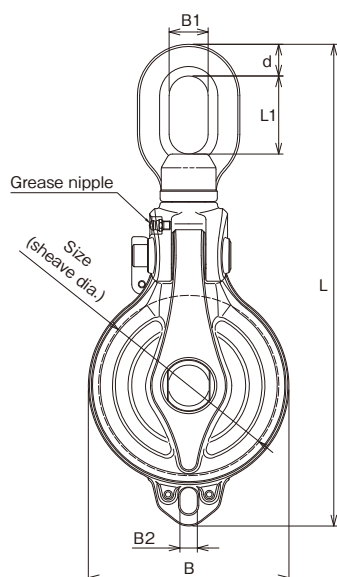


[Double sheave]

Heavyduty Block Type PB (with Bearing)



| No. | Size (sheave dia.) (mm) | No. of sheaves | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | t1 (mm) | Hex. wrench dia. (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|--------|-------------------------------|-------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|------------|-----------------------------|----------------|------------------------|------------------------------|
| AK1854 | 125 | 1 | 20 | 22 | 334 | 54 | 159 | 111 | 139 | 27 | 12 | 76 | 5 | 6207 | 6.2 | 2.5 |
| AK1855 | 150 | 1 | 20 | 25.5 | 389 | 58.5 | 182 | 132 | 167 | 30 | 12.5 | 87 | 6 | 6209 | 9.8 | 3.0 |
| AK1856 | 175 | 1 | 24 | 29 | 444 | 66 | 205 | 155 | 192 | 34 | 13.5 | 96.5 | 6 | 6210 | 13.8 | 3.5 |
| AK1864 | 125 | 2 | 20 | 25.5 | 353 | 58.5 | 175 | 111 | 139 | 30 | 12 | 120 | 5 | 6207 | 10 | 2.5 |



* Material: Special stainless steel,
Sheave pin/swivel/swivel pin/toggle
pin/stopper pin = SUS304, Grease
nipple= SUS303

* The working load does not apply to
the becket part.

* The working load conforms to the
working load of the bearings.

* This product contains two steel
bearings with rubber seals.

Product features



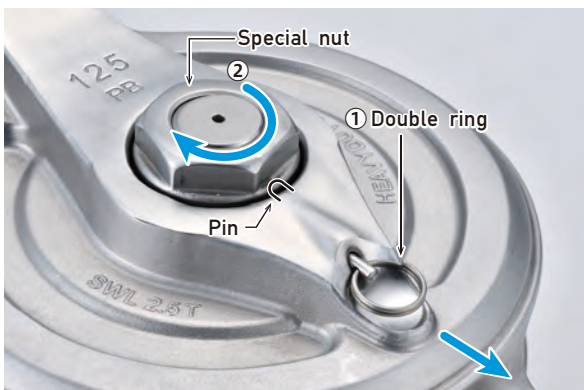
Bearings for smooth rotation

This new model has two sets of bearings with rubber seals. This helps the rotation stability of the sheave under heavy loads, and improves workability at sea.



New mechanism for double sheave model

Partition plate between the sheave can be fixed with pin to the arm. This improves the strength and stability.



Measures against loose nuts

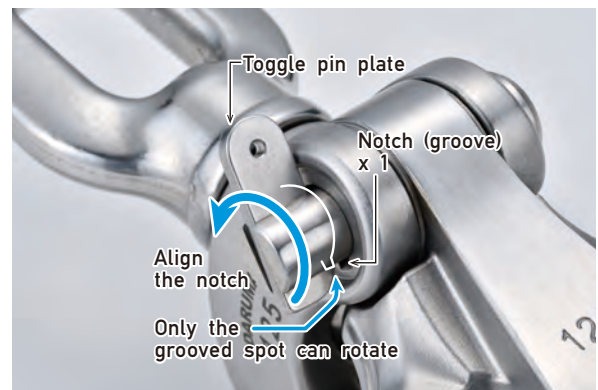
- The invented special nut offers loose nut preventive function.
- ① Pull the double ring.
- ② Turn the special nut while pulling the ring.

* The pin will be released only by pulling the double ring. The pin will be caught when turning the special nut without pulling it. Be sure to keep pulling when turning.



A double arm for the top part

This special design assures safety and reliability while distributing the applied load.



Measures against toggle pin release

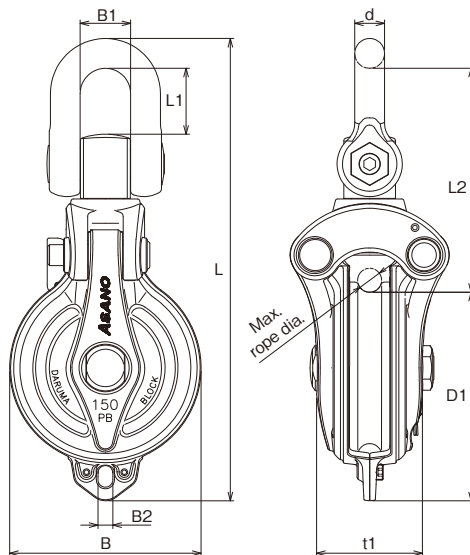
- The toggle pin can be removed only when the toggle pin plate is aligned with the notch (groove). This is to prevent the unintended release of the toggle pin.
- Vibrations may cause unintentional position alignment. To prevent this, bind the holes on the toggle pin plate and block body with a wire.



Product features



A double arm for the top part and a rib structure in the center of the main body distributes the applied load to assure safety and reliability.



The thickness of the sheave pin socket has been widened to improve strength and safety. To prevent the sheave pin nut from loosening, we have newly adopted a stopper pin unit.

Heavyduty Block Type PB-SII (with Bearing)



| No. | Size (sheave dia.) (mm) | No. of sheaves | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | t1 (mm) | Hex. wrench dia. (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|--------|-------------------------------|-------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|------------|--------------------------|----------------|------------------------|------------------------------|
| AK1875 | 150 | 1 | 21 | 26 | 403 | 57 | 195 | 182 | 167 | 44 | 13 | 92 | 6 · 10 · 14 | 6211 | 13.7 | 5.0 |

* Material: Special stainless steel, Sheave pin / swivel pin / arm pin = SUS304, Grease nipple = SUS303

* The working load does not apply to the becket part. * The working load conforms to the working load of the bearings.

* This product contains two steel bearings with rubber seals.



Product features



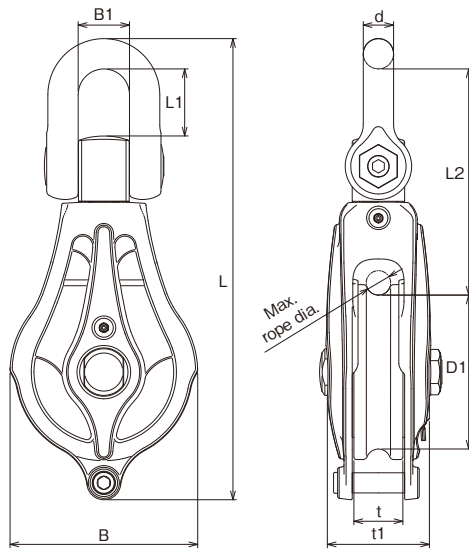
In order to improve the strength and safety, the pin diameter of the shackle is increased and the sheave pin socket is widened.



This newly developed model uses two bearings to improve the stability during sheave rotation. At the same time, bearings with higher strength are used to match the working load limit.



The grease nipple has been updated to SUS303, while the current model is made of brass. Furthermore, it is now possible to lubricate the bearings.



Tough Block Type PB-II (with Bearing)



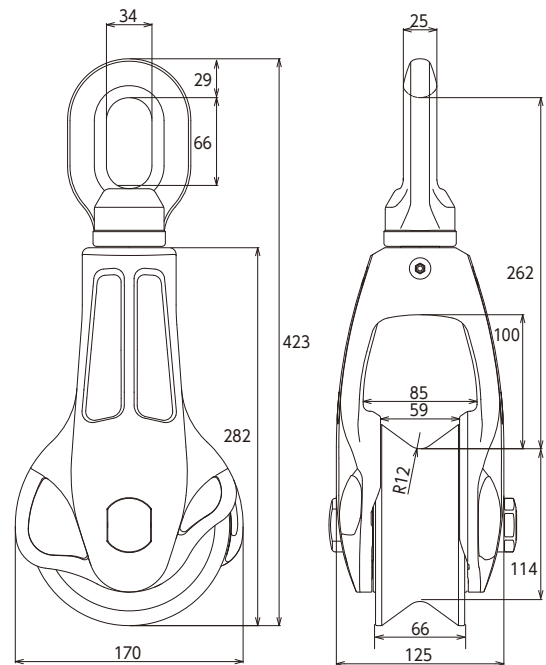
| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | B1 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|--------|-------------------------------|---------------------------|-----------|-----------|------------|------------|-----------|------------|-----------|------------|-----------------------------|----------------|------------------------|------------------------------|
| AK1885 | 125 | 21 | 23 | 346 | 50 | 175 | 134 | 38 | 37 | 76 | 8 · 14 | 6208 | 7.1 | 3.0 |
| AK1890 | 125 | 26 | 23 | 346 | 50 | 175 | 134 | 38 | 37 | 76 | 8 · 14 | 6208 | 7.0 | 3.0 |
| AK1886 | 150 | 21 | 26 | 396 | 57 | 194 | 161 | 44 | 42 | 87 | 10 · 14 | 6211 | 11.9 | 5.0 |
| AK1891 | 150 | 30 | 26 | 396 | 57 | 194 | 161 | 44 | 42 | 87 | 10 · 14 | 6211 | 11.4 | 5.0 |
| AK1887 | 175 | 25 | 29 | 456 | 62 | 222 | 187 | 50 | 45 | 96 | 12 · 14 | 6212 | 16.1 | 6.0 |
| AK1892 | 175 | 32 | 29 | 456 | 62 | 222 | 187 | 50 | 45 | 96 | 12 · 14 | 6212 | 16.6 | 6.0 |

* Material: Special stainless steel, Sheave pin / swivel pin = SUS304, Grease nipple = SUS303

* The working load conforms to the working load of the bearings.

* This product contains two steel bearings with rubber seals.

Assuming the use with metal wire rope or textile rope, two types of the sheave with different maximum rope diameter are available for each size.



Tough Hanging Roller Type II (with Bearing)



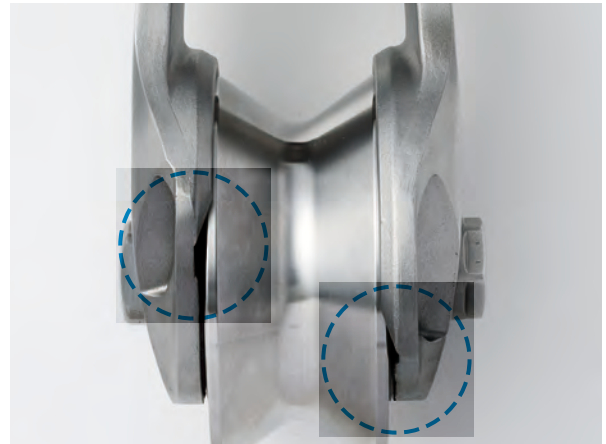
| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|---------|-------------------------------|---------------------------|----------------|------------------------|------------------------------|
| AK10065 | 150 | 32 | 6308 | 11.8 | 5.0 |

- * Material: Special stainless steel, Swivel/swivel pin/sheave pin = SUS304, Grease nipple = SUS303
- * The working load conforms to the working load of the bearings.
- * This product contains two steel bearings with rubber seals.

Product features



Small metal fittings like the Snap Hook/ISH (P010) can pass through. (Refer to P007, usage example K.)



Changing the horizontal width of the main body prevents even metal fittings from getting caught when hoisting. The sheave is also designed to be in the main body to prevent ropes from being caught.



The wider space between the body and the sheave allows ropes and fittings to pass through.



The bolt edge of the sheave pin is tightly fixed through crimping.



Swivel grease nipple

Use a grease gun to lubricate.

* Use a grease gun with a nozzle size that is smaller than the inner diameter of the lubrication section.



AK Block Type PB (with Bearing)

AK Block Type PB (with Stainless Bearing)



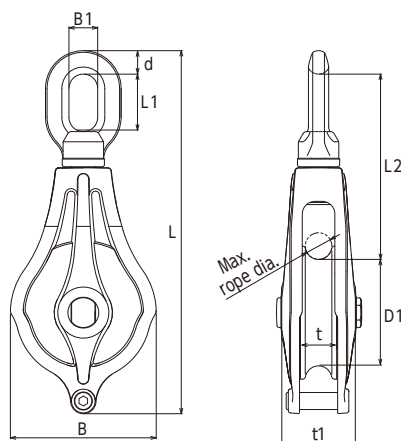
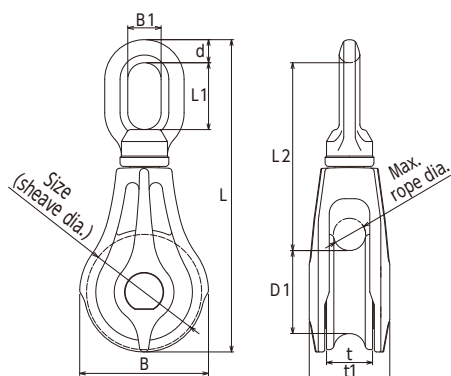
[With bearing]

| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | t (mm) | t1 (mm) | Bearing No. | Unit weight (kg) | Working load limit (kg) |
|--------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|-------------|------------------------|-------------------------------|
| AK1680 | 50 | 14 | 10 | 136 | 29 | 82 | 36 | 56 | 14 | 20 | 35 | 6000 | 0.5 | 400 |
| AK1681 | 75 | 16 | 14.5 | 194 | 38 | 111 | 59 | 81 | 19 | 24 | 44 | 6002 | 1.3 | 600 |
| AK1682 | 100 | 22 | 16 | 243 | 44 | 137 | 78 | 106 | 22 | 28 | 50 | 6203 | 2.5 | 1,000 |

[With stainless steel bearing]

| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | t (mm) | t1 (mm) | Bearing No. | Unit weight (kg) | Working load limit (kg) |
|---------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|-------------|------------------------|-------------------------------|
| AK10300 | 50 | 14 | 10 | 136 | 29 | 82 | 36 | 56 | 14 | 20 | 35 | 6000 | 0.5 | 400 |
| AK10301 | 75 | 16 | 14.5 | 194 | 38 | 111 | 59 | 81 | 19 | 24 | 44 | 6002 | 1.3 | 600 |
| AK10302 | 100 | 22 | 16 | 243 | 44 | 137 | 78 | 106 | 22 | 28 | 50 | 6203 | 2.5 | 1,000 |

- The sheave is designed to be in the main body to prevent the ropes from being caught.
 - The bolt used for connecting the swivel is one size thicker than those of previous blocks for greater strength.
- * Material: Special stainless steel, Swivel/swivel pin/sheave pin/nut = SUS304
 * The working load conforms to the working load of the bearings. (This product contains two bearings.)



The bolt edge of the sheave pin is tightly fixed through crimping.



AK10074 has grease nipples on the body.

AK Block Type PB II (with Bearing)



| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|---------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|-----------------------------|----------------|------------------------|------------------------------|
| AK10073 | 125 | 25 | 22 | 341 | 52 | 174 | 100 | 137 | 27 | 34 | 69 | 8 | 62/28 | 4.9 | 1.5 |
| AK10074 | 150 | 30 | 25.5 | 397 | 58.5 | 197 | 120 | 163 | 30 | 38 | 95.5 | 10 | 6207 | 7.5 | 2.5 |

- * Material: Special stainless steel, Swivel/swivel pin/sheave pin/bucket bolt/bucket collar = SUS304
 * The working load conforms to the working load of the bearings. * This product contains two steel bearings with rubber seals.



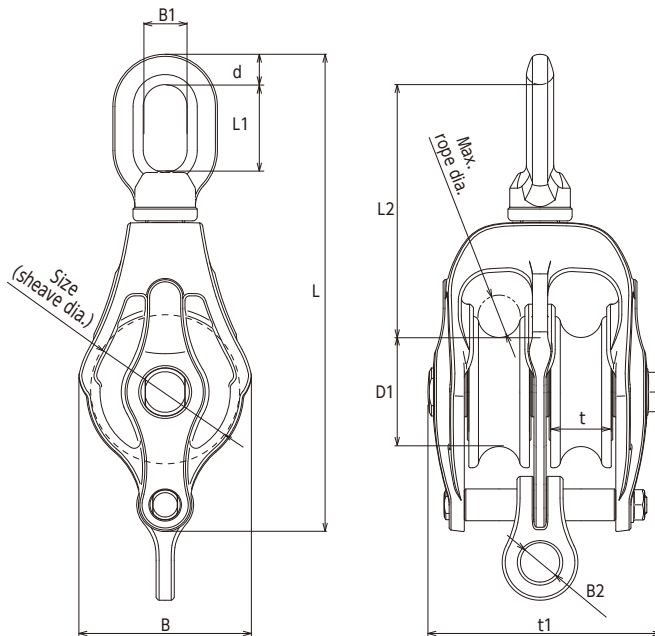
Product features



A becket unique to this model is used. This has been designed for safety and is stronger than becketts used for existing models.



The design of the sheave pin socket has been widened to improve the strength of the main body. The bearings in the sheave facilitate smooth rotation.



The bolt edges of the sheave and becket pins are firmly fixed through crimping to prevent them from loosening.

AK Block Type PB Double Sheave (with Stainless Bearing)



| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | t (mm) | t1 (mm) | Bearing No. | Unit weight (kg) | Working load limit (kg) |
|---------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|----------------|------------------------|-------------------------------|
| AK10310 | 50 | 14 | 10 | 158 | 29 | 83.5 | 36 | 57 | 14.5 | 13 | 20 | 77 | 6000 | 0.95 | 400 |
| AK10311 | 75 | 16 | 14.5 | 229 | 37.5 | 117 | 59 | 84 | 19 | 16.5 | 24 | 94 | 6002 | 2.35 | 600 |
| AK10312 | 100 | 22 | 16 | 282 | 43 | 141.5 | 78 | 109 | 22 | 19.5 | 28 | 110.5 | 6203 | 4.35 | 1,000 |

* Material: Special stainless steel, Swivel/sheave pin/becket pin/becket pin cover = SUS304

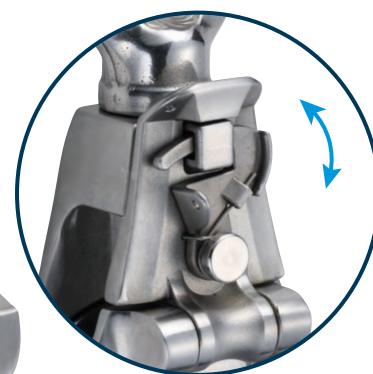
* The working load conforms to the working load of the bearings. * This product contains two stainless steel bearings with rubber seals.

AK Snatch Block Type PB



Product features

The hook-type snatch enables smooth rope insertion and extraction. Additionally, the new hook design is shaped to be easy to handle with fingers, which allows for quick opening and closing and helps improve work efficiency.



Designed to help prevent accidental hook release

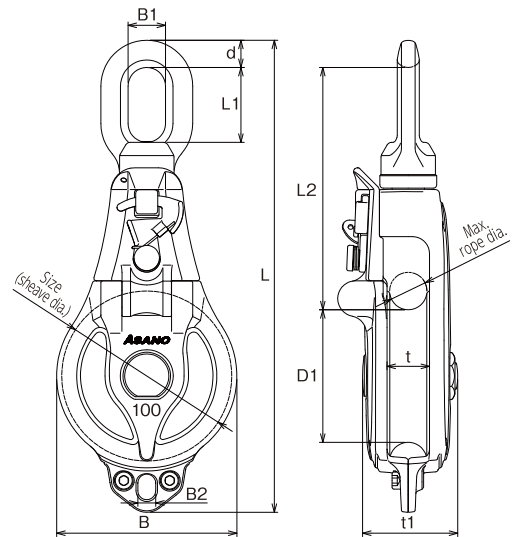
The hook and the body each have a hole through which a wire can be threaded, to fix the hook to the body and prevent accidental release.



Double-shielded bearing

This block features a ball bearing for stabler sheave rotation compared to our existing snatch blocks that use bushing (AK Snatch Block Type III-A with eye top or forged hook top; see P069).



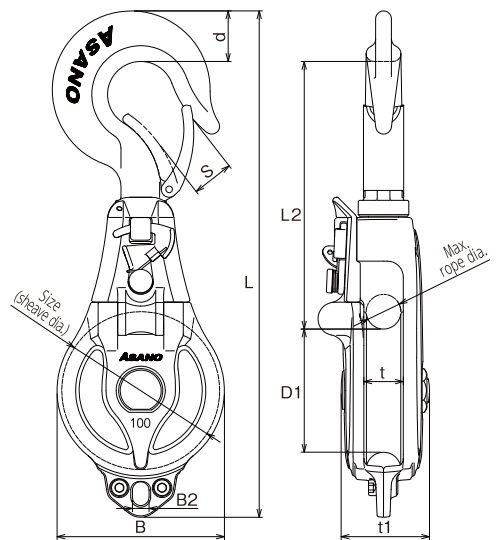


AK Snatch Block Type PB with Eye Top (with Stainless Bearing)



| | Size (sheave dia.) (mm) | No. of sheaves | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (kg) |
|---------|-------------------------------|-------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|-----------------------------|------------------------|-------------------------------|
| AK10201 | 75 | 1 | 16 | 14.5 | 221 | 38 | 115 | 59 | 81 | 19 | 8.5 | 21 | 47 | 5 | 1.5 | 500 |
| AK10202 | 100 | 1 | 22 | 16 | 278 | 44 | 143 | 78 | 106 | 22 | 10.5 | 25 | 56 | 5 | 2.7 | 1,000 |

* Material: Special stainless steel, Swivel/swivel pin/sheave pin = SUS304
 * The working load does not apply to the becket part. * The working load conforms to the working load of the bearings.
 * This product contains two stainless steel bearings with rubber seals.



AK Snatch Block Type PB with Forged Hook Top (with Stainless Bearing)



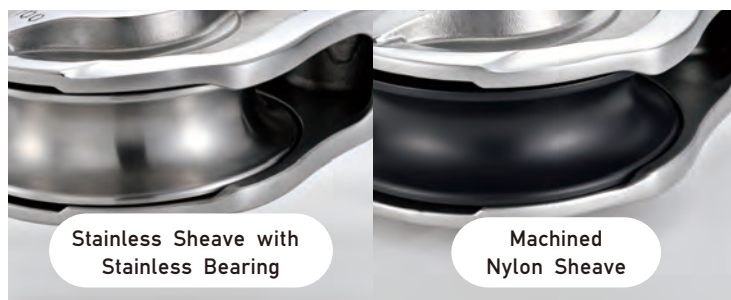
| No. | Size (sheave dia.) (mm) | No. of sheaves | Max. rope dia. (mm) | d (mm) | L (mm) | L2 (mm) | D1 (mm) | B (mm) | B2 (mm) | S (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (kg) |
|---------|-------------------------------|-------------------|---------------------------|-----------|-----------|------------|------------|-----------|------------|-----------|-----------|------------|-----------------------------|------------------------|-------------------------------|
| AK10206 | 75 | 1 | 16 | 22 | 243 | 130 | 59 | 81 | 8.5 | 18 | 21 | 47 | 5 | 1.7 | 500 |
| AK10207 | 100 | 1 | 22 | 32 | 321 | 170 | 78 | 106 | 10.5 | 26.5 | 25 | 56 | 5 | 3.2 | 1,000 |

* Material: Special stainless steel, Hook/sheave pin = SUS304
 * The working load does not apply to the becket part. * The working load conforms to the working load of the hook.
 * This product contains two stainless steel bearings with rubber seals.

AK Block Type PB-S

The "AK Block Type PB-S" series is a model that has been developed for use with aquaculture nets. In particular, a model with a machined nylon sheave provides durability even when it is soaked in seawater.

Product features



Two types of sheaves are available in the product lineup, allowing you to select an appropriate sheave suitable for your purposes. Nylon MC801 used for the nylon sheave has excellent weather and abrasion resistance.



The product is designed so that the pins and nuts are flush with the main body surface. In addition, sharp edges and corners of the main body are rounded to ensure the design is easy on ropes and nets.



A structure in which both ends of the sheave are fitted into the main body prevents ropes from getting caught.

The main body has a compact integrated structure that provides superior strength. In addition, the material used for the product, with the exception of the nylon sheave, is special stainless steel that is widely used for industrial components such as seawater pumps due to its improved abrasion and corrosion resistance.

Example of combination use

The product can be used in combination with ASANO's 16 mm Purse Shackle (P077).



In addition, the product can also be combined with 16 mm Quick Link or 16 mm Swivel (Jaw & Jaw). Please refer to our web site for the products.





AK Block Type PB-S

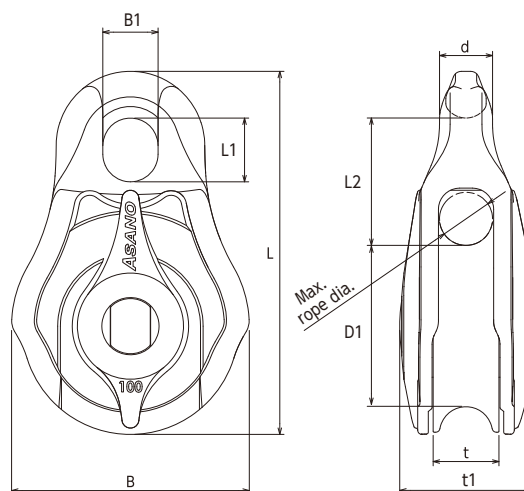
(Stainless Sheave with Stainless Bearing)



| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | t (mm) | t1 (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|---------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|----------------|------------------------|------------------------------|
| AK10362 | 100 | 25 | 25 | 171 | 30 | 60 | 76 | 112 | 26 | 31 | 63.5 | 6203 | 2.1 | 1.0 |

* Material: Special stainless steel * The working load conforms to the working load of bearings.

* This product contains two stainless steel bearings with rubber seals.



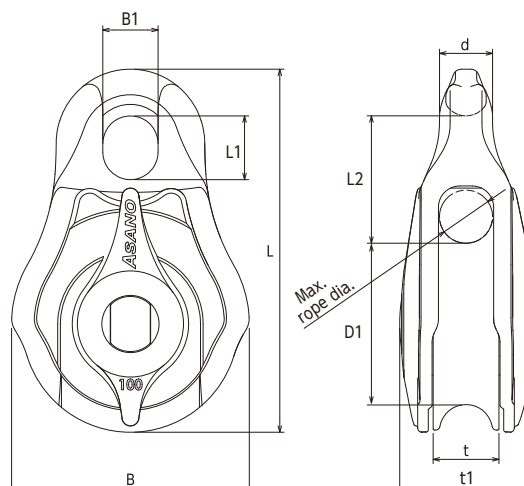
AK Block Type PB-S

(Machined Nylon Sheave)



| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | t (mm) | t1 (mm) | Unit weight (kg) | Working load limit (t) |
|---------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|------------------------|------------------------------|
| AK10372 | 100 | 25 | 25 | 171 | 30 | 60 | 76 | 112 | 26 | 31 | 63.5 | 1.6 | 1.0 |

* Material: Special stainless steel, Sheave = MC801 Nylon



AK Block Type III-A

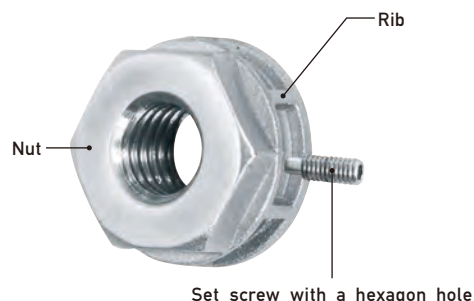
There are three types in the AK Block Type III-A series: the eye type, the hook type, and the snatch type. In addition, there are single sheave types and double sheave types.



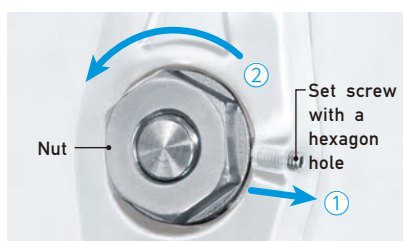
Product features

Improved nut loosening prevention

Ribs are designed into the nut, and a set screw is fixed between the ribs. When the nut is loosened, the rib runs into the set screw, making the nut harder to loosen.



How to remove



When removing, ① remove the set screw first, and then ② remove the nut.

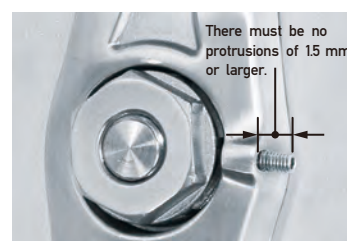
⚠ Caution: If you attempt to remove the nut first, the tip of the set screw will bend and become unremovable.

How to mount



When mounting, ① tighten the nut first, and then ② screw the set screw.

⚠ Caution: Do not use products if the set screw is protruding 1.5 mm or more. Doing so will cause the nut to come loose and come off, and may cause parts and/or hoisted loads to fall resulting in an accident.



If the set screw hits a rib, it will not go all the way in and will protrude 1.5 mm or more. In this case, loosen the nut to move the rib out of the way, and then screw in the set screw all the way.

Adopts a hook-type snatch

Allows fast open and close operation.

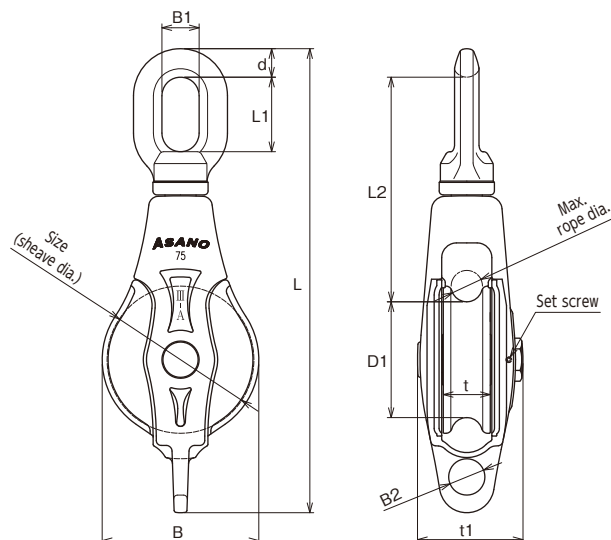


Improved usability of ropes

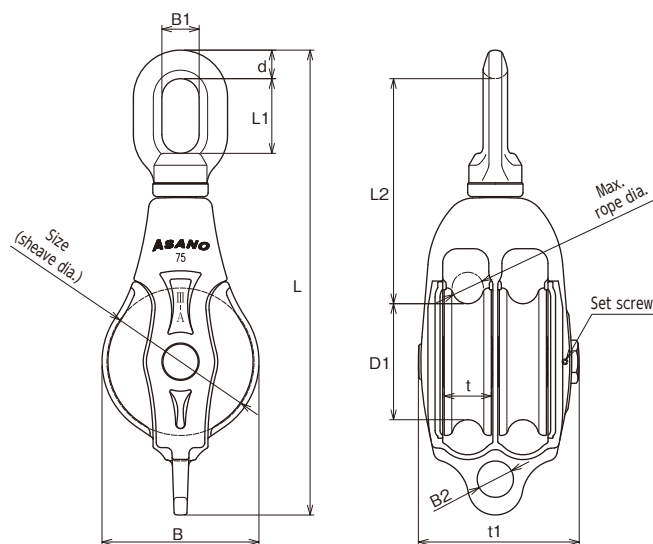
Taking the maximum rope diameter for each size into consideration, the space below the sheave and the bucket diameter are enlarged to improve usability. It enables broader use in more situations.



[Single sheave]



[Double sheave]



AK Block Type III-A, Single / Double Sheave (with Eye Top)



| No. | Size (sheave dia.) (mm) | No. of sheaves | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (kg) |
|---------|-------------------------------|-------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|-----------------------------|------------------------|-------------------------------|
| AK10141 | 75 | 1 | 16 | 14.5 | 237 | 38 | 115 | 59 | 80 | 19 | 18 | 24 | 54 | 1.5 | 1.2 | 500 |
| AK10146 | 75 | 2 | 16 | 14.5 | 237 | 38 | 115 | 59 | 80 | 19 | 18 | 24 | 82 | 1.5 | 1.6 | 500 |
| AK10142 | 100 | 1 | 22 | 16 | 297 | 44 | 143 | 78 | 108 | 22 | 23 | 28 | 62 | 1.5 | 2.2 | 1,000 |
| AK10147 | 100 | 2 | 22 | 16 | 297 | 44 | 143 | 78 | 108 | 22 | 23 | 28 | 95 | 1.5 | 3.1 | 1,000 |
| AK10143 | 125 | 1 | 25 | 22 | 364 | 54 | 174 | 100 | 135 | 27 | 26 | 32 | 73 | 2 | 4.0 | 1,200 |
| AK10148 | 125 | 2 | 25 | 22 | 364 | 54 | 174 | 100 | 135 | 27 | 26 | 32 | 111 | 2 | 5.7 | 1,200 |
| AK10144 | 150 | 1 | 30 | 25.5 | 433 | 60 | 204 | 120 | 160 | 30 | 31 | 38 | 82 | 3 | 6.0 | 2,500 |
| AK10149 | 150 | 2 | 30 | 25.5 | 433 | 60 | 204 | 120 | 160 | 30 | 31 | 38 | 130 | 3 | 9.0 | 2,500 |

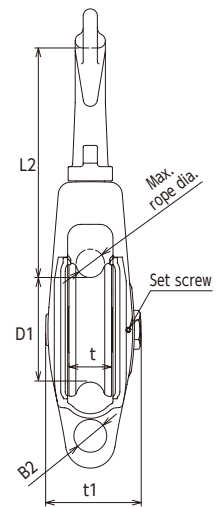
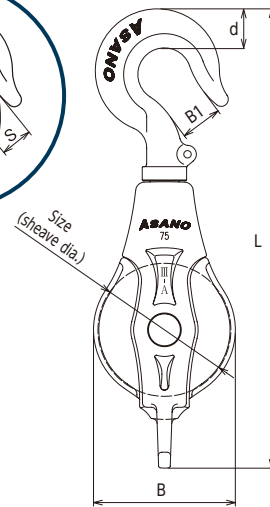
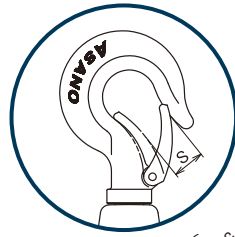
* Material: Special stainless steel, Sheave = SCS13 (equivalent to SUS304)

Swivel/side plate/sheave pin/set screw with a hexagon hole = SUS304, Oil impregnated bush = bronze

[Single sheave]



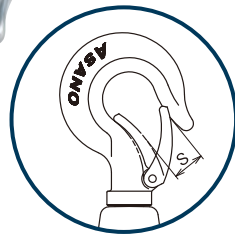
with latch



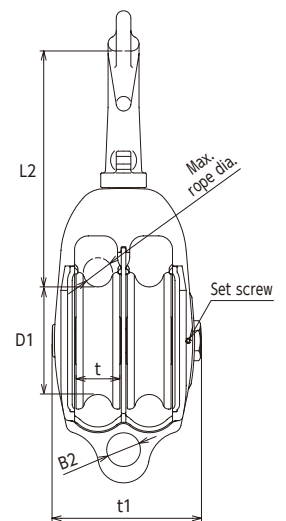
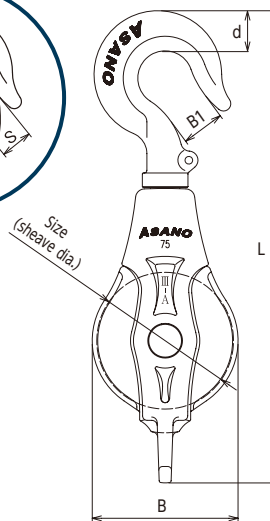
[Double sheave]



with latch



Hooks with latches are also available.



AK Block Type III-A, Single / Double Sheave (with Forged Hook Top)



| Without latch No. | With latch No. | Size (sheave dia.) (mm) | No. of sheaves | Max. rope dia. (mm) | d (mm) | L (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | S (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (kg) |
|--------------------|----------------|-------------------------|----------------|---------------------|--------|--------|---------|---------|--------|---------|---------|--------|--------|---------|-----------------------|------------------|-------------------------|
| AK10151 | AK10181 | 75 | 1 | 16 | 22 | 259 | 129 | 59 | 80 | 23 | 18 | 18 | 24 | 54 | 1.5 | 1.25 | 500 |
| AK10156 | AK10186 | 75 | 2 | 16 | 22 | 259 | 129 | 59 | 80 | 23 | 18 | 18 | 24 | 82 | 1.5 | 1.80 | 500 |
| AK10152 | AK10182 | 100 | 1 | 22 | 32 | 340 | 170 | 78 | 108 | 30 | 23 | 26.5 | 28 | 62 | 1.5 | 2.70 | 1,000 |
| AK10157 | AK10187 | 100 | 2 | 22 | 32 | 340 | 170 | 78 | 108 | 30 | 23 | 26.5 | 28 | 95 | 1.5 | 3.75 | 1,000 |
| NEW AK10153 | AK10183 | 125 | 1 | 25 | 36 | 395 | 191 | 100 | 135 | 37 | 26 | 30 | 32 | 73 | 2 | 4.5 | 1,200 |
| NEW AK10158 | AK10188 | 125 | 2 | 25 | 36 | 395 | 191 | 100 | 135 | 37 | 26 | 30 | 32 | 111 | 2 | 6.2 | 1,200 |

* Material: Special stainless steel, Sheave = SCS13 (equivalent to SUS304)
Hook/side plate/sheave pin/set screw with a hexagon hole = SUS304, Oil impregnated bush = bronze

AK Snatch Block Type III-A, Single Sheave (with Eye Top)

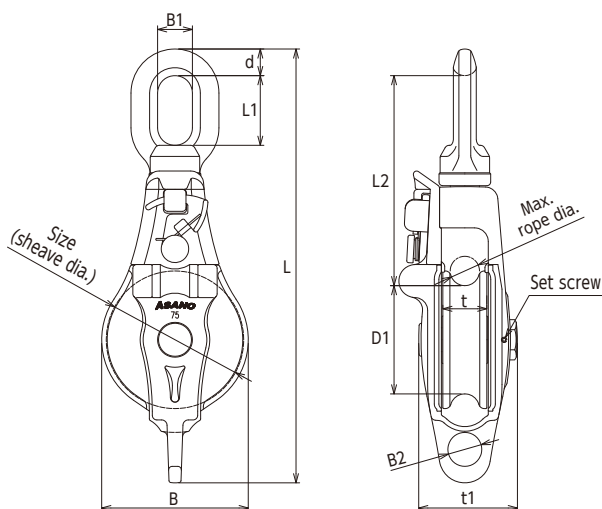


Adopts a hook-type
snatch. Allows fast
open and close
operation.

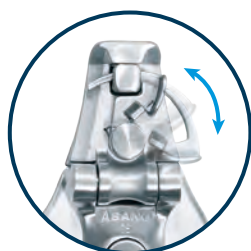
| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (kg) |
|---------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|-----------------------------|------------------------|-------------------------------|
| AK10161 | 75 | 16 | 14.5 | 237 | 38 | 115 | 59 | 80 | 19 | 18 | 24 | 54 | 1.5 | 1.3 | 500 |
| AK10162 | 100 | 22 | 16 | 297 | 44 | 143 | 78 | 108 | 22 | 23 | 28 | 62 | 1.5 | 2.4 | 1,000 |
| AK10163 | 125 | 25 | 22 | 364 | 54 | 174 | 100 | 135 | 27 | 26 | 32 | 73 | 2 | 4.4 | 1,200 |
| AK10164 | 150 | 30 | 25.5 | 433 | 60 | 204 | 120 | 160 | 30 | 31 | 38 | 82 | 3 | 6.8 | 2,500 |

* Material: Special stainless steel, Sheave = SCS13 (equivalent to SUS304)

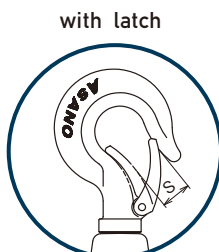
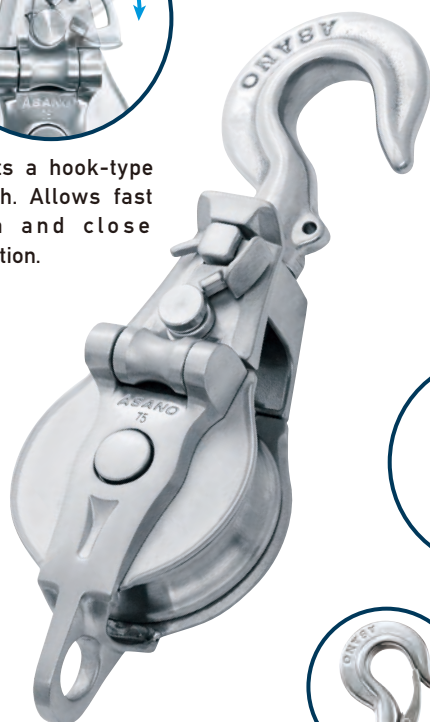
Swivel/side plate/sheave pin/set screw with a hexagon hole = SUS304, Oil impregnated bush = bronze



AK Snatch Block Type III-A, Single Sheave (with Forged Hook Top)



Adopts a hook-type
snatch. Allows fast
open and close
operation.



with latch

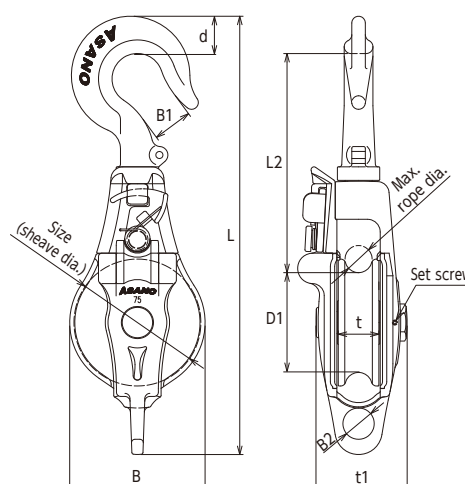


Hooks with
latches are
also available.

| Without latch No. | With latch No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | S (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (kg) |
|-------------------------|-------------------|-------------------------------|---------------------------|-----------|-----------|------------|------------|-----------|------------|------------|-----------|-----------|------------|-----------------------------|------------------------|-------------------------------|
| AK10171 | AK10191 | 75 | 16 | 22 | 259 | 129 | 59 | 80 | 23 | 18 | 18 | 24 | 54 | 1.5 | 1.40 | 500 |
| AK10172 | AK10192 | 100 | 22 | 32 | 340 | 170 | 78 | 108 | 30 | 23 | 26.5 | 28 | 62 | 1.5 | 2.85 | 1,000 |
| NEW AK10173 | AK10193 | 125 | 25 | 36 | 395 | 191 | 100 | 135 | 37 | 26 | 30 | 32 | 73 | 2 | 4.9 | 1,200 |

* Material: Special stainless steel, Sheave = SCS13 (equivalent to SUS304)

Hook/side plate/sheave pin/set screw with a hexagon hole = SUS304, Oil impregnated bush = bronze





Hanging Roller Type PB

(with Stainless Bearing)

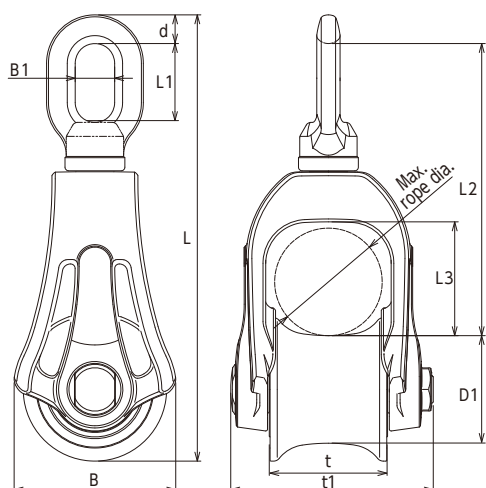


| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | D1 (mm) | B (mm) | B1 (mm) | t (mm) | t1 (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|---------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|-----------|------------|----------------|------------------------|------------------------------|
| AK10051 | 80 | 60 | 16 | 249 | 43 | 163 | 63 | 60 | 90 | 22 | 65 | 113 | 6204 | 2.8 | 1.0 |
| AK10052 | 100 | 70 | 22 | 306 | 52 | 196 | 75 | 75 | 109 | 27 | 80 | 135 | 63/22 | 4.5 | 1.3 |

* Material: Special stainless steel, Swivel/swivel pin/sheave pin = SUS304

* The working load conforms to the working load of the bearings.

* This product contains two stainless steel bearings with rubber seals.



Product features

Main body shape with visible sheave



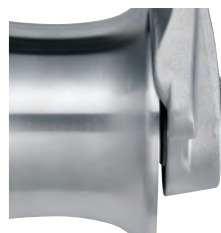
In addition to the unique shape, the sheave guard is slanted to reduce the risk of ropes being caught.

Sufficiently wide opening



The wider space between the body and the sheave allows ropes and fittings to pass through.

Improved sheave pin socket in main body



The design of the sheave pin socket was widened to improve the strength of the main body.

Bolt retainment through crimping



The bolt edge of the sheave pin is tightly fixed through crimping.

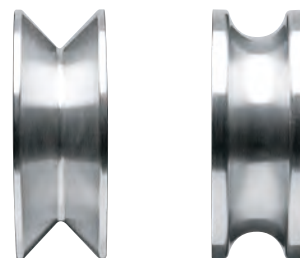
Sheave with bearings



Bearings in the sheave facilitate smooth rotation.



Product features



V-groove sheave U-groove sheave
Lineup of V-groove and U-groove sheaves.



The protruding rib also contributes to increased strength.



Improved strength through the integrated structure of the sheave shaft and main body. The edges of the sheave are designed to fit into the main body to prevent ropes from getting tangled.

Long Liner Wani-Block

(with Stainless Bearing)

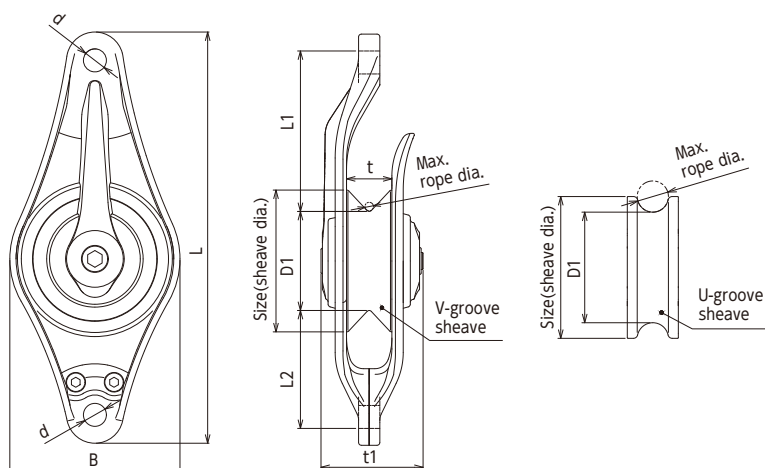


| No. | Sheave | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Bearing No. | Unit weight (kg) | Working load limit (t) |
|---------|----------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------------------------|----------------|------------------------|------------------------------|
| AK10351 | V groove | 100 | 6 | 16.2 | 290 | 113 | 83 | 70 | 32 | 72 | 6 · 10 | 6005 | 2.6 | 0.75 |
| AK10352 | U groove | 100 | 22 | 16.2 | 290 | 109 | 79 | 78 | 32 | 72 | 6 · 10 | 6005 | 2.6 | 0.75 |

* Material: Special stainless steel, Sheave pin/sheave pin nut/M8 hex socket bolt = SUS304

* The working load conforms to the working load of the bearings.

* This product contains two stainless steel bearings with rubber seals.



Combination example

Swivel

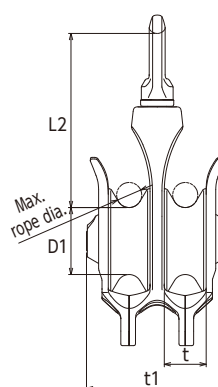
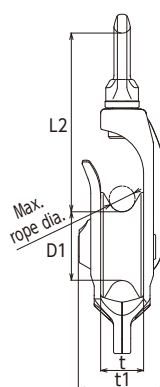
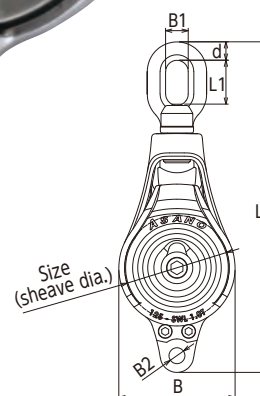
Can be used with size 16 of the ASANO Swivel (Jaw & Jaw). Please refer to our web site for the products.



[Single sheave]



[Double sheave]



Wide Sheave Wani-Block (with Bearing)

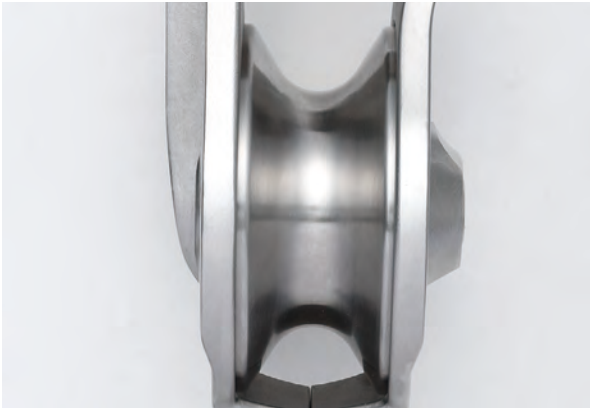


| No. | Size (sheave dia.) (mm) | No. of Sheaves | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | B2 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Bearing No. | Unit weight (kg) | Working load limit (kg) |
|---------|-------------------------------|-------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|-----------------------------|----------------|------------------------|-------------------------------|
| AK10083 | 125 | 1 | 30 | 22 | 395 | 52.5 | 208 | 80 | 139 | 27 | 19 | 50 | 102 | 8-14 | 6007 | 5.9 | 1,000 |
| AK10084 | 125 | 2 | 30 | 22 | 395 | 52.5 | 208 | 80 | 139 | 27 | 19 | 50 | 169 | 8-14 | 6007 | 9.8 | 1,000 |

* Material: Special stainless steel, Swivel/swivel pin/bolt = SUS304 * The working load conforms to the working load of the bearings.

* This product contains two steel bearings with rubber seals.

Product features



The width of the sheave allows a thick rope to pass through smoothly.



Since the rims of the sheave are covered by the main body, a length of rope will not easily become caught between the main body and the sheave.



The sheave shaft is integrated into the main body, contributing to the increased strength of the sheave shaft.



The distinctively protruding rib contributes to high level strength.(single sheave)





Size 50



Size 75-100



Size 50



Size 75-100

On the new model, in sizes 75 to 125, the sheave pin bolt end is caulked and securely fixed in order to prevent loosening during use. Sheaves cannot be replaced for size 50 blocks.

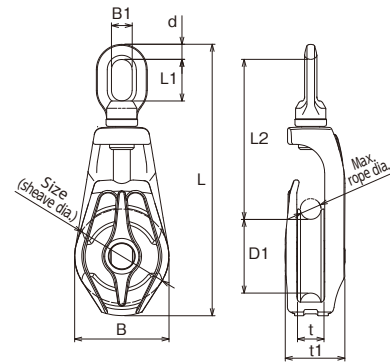
NEW

AK Wani-Block Type P-III



| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | t (mm) | t1 (mm) | Unit weight (kg) | Working load limit (kg) |
|---------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|------------------------|-------------------------------|
| AK10090 | 50 | 14 | 10 | 160 | 27 | 100 | 36 | 50 | 14 | 20 | 43 | 0.6 | 350 |
| AK10091 | 75 | 16 | 14.5 | 231 | 38 | 139 | 59 | 75 | 19 | 24 | 51 | 1.6 | 600 |
| AK10092 | 100 | 22 | 16 | 287 | 44 | 170 | 78 | 100 | 22 | 28 | 63 | 3.3 | 1,000 |

* Material: Special stainless steel, Sheave pin/ swivel/swivel pin = SUS304



Special
attachment



Hex wrench

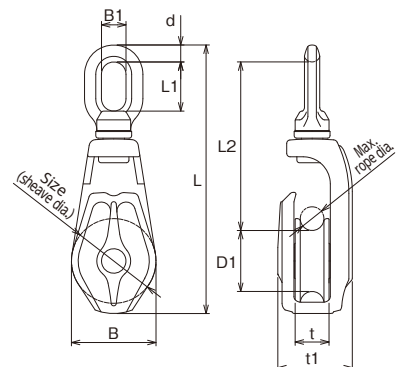
The AK Wani-Block Type P series will be replaced with the AK Wani-Block Type P-III shown above.

AK Wani-Block Type P



| No. | Size (sheave dia.) (mm) | Max. rope dia. (mm) | d (mm) | L (mm) | L1 (mm) | L2 (mm) | D1 (mm) | B (mm) | B1 (mm) | t (mm) | t1 (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (kg) |
|---------|-------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|------------|-----------------------------|------------------------|-------------------------------|
| AK10004 | 125 | 25 | 22 | 348 | 54 | 200 | 100 | 125 | 27 | 32 | 73 | 14 | 6.5 | 1,500 |

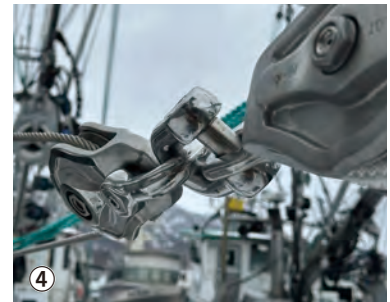
* Material: Special stainless steel, Sheave pin/ swivel/swivel pin = SUS304





ASANO Stainless Steel Blocks on Boats

Our highly specialized blocks are used in oceans and seas around the world, proving their worth in harsh environments through excellent seawater resistance, durability, and more.



①,③AK Block Type PB II (P060) ②,④AK Block Type PB-S (P065) ⑤Tough Hanging Roller Type II (P058)

Rigging Hardware & Wire Rope

FEATURE 01

Various variations to meet demands

About 2,000 products. This is how many ASANO cutting edge rigging hardware product there are. Products with many size variations are available from general products to original products based on unique ideas. Our products are sure satisfy professional requirements. ASANO's monozukuri (manufacturing) spirit is utilized in even small rigging hardware products, which are continually improved.



FEATURE 02

Focusing on details

Cost performance is a key factor behind rigging hardware products that connect objects by taking the functionality and intended objectives into account. Simultaneously, we also develop products that emphasize the beauty of stainless steel. For example, Turnbuckle Type A, Pipe Body. A part of the main body is mirror-finished and can be used in locations where aesthetics are required. This goes beyond the simply functions of conventional turnbuckles.



Turnbuckle Type A,
Pipe Body (P081)

FEATURE 03

Wide variety of application possibilities created by integration

ASANO's rigging hardware take advantage of the characteristics of stainless steel. Such rigging hardware is used at sea and on land. In addition, ASANO's rigging hardware is used in a wide variety of applications such as for rigging on ships, for hanging drop prevention boards or signs, and for installing bird prevention nets. Usage possibilities are further expanded by combining wires with rigging hardware products.



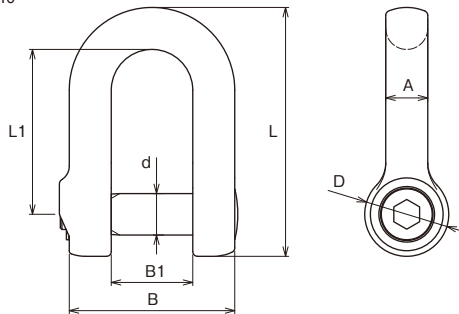


Purse Shackle PAT.



| No. | Size | d (mm) | L (mm) | L1 (mm) | A (mm) | B (mm) | B1 (mm) | D (mm) | Thread dia. | Hex. wrench dia. (mm) | Snap ring size | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|-----------|------------|-----------|-----------|------------|-----------|----------------|-----------------------------|-------------------|-----------------------|-------------------------------|
| AK18258 | 13 | 13 | 78 | 52 | 13 | 52 | 26 | 26 | W1/2 | 8 | 8 | 275 | 600 |
| AK18259 | 16 | 16 | 96 | 64 | 16 | 64 | 32 | 32 | W5/8 | 10 | 10 | 525 | 1,000 |

* Material: Special stainless steel,
Pin = SUS316, Snap ring = SUS316

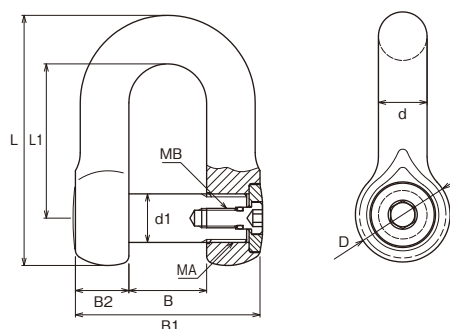


Free Shackle



| No. | Size | d (mm) | d1 (mm) | L (mm) | L1 (mm) | D (mm) | B (mm) | B1 (mm) | B2 (mm) | MA (mm) | MB (mm) | Hex. wrench dia. (mm) | Unit weight (kg) | Working load limit (t) |
|--------|------|-----------|------------|-----------|------------|-----------|-----------|------------|------------|------------|------------|-----------------------------|------------------------|------------------------------|
| AK2323 | FM19 | 20 | 20 | 100 | 64 | 39 | 32 | 76 | 22 | M20 | M8 | 6-10 | 0.77 | 2.6 |
| AK2324 | FM22 | 23 | 24 | 117 | 74 | 47 | 38 | 88 | 25 | M24 | M10 | 8-14 | 1.23 | 3.6 |
| AK2325 | FM25 | 26 | 27 | 138 | 84 | 57 | 44 | 98 | 27 | M27 | M12 | 10-14 | 1.87 | 5.2 |
| AK2326 | FM28 | 29 | 30 | 154 | 92 | 65 | 50 | 112 | 31 | M30 | M14 | 12-14 | 2.75 | 6.3 |

* Material: Special stainless steel,
Pin = SUS304



Product features



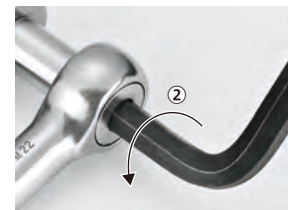
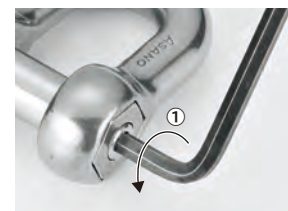
Pin loosening prevention mechanism

Fixing is performed with a screw and a snap ring. This efficiently prevents loosening of the pin.



Moderate curved shape

The curved shape is gentle on ropes. It prevents rope damage and improves their service life.



How to remove the nut

- ① Rotate the pin at the center of the nut with a hexagon wrench to remove it.
- ② Rotate the bolt with a hexagon wrench from the opposite side to remove it.

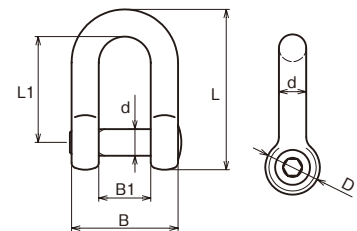


D-Shackle with Hex Socket Pin & O-Ring

| No. | Size | d (mm) | L (mm) | L1 (mm) | B (mm) | B1 (mm) | D (mm) | Thread dia. | Hex. wrench dia. (mm) | O-ring size | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|-----------|------------|-----------|------------|-----------|----------------|-----------------------------|-------------|-----------------------|-------------------------------|
| AK1980 | 6 | 6 | 36 | 24 | 24 | 12 | 12 | W1/4 | 4 | S6 | 24 | 90 |
| AK1981 | 7 | 7 | 42 | 28 | 28 | 14 | 14 | W5/16 | 5 | S7 | 40 | 110 |
| AK1982 | 8 | 8 | 48 | 32 | 32 | 16 | 16 | W5/16 | 5 | S9 | 60 | 140 |
| AK1983 | 9 | 9 | 54 | 36 | 36 | 18 | 18 | W3/8 | 6 | S10 | 80 | 170 |
| AK1984 | 10 | 10 | 60 | 40 | 40 | 20 | 20 | W3/8 | 6 | P10 | 110 | 200 |
| AK1985 | 12 | 12 | 72 | 48 | 48 | 24 | 24 | W1/2 | 8 | P12 | 190 | 280 |
| AK1986 | 13 | 13 | 78 | 52 | 52 | 26 | 26 | W1/2 | 8 | P12.5 | 240 | 400 |
| AK1987 | 16 | 16 | 96 | 64 | 64 | 32 | 32 | W5/8 | 10 | P16 | 435 | 600 |
| AK1988 | 19 | 19 | 114 | 76 | 76 | 38 | 38 | W3/4 | 10 | P22 | 750 | 720 |

- An O-ring is fitted to reduce loosening caused by vibration.

* Material: SCS13 (equivalent to SUS304),
Pin = SUS304, O-ring = rubber

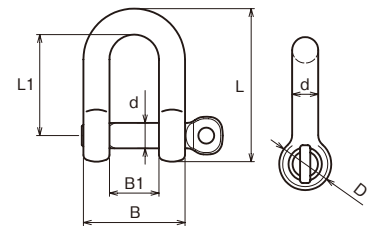


D-Shackle with O-Ring

| No. | Size | d (mm) | L (mm) | L1 (mm) | B (mm) | B1 (mm) | D (mm) | Thread dia. | O-ring size | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|-----------|------------|-----------|------------|-----------|----------------|-------------|-----------------------|-------------------------------|
| AK1960 | 6 | 6 | 36 | 24 | 24 | 12 | 12 | W1/4 | S6 | 27 | 140 |
| AK1961 | 7 | 7 | 42 | 28 | 28 | 14 | 14 | W5/16 | S7 | 43 | 170 |
| AK1962 | 8 | 8 | 48 | 32 | 32 | 16 | 16 | W5/16 | S9 | 56 | 220 |
| AK1963 | 9 | 9 | 54 | 36 | 36 | 18 | 18 | W3/8 | S10 | 90 | 270 |
| AK1964 | 10 | 10 | 60 | 40 | 40 | 20 | 20 | W3/8 | P10 | 120 | 320 |
| AK1965 | 12 | 12 | 72 | 48 | 48 | 24 | 24 | W1/2 | P12 | 200 | 400 |
| AK1966 | 13 | 13 | 78 | 52 | 52 | 26 | 26 | W1/2 | P12.5 | 255 | 450 |
| AK1967 | 16 | 16 | 96 | 64 | 64 | 32 | 32 | W5/8 | P16 | 480 | 900 |

- An O-ring is fitted to reduce loosening caused by vibration.

* Material: SCS13 (equivalent to SUS304),
Pin = SUS304, O-ring = rubber

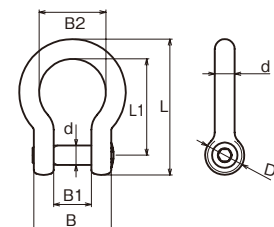


Bow Shackle with Hex Socket Pin & O-Ring

| No. | Size | d (mm) | L (mm) | L1 (mm) | B (mm) | B1 (mm) | B2 (mm) | D (mm) | Thread dia. | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|-----------|------------|-----------|------------|------------|-----------|----------------|-----------------------|-------------------------------|
| AK11281 | 6 | 6 | 42 | 30 | 24 | 12 | 21 | 12 | W1/4 | 32 | 90 |
| AK11282 | 8 | 8 | 56 | 40 | 32 | 16 | 28 | 16 | W5/16 | 72 | 140 |
| AK11283 | 10 | 10 | 70 | 50 | 40 | 20 | 35 | 20 | W3/8 | 135 | 200 |
| AK11284 | 12 | 12 | 84 | 60 | 48 | 24 | 42 | 24 | W1/2 | 233 | 280 |

- An O-ring is fitted to reduce loosening caused by vibration.

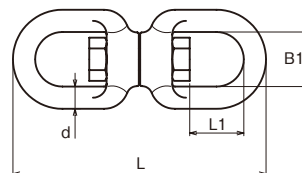
* Material: SCS13 (equivalent to SUS304),
Pin = SUS304, O-ring = rubber





Swivel

| No. | Size | d (mm) | L (mm) | L1 (mm) | B1 (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|-----------|------------|------------|--------------------|-------------------------------|
| AK2199 | 4 | 4 | 51 | 11 | 11 | 22 | 50 |
| AK2200 | 5 | 5 | 60 | 14 | 13 | 39 | 80 |
| AK2201 | 6 | 6 | 71 | 17 | 15 | 60 | 130 |
| AK2202 | 8 | 8 | 94 | 20 | 20 | 147 | 250 |
| AK2203 | 9 | 9 | 102 | 22 | 22 | 200 | 290 |
| AK2204 | 10 | 10 | 118 | 27 | 24 | 285 | 300 |
| AK2215 | 12 | 12 | 132 | 27 | 25 | 420 | 600 |
| AK2205 | 13 | 13 | 152 | 35 | 31 | 605 | 600 |
| AK2206 | 16 | 16 | 188 | 45 | 38 | 1,100 | 1,000 |
| AK2207 | 19 | 21 | 229 | 52 | 42 | 2,250 | 1,600 |
| AK2208 | 22 | 23.5 | 248 | 52 | 47 | 3,130 | 2,100 |
| AK2209 | 25 | 26 | 291 | 66 | 63 | 4,820 | 2,600 |
| AK2210 | 28 | 29 | 340 | 76 | 70 | 6,600 | 3,200 |
| AK2211 | 32 | 33 | 389 | 87 | 80 | 9,500 | 4,200 |



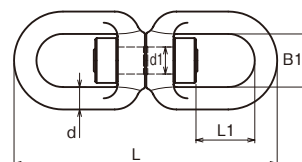
* Material: SCS13 (equivalent to SUS304),
Pin/nut = SUS304
* Do not use under conditions of
constant rotation.



Swivel with Thick Pin

| No. | Size | d (mm) | d1 (mm) | L (mm) | L1 (mm) | B1 (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|------------|-----------|------------|------------|--------------------|-------------------------------|
| AK2217 | 13 | 13 | 16 | 152 | 31 | 31 | 640 | 1,000 |
| AK2218 | 16 | 16 | 19 | 188 | 41 | 38 | 1,180 | 1,600 |
| AK2219 | 19 | 21 | 22 | 229 | 50 | 42 | 2,190 | 1,950 |

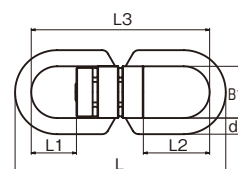
* Material: SCS13 (equivalent to SUS304), Pin/nut = SUS304
* Do not use under conditions of constant rotation.



Swivel with Bearing

| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | B1 (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|-----------|------------|------------|------------|------------|--------------------|-------------------------------|
| AK2220 | 10 | 10 | 130 | 27 | 41 | 110 | 32 | 410 | 300 |
| AK2221 | 13 | 13 | 160 | 33 | 49 | 134 | 38 | 800 | 600 |
| AK2222 | 16 | 16 | 182 | 35 | 53 | 150 | 42 | 1,300 | 1,000 |
| AK2223 | 19 | 19 | 222 | 48 | 67 | 184 | 45 | 1,800 | 1,600 |
| AK2224 | 22 | 22 | 256 | 58 | 78 | 212 | 50 | 2,600 | 2,100 |
| AK2225 | 25 | 25 | 280 | 61 | 84 | 230 | 55 | 3,600 | 2,600 |

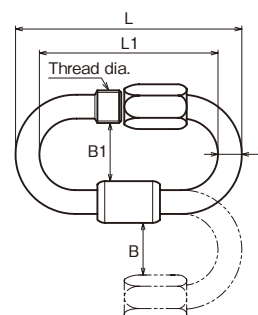
* Material: SUS304
* Do not use under conditions of constant rotation.



Turning Link

| No. | Size | d (mm) | L (mm) | L1 (mm) | B (mm) | B1 (mm) | Thread dia. | Width across flats | Unit weight (g) | Working load limit (t) |
|--------|------|-----------|-----------|------------|-----------|------------|----------------|--------------------------|-----------------------|------------------------------|
| AK1272 | 6 | 6 | 57 | 45 | 11 | 13 | M9 | 12 | 50 | 0.37 |
| AK1273 | 8 | 8 | 76 | 60 | 17 | 19 | M11 | 13 | 100 | 0.62 |
| AK1274 | 10 | 10 | 90 | 70 | 20 | 22 | M14 | 17 | 200 | 0.9 |
| AK1275 | 13 | 13 | 119 | 93 | 25 | 28 | M18 | 21 | 415 | 1.7 |
| AK1276 | 16 | 16 | 144 | 112 | 30 | 34 | M20 | 24 | 710 | 2.2 |
| AK1277 | 19 | 19 | 170 | 132 | 36 | 41 | M24 | 30 | 1,160 | 3.1 |
| AK1278 | 22 | 22 | 196 | 152 | 41 | 46 | M27 | 32 | 1,780 | 5 |
| AK1279 | 25 | 25 | 225 | 175 | 50 | 55 | M33 | 38 | 2,670 | 6.5 |

* Material: SUS316



Turnbuckle Type A, Pipe Body

The "Turnbuckle Type A, Pipe Body" series provides ASANO-like attractive rigging hardware products with a focus on detail that goes beyond that of conventional turnbuckles.

Product features



Straight Top



Eye Top



Hook Top

Three types are available to meet a range of requirements.



The product is designed so that it can be rotated using various tools such as screwdrivers and adjustable wrenches.



This product can be used not only as a conventional turnbuckle but also in places where attractive rigging hardware can demonstrate its potential.



The main body is made of special stainless steel that ensures superior corrosion resistance and strength. Extremely high attention has been paid to detail such as thicker walls for the screw holes and tool holes where stress is concentrated and strength is required.



Turnbuckle Type A, Pipe Body (Eye & Eye)

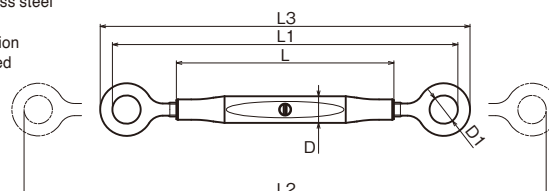


| No. | Size | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | D (mm) | D1 (mm) | Thread dia. | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|------------|------------|------------|-----------|------------|-------------|--------------------|-------------------------------|
| AK13410 | 12 | 200 | 318 | 480 | 340 | 24.5 | 26 | W1/2 | 650 | 600 |
| AK13411 | 16 | 250 | 375 | 572 | 403 | 27.4 | 25×40 | W5/8 | 1,120 | 900 |
| AK13412 | 19 | 300 | 435 | 675 | 469 | 33.5 | 25×40 | W3/4 | 1,800 | 1,070 |
| AK13413 | 22 | 325 | 487 | 737 | 527 | 39.4 | 30×48 | W7/8 | 2,700 | 2,100 |
| AK13414 | 25 | 350 | 532 | 792 | 578 | 42.7 | 34×54 | W1 | 3,950 | 2,700 |

* Material: Special stainless steel

Eye bolt = SUS304

* L2 indicates the dimension at the maximum extended length.



Turnbuckle Type A, Pipe Body (Hook & Hook)

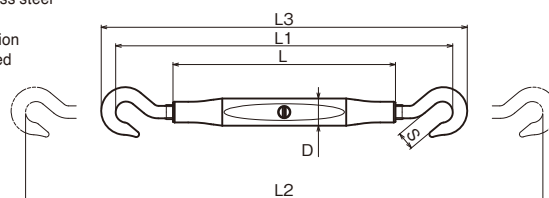


| No. | Size | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | D (mm) | S (mm) | Thread dia. | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|------------|------------|------------|-----------|-----------|-------------|--------------------|-------------------------------|
| AK13420 | 12 | 200 | 303 | 465 | 329 | 24.5 | 17 | W1/2 | 600 | 375 |
| AK13421 | 16 | 250 | 368 | 565 | 400 | 27.4 | 22 | W5/8 | 1,040 | 600 |
| AK13422 | 19 | 300 | 438 | 678 | 478 | 33.5 | 25 | W3/4 | 1,720 | 800 |
| AK13423 | 22 | 325 | 489 | 739 | 535 | 39.4 | 31 | W7/8 | 2,650 | 1,000 |
| AK13424 | 25 | 350 | 536 | 796 | 590 | 42.7 | 36 | W1 | 3,690 | 1,350 |

* Material: Special stainless steel

Hook bolt = SUS304

* L2 indicates the dimension at the maximum extended length.



Turnbuckle Type A, Pipe Body (Stud & Stud)

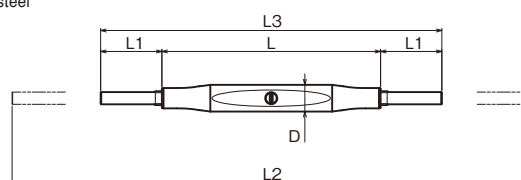


| No. | Size | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | D (mm) | Thread dia. | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|------------|------------|------------|-----------|-------------|--------------------|-------------------------------|
| AK13430 | 12 | 200 | 56 | 474 | 312 | 24.5 | W1/2 | 540 | 600 |
| AK13431 | 16 | 250 | 60 | 567 | 370 | 27.4 | W5/8 | 870 | 900 |
| AK13432 | 19 | 300 | 75 | 690 | 450 | 33.5 | W3/4 | 1,500 | 1,070 |
| AK13433 | 22 | 325 | 90 | 755 | 505 | 39.4 | W7/8 | 2,170 | 2,100 |
| AK13434 | 25 | 350 | 100 | 810 | 550 | 42.7 | W1 | 3,040 | 2,700 |

* Material: Special stainless steel

Stud bolt = SUS304

* L2 indicates the dimension at the maximum extended length.





Size 16



Size 19



The size 19 hook is designed to be even stronger, to withstand large loads.

Swivel Snap Hook Type II

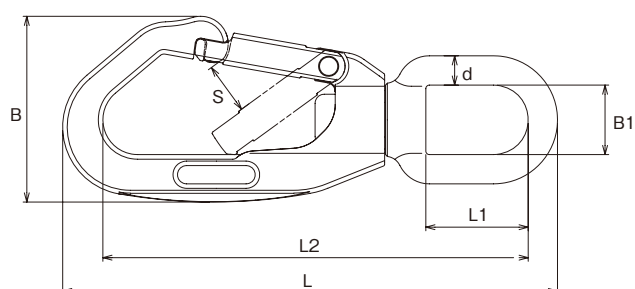


The material used for this product has superior seawater resistance compared to conventional Swivel Snap Hook.

| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | B1 (mm) | S (mm) | Unit weight (g) | Working load limit (kg) |
|--------------------|------|-----------|-----------|------------|------------|-----------|------------|-----------|-----------------------|-------------------------------|
| AK12465 | 16 | 16 | 270 | 56 | 232 | 101 | 38 | 28 | 1,600 | 1,000 |
| NEW AK12466 | 19 | 21 | 340 | 68 | 277 | 137 | 42 | 30 | 3,570 | 1,600 |

* Material: Special stainless steel, Swivel pin/spring = SUS304

* Do not use under conditions of constant rotation.



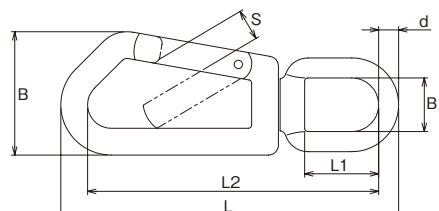
Swivel Snap Hook



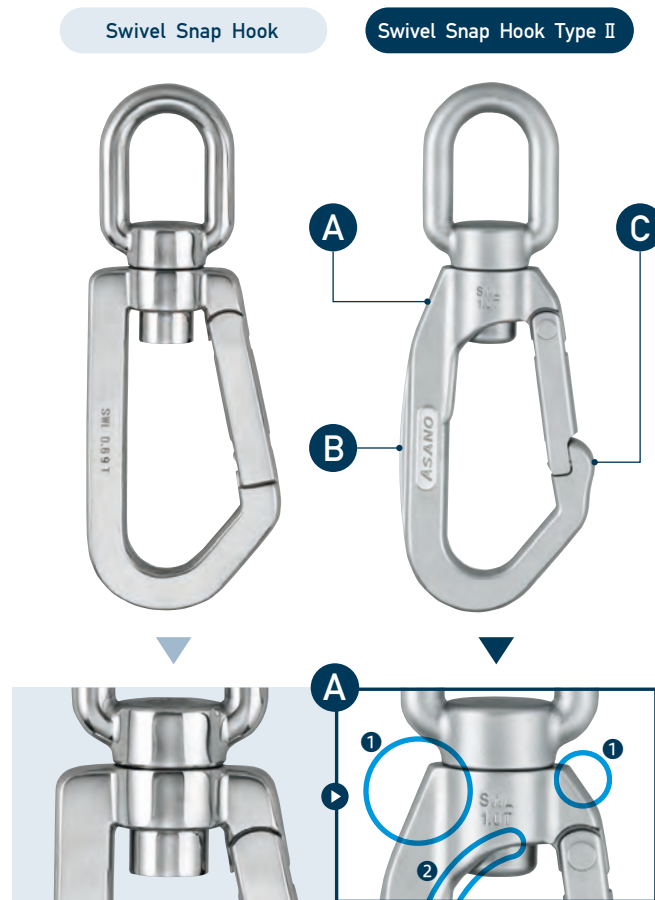
| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | B1 (mm) | S (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|-----------|------------|------------|-----------|------------|-----------|-----------------------|-------------------------------|
| AK1150 | 6 | 5 | 100 | 22 | 87 | 37 | 16 | 10 | 85 | 120 |
| AK1151 | 8 | 6 | 110 | 22 | 98 | 45 | 16 | 12 | 126 | 140 |
| AK1152 | 10 | 8 | 141 | 26 | 122 | 54 | 20 | 15 | 220 | 150 |
| AK1153 | 12 | 10 | 172 | 35 | 148 | 66 | 24 | 17 | 388 | 250 |
| AK1154 | 14 | 13 | 225 | 45 | 195 | 82 | 30 | 21 | 1,000 | 560 |

* Material: SCS14 (equivalent to SUS316), Pin/spring = SUS304

* Do not use under conditions of constant rotation.



Comparison with conventional Swivel Snap Hook

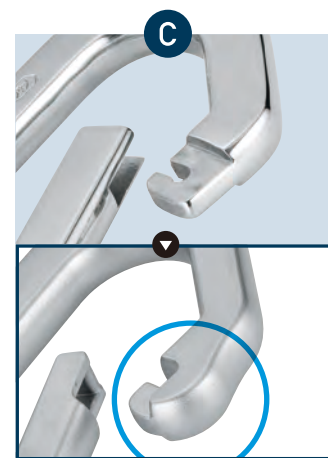


Changed the swivel shape

- ① Changed the protruding parts to prevent ropes from being caught.
- ② Increased the inside thickness for strength.



Added a rib to the side of the main body to increase strength.



Changed the shape of the interlocking part to significantly increase the working load limit.

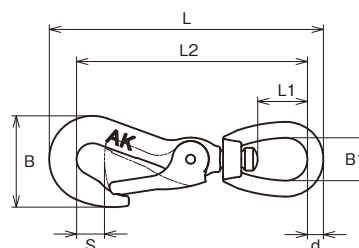
The material is changed to special stainless steel with greater strength.

Tuna Swivel Snap



| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | B (mm) | B1 (mm) | S (mm) | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|-----------|------------|------------|-----------|------------|-----------|-----------------------|-------------------------------|
| AK12450 | T0 | 3.5 | 60 | 11 | 51 | 20 | 9 | 6 | 17 | 40 |
| AK12451 | T1 | 4.5 | 69 | 11 | 57 | 26 | 12 | 5 | 32 | 60 |

* Material: Special stainless steel, Swivel = SCS13 (equivalent to SUS304)
* Do not use under conditions of constant rotation.



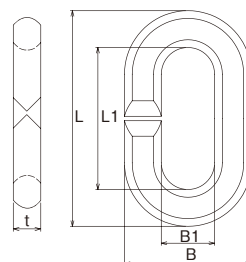


Available in combination
with swivels (P079)

Strong C-Link

| No. | Size | L (mm) | L1 (mm) | B (mm) | B1 (mm) | t (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|------------|-----------|------------|-----------|-----------------------|-------------------------------|
| AK4205 | 13 | 77 | 50 | 49 | 20 | 11.4 | 170 | 200 |
| AK4206 | 16 | 97 | 64 | 57 | 24 | 14 | 320 | 390 |
| AK4207 | 19 | 115 | 76 | 67 | 28 | 16.6 | 540 | 520 |
| AK4208 | 22 | 134 | 88 | 79 | 33 | 19.3 | 840 | 690 |
| AK4209 | 25 | 152 | 100 | 89 | 37 | 22 | 1,230 | 880 |
| AK4210 | 28 | 168 | 111 | 96 | 41 | 24.5 | 1,650 | 1,050 |

* Material: SUS304



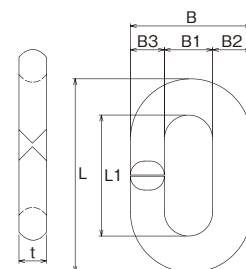
Heavyduty C-Link



| No. | Size | L (mm) | L1 (mm) | B (mm) | B1 (mm) | B2 (mm) | B3 (mm) | t (mm) | Unit weight (g) | Working load limit (kg) |
|--------|------|-----------|------------|-----------|------------|------------|------------|-----------|-----------------------|-------------------------------|
| AK3621 | 6 | 37 | 23 | 22.5 | 8 | 8 | 6.5 | 6 | 22 | 120 |
| AK3622 | 8 | 51 | 32 | 31 | 12 | 10.5 | 8.5 | 7 | 40 | 150 |
| AK3623 | 9 | 57 | 36 | 35 | 14 | 11.5 | 9.5 | 8 | 60 | 190 |
| AK3624 | 11 | 69 | 44 | 42 | 17 | 13.5 | 11.5 | 10 | 110 | 230 |
| AK3625 | 13 | 80 | 50 | 50 | 20 | 16 | 14 | 11.5 | 200 | 300 |
| AK3626 | 16 | 100 | 64 | 61 | 24 | 20 | 17 | 14 | 360 | 520 |
| AK3627 | 19 | 120 | 76 | 72 | 28 | 23.5 | 20.5 | 17 | 630 | 620 |
| AK3628 | 22 | 138 | 88 | 84 | 33 | 27.5 | 23.5 | 20 | 980 | 860 |
| AK3629 | 25 | 157 | 100 | 95 | 37 | 31.5 | 26.5 | 23 | 1,390 | 1,100 |
| AK3630 | 28 | 174 | 111 | 106 | 41 | 35 | 30 | 26 | 1,940 | 1,260 |
| AK3631 | 32 | 196 | 125 | 121 | 50 | 38 | 33 | 29 | 2,760 | 1,650 |

* Material: Special stainless steel

* Note: Do not deform or weld the product.

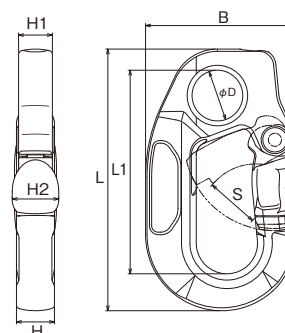


Snap Hook



| No. | Size | S (mm) | L (mm) | L1 (mm) | B (mm) | H (mm) | H1 (mm) | H2 (mm) | D (mm) | Unit weight (g) | Working load limit (kg) |
|---------|------|-----------|-----------|------------|-----------|-----------|------------|------------|-----------|-----------------------|-------------------------------|
| AK18315 | 1SH | 25 | 124 | 96 | 72 | 18 | 16 | 22 | 24 | 600 | 1,300 |
| AK18316 | 2SH | 28 | 143 | 110 | 81 | 20 | 18 | 24 | 27 | 900 | 1,800 |
| AK18317 | 3SH | 32 | 177 | 128 | 109 | 22 | 20 | 30 | 30 | 1,600 | 2,500 |

* Material: Special stainless steel,
Spring = SUS304, Lock pin = copper alloy,
Set screw = SUS304



Effective form and finish

Grooves in the body reduce body weight and contact area with ropes.

Ropes smoothly slide on the mirror finish surface.

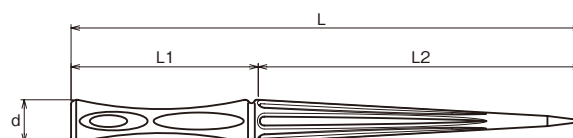


Light Spike SG



| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | Unit weight (g) |
|--------|------|-----------|-----------|------------|------------|--------------------|
| AK4295 | 25S | 25 | 300 | 110 | 190 | 375 |
| AK4296 | 25L | 25 | 350 | 130 | 220 | 465 |
| AK4297 | 28S | 28 | 350 | 130 | 220 | 535 |
| AK4298 | 28L | 28 | 400 | 130 | 270 | 600 |
| AK4299 | 32L | 32 | 400 | 130 | 270 | 750 |

* Material: Special stainless steel

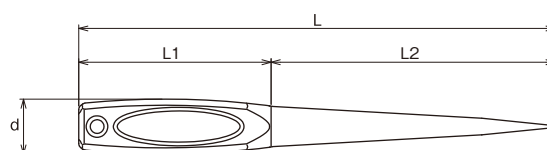


Light Spike SG-K



| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | Unit weight (g) |
|--------|------|-----------|-----------|------------|------------|--------------------|
| AK4275 | 22S | 30 | 260 | 105 | 155 | 450 |

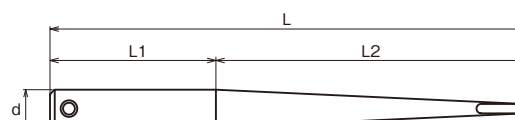
* Material: Special stainless steel



Spike

| No. | Size | d (mm) | L (mm) | L1 (mm) | L2 (mm) | Unit weight (g) |
|--------|------|-----------|-----------|------------|------------|--------------------|
| AK4241 | 16 | 16 | 200 | 70 | 130 | 210 |
| AK4242 | 19 | 19 | 200 | 70 | 130 | 300 |
| AK4243 | 22S | 22 | 250 | 95 | 155 | 450 |
| AK4244 | 22L | 22 | 300 | 110 | 190 | 510 |
| AK4245 | 25S | 25 | 300 | 110 | 190 | 700 |
| AK4246 | 25L | 25 | 350 | 130 | 220 | 900 |
| AK4247 | 28S | 28 | 350 | 130 | 220 | 1,200 |
| AK4248 | 28L | 28 | 400 | 130 | 270 | 1,380 |

* Material: SUS304





ASANO's VALUABLE CREATIONS

1

MATERIAL

Skillfully manipulating stainless steel materials

Providing products with characteristics that are most appropriate for the required usage conditions by utilizing long-held knowledge about stainless steel materials and broad experience in casting.

2

PRODUCTION METHOD

Extensive knowledge of manufacturing methods

Achieving maximum product performance and responding to requirements of respective usage environments without fail by using both casting and forging manufacturing methods.

3

DESIGN

Designing shapes without limitations

The basis of ASANO design is integral molding. Making the best use of 3D design, we diligently carry out processes from product conception to realization of top quality products.

AVC

ASANO's VALUABLE CREATIONS

Producing stainless steel products that can solve various problems.

1 _ MATERIAL

Diversified range of stainless steel materials

There are various types of stainless steel including "SUS304", which can be used for a variety of purposes, and "SUS316", which is more corrosion resistant than "SUS304". Each type has its own unique characteristics. Furthermore, the characteristics of stainless steel such as strength and corrosion resistance change depending on the percentage of ingredient components and the method of heat treatment. In other words, even though we simply call it stainless steel, there are a variety of types of it.

Material characteristics crafted from our experience

The material characteristics of stainless steel are arranged to produce variations with specific characteristics such as high resistance to seawater, high degree of hardness, etc. With broad knowledge of and experience in stainless steel materials that have been nurtured in our casting factory over a long period of time, ASANO has a high level technical background enabling selection of optimum materials and development of products in accordance with the environments in which they are used and with the methods with which they are used.

Carefully evaluated materials and combinations

Our experience-based technology allows the products, such as the Auto Shackle (P013), which should be small and light enough to fit into the palm of a hand, to be surprisingly strong in relation to their respective sizes. Our technology has also enabled commercialization of our products, such as the Purse Snap Shackle (P020), which is comprised of at least two parts: one part of which must be strong and the other part of which must be corrosion resistant, and each part of which is composed of the optimum stainless steel material.

Skillfully manipulating stainless steel materials

2 _ PRODUCTION METHOD

Possibilities created by casting

Casting is a processing method in which metal is heated to a temperature beyond its boiling point in order to liquefy it, the liquefied metal is poured into a mold, and then the metal is cooled so that it changes from a liquid to a solid and into the desired shape. The strength of products produced by the casting method is inferior to that of the products created by the forging method, which will be described later. However, one advantage of casting is that metal can be formed into a desired shape. In other words, this method enables creation of products via integral molding that allows for relatively freer formation of product shapes.

What ASANO has pursued

By utilizing the advantages of casting, which makes it easier to produce rounded items, we created products such as fishing gear which, thanks to its shape, has gentle contact with rope and fishing nets, and suppresses wear of both. Furthermore, casting enables production of product shapes of differing thicknesses: the material can be made thick only where load may be applied, otherwise thinner. Casting enables very strong lightweight products to be produced at reasonable costs. The advantage of casting lies in freer formation of product shapes that is derived from integral molding. We carry out a significant amount of casting to produce our products.

What forging is good for

On the other hand, the forging method incorporates the technique of pressurizing metal (using methods such as hammering) to reduce cavities in it, miniaturize its crystals, and to align the directions of the crystals to improve its strength before the metal is formed into the desired shape. This method is effective for products that are required to be strong. However, it has a disadvantage: That is, unlike the casting method, it is costly to form the metal into the shape suitable for the desired purpose.

Extensive knowledge of manufacturing methods

3 _ DESIGN

Optimum shapes and high performance derived from 3D design

Using the 3D design technique, ASANO implements procedures from designing shapes suitable for the intended purposes to calculating theoretical strength values. Then, ASANO creates the product by checking its shape against 3D print samples. To produce superior products, we improve and refine product design while repeatedly embodying ideas. Through this approach, we work to develop products that always deliver performance that is beyond expectations.

Aiming to create "organic forms"

Metal projects a cold image. By using metal, we produce metal products with shapes that can fit into the palm of your hand. By this, we always aim to produce metal products that are not perceived as "tools" but as your "partners" with ideal usability and sophisticated quality. Every part of ASANO products represents our commitment to details that only we, who have been continuously pursuing the potential of stainless steel, can achieve.

Functional design

When creating a product from scratch that optimally meets the actual usage conditions, we need to think of numerous product forms in order to create a product that exhibits optimal performance. The greatest advantage of cast products, which ASANO is highly skilled at producing, is a high degree of design flexibility that is derived from integral molding. Limitless free conceptions have enabled us to produce products with new designs and functions that have never existed before.

Designing shapes without limitations

Products that make a difference

ASANO utilizes expertise in stainless steel materials and produces products with characteristics that are most suitable for the intended purposes of the products. This enables ASANO products to improve and enhance work efficiency of users and greatly contribute to achieving the required results.



© Snap Hook: 1SH (P010)

Contrary to its appearance, this metal fitting, which can be held in the palm of a hand, has a high working load limit of 1.3 t. Every part of the metal fitting represents our diligent approach to manufacturing.



Combination to utilize product advantages

ASANO is particularly strong in the area of free shape forming achieved by casting, which ASANO has a long history of practicing. In addition, we use forged parts for products that are required to have a high degree of strength. For example, swivels are important components of block products that are to be suspended from a height. We adopt forged swivels with the required degree of strength for this purpose. Regarding fishing gear, in many cases strength and operability have a direct effect on fishing results. Therefore, we need to produce products that respond unflinchingly to the severe demands of fishing equipment. The combination of the different characteristics of casting and forging allows us to produce products that satisfy the following conflicting requirements: "downsized", "light-weight", and "high degree of strength".



Products created from freewheel thinking

© Auto Shackle (P013)

The insertion of a Marline spike or driver into the hole in the center of the main body releases the gate. Handling of the Auto Shackle in ways other than that mentioned above does not release the gate; the shape of the product does not enable the gate to be easily released even when something hits the product under the sea. Creating this shape was difficult since the requirement was not easy to meet. However, we were able to market the first commercialized Auto Shackle in the world. Since then, the product has enjoyed enduring popularity. The product that fits into the palm of your hand is easy to operate.

© Tough Hanging Roller Type II (P058)

Unlike conventional blocks, the main body of the Tough Hanging Roller II has an asymmetrical design that allows the metal fitting to pass through between the sheave and the main body without getting caught. Furthermore, the main body covers the edges of the sheave to prevent a rope from getting caught between the main body and the sheave.



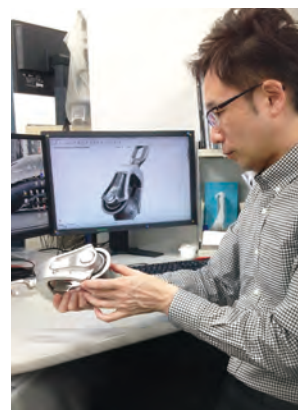




ASANO Style

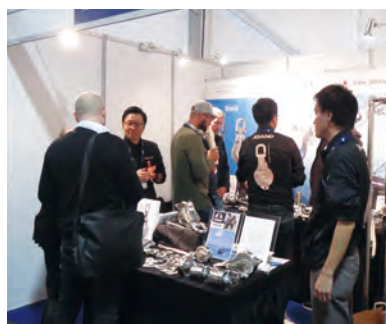
Aiming for products loved at work site

ASANO always cares about users' feedback. Based on the valuable opinions obtained not only from users in Japan, but also from fishermen and dealers abroad, the processes from designing shapes suitable for various tasks to calculating ideal strength values are executed, and products are manufactured while confirming the shapes using 3D printed samples. Development using feedback from the workplace and development speed are our fundamentals.



Placing value on “Opinions from the workplace” and “Speed”

Two of the pillars that support ASANO's monodzukuri (manufacturing). That is “development using opinions from the workplace” and “development speed”. The expertise that combines these two things, which are sometimes at conflict, is the strength of ASANO manufacturing.



(left) Exhibition in Norway. The Asano product exhibition booth bustling with many customers. Each and every opinion obtained here is used to create the next product.



(right) Meeting with dealers. It is a valuable opportunity to hear their frank opinions from local dealers as a starting point for product development and improvement in the near future.



(left) Product development. Sales staff members and people in charge of development work as a team to closely examine information obtained through exhibitions, daily sales activities, and other events.

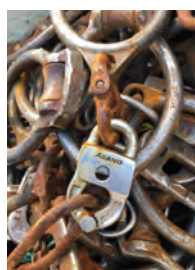


(right) Constructive use of 3D printing. 3D printing makes it possible to bring an idea into shape within a short time period. It is critical in terms of confirming the 3-dimensional shape and analyzing products before they enter mass production.

Conducting overseas tests on fishing gear and making progress

There has been an increase in requests from customers, saying that they want to test out our products on their boats and evaluate them. We greatly appreciate this type of request because ASANO has been developing products after receiving various opinions from fishermen in each region so far.

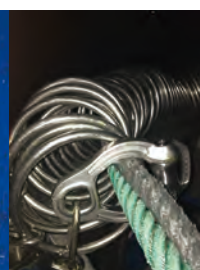
The images show tests conducted on our items, which were sent to us from customers who had tested them. So far, we have received high praise for fishing gear used near the purse-line and nets for such as the “Auto Shackle Series” and “Snap Hook” from purse seine boats mostly in America, Spain as well as Norway. As a result, we have received many orders and these products are being put into actual use.



Testing the Auto Shackle(P013), a product that truly represents ASANO, on a purse seine boat in Norway.



A shot from a purse seine boat in Spain. Testing the Purse Ring Type O Size 120 (P025). After receiving the result, we decided to add Size180 in the lineup straight away to support large diameter ropes.



AK Hook Type G (P036)-our new challenge for gill net fishing. A test operation in the U.S.. Local fishermen favorably commented that this product provided good usability.

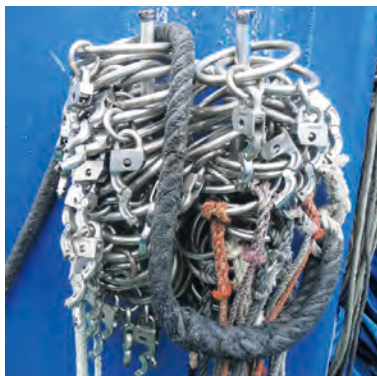


Auto Shackle Type IV (P014) tested as a part of new method for salmon farming net in Chile. This is also our new challenge to aquaculture industry.

ASANO products actively used on the world's oceans

ASANO's stainless steel fishing gear and ship equipment have been manufactured since 1977, and they are now used and valued by customers in Japan as well as in the U.S., Norway, Spain, and Australia to name a few countries. Among these products, we would like to introduce three key products, with accompanying photos, that are popular around the world.

1 Auto Shackle (P013)



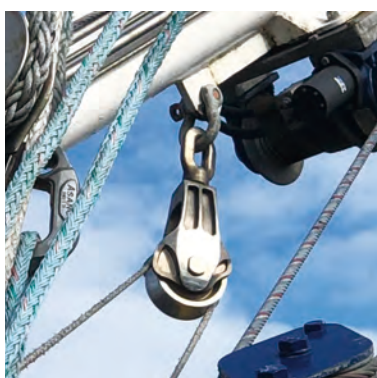
Auto Shackles have been developed to be used to connect a net and rings (purse rings) at the bottom of the net for purse seine fishing. Auto Shackles have been developed to provide two functions that are usually conflicting: "secure rigging" and "quick release". The simple mechanism of a gate that can easily be opened by inserting a sharp tool such as a spike into the hole in the body has gained a good reputation. This is a long selling product that has been on the market for over 20 years. They come in a variety of types such as types II, IIS, and III, and are used in a range of different fields.

2 Snap Hook (P010)



Snap Hooks are a component of rigging hardware that can be used for a range of purposes in any locations on ships and land. In contrast to its compact appearance, it is remarkably strong. The 3SH size model (working load limit 2.5 tons) has been newly added to the lineup and is suitable for an environment that requires sturdier tools than the 1SH (1.3 tons) or 2SH (1.8 tons). ASANO's superior casting technology has been applied to trim the thickness of the hook's body to the limit to make the product compact and exceptionally strong. Owing to the highly reliable interlock system that has been incorporated into the gate section, Snap Hooks are used and valued along with Auto Shackles on oceans around the world.

3 Tough Hanging Roller Type II (P058)



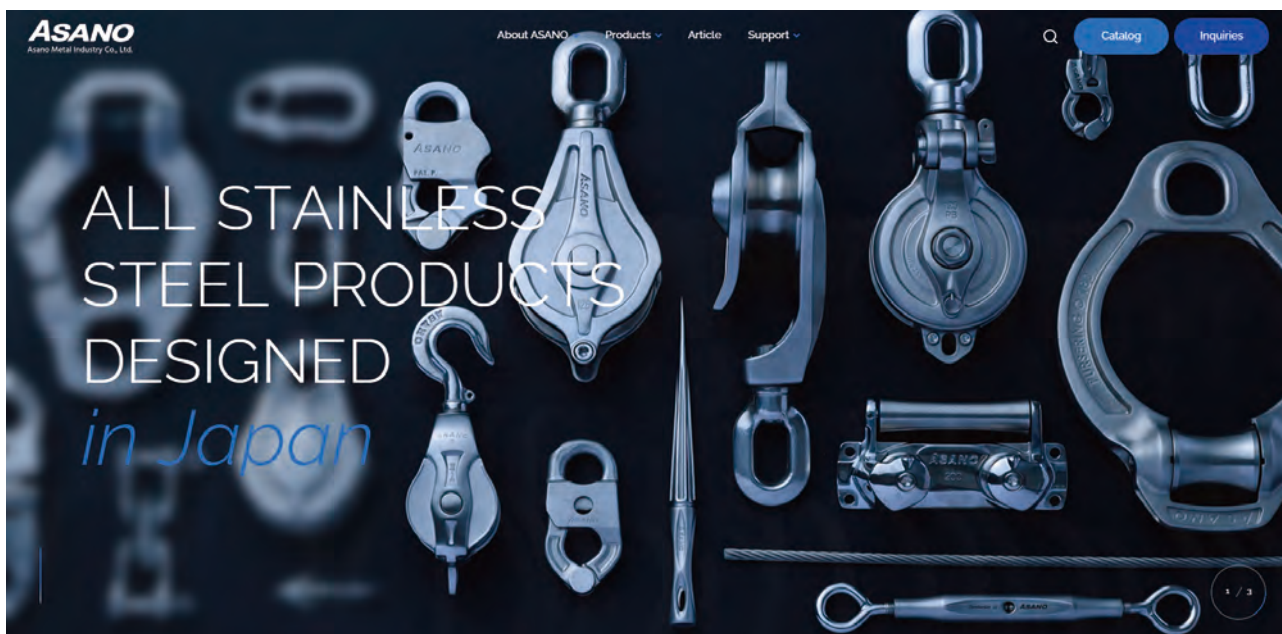
Tough Hanging Roller Type II has a working load limit of 5 tons, which is the highest among ASANO blocks. Sufficient space is provided between the main body and the sheave to allow thick ropes with a diameter of up to 32 mm to be used, and small fittings such as a size 1SH Snap Hook can pass through it smoothly. An asymmetric design has been applied to minimize the risk of metal fittings getting caught and stuck when they are pulled upwards. Assuming that the rollers are used in extreme environments such as at sea, stainless steel materials that have superior resistance to salt and corrosion and that are often used for seawater pumps are used, which provides outstanding durability.

Corporate Website



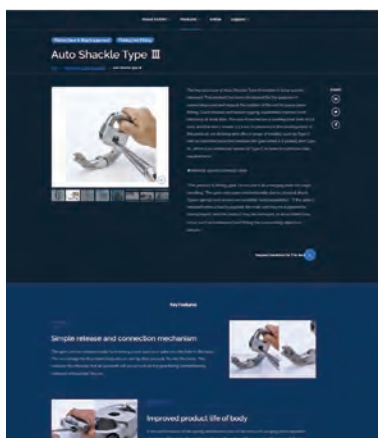
<https://asano-metal.com>

Special website for stainless steel hardware is now available!



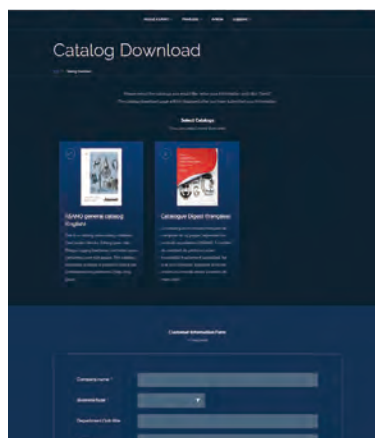
ASANO has built up a rich lineup of stainless steel blocks, fishing gear and ship equipment, and there are many products and functions that we would like to introduce. On this website, you will be able to find more products and learn about ASANO's challenging approach toward monodzukuri (manufacturing). You will also be able to enjoy movies about our popular items and download our latest catalog in PDF format. You can access the website by scanning the QR code or entering the above URL into a browser.

Product details page



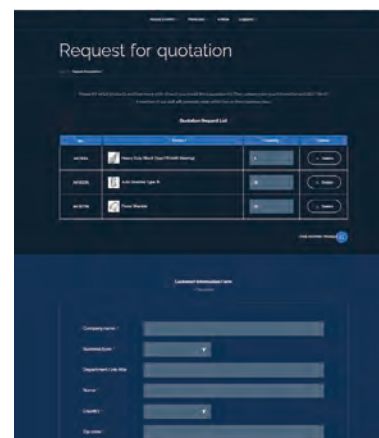
On this page, you will be able to learn about the specifications and key features of our products accompanied by movies and photos. And you can also check the latest list prices for each products.

Catalog download page



Catalogs in a couple of languages can be downloaded as a PDF file thorough this page. You will be able to find products that meet the professional requirements of the fishing and marine industries.

Quotation request page



Simple and easy form for requesting a quotation is available on the site. Just let us know what you want. A member of our staff will generally reply within two or three business days after receiving your quotation request.

Instagram



<https://www.instagram.com/asanometal/>

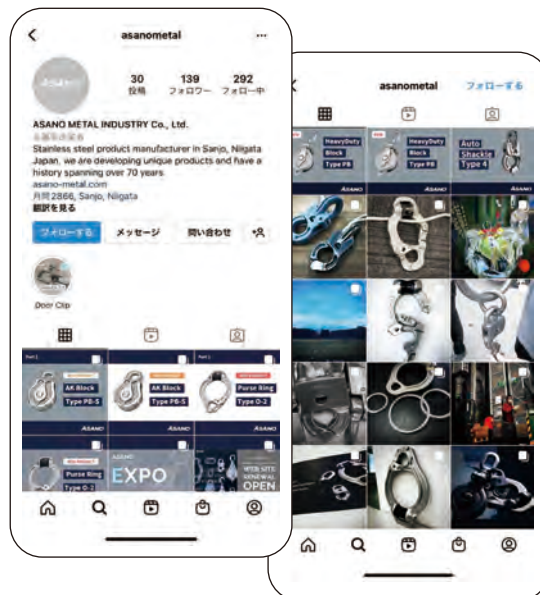
ASANO has just launched corporate Instagram!



On our Instagram, you can of course find not only our latest products, but also developing products! Furthermore, our daily works and the other related informations for you to understand ASANO are there.

Why don't you follow ASANO?

Your comments and direct messages are always welcome!



YouTube



<https://www.youtube.com/user/asanometal>

Easier to view, easier to learn about ASANO products!



In order to convey appealing facts about ASANO products to a broad audience, we have produced various movies. You will be able to enjoy movies about our popular items prepared by our product development staff.

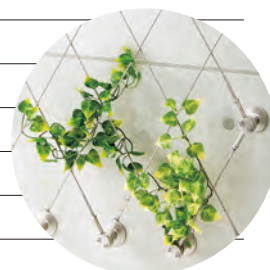


Sea and Land

We respond to the needs of the present age with proven technology nurtured by our long history.



| | |
|-----------------|---|
| 1892 | Founded in Go-no-cho, Sanjo, Niigata, Japan, the company first manufactured wooden articles for two generations. |
| August, 1944 | Established Asano Metal Industry Company (capitalized at 145,000 yen) at 301 Yokka-machi, Sanjo. Started manufacturing pig iron castings. |
| June, 1960 | Established a new pig iron casting factory at 1135 Shinbo, Sanjo. Began manufacturing two kinds of malleable cast iron at 301 Yokka-machi, Sanjo. |
| November, 1967 | Increased the capital to 3.5 million yen. |
| July, 1968 | Discontinued manufacturing pig iron casting. Started to concentrate on malleable iron casting and expanding the business. Established a new factory at Tsukioka, Sanjo, and shifted the former factories from Shinbo and Yokka-machi. Renewed all equipment to improve precision and quality control. |
| June, 1969 | Increased the capital to 7 million yen. Established a new stainless casting factory. |
| October, 1975 | Increased the capital to 14 million yen. |
| April, 1977 | Started manufacture of fishing gear and ship equipment. Started direct marketing all over Japan. |
| October, 1981 | Discontinued malleable iron casting to concentrate on stainless steel to expand production. |
| June, 1984 | Enlarged the factory and introduced the latest equipment to accept massive orders of stainless steel. |
| January, 1986 | Started to manufacture all stainless steel snow melting sprinkler nozzles. |
| October, 1987 | Entered into production of Physical Education equipment. Introduced numerous products to the marketplace, including patented inventions like tennis net posts. |
| March, 1988 | Improved automatic sand process equipment to streamline the stainless steel production with the aim of accepting more orders. |
| 1990 | Introduced the automatic warehousing system to streamline delivery, inventory, and logistics management. Renewed equipment to further improve quality. |
| 1991 | Introduced a CAD system to respond to the diverse needs of the age and speed up development. Increased the capital to 20 million yen. |
| 1995 | Started research of aluminum casting to meet diverse needs. |
| 1998 | Constructed the present head office and warehouse to expand the business, and conducted streamlining. |
| 1999 | Introduced a new computer system to enhance our core business. Introduced a new CAD system to strengthen planning and development. |
| 2000 | Introduced a new logistic system to accept small lot production in great varieties. |
| March, 2001 | Introduced high frequency electric furnaces: one 350 kg and one 150 kg. |
| May, 2002 | Introduced 3D CAD, which helped streamline development processes and improve designability. |
| July, 2004 | Introduced a 3D modeling machine to model designs and simulate basic structures. |
| 2006 | Published our website. |
| December, 2007 | Extended the automatic warehousing system to further streamline logistic management. |
| 2008 | Started to accept quotes and inquiries through our website to speed up provision of information. |
| September, 2011 | Launched the English version of our website to gain overseas business development. |
| July, 2013 | Fully updated our website, and started to provide detailed product information, such as installation manuals, instruction manuals, and referential design price tables. |
| September, 2017 | Launched our online shopping site in Japanese to create a highly convenient order receiving system. |
| February, 2018 | Completely refurbished the office to make business operations more efficient. |
| July, 2021 | Spun off our overseas sales division as an independent company, with the goal of expanding overseas business. |
| January, 2023 | Change of CEO. CEO Yoshiki Asano appointed as chair of the board; Managing Director Kazushi Asano appointed as CEO. |
| 2024 | 80th anniversary of the establishment of the company (132 years since starting business) |





●Company overview

| | |
|----------------------------------|--|
| Company name | Asano Metal Industry Co., Ltd. |
| Representative | Kazushi Asano, CEO |
| Head office | 2866 Tsukioka, Sanjo-shi, Niigata, 955-0803, Japan TEL: +81-256-33-0101 FAX: +81-256-33-0096 https://asano-metal.com |
| Capital | 20 million yen |
| Banks | The Daishi Hokuetsu bank, Sanjo branch Sanjo shinkin bank, Honjyouji branch |
| Building site of the head office | 11,000 m ² |
| Building site | Office: 925 m ² Warehouse: 1,743 m ² Stainless steel factory: 1,600 m ² Finishing factory: 169 m ² |
| Business items | Cast stainless steel Lost-wax articles Acid resistant steel Heat resistant steel All-stainless steel products Fishing gear / ship equipment Rigging hardware Wire rigging hardware Handrail and handrail brackets Wall greening wire bracket Tennis articles Stainless playground equipment Snow melting sprinkler system nozzles Other |
| Overseas sales company | Asano Global Co., Ltd. https://asano-global.com |

●Main Equipment

| | |
|--|--|
| · High frequency electric furnace: 2 (350 kg furnace, and 150 kg furnace) | · Universal testing equipment |
| · Analyzer: 1 (count back) | · Dry sand-mold molding equipment: 1 |
| · Sand processing equipment: 1 (60 tons per month) | · Balancer: 1 |
| · Shot blasting: 2 (2 tons, 1 ton) | · Sand-mold drying furnace: 1 |
| · Crane blasting: 2 (2.5 tons, 2 tons) | · Automatic high-rise warehouse equipment: 4 |
| · Heat treatment furnace (solution heat treatment): 1 (40 tons per month) | · 2D CAD |
| · Press correcting machine: 2 (50 tons) | · 3D CAD |
| · Welding machines, 300 A: 4 | · 3D molding machine: 4 |
| · Molding equipment: 1 | · Digital microscope: 1 |
| · Rockwell hardness testing device: 1 | · Wire swaging equipment: 1 |



Digital microscope



Rockwell hardness test device



3D molding machine

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About product information on this catalog

- The contents of this catalog are current as of April 2025.
- We strive to keep our price lower by streamlining and other effort. However, we may reluctantly have to adjust the prices on short notice if the prices of raw materials change due to economic climate or other reasons. We appreciate your understanding.
- Please be aware that the sizes and specifications may change for improvement without prior notice.
- Please remember that there are some tolerances in the sizes listed in this catalog.
- Actual product colors may vary slightly due to color printing.
- All rights reserved. Do not reproduce any pictures, illustrations, and text from this catalog.



ASANO METAL INDUSTRY CO., LTD.
ASANO GLOBAL CO., LTD. (International Sales)

2866 Tsukioka, Sanjo, Niigata, 955-0803, Japan

TEL : +81-256-33-0101

Email : info-english@asano-metal.co.jp

<https://asano-metal.com>

