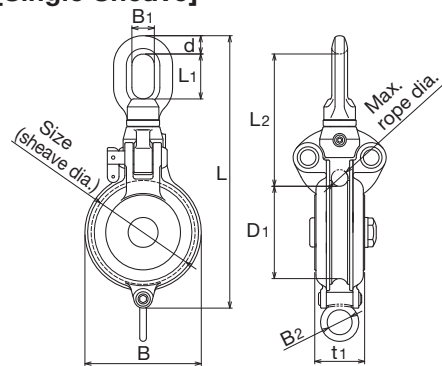


5. Product specifications

Heavyduty Block [Single Sheave]

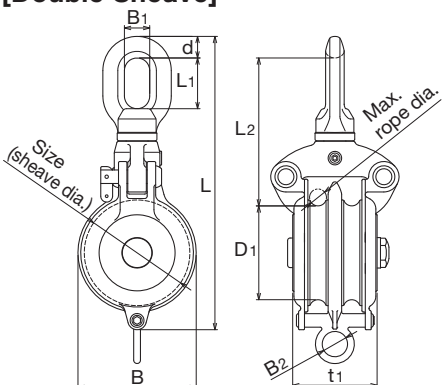


[Single Sheave]

No.	Size (sheave dia. (mm))	Type	Max. rope dia. (mm)	d	L	L ₁	L ₂	D ₁	B	B ₁	B ₂	t ₁	Wrench dia.	Bearing number	Unit weight (kg)	Working load limit (t)
AK1732	125	Single Sheave	20	22	328	54	159	111	140	27	30	60	6, 8	6308	5.9	2.5
AK1733	150	Single Sheave	20	25.5	380	60	182	132	167	30	30	71	8, 8	6310	9.4	3.0
AK1734	175	Single Sheave	24	29	434	68	206	155	194	34	40	82	8, 10	6312	14.3	3.5

*Material: Special stainless steel, Sheave pin / Swivel / Swivel pin / Arm pin = SUS304, Grease nipple = brass
 *The working load limit does not apply to the becket part.
 *This product contains one steel bearing with rubber seal.

[Double Sheave]

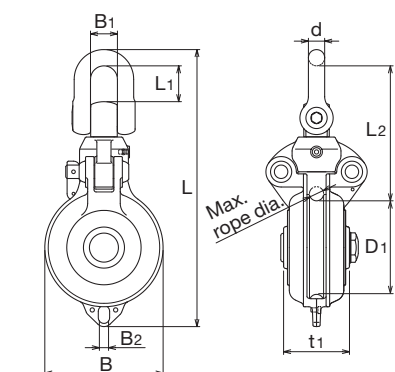


[Double Sheave]

No.	Size (sheave dia. (mm))	Type	Max. rope dia. (mm)	d	L	L ₁	L ₂	D ₁	B	B ₁	B ₂	t ₁	Wrench dia.	Bearing number	Unit weight (kg)	Working load limit (t)
AK1792	125	Double Sheave	20	25.5	347	60	175	111	140	30	30	100	6, 8	6308	9.8	2.5

*Material: Special stainless steel, Sheave pin / Swivel / Swivel pin / Arm pin = SUS304, Grease nipple = brass
 *The working load limit does not apply to the becket part.
 *This product contains one steel bearing with rubber seal.

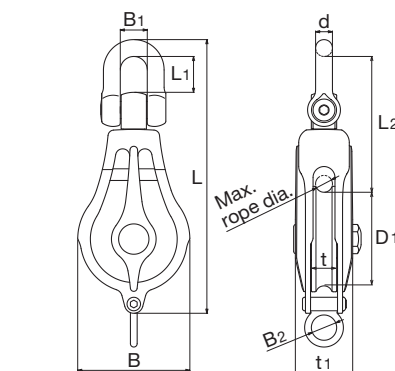
Heavyduty Block Type SII



No.	Size (sheave dia. (mm))	Type	Max. rope dia. (mm)	d	L	L ₁	L ₂	D ₁	B	B ₁	B ₂	t ₁	Hexagon wrench dia.	Bearing number	Unit weight (kg)	Working load limit (t)
AK1783	150	Single Sheave	20	23	391	50	190	132	167	38	13	93	4, 8, 14	6308	12.2	5.0

*Material: Special stainless steel, Sheave pin / Swivel / Swivel pin / Arm pin = SUS304, Grease nipple = brass
 *The working load limit does not apply to the becket part.
 *This product contains two steel bearings with rubber seals.

Tough Block Type PB



No.	Size (sheave dia. (mm))	Type	Max. rope dia. (mm)	d	L	L ₁	L ₂	D ₁	B	B ₁	B ₂	t ₁	Hexagon wrench dia.	Bearing number	Unit weight (kg)	Working load limit (t)
AK10010	125	Single Sheave	20	20	325	42	161	111	133	32	30	68	6, 8, 10	6308	6.2	3.0
AK10011	150	Single Sheave	20	23	370	50	180	132	159	38	30	75	8, 14	6310	9.4	5.0
AK10012	175	Single Sheave	24	26	427	57	208	155	185	44	40	85	8, 10, 14	6312	14.4	6.0

*Material: Special stainless steel, Sheave pin / Swivel pin = SUS304
 *The working load limit does not apply to the becket part.
 *This product contains one steel bearing with rubber seal.

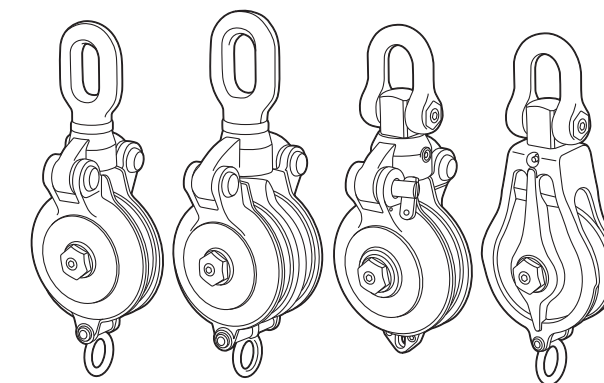
ASANO Heavyduty Block Single Sheave/Double Sheave/Type SII Tough Block Type PB

1732 MAE

Instruction manual

Before use Important

- For proper and safe use of the product, the prevention of injury to yourself and others around you, and the prevention of damage to property, read and understand this document thoroughly before handling the product.
- After reading this document, store it in a place where it can be easily referenced.
- Have an expert plan and install equipment such as cranes that will be used with the product.
- Follow the industrial safety and health regulations and safety ordinance for cranes when handling the product.
- The product is manufactured for the purpose of hoisting or pulling heavy loads. Do not use it for any other purpose.
- The product is for professional use only. It is not for general home use.



Safety precautions

The descriptions in these "Safety precautions" and in the text are for you to follow in order to prevent injuries and property damage.

- The danger and degree thereof resulting from incorrect handling are classified as follows.

Warning	Ignoring this indication and handling the product incorrectly may result in serious injury or death.	Caution	Ignoring this indication and handling the product incorrectly may result in minor injury or property damage.
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- The following symbols are used to indicate the descriptions for you to follow.

	Describes something you must not do.		Describes something you must do.
--	--------------------------------------	--	----------------------------------

Warning

- Do not use for the purpose of hoisting people or equipment with people in it.**
Doing so may lead to serious injury or a fatal accident.
- Do not apply loads that exceed the working load limit.**
Doing so may damage the pulley, drop the hoisted load, and lead to serious injury or a fatal accident.
- Do not apply impact loads.**
Doing so may lead to serious injury or a fatal accident due to a broken pulley or other part, or falling hoisted loads.
- Do not ride on top of hoisted loads or pulley equipment.**
Doing so may lead to serious injury or a fatal accident due to falls or falling hoisted loads.
- Do not use when there are people within the movement range of the hoisted load or under the pulley.**
Doing so may lead to serious injury or a fatal accident.
- When hoisting, stay away from the pulley, rope, and around and under the hoisted load.**
Failure to do so may get your hands or body caught or you may get crushed under the falling hoisted load, lead to serious injury or a fatal accident.
- Do not use the swivel for purposes such as constant rotation.**
Doing so may damage the swivel, drop the hoisted load, and lead to serious injury or a fatal accident.
- Do not perform modifications such as welding or cutting.**
Doing so may lead to serious injury or a fatal accident due to a weakened or broken pulley.
- Inspect before use and periodically.**
Failure to do so will overlook abnormalities or damage to the pulley, and may lead to serious injury or a fatal accident.
- Do not let the rope fixture touch the pulley.**
Doing so may damage the pulley and lead to an accident of a falling hoisted load.
- Attach the hoisted load so that the sheave and hoisted load fixture are in tandem.**
If the load is applied to the pulley from the side, it may lead to serious injury or a fatal accident due to breakage.
- After starting to hoist a load, check that the rope is in the groove of the sheave.**
Failure to do so may drop the hoisted load due to rope damage, and lead to serious injury or a fatal accident.
- Do not use during bad weather such as in strong winds.**
Doing so may drop the hoisted load and lead to serious injury or a fatal accident.
- When attaching, removing, or transporting a pulley, use slip-resistant protective gloves and perform work in a stable place.**
Failure to do so may drop the pulley and lead to serious injury or a fatal accident.

Caution

- Do not use while submerged such as in the sea or water.**
Doing so will lead severe rotation failure or strength deterioration due to adhesion of foreign matter or corrosion.
- Do not let the pulley touch sharp objects or abrasive surfaces.**
Doing so will cause the pulley to weaken due to damage or abrasion.
- Do not let the sheave rotate continuously at high speeds for long periods of time.**
Otherwise the bearing may abrade due to frictional heat, which may cause the rotation failure of the sheave.
- Use within the temperature range between -18°C and 66°C.**
Using outside of this temperature range will cause rotation failure or strength deterioration.
- In low temperature environments, check that the sheave is not frozen before working.**
Failure to do so may damage the rope from rotation failure of the sheave due to freezing.
- In high temperature environments, lubricate periodically.**
In high temperature environments, depletion of lubricant is severe and if the lubricant dries up, it will cause the rotation failure of the sheave or the shaft.
- Do not use or store in the following environments.**
 - Places with extreme temperature changes
 - Places with corrosive or acidic gas
 Doing so will cause rotation failure or strength deterioration.

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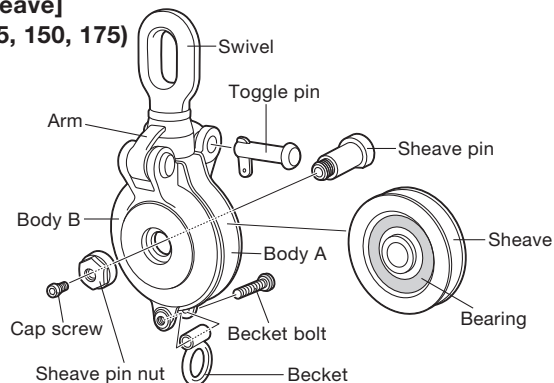
Homepage <http://www.asano-metal.co.jp/en>

E-mail info-english@asano-metal.co.jp

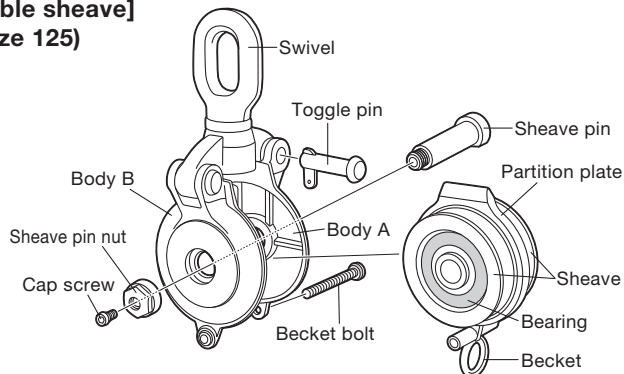
Dealer

1. Part names

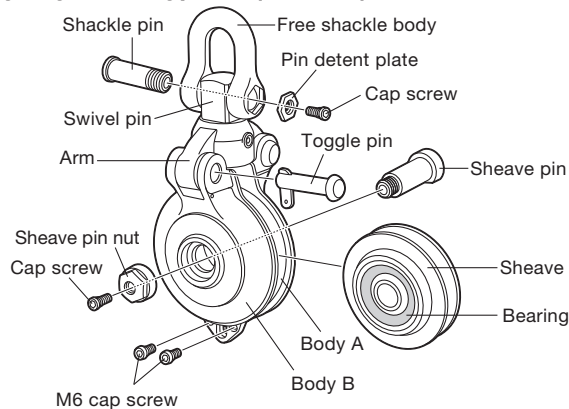
■ Heavyduty Block [Single Sheave] (Size 125, 150, 175)



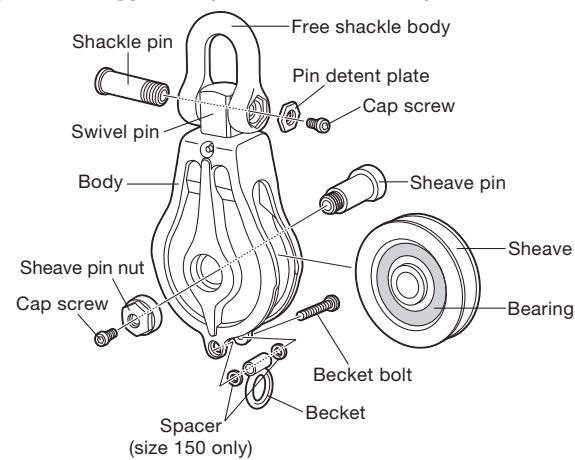
■ [Double sheave] (Size 125)



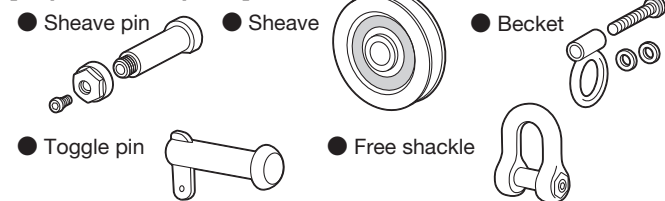
■ Heavyduty Block Type SII (Size 150)



■ Tough Block Type PB (Size 125, 150, 175)



[Replacement parts]



2. Removing and attaching the parts

Removing and attaching the sheave pin (all models)

<Removal>

- Rotate the cap screw with a hexagon wrench to remove it.

Tool	Size	125	150	175
Hexagon wrench		6 mm	7 mm	10 mm

Note 1 The O-ring is attached to the cap screw. When removing the cap screw, the O-ring may stick to the sheave pin nut and fall off from the cap screw. In such a case, insert the O-ring into the cap screw again.

- Use a wrench or socket wrench to remove the sheave pin nut.

Tool	Size	125	150	175
Nut double face width		30 mm	36 mm	41 mm

Note 2 The sheave pin nut is the **left-hand screw**. If you try to remove it like a normal right-hand screw, it will become strongly tightened and the screw may no longer be able to be removed. When removing, rotate in the direction of the arrow in the figure (removal direction).

- You can remove it if you pull the sheave pin out from the body.

<Attachment>

- To attach, follow the <Removal> procedure in reverse order.

Note 3 Insert the sheave pin so that its notch enters the uneven part of the body.

Note 4 Apply adhesive to prevent the screw part of the cap screw from loosening. (Loctite 263 recommended)

Removing and attaching the toggle pin (Heavyduty Block Single sheave/ Double sheave/Type SII only)

<Removal>

- Raise the toggle pin plate of the toggle pin and make it straight as shown in the figure.
- You can remove it if you pull the toggle pin straight out.

<Attachment>

- To attach, follow the <Removal> procedure in reverse order.

* The toggle pin will be safer if you pass wire through the toggle pin plate hole and bind it so that it does not fall off.

* The Type SII has a through hole in the body so you can pass wire through it as shown in the upper right figure.

Removing and attaching the free shackle (Heavyduty Block Type SII/ Tough Block Type PB only)

<Removal>

- Rotate the cap screw with a hexagon wrench and remove it along with the pin detent plate.

Tool	Size	125	150	175
Hexagon wrench		6 mm	7 mm	10 mm

* Check the O-ring as shown in **Note 1** because the cap screw is the same part used for the sheave pin.

- Rotate the shackle pin with a hexagon wrench to remove it from the free shackle body.

Tool	Size	125	150	175
Hexagon wrench		10 mm	14 mm	14 mm

<Attachment>

- To attach, follow the <Removal> procedure in reverse order.
- Apply adhesive to the cap screw. Refer to **Note 4**.

Removing and attaching the becket (all models)

- You can rotate the becket bolt with a hexagon wrench to remove or attach the becket.

Tool Hexagon wrench 8 mm

Note 5 When attaching, apply adhesive to the screw part of the becket bolt to prevent it from loosening. (Loctite 263 recommended) Also check that the O-ring is attached.

- Replacement parts are not prepared for the heavyduty block double sheave because the becket and partition plate are built as one piece.

- Replacement parts are not prepared for the heavyduty block type SII because the becket is slotted holes of body A and body B that are secured with the M6 cap screws. Rotate with a hexagon wrench to remove.

Tool Hexagon wrench 4 mm

Note 6 When attaching, apply adhesive to prevent the screw part of the M6 cap screw from loosening. (Loctite 263 recommended)

3. Inspection and maintenance

Inspection before use

Warning

Inspect before using the pulley.
Using the product when there is a problem accelerates the damage and may lead to strength deterioration, damage to the product, or an accident of falling hoisted load.

<Inspection of movable parts>

- The swivel, free shackle, and sheave rotate smoothly.

Caution

If rotation is poor, not centered, significantly rattles, or if rotation stops, discontinue use and replace the part or product.

- The toggle pin attaches and detaches and the arm opens and closes smoothly.

<Inspection of the sheave pin, becket, and free shackle>

- The nut and cap screw securing the sheave pin are not loose or defective.
- The becket bolt securing the becket is not loose or defective.
- * The M6 cap screws for the Type SII are not loose or defective.
- The shackle pin and cap screw securing the free shackle are not loose or defective. Also, the pin detent plate is not cracked or defective.
- * For the checking method, refer to **2. Removing and attaching the parts**.

<Visual inspection of appearance>

- There are no cracks or corrosion in the swivel and welded part of the swivel pin. There are also no cracks or corrosion in the other parts.
- There are no bends, twists, distortions, or stretches.
- There is no excessive wear, denting, or hollowing out.
- There is no wire scratch marks on the sheave surface.
- Foreign matter or dirt is not attached.
- Casted characters on the body shall be readable.

Warning

Do not use products that are in the following conditions
- Products that are deformed, cracked, or worn out
- Products with signs of corrosion such as rust stains or galvanic corrosion
Doing so may lead to serious injury or a fatal accident due to falls or falling hoisted loads.

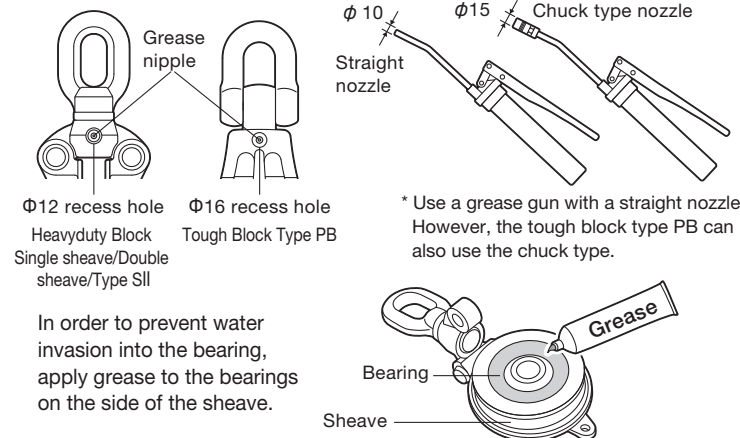
Caution

Do not let the product touch other types of metal for long periods of time.
Doing so will cause corrosion.

Maintenance

<Applying grease (or lubricant)>

- Applying to the swivel pin and the side surfaces of the bearing
- Apply grease from the grease nipple to prevent rotation failure and abrasion of the swivel.



In order to prevent water invasion into the bearing, apply grease to the bearings on the side of the sheave.

Warning

Do not let grease on the swivel pin dry up.
Drying up will lead to breakage of the swivel pin or the crack of the welded portion.

<Removing corrosion (rust), dirt, and foreign matter>

- For light dirt (such as hand marks, sand, or mud), wipe with a damp soft cloth or sponge, and then wipe with a neutral detergent.
- If dirt still remains, wiping with a store-bought cleaner (cleaning solution), remover, or thinner is effective.
- If rust stains (spots of rust caused by iron particles in dirt) remain after performing ① and ②, use a store-bought rust remover.
- If the rust cannot be removed with a store-bought rust remover, rub it off with sandpaper or an abrasive compound.
- Remove foreign matter by scraping it away with sharp-tipped object such as a slotted screwdriver, and then perform ① and ②. Rub off persistently attached foreign matter with a file or abrasive compound because you may damage the product if you use excessive force.

Caution

Wipe frequently.
Attached foreign matter such as sea water, soot, or iron particles will cause corrosion.

Periodic inspection

- Perform periodic inspection at least once a year.
- If you use the product under harsh conditions such as frequent hoisting of loads equal to the working load limit, or intense vibration or rolling, perform inspection more frequently because the parts will wear out substantially.
- For periodic inspection, inspect all of the items in **Inspection before use**, perform **Maintenance**, and check the dimensions of each part. If the dimensions are 10% different from the original dimensions or the dimensions in the catalog, replace the part or product. (Refer to **5. Product specifications** for the dimensions.)

Warning

When disassembling the pulley for sheave replacement, remove it from high places and disassemble on the ground.
Failure to do so may drop the pulley and lead to serious injury or a fatal accident.

Caution

When replacing parts, use ASANO-specified parts.
Failure to do so may result in lower functionality of the pulley due to incompatible parts.

4. In case of trouble

- If a problem occurs while using the pulley, discontinue use immediately, and check the items in **3. Inspection and maintenance**.

Warning

In the unlikely event the pulley deforms or breaks and a load is hanging in midair, first take down the hoisted load, unload the pulley, and take safety measures to prevent secondary accidents.

- For inquiries about pulleys, please consult the dealer where you purchased the product.