



WHK40 & WHK65 - INSTRUCTION MANUAL



T-ISS™
safety suppliers

a Heijboer Safety Group company

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Caution

This manual should be thoroughly read by all operators prior to any works commencing, relating to installation, operation and maintenance of this equipment.

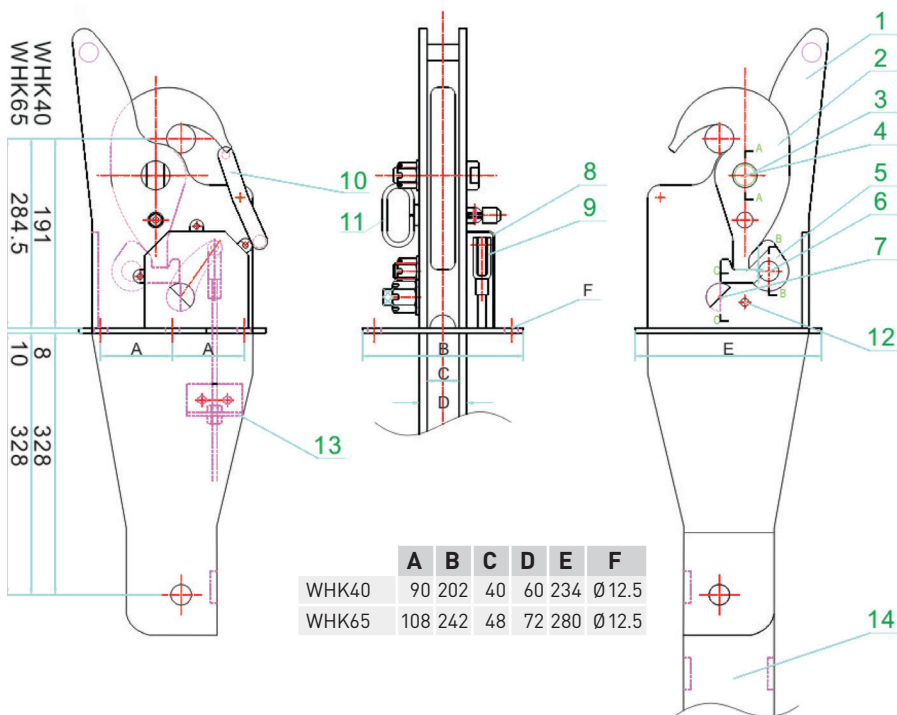
If there is any problem available of the contents of this manual, please contact our company before commencing works.

Our company takes no responsibility for any incident resulting from the misinterpretation, extension or deviation from the instructions contained within this manual.

1. Model and Hook

1. MODEL: WHK40, WHK65

2. HOOK



No.	Discription	Qty.	No.	Discription	Qty.	No.	Discription	Qty.
1	Hook base	1	6	Block schaft	1	11	Safety pin	1
2	Hook body	1	7	Hafe axle	1	12	Bracket	1
3	Bush	1	8	Cover	2	13	Hydrostatic cable bracket	1
4	Hook shaft	1	9	Pull rod	1	14	Set of deck plates	1
5	Block	1	10	Rope stopper	1			

2. Materials

Hook / Hook plates / Release Gear: SS316L

Bush: Brass

3. Standard Supply

- Two hooks with hook plates (length suitable for the boat)
- One release handle
- One hydrostatic release unit
- One instruction poster
- One stern hook
- One instruction manual

Note: Only approved cables may be used.

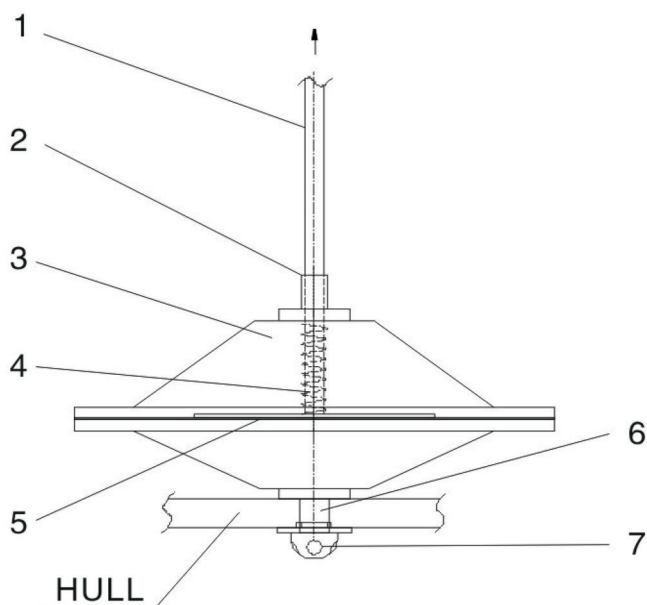
4. Important

The gear must be installed in accordance with this manual by a qualified person.

The gear mechanism must not be repaired or altered.

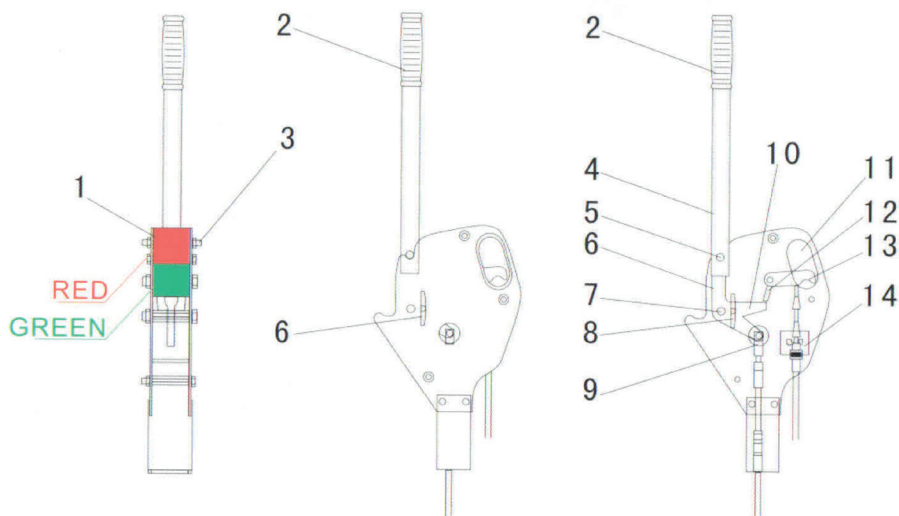
The manufacturer/supplier accepts no responsibility or warranty if the installation, testing, or maintenance is not carried out strictly according to the instructions.

5. Hydrostatic Release Unit



No.	Description	Qty.
1	Pull rod	1
2	Pull rod sleeve	1
3	FRP cylindrical shell	2
4	Spring	1
5	Cushion	1
6	Joint	1
7	Filter tip	1

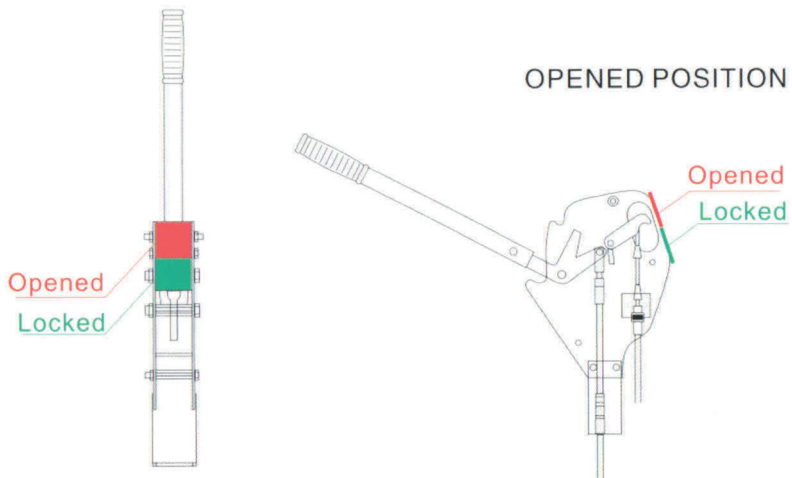
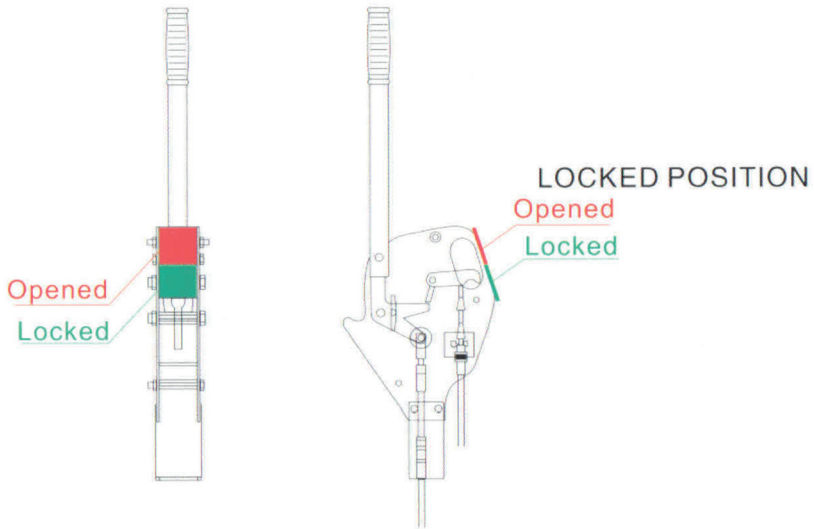
6. Release Handle Unit



No.	Description	Qty.
1	Side plates	2
2	Release handle	1
3	Bolt & nuts	1 lots
4	Outer tube	1
5	Roller	1
6	Inner tube	1
7	Handle pin	1

No.	Description	Qty.
8	Safety pin	1
9	Cable fitting	2
10	Operation lever	1
11	Emergency release gear cover	2
12	Hydrostatic locking lever	1
13	Emergency release handle	1
14	Hydrostatic cable bracket	1

7. Release Handle Operation



8. Hook Release Procedure

ON / OFF LOAD RELEASE HOOKS

Please strictly follow the procedures described below. Incorrect operation may result in serious harm.

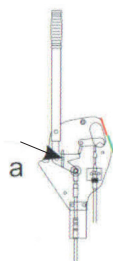
Before operation, confirm that the safety pin is fitted and that the operating handle is in the correct position. Failure to follow these instructions may result in serious accidents.

OPERATING INSTRUCTIONS

1. Normal release procedure (without load, a)

After the lifeboat has fully entered the water, operate according to the following steps:

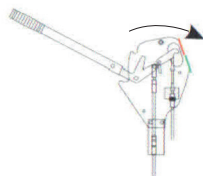
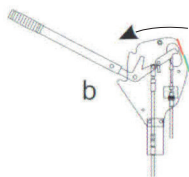
- Before water entry, do not operate the handle.
- After the lifeboat is fully waterborne, remove the safety pin.
- Confirm that the hydrostatic interlock has been released, then pull the operating handle to release.



2. Emergency release procedure (with load, b)

When the lifeboat is not fully waterborne, but the height above the water surface does not exceed 3 metres, perform the following steps:

- Remove the safety pin from the operating handle.
- Confirm that the hydrostatic interlock is released, then move the handle to the red marked position.
- Pull the operating handle.

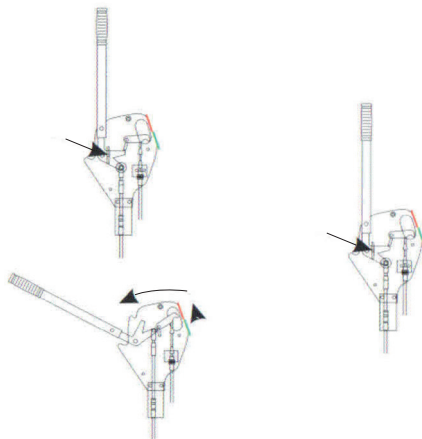


3. On-load release procedure

After the lifeboat has fully entered the water:

This procedure shall only be carried out when the release mechanism is not functioning normally.

- Confirm that the lifeboat is fully waterborne.
- At both the forward and aft ends, remove the red-marked wrench.
- Open the forward and aft doors and stand at the positions marked in red.
- Use the wrench to operate until the lifeboat suspension hooks are released.

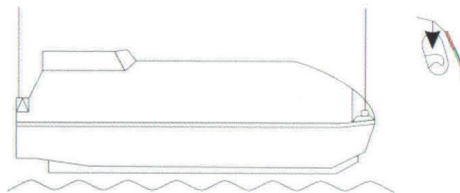


Warning:

This device can be opened at any time. Operation must be strictly controlled.

4. Recovery procedure

- Confirm that both release hooks are inside the guide blocks.
- Reset the operating handle and insert the safety pin.
- Raise the lifeboat slightly; the hydrostatic interlock will automatically reset.
- Hoist the lifeboat to the stowed position.



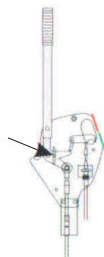
Installation Instructions

1. The hook assemblies must be securely bolted to the lifeboat shoes, ensuring the following:

- 1). They are mounted vertically.
- 2). The hook center and height are positioned above deck level.

It is essential that both side plates of each release hook assembly are equally loaded while under tension to ensure maximum system efficiency.

2. Position the release handle unit adjacent to the helmsman's seat, using the bolts and backing plate provided. Ensure that the release handle unit is oriented for pull release operation only.



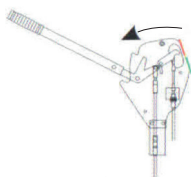
3. Install the system interconnecting cables, ensuring the following:

- A. Cables are of the correct length and run with the minimum number of bends.
Any bends must have a generous radius.
- B. Do not clamp the cable within the bend area.
Always clamp the cable at the tangent points just beyond the bend.
- C. Ensure all clamps and clips are properly tightened and secured.
Following these recommendations will significantly improve the efficiency and service life of both the system and the cable.

4. Operating cable attachment and adjustment:

1) Release Hooks

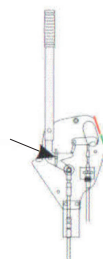
- A. Remove the cover to access the release lever arm.
- B. Screw one end of the operating cable into the pull rod, ensuring a minimum engagement of 12 mm.
- C. Mount the pull rod onto the release lever arm using the swivel pin and split pin.
Ensure the split pin is facing away from the release hook side plate.
- D. Maintain alignment and clamp the cable to the release hook side plate, then refit the cover.



2) Hydrostatic release unit

- A. Screw one end of the hydrostatic cable into the pull rod and secure it with a nut.
- B. Lock the cable to the pull rod sleeve using the nuts provided.

- 3) Release handle unit
 - A. Ensure the release handle is in the locked position.
 - B. Mount the forward and aft release cables onto the cable fittings of the release handle.
Ensure all slack and cable travel are fully taken up, and lock off using bulkhead nuts.
 - C. After fitting the cables, ensure that the hydrostatic locking lever is in the locked position when the release handle is in the upright, closed position.
 - D. Sleeve a 400 mm plastic tube over the cable to prevent seawater ingress.



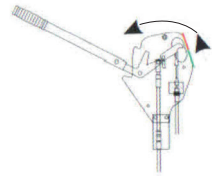
5. Pre-operational checks before installing the lifeboat into the davits:

- 1) Check all sub-assembly fixings, cable clamps, and locking nuts to ensure they are secure.
- 2) Ensure all maintenance and lubrication procedures have been completed.
- 3) Check that both release lever arms are correctly positioned.
- 4) Remove the safety pin from the release handle unit. Move the safety pin aside and ensure the hydrostatic locking lever is in the full open position.
- 5) Hold the release handle and move it firmly to the full open position.
Ensure that both hooks can swing freely.
Confirm that the release handle cannot be moved into the locked position while the hooks are in the open, swung-out position.
The release handle must be in the fully open position against the stopper to avoid cable overload.
- 6) Ensure the hooks correctly lock when returned to the hoisting position and when the release handle is returned to the locked position.
If cable travel prevents this operation, adjust the slack and cable travel accordingly.
- 7) Reinsert the safety pin into the release handle unit.

6. Factory acceptance function test

- A. Ensure the release handle is in the locked position.
- B. Lower the craft into the water; remove the safety pin from the release handle unit.
- C. Confirm visually that the hydrostatic locking lever moves from the closed to the open position (red marking visible).
- D. Hold the release handle and move it firmly until it reaches the full open position.
- E. Confirm visually that both release hooks fully open and that the linkages move freely.

Repeat this function test three additional times to ensure the system operates consistently and reliably.



Operation Instructions

DEATH OR SERIOUS INJURY MAY RESULT FROM MISUSE OR OPERATION BEYOND THESE INSTRUCTIONS.

1. Normal release procedure (Off-load procedure)

When the boat is fully waterborne, perform the release procedure as follows:

- Do not touch the release handle until the boat is fully waterborne.
- Remove the safety pin from the release handle only when the boat is fully waterborne.
- Ensure the hydrostatic locking lever is in the open position (red marking). Then hold the release handle and move it firmly to the full open position.

Proceed to sail away from the lifting point; the lifting ring will separate from the hooks of the lifeboat.

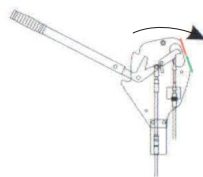
2. Emergency release procedure (On-load procedure)

When the boat is not waterborne and the distance to the waterline is less than 3.0 m, perform the release procedure as follows:

- Remove the safety pin from the release handle.
- Insert the safety pin of the release handle into the emergency release sleeve. Move it down and ensure the hydrostatic locking lever is in the fully open position (red marking).
- Hold the release handle and move it firmly to the full open position.

The lifting ring will separate from the hooks of the lifeboat.

The lifeboat will fall into the sea and must proceed to sail away immediately.

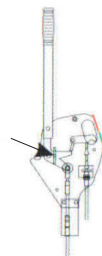


3. Emergency release procedure (On-load)

EMERGENCY PROCEDURE TO BE USED ONLY WHEN THE BOAT IS WATERBORNE

This procedure must only be used if the release handle at the helmsman's position fails to operate or if cables break:

- Ensure the lifeboat is fully waterborne.
- Two red wrenches are located near the lifting hooks inside the canopy, forward and aft.
- Open the forward and aft access doors/hatches and place the red wrench on the square head of the release cam on each hook.



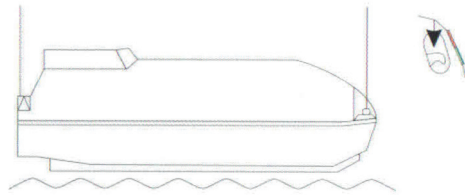
d. Pull down on the red wrench to release each hook.

WARNING: The gear is an on-load release hook system, which can be operated at any time.

Only trained and certified crew should operate this equipment.

4. Recovery procedure

- a. Ensure both hooks are in the locked position.
- b. Refit the safety pin into the release handle.
- c. When the boat is lifted just clear of the water, ensure the hydrostatic locking lever is in the OFF position (green marking).
- d. When the boat is lifted to deck height, again ensure the hydrostatic locking lever is in the OFF position (green marking).
- e. Secure the boat back into the stowed position.



9. Maintenance

Lifeboat and davit maintenance, or any associated work, must be carried out by fully trained safety officers or engineers.

Lifeboat and davit maintenance, or any associated work (other than visual inspection), must be carried out utilizing the maintenance pad-eyes/pendants only to suspend the survival crafts, ensuring that the weight has been fully transferred onto the maintenance pendants before any work is carried out.

Please note that the number of maintenance workers retained by the maintenance pendants is rated to a maximum of 3 crew members.

The release system is constructed from non-corrosive materials throughout. All pivots are manufactured from stainless steel set in bronze bushes. The operating cables are manufactured from corrosion-resistant materials.

WEEKLY MAINTENANCE

A visual inspection should be carried out every week. Pay particular attention to the following vital components:

1. Check that the links are fully engaged within the throat of the hooks.
2. Check the hooks for any corrosion or rust.
3. Wipe off dirt, salt, dust, etc., which may affect proper operation.
4. Ensure the safety pin is fitted and the release handle is in the locked position.
5. Check the hooks to ensure no damage is present.
6. Apply grease if necessary.
7. Check that the cables show no signs of damage or corrosion.

MONTHLY MAINTENANCE

BEFORE ANY WORK IS CONDUCTED ON THE LIFTING GEAR, the boat must be supported by the hanging-off pendants. Only trained and qualified personnel may carry out this work.

1. Repeat the schedule listed in the weekly maintenance program.
2. Remove the safety pin from the release handle.
3. Insert the safety pin of the release handle into the emergency release sleeve.
4. Hold the release handle and move it firmly to the full open position until the lifting ring separates from the hooks of the lifeboat.
5. Remove the cover, ensure the release cam is in the correct position, and verify that the release cam assemblies are properly lubricated.

6. Clean off any dust, salt, oil, or debris from cable connections and rods. Move the release handle several times to release the cables and cam pin. Ensure the operation is smooth and unrestricted.
7. Refit the clear covers.
8. When all parts have been oiled, greased, and cleaned, bring the hooks to the locked position and return the release handle to the locked position. Fit the safety pin and verify that both release cams are correctly locked against the lock piece. Ensure the hydrostatic locking lever on the release handle is in the locked position (green marking).
9. The winch must be hand-cranked when transferring the loads from the pendants onto the fall wires and hooks.
10. After transferring the loads, remove and stow the pendant strops and prepare the boat for launching.
11. The boat should be regularly launched and tested to ensure continued operational safety.

YEARLY MAINTENANCE

Once a year, during the monthly check and maintenance, a yearly inspection should be carried out on the hydrostatic block before operating it. Perform the following checks:

1. Repeat the schedule listed in the monthly program, with the exception of the operational deployment and retrieval at present.
2. Disconnect cables from the release unit.
3. Remove clamping bolts.
4. Clean and dry all parts of any deposits of salt or dirt and add some inhabitant oil. Replace the diaphragm in the same position.
5. Disconnect cables from the top end and clean. Check if the cable is operating freely and add oil. Make sure that the unit is reassembled correctly and according to the instructions.
6. Replace the upper part in the same location and fasten the clamping bolts around the unit. Hand-tighten the bolts opposite each other. Repeat tightening several times.
7. Reconnect the cable according to the fitting instructions.
8. Check the release cam pin and lock piece for any damage. The tail end of the lock piece will be damaged over time, depending on operation and use.

If the diameter of the lock piece tail is above 5 mm radius, the lock piece should be replaced with a new one.

(Only manufacturer representatives may perform this.)

Lubrication

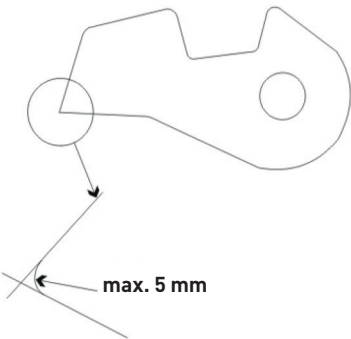
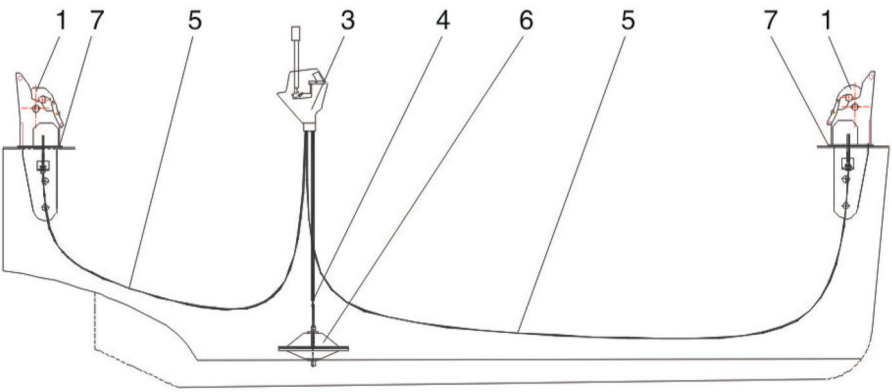
Release pin assemblies, cables, cable end rods, and all moving parts must be cleaned with a turpentine/paraffin-based medium or light cloth. Clean with a non-fluffy, oil-soaked cloth and then apply a thin, even film of grease sparingly.

Recommended lubricants:

- Shell Avania Grease R2 or G3 B.P. LS2
- Mobilux EP2
- LPS ESA100

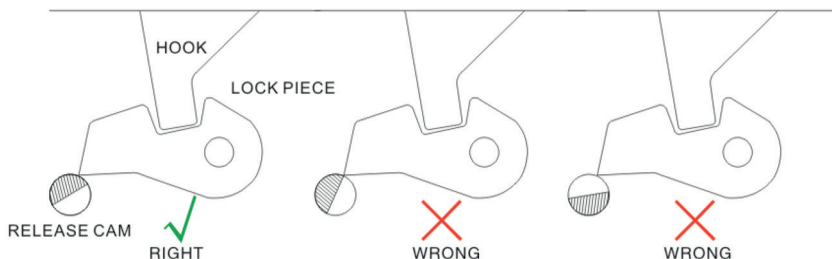
The above lubricants are for guidance only and are subject to availability and local conditions.

10. Standard Hook Arrangements



No.	Description	Qty.
1	WHK40 On/Off-load Release Hook	2
2	Hydrostatic Release Unit	1
3	Hooks Release Handle	1
4	Release Handle Unit	1
5	Aft Hook Release Cable	1
6	Forward Hook Release Cable	1
7	Mounting Plate	2

11. Details of Lock Piece & Release Cam



12. Lifting Rings

All lifting rings (not part of our supply) must be approved by the manufacturer, tested, and certified according to Classification standards.

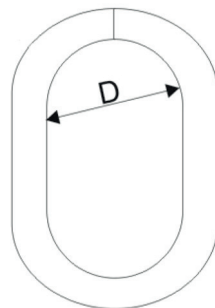
Factor of Safety: minimum 6

The following dimensions are recommended for a 5.0T SWL:

- Inside Diameter: Max. 190 mm
- Width: Min. 160 mm

If in doubt, ALWAYS ASK!

All lifting rings must have a type approval certificate.



Max. Dimension: 38 mm

13. Cables for On-Load Recommendation

Only push-pull cables of marine heavy-duty type should be used.

Stainless steel or other corrosion-resistant materials must be used to ensure proper functioning of the release gear over time.

I) Temperature Range: -40°C to $+130^{\circ}\text{C}$

II) Travel: 101 mm (4") Bulkhead fitting

III) Deflection: Max. 8°

IV) Examples: 416# for 3.36–8.5T SWL
316# for hydrostatic unit

V) Bend Radius: 416#: 254 mm
316#: 177 mm

Morse or Ringspan manufactured cables or equipment meeting equivalent specifications may also be used.

CONTACT INFORMATION

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