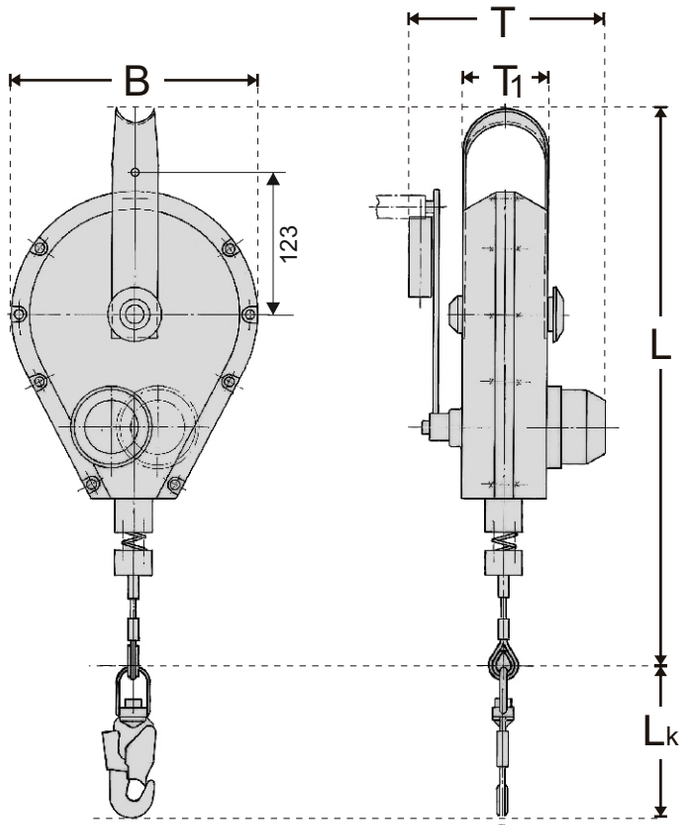
Datasheet

Height-safety Device with rescue hoisting facility HRA 18



Art.-Nr.: 41-HRA18

Dimensions & Weight:

Rope length	Length (L)	Width (B)	Depth (T)	Depth (T1)	Carabiner (L_k)	Weight
18 m	565 mm	233 mm	225 mm	97 mm	170 mm	11.5 kg

Properties & application fields:

- Aluminum housing and galvanized wire rope: especially resistant against alkaline solutions, salt water, heat, fire, cold and ultraviolet radiation.
- Bracket suspension, especially sturdy for safely attaching the fall arrestor.
- IKAR height-safety devices with rescue hoisting facility (type HRA) are equipped with a winching unit. In case of a rescue after a fall, this winch unit can easily be snapped-in by a second person. The person who has suffered the accident can therefore be rescued quickly and safely.
- Compact design: Stationary use, with medium working radius.

Instructions for use
Hazard area

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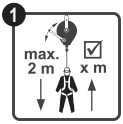
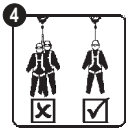
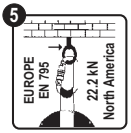
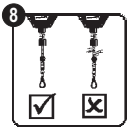
1. The IKAR Fall Arrest Block HRA with recovery mechanism in accordance with EN 360:2002 / 1496:2007 B, CSA Z259.2.2 type 3, ANSI/ASSE Z359.1-2007, Z359.14-2012 is an automatic fall arrest system, part of a fall protection PPE with integrated fall restraint functions to serve as a fall arrest and recovery lifting device. In conjunction with a safety harness (EN 361:2002 / 1497:2007, CSA Z259.10-06, ANSI/ASSE Z359.1-2007), the HRA device provides safety for persons carrying out work with a risk of falling (e.g. when moving in containers, vertical shafts, sewer systems). With the recovery mechanism, the lifeline is wound up to lift the casualty in an emergency. Descent of the person is limited to a path of 2 m (Fig. 1). The HRA device may only be used for the intended purpose.
2. The instructions for use are to be fully read and understood before use. Non-observance of the instructions for use will put lives at risk (Fig. 2). In case of fall, prolonged suspension of a person for more than 20 minutes must be avoided (risk of shock).
3. The recovery mechanism has only been approved for recovery purposes, not for lifting and lowering loads.
4. Only safety harnesses in accordance with EN 361, EN 361/1497, CSA Z259.10-06, ANSI/ASSE Z359.1-2007 are permitted for use with the fall arrest block with recovery mechanism (other harnesses are not permitted) (Fig. 3).
5. One device can only protect one person at a time, but can be used successively by several persons.
6. A rescue plan covering any rescue case that might occur during work must exist.
7. During the rescue operation, there must always be direct or indirect visual or communicative contact with the person to be rescued.
8. For devices with a hand chain drive, a suitable attachment point of sufficient carrying capacity must be chosen (e.g. anchorage point in accordance with EN 795; or 6 kN carrying capacity (for North America 22,2 kN) at present constructions; BGR 198) (Fig. 5). Attachment is made using a suitable connecting element in accordance with EN 362 or sling rope, the rope being pulled through the handle of the fall arrest block and closed with a secured connecting element in accordance with EN 362:2004 / CSA Z259.12-01 / ANSI / ASSE Z359.12-2009.
9. The HRA device should be in a perpendicular position above the head of the person to be rescued in order to prevent swinging (Fig. 6). The suspension of the device must allow for compensating deviations in rope/webbing length. When the device has been attached to the anchorage point, attach the end of the connecting device (karabiner type connector) to the ring attachment point of the safety harness. If the karabiner hooks are not self-locking, they must be screwed tight with a sleeve nut.
10. The HRA fall arrest block with winding handle can only be used as part of a fall arrest system in conjunction with the holders and support brackets of the IKAR anchor devices in accordance with EN 795. The instructions for use of the anchor devices and their components must be observed.
11. Before every use, check the readability of the product label.
12. A visual inspection and functional test of the HSA fall arrest block must be performed before every use (Fig. 7). To do so, attach the fall arrest block to a suitable anchor point: Pull the rope, the ratchets must lock audibly and the device must be locking. Firmly hold the rope and allow it to retract into the fall arrest block in a controlled manner. If the rope is released, it may cause injuries and damage by its quick and uncontrolled retraction into the housing. Check the karabiner hook for proper functioning (self-closing, lockable). Check the retractable connecting device for proper condition. A HRA fall arrest block with a damaged connecting element or device (Fig. 7a + 8), e.g. ropes with a kink or broken/torn strand, must not be used.
13. A fall arrest block must be withdrawn from use if damaged, loaded by fall or if its safe condition is doubtful. It may only be used further if tested and released in writing by an expert from or trained by the manufacturer.









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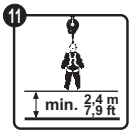
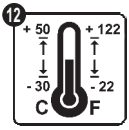
14. Fall arrest blocks must not be used for securing persons working above bulk goods or similar substances where people can sink in (Fig. 9).
15. As necessary, but at least every 12 months, fall arrest blocks with recovery mechanism must be inspected by the manufacturer or by persons trained and authorised by the manufacturer (Fig. 10). This must be documented in the inspection log book supplied with the product. The effectiveness and durability of the fall arrest block depends on regular inspection.
16. Observe BGR 198 (fall and BGR 199 (rescue operation)).
17. With the fall arrest block above the user, the clear height below the user must be 2.4 m.
18. The IKAR fall arrest block with recovery mechanism can be used in a temperature range from -30° C to +50° C in accordance with EN 360 (Fig. 12).
19. The rated load is 136 kg (Fig. 13).
20. Fall arrest blocks with recovery mechanisms must be protected from the effects of welding flames and sparks, fire, acids, lyes, solvents and similar agents.
21. No modifications may be made on the device.
22. Note: Fall arrest blocks with recovery mechanism may only be used by persons who are appropriately trained or otherwise skilled. Users must be free from health impairments (alcohol, drug, medication or cardiovascular problems).
23. The service life of the fall arrest block with recovery mechanism must be determined in the yearly inspection; it is approx. 10 years depending on load stress.
24. After every use of the fall arrest block, the device must be inspected by an expert trained by the manufacturer.
25. When the HRA fall arrest block is used, it must be ensured that the loaded lifeline does not pass over edges.



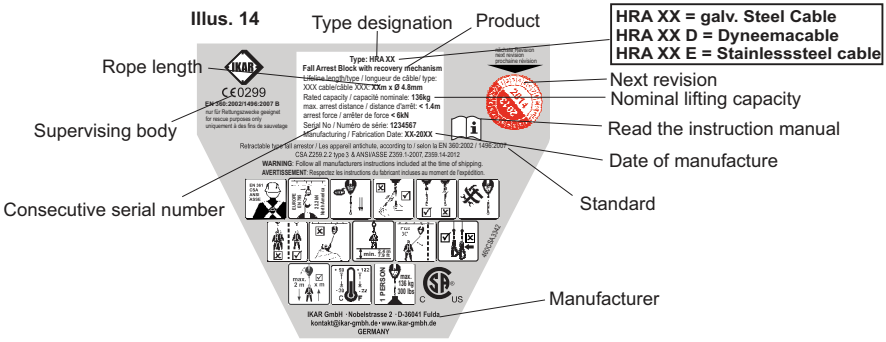


Service and maintenance

1. The lifeline shall only retract under load. On no account may the lifeline be fully pulled out and released because the karabiner hook jolting against the device may cause the retraction spring to break.
2. For devices that are constantly exposed to the weather, it is recommended to grease the steel rope with acid-free oils or Vaseline at regular intervals.
3. IKAR fall arrest blocks with recovery mechanism should be stored in dry, dust- and oilfree condition in a suitable container.
4. Components which have become wet during cleaning or use may only be dried naturally, not near a fire or similar heat sources.

Labelling of the fall arrest block with recovery mechanism from HRA 24:

Illus. 14



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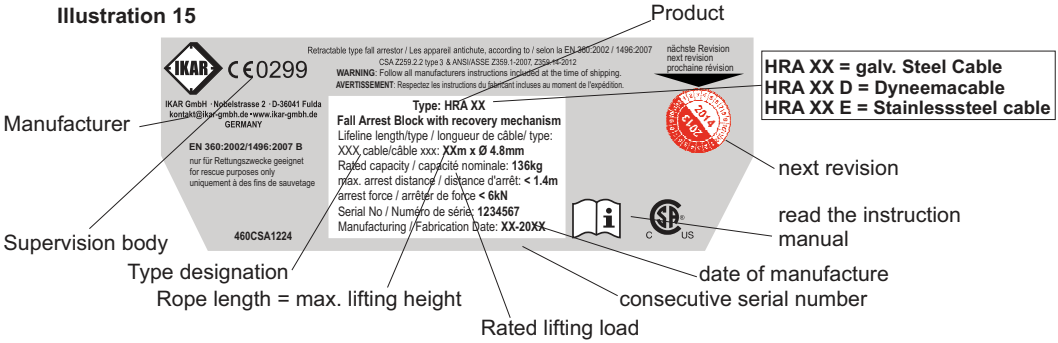
Labelling of the self-retracting lifeline with lifting device up to type HRA 18:

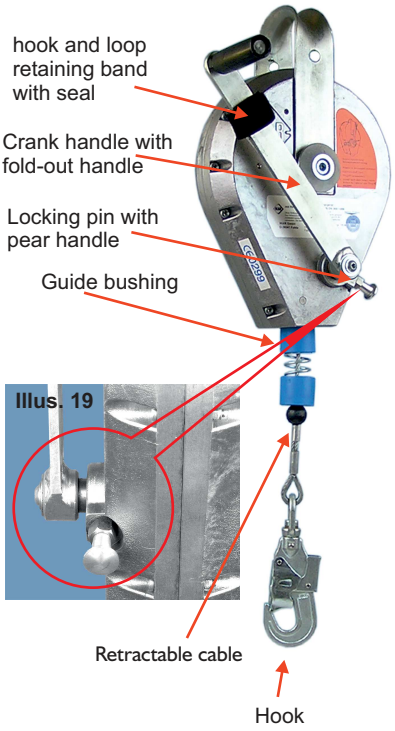
Illustration 15



Function description for self-retracting lifelines with rescue lifting device through crank mechanism (type HRA) according to EN 1496:2007 - class B

Rescue application:

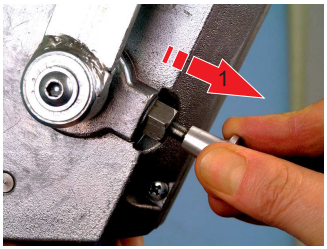
Illus. 16



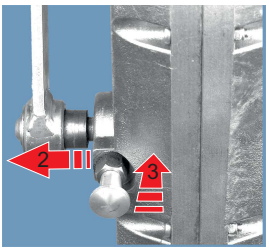
Illus. 19

Illustration 16 /19 shows the IKAR self-retracting lifeline HRA with crank position set to the "**self-retracting lifeline**" function!

Illus. 17



Illus. 18



Required operations:

1. Open the sealed hook and loop retaining band, see illustration 16.
2. Unfold the crank handle, see illustration 16.
3. Pull out the locking pin with pear handle (see illustration 17) (action 1), until the crank handle axis (action 2) pops out audibly and visibly (illustration 18).
4. Rotate the crank handle back and forth until the gear has engaged. The locking pin jumps back into its initial position (action 3).
5. The "**rescue function**" of the HRA device is established.
6. The casualty can now be cranked up and down. Descending is only allowed to a maximum distance of 2 m.

Note: Devices with rescue hoisting crank may only be used with the corresponding holders (holding plates) for IKAR fastening facilities EN 795. After successfully using the rescue hoisting device, the HRA device must always be checked by an expert trained by the manufacturer.

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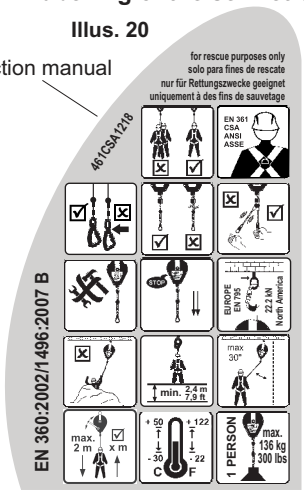
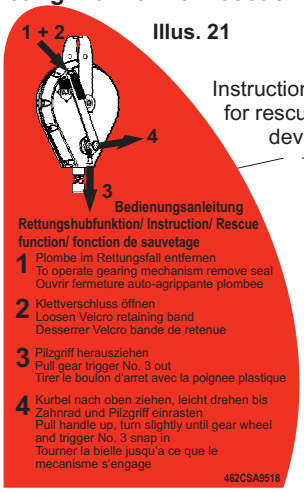
Labelling of the self-retracting lifeline with rescue lifting device:

Illus. 20



Illus. 21



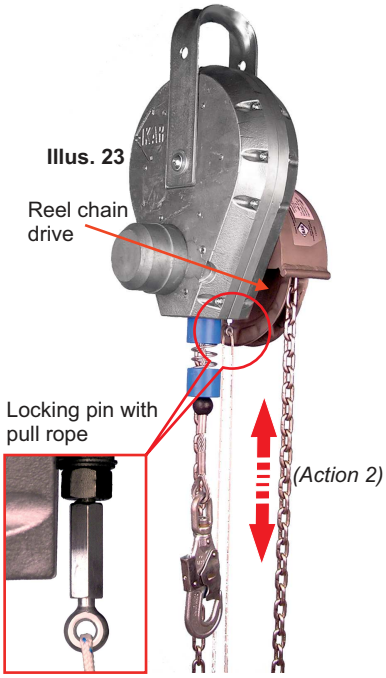
Instruction manual for rescue lifting device

Illus. 22

Instruction manual for rescue lifting device. Function description of self-retracting lifelines with rescue lifting device through reel chain drive (type HRA) according to EN 1496:2007 - class B

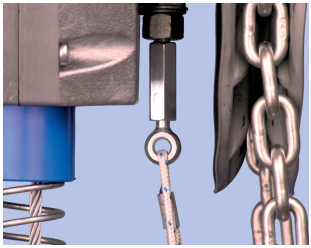
Rescue application:

Illus. 23

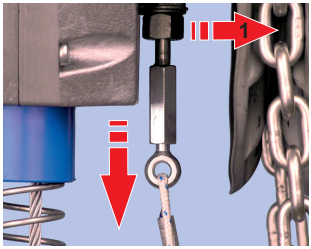


Illus. 26

Illus. 24



Illus. 25



Required operations:

1. Open the sealed chain hoist.
2. The locking pin (illustration 26) is equipped with a pull rope. The pulling direction (illustration 25) is defined downwards.
3. Pull out the locking pin (illustration25). The chain wheel will pop out audibly to the side by spring force (action 1).
4. Rotate the chain wheel (illustration 23) back and forth by pulling the chain (action 2) until the gear has engaged. Release the pull rope of the locking pin. The locking pin will return to its initial position (illustration 24).
5. The "**rescue function**" of the HRA device is now established.
6. The casualty can now be cranked up and down. Descending is only allowed to a maximum distance of 2 m. Cranking up is allowed over the complete rope length.

Note: The rescue lifting device must generally be inspected by an expert trained by the manufacturer after each use.