

The Ferno R-ALF Rescue Kit is a 3:1 or 5:1 ratio mechanical advantage lift system for work positioning, rescue or load hauling with a two-way self-locking brake. The 3:1 mechanical advantage lifting capability allows the operator to reduce the manual handling lift ratio to a third of the load weight or a fifth of the load weight for the 5:1 system. The total length of rope supplied with each system allows for a 'working length' of approximately 16 m lowering or lifting.



Specifications

APPLICATIONS

The Ferno R-ALF Rescue Kit is designed for multi-purpose use including confined space entry and egress, rescue, industrial height safety, work positioning, ascent, controlled descent and as a main or secondary system

3:1 SYSTEM

5:1 SYSTEM

SYSTEM COMPONENTS

- 1 x R-ALF Self Locking Pulley
- 2 x Medium Prusik Minding Pulley (Single)
- 2 x Large Triple-action Steel Karabiner with Captive Bar
- 1 x 8 mm Steel Maillon Twist
- 1 x Round Sling - WLL 400 kg
- 50 m x 11 mm Kernmantle Rope
- 1 x Rope Bag
- Optional: Dust proof, plastic Stowage Drum with lid (FWE-CSRDRUM)

- 1 x R-ALF Self Locking Pulley
- 2 x Medium Prusik Minding Pulley (Double)
- 2 x Large Triple-action Steel Karabiner with Captive Bar
- 1 x 8 mm Steel Maillon Twist
- 1 x Round Sling - WLL 400 kg
- 80 m x 11 mm Kernmantle Rope
- 1 x Rope Bag
- Optional: Dust proof, plastic Stowage Drum with lid (FWE-CSRDRUM)

SYSTEM LENGTH

50 m of rope - approximately 16 m of Lift/Drop

80 m of rope - approximately 16 m of Lift/Drop

WORKING LOAD LIMIT (WLL)

250 kg maximum - 1 person working or 2 persons rescue

ROPE BREAKING STRENGTH (MBS)

2997 kg minimum (29.4kN)

RATINGS

Round Sling - 32 kN / Maillon - 32 kN / Karabiners - 50 kN / Pulleys - 40kN

R-ALF RESCUE HAULER PULLEY

ROPE: 11 mm

WLL: 250 kg / 550 lb

WEIGHT: 1200 g / 43 oz

MATERIALS/FINISH: Aluminium/Anodised

STANDARDS: CE 0120; ANSI Z359:4:2007

RP063A1 PRUSIK PULLEY (3:1 System)

ROPE: 11 mm

WHEEL: Aluminium

MBS: 50kN / 11,240 lbf

WEIGHT: 280 g / 9.9 oz

MATERIALS/FINISH: Aluminium/Anodised

STANDARDS: CE; EN 12278

RP065A1 PRUSIK PULLEY (3:1 System)

ROPE: 13 mm / 1/2 in MAX

WHEEL: Aluminium

MBS: 50 kN / 11,240 lbf

WEIGHT: 215 g / 7.6 oz

MATERIALS/FINISH: Aluminium/Anodised

STANDARDS: CE; EN 12278

RP0064A1 PRUSIK PULLEY (5:1 System)

ROPE: 13 mm / 1/2 in MAX

WHEEL: Aluminium

MBS: 50 kN / 11,240 lbf

WEIGHT: 500 g / 17.6 oz

MATERIALS/FINISH: Aluminium/Anodised

STANDARDS: CE; EN 12278

Note: Each pulley has individual markings which may differ slightly with manufacture dates. It is important to record in writing the date the system is put into service as over the life of the system, the rope may be replaced and a new date will apply to the rope only. A sample of the System label is attached to the rope, example below.

WARNING EXPERT USE ONLY		
You must be trained by a competent agency or person in the use of this product. Check the lanyard for damage before every use. Retire on any visible signs of damage.		
MANUFACTURED to the RELEVANT Sections of AS/NZS 1891.1 Made in WA by Ferno Australia Pty Ltd		
Rating 21 kN	Batch No 12345	Date of Manufacture 02 /2015
Length 50 M	Serial No 12345	Item Name FWE-RRK 3.1

Employer: It is your responsibility to ensure all users are instructed and trained in the correct use and maintenance of the equipment. Once equipment is issued, it is assumed this has been completed.

User: Only competent users should use this equipment. It is your responsibility to read and understand these instructions and be properly trained in the use of this equipment. Always use equipment safely and properly. Check equipment before and after each use.

General: This manual contains general instructions for the use, operation and care of this product. The instructions are not all inclusive. Safe and proper use of this product is solely at the discretion of the user. Safety information is included as a service to the user. All other safety measures taken by the user should be within and under consideration of applicable regulations and work protocols. It is recommended that training on the proper use of this product be provided before using this product in an actual situation.

Retain this manual for future reference. Include it with the product in the event of transfer to new users. Additional copies are available on request from Ferno Australia.

WARNING

- » Working at height/rope access/technical rescue procedures require special skill and are potentially hazardous activities. No person should attempt such activities unless they have received professional instruction and training in these activities.
- » Before and after each use the device should be inspected by the Operator and if there is any doubt about the correct functioning, it should be immediately taken out of service and returned to the supplier or authorised service agent for inspection and rectification.
- » It is prohibited to alter, modify or tamper with the device in any way or form. The device is NOT to be rectified or serviced by any person unless they are trained and authorised by Ferno Australia.
- » If any part of the device assembly is exposed to chemicals, corrosive cleaning materials or hazardous atmospheres, the user must consult the manufacturer to determine if the part is suitable for ongoing use.

IMPORTANT

- » Ensure you have a rescue plan in place prior to working at height or confined space. A rescue plan is MANDATORY and the Operator must be aware of it prior to commencing work. Ensure the Operator is in good physical and mental health and is trained and competent in the use of the device. The Operator must have all relevant PPE for the job prior to commencement of working at height. Such PPE may include, but not be limited to the following: harness, lanyard, helmet, gloves, appropriate foot wear etc.
- » Consult with AS/NZS 4488.2:1997 for both requirements and guidance for the rigging and use of industrial rope access systems and guidance on the selection and maintenance of components.

BEFORE USE

Prior to each use of the Ferno R-ALF Rescue Kit, inspect the system to ensure it functions correctly and all components are damage free. A checklist is provided below as a guide that may be used in conjunction with your usual work place protocols.

INSPECTION GUIDE

INSTRUCTION LABEL	<ul style="list-style-type: none"> • Intact and securely in place • Legible
COMPONENTS	<ul style="list-style-type: none"> • Are all components present?
HARDWARE	<ul style="list-style-type: none"> • Is the hardware true to their original forms and free of cracks, burrs, deep scratches and gouges? • Do moving parts move freely and smoothly? • Are devices free of grit and sand? • Are karabiner hinge pins securely in place? • Do the karabiner locking sleeves turn smoothly and latch the gates securely?
ROPE	<ul style="list-style-type: none"> • Is all rope in good condition with no cuts or frayed edges? • Is rope stitching in good condition with no frayed or broken threads?

Rope Lifespan

Generally rope has a 10 year life span in ideal storage conditions however rope working life span will be affected by, but not limited to, the following conditions: frequency and type of operational usage, exposure to chemicals and natural environmental elements, your organisation's inspection criteria and protocols.

The working life of the rope is potentially deemed to be less than the actual shelf life. Refer to rope manufacturer's guidelines if additional information is required. Contact sales@ferno.com.au to request if necessary.

It is critical that the user conducts regular inspections on the rope to check its condition. If there is any doubt, the rope should be replaced.

INSTRUCTIONS FOR USE

Improper use and maintenance of the Ferno R-ALF Rescue Kit can result in injury. Use this system only for the purpose described in this manual.

The R-ALF Pulley will lock in either direction if the rope is released.

The User is the person or load attached to the R-ALF Rescue System and being lowered or raised on the system. **The Operator** is the standby person who remains at the operational end of the system to manually control the raising and lowering of the User or load.

DESCENDING:

Operator:

1. Attach User to System.
2. Pull the tail end of rope slightly to release the brake and keep hold of the rope.
3. Control the rate of descent by feeding the rope into the System as required.
4. To lock off, let go of the rope. The brake will automatically engage.

ASCENDING:

Operator:

1. Attach User to System.
2. Pull the tail end of rope to release the brake and keep hold of the rope.
3. Control the rate of ascent by pulling the rope at the desired speed.
4. To lock off, let go of the rope. The brake will automatically engage.

Care should be taken not to load the R-ALF pulley across its minor axis or against its axles across a structure or anchor point unless it is specifically designed to do so.

Extreme care should be taken when using the System near harmful chemicals, moving machinery, electrical hazards and near sharp edges and abrasive surfaces. Wet and icy conditions may cause the rope to become slippery. Extra care should be taken when using the System under these conditions. Wearing appropriate gloves is mandatory to protect hands from rope burn and injury.

SAFETY TIPS:

- » When the System is not in use raising or lowering, the end length of 11mm rope should be 'tied-off' to further secure the User's position.
- » The Ferno Res-Q-Link Recovery Pole used in conjunction with the System allows you to hook on to a suspended victim during a rescue and cut them free of their primary connection to either lower or lift them to safety.

CLEANING AND STOWAGE

Hardware: Clean off surface dirt from hardware with a damp sponge. Clean with mild detergent/water mix if required. Always dry the device, preferably with compressed air, before storing.

Rope: Use Ferno Rope & Harness Wash to clean superficial dirt from rope and air dry in a well ventilated, shaded area away from direct heat to dry completely.

Store all equipment in a clean, dry area away from chemicals and corrosive elements. An optional dust proof, plastic Stowage Drum with lid (FWE-CSRDRUM) is available from Ferno Australia.

INSPECTION

To maintain the safety and serviceability of this product, the following inspections must be performed.

- Operator Inspection** The User/Operator should inspect the Ferno CSRK before and after each use. Check for excessive wear or damage of all components (refer to Inspection Guide in this manual). Refer any signs of deterioration to a competent person for a decision on the safety and serviceability of the product.

- Periodic Inspection** A full periodic inspection should be conducted every six months by a competent person or more often if your organisation's protocols dictate. If any part of the System is to be exposed to harsh chemicals or hazardous atmospheres, the User/Operator should consult with Ferno Australia to determine whether the part is suitable for continued use.

Periodic inspections should be recorded in the product's Inspection and Maintenance log.

PRODUCT	IDENTIFICATION #	DATE SUPPLIED	ISSUE DATE	FIRST INSPECTION DATE

DATE	COMMENTS	ACTION YES/NO	SIGNATURE	NEXT INSPECTION