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About Henriksen

H. Henriksen AS is a technology company with a long and proud history within the maritime and offshore sector. The company has a strong position within safe rescue boat lifting operations, Launch & Recovery systems for offshore vessels, Oil Spill Recovery systems and Entering and Boarding Systems for both maritime and urban environments.









Henriksen was founded in 1856 based in the maritime industry, and is currently located in South Eastern part of Norway, right by the Oslo Fjord. We have approximately 50 employees, of whom there are 22 skilled workers, 15 engineers and 5 salespeople.

Henriksen has a brand vision that is rooted in over 150 years of experience. Our vision has been shaped by our founding fathers and many generations of forefathers. Their first-hand experience and challenges has proven our true overreaching vision over time "always look forward with the intent of creating safer operational conditions." We are committed to create safer operational conditions world wide and The Henriksen slogan is "Reducing Operational Risk".

Henriksen REBS®

The Rapid Entering and Boarding Systems (REBS ®) segment was established at Henriksen in 2003 as a response to a initiative from the Norwegian Defense. They sought products that could increase the effectiveness and safety of boarding operations. Boarding is a high risk operation and the users wanted equipment that was safe and thoroughly tested. With time REBS has evolved into a result of a multinational cooperation, where input from users in different countries has resulted in product improvements and a reduced operational risk. This development has resulted in several state of the art boarding products.

Boarding operations poses many challenges and the equipment suffers from rough use in demanding environments. The products therefore have to be as lightweight as possible while still being strong and durable. To meet these challenges, we utilize high performance materials like carbon fiber and titanium. We develop and manufacture several products in-house as well as cooperate with other manufacturers of unique high-quality boarding products. We are currently experiencing rapid growth in the REBS® segments and our ambition is to be the unquestionably largest and most competent actor in the world market.

Reducing Operational Risk - Maximizing Operational Performance

The users of REBS® products have their biggest enemy in exposure. We aim to make our products safer, stronger, lighter and faster than any other products in order to maximize the operational performance of our users. Our products allows our users to minimize the level of exposure and thereby reduce their operational risk.

Disclaimer

Although great efforts have been made in order to produce accurate and correct information in this catalog, there is always a possibility that an error has occurred. Designs and dimensions of the products listed in this catalog were correct at the date of publication but are however subject to change without notice. Please ask for our confirmation in cases where accuracy is critical. Typographical and pictorial errors that are brought to our attention will be corrected in subsequent issues.

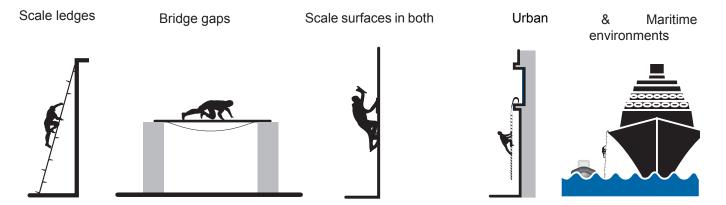


PRODUCT FOUNDATION

WE SPECIALIZE IN CREATING SYSTEMS AND PRODUCTS

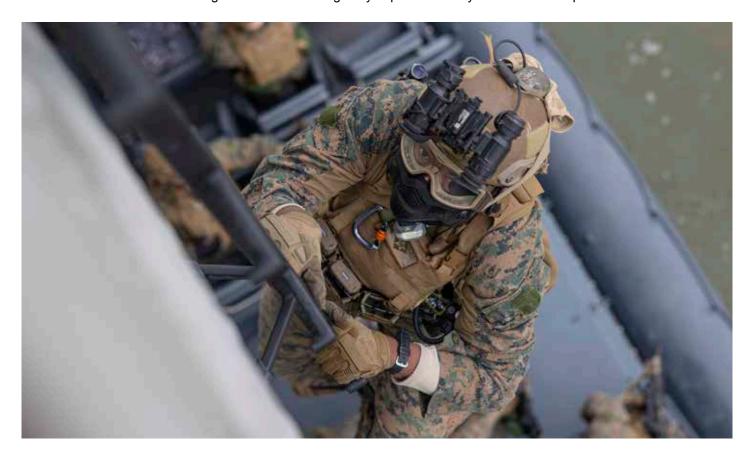
THAT ENABLE OUR USERS TO

FAST, SAFE AND EFFICIENTLY:

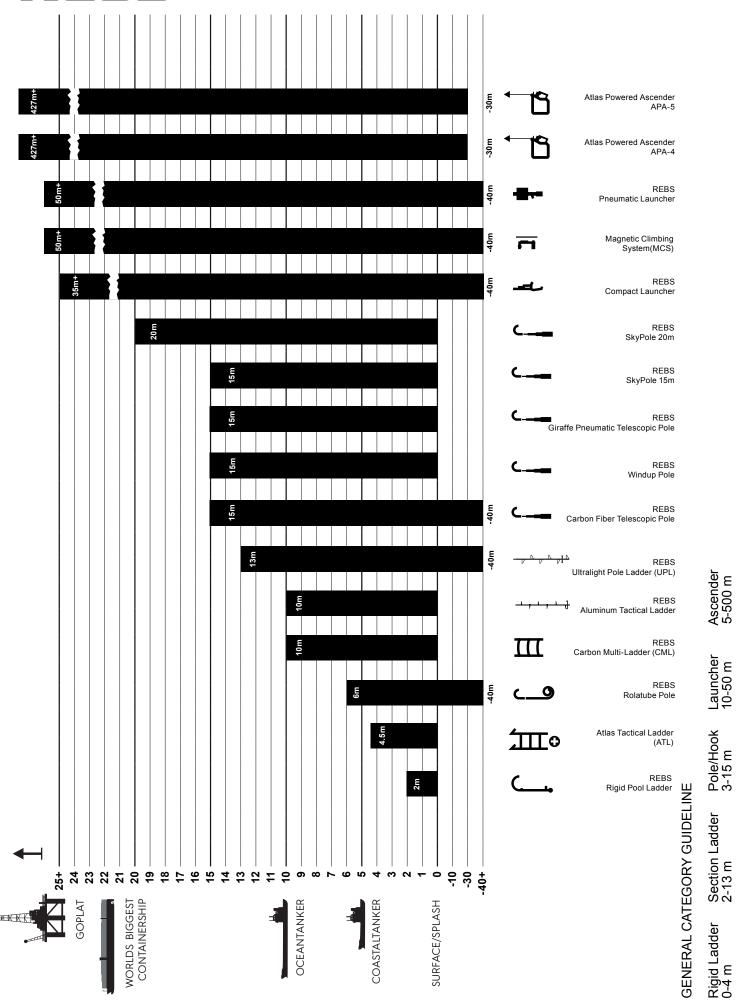


REBS STANDARD

Back in 2016 REBS published the first version of SOCES-2016 (Special Operation Climbing Standard). The standard sets requirements to strength-, design- and environmental-requirements and is a guide for designers, users and purchasers. The lack of relevant military and civil standards inspired us to create SOCES. It combines special operations-requirements with operational- and technical limitations, based on years of experience with Rapid Entering and Boarding Systems (REBS). The standard is open, to be shared to anyone with interest for the subject. Our scope is to make vertical access operations safer, and to be able to compare similar systems to each other, and to create a common tests and understanding. The standard is regularly improved so any comments or improvements is welcome.



REACH CHART







POOL LADDER

The Pool ladder is a special tool for moderate height boarding operations. The ladder is preferably used together with an optional length wire ladder for extended reach and flexibility. The Pool Ladder can be placed either by hand or using a telescopic pole.

The Pool Ladder is a single section rigid ladder with integrated hooks that offers excellent stability and climbing ease for deployment near entry points. The ladder inside width measures 284 mm. The ladder floats in water and has a MBL of 330 kg. It is recommended for only one operator to climb at a time.

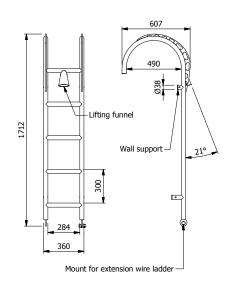
Place a telescopic pole in the lifting funnel to place the Pool Ladder on an entry point far from reach overhead. The lifting funnel is specially made for the top adapter on our telescopic poles and keeps the Ladder from rotating on the Pole, increasing positional control and making the ladder much easier to place securely.

The Pool Ladder is constructed from black anodized high strength aluminum alloy. Standoffs create space for hands and feet while climbing.

In marine environments the wire ladder will provide additional reach as well as increased operational safety. The RIB / boarding vessel will not be able to knock the ladder off its hold when it is riding on the waves.

Specifications		
Part no.	BE001690	
MBL	330 kg / 728 lbs	
Weight	6,2 kg / 13.7 lbs	
Material	Black Anodized Aluminum	



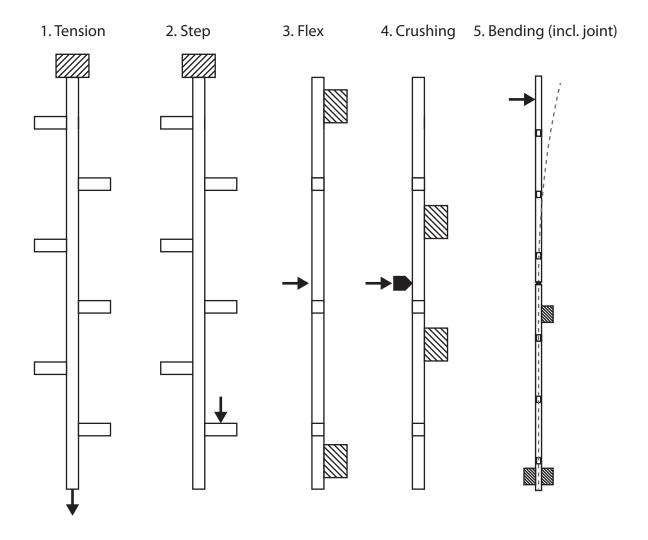








SINGLE STILE LADDER COMPARISON



Test	UPL	Carbon Ladder	Tactical Ladder	Units
Tension Break Load	3660	2970	2170	kg
Step Break Load	990	550	775	kg
Flex	15	10	10	mm @ ~125 Kg
Crushing	490	350	600+	Kg @ R=3mm / d=15mm
Bending	147	146,5	120	mm @ 20 Kg (incl. Joint)
Weight	1682	2418	2310	g
Effective Length	1700	1700	1553	mm
Weight / m	0,989	1,422	1,487	kg/m
Stackability	Yes	No	No	
Salt water resistance	Yes	Yes	Partially	
Diving suitability	Yes	Yes	No	
Typical Reach	12	11	10	m

REBS® TACTICAL LADDER

The REBS Tactical ladder is a rigid section aluminum ladder with great strength and versatility. Fixed ladders are in many cases a more effective alternative than flexible ladders. The Tactical ladder can be use in maritime operations and is also well suited for entering buildings or ledges in urban environments.

The REBS® Tactical Ladder is a lightweight rigid section ladder that is well suited for both urban and marine boarding and entering.

To achieve up to 10 m length, the operators can connect 5 Tactical Ladder sections and a 1,5 m wire ladder for a superior reach with a well optimized configuration.

The Tactical Ladder is very robust and is made from forged and anodized aluminum. The rungs are fastened with dual rivets.

The ladder element, the flexi element, the hook and all surrounding gear is connected with quick release pins.

In marine environments, combining the Tactical Ladder with a wire ladder will provide the same advantages by extending the effective length of the total system. The wire ladder will also provide additional reach as well as increased operational safety in a RIB / boarding craft by reducing the likelihood of the boat jarring the ladder from its hold while riding alongside the target ship.

The Tactical Ladder is particularly well suited for urban operations. With our base stabilizer and wall support it is great for situations where hook attachment is not possible.

Specifications	
MBL	1000 kg / 2204 lbs
Typical reach	10 m / 33 ft
Section weight	2,3 kg / 5 lbs
Available colors	Black, Sand
Section length	1,6 m / 5.25 ft







TACTICAL LADDER - SYSTEM OVERVIEW

REBS Ladder 1,6 m section BE004511



REBS Hook Tactical 7" / 10"

BE004512 / BE005746



Flexielement BE004636



REBS Tactical Hook Handle*

BE000377





REBS Hook Dual 6,8" Tactical BE004514



Single Step BE004515



Tactical Base Stabilizer BE006526



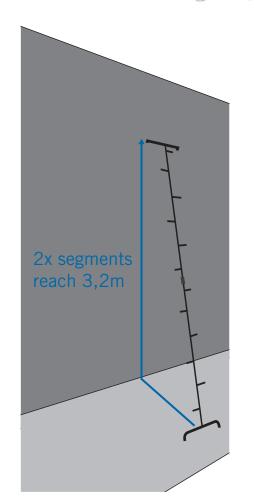
Wall & Corner Support BE006527



Bag BE003342



Tactical Ladder Packages						
Part Name	Part no.	7" Hook BE006870	10" Hook BE000151	Dual Hook BE006872		
REBS Ladder Section 1,6 m	BE004511	4	4	4		
REBS Hook 7" Tactical	BE004512	1	-	-		
REBS Hook 10" Tactical	BE005746	-	1	-		
REBS Hook Dual 6,8 " Tactical	BE004514	-	-	1		
REBS Tactical Hook Handle	BE000377	1	1	-		
Single Step	BE004515	1	1	1		
Flexielement	BE004636	1	1	1		
Bag	BE003342	1	1	1		
Wire Ladder 1,5 m	BE002460	1	1	1		



REB5®

ULTRALIGHT POLE LADDER (UPL)

The REBS® Ultralight Pole Ladder (UPL) is our latest single stile ladder. It is lighter, easier to stack and carry, and stronger. A light weight rigid section ladder that is excellent for both urban and marine boarding and entering.

The UPL is delivered in 1,7 m sections. Depending on the hook used, the system can reach up to 12 m (39 ft) The total length is achieved by connecting (top to bottom): hook, top adapter, five sections of 1,7 m each, an optional single step and a 1,5 m wire ladder. Each section is molded using the latest in carbon fiber molding technology. A coat of durable non slip paint has been applied to the steps. This layer is easy to repaint when necessary, increasing lifespan of the ladders.

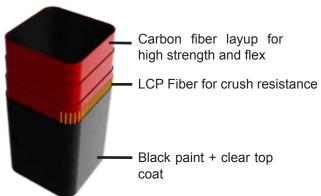
The quick connectors make it safe, fast and easy to assemble the sections together. The modular design makes it easy to assemble the required amount of sections to make up the right length for the task at hand.

The ladder has rubber tipped standoffs that provide good space for hands and feet which increase climbing comfort and efficiency.

By attaching a flexible wire ladder at the bottom of the ladder sections, an additional 1,5 m of reach is gained. In addition to increasing the total length, the wire ladder also keeps the lowest step closer to the ground.

In marine environments the wire ladder will provide additional reach as well as increased operational safety. The RIB / boarding craft will not be able to knock the ladder off its hold when it is riding on the waves.





Specifications	
MBL*	2400 kg / 5291 lbs (Step: 890 kg)
Typical reach	12 m / 39,4 ft
Section weight	1,7 kg / 3 lbs
Section length	1,7 m / 5.6 ft





UPL - SYSTEM OVERVIEW

REBS Ultralight Pole Ladder REBS Hook Dual 6,8" Tactical BE008007



REBS Hook Tactical 7" / 10" BE004512 / BE005746





Single Step BE000034

REBS Tactical Hook Handle BE000377



Top Adapter

REBS UPL Junior BE000490







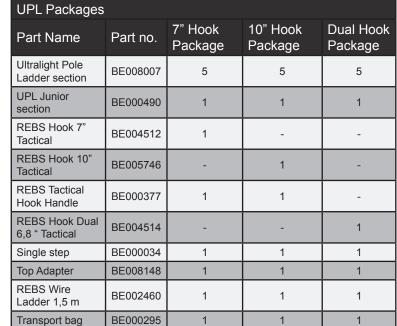
BE000641





Wire Ladder 1,5 m BE002460







May be used on the back of operator or lifted and carried by two operators.



UPL JUNIOR

REBS UPL Junior (BE000490) is a half section of the Ultralight Pole Ladder, or a system by itself. Featuring all the same great technology as its bigger brother.

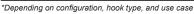
The UPL Junior allows the operator to reach the perfect height. And make transport even easier and more compact.







Specifications	
MBL*	2400 kg / 5291 lbs (Step: 250k kg)
Typical reach	12 m / 39,4 ft
Section weight	0,9 kg / 2 lbs
Section length	0,9 m / 5.6 ft





REB5®

CARBON MULTI LADDER (CML)

The Carbon Multi Ladder is a multi function ladder system comprised of carbon fiber ladder sections. The innovative, lightweight, strong and smooth design is derived from the same advanced molding techniques also used to fabricate modern bicycle frames and components. As a result of the state-of-the-art fabrication process, the ladder design optimizes the carbon fiber properties into a very strong monocoque frame. The Carbon Multi Ladder system packs into a low-volume package that is easily carried on a backpack or with the custom CML Backpack. The Carbon Multi Ladder can be used in multiple configurations.

The Carbon Multi Ladder system is a versatile system with multiple functions, its main usage modes are:

- 1. Suspended by hook(s)
- 2. Leaning against wall
- 3. Stretcher
- 4. Bridge

The ladder segments and its components are rapidly and easily assembled with stainless steel quick release pins.

Shown below is a detailed view illustrating the innovative design made possible by the molding process. The circular indentations have corresponding bosses which align and lock the ladder segments when stacked.

The Carbon Multi Ladder has the same interface as the Tactical Ladder which gives full compatibility with the Tactical Hook and flexi element.

The top adapter is made from high performance Aluminum alloys and enables the ladder to be used with both one or two hooks.



This picture shows 3x CML Sections plus all equipment necessary for all 4 main usage modes packed with the CML Backpack.

Specifications	
MBL* (Suspended by Hook)	1000 kg / 2204 lbs
Section weight	1,85 kg / 3.7 lbs
Section length	0,9 m / 2.95 ft





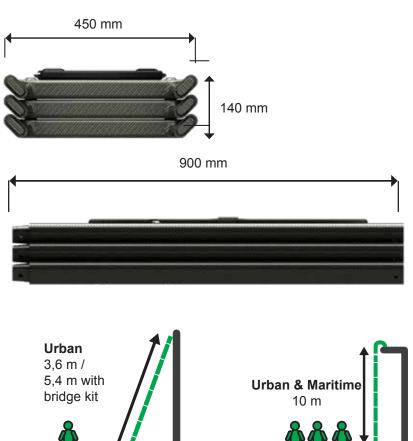


The Carbon Multi Ladder system stacks into a compact and stable package for transportation and storage.

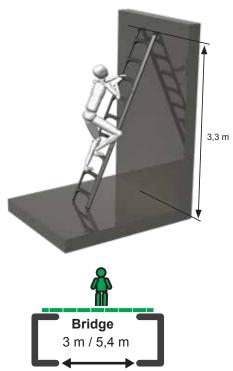
URBAN & MARITIME USAGE

Depending on desired angle, stack up to five sections for a total ladder length of 4,5 m and use them as a leaning rung ladder to scale a wall. The Carbon Multi Ladder is a very efficient tool for urban operation.

Mount the top adapter for use in maritime operations. Stack three sections, the top adapter with hooks and flexi elements, and a wide wire ladder for an efficient maritime boarding tool. The top adapter accommodates either single or dual hook setup. The hanging ladder configuration is also great for certain urban operations, and can also be equipped with our MaxGrip hook. The MaxGrip hook is developed especially for urban use, and is particularly suitable for compound structures.





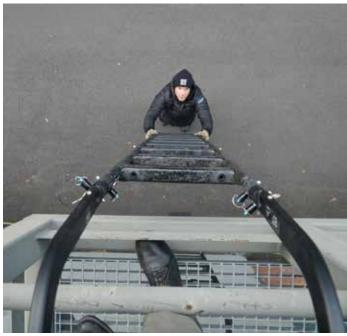


CML USE

SUSPENDED FROM HOOK(S)

The Carbon Multi Ladder can reach up to 10 m high ledges. In a hanging position the minimum breaking load (MBL) is 1000 kg.

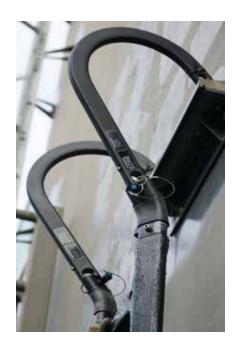




SINGLE / DOUBLE HOOKS

The Carbon Multi Ladder developed for use with our Tactical Hooks, and used with either single or dual hook setup. Our new Tactical Hooks (BE000298+BE000299) is developed to fit the Carbon Multi Ladder with a twisted angle that fits our Flexielement as well.





BE000298+BE000299 REBS 10" CML Right /Left with the flexielements.



Single Hook with Top Adapter.

CML USE

SCAFFOLDING LADDER

Use the angle connectors to connect the sections together at angle. Also use the rubber feet in the end of the CML, to protect the carbon fiber surfaces. The specidfied MBL capacities will maintain, including leaning, hanging and bridge.









BE007566 Rubber Foot



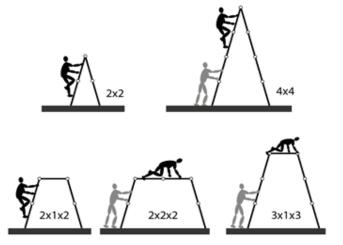


BE007569 CML Angle Connector Kit





The rubber feet and tops both protect the ladder from hard abrasive surfaces as well as provide friction against slippery surfaces and act as shock absorbers. A wide wire ladder has been developed to give the Carbon Multi Ladder extra flexibility and ease of use.



REBS[®] CML - STRETCHER

HANDLES

Connect two sections and four handles to make a stretcher. With the handles the stretcher is ergonomic and easy to carry. The handles can be quickly removed to fit into helicopters and other tight spaces. The handles provide a good grip while also keeping the stretcher lifted off the ground.



EMERGENCY EVACUATIONS

The stretcher handles keeps the stretcher off the ground and protect the hands of the operators carrying it. The hand protectors double as runners which makes possible single handed emergency evacuations by pulling the stretcher as a sled. The stretcher bed has an integrated lifting harness which enables vertical lifts of patient in stretcher, e.g. for helicopter evacuation.







The CML Backpack fits up to 6 x ladder sections and all needed equipment.











Bridge Line Kit

BRIDGE

Stack three elements to make a bridge. The bridge has been tested to a MBL of 200 kg / 440 lbs at the center when laid across a 3 m / 9.8 ft gap. A bridge kit which allows users to cross gaps of up to 5,4 m / 17.7 ft (6 sections) as shown on the picture below is also available for advanced users.



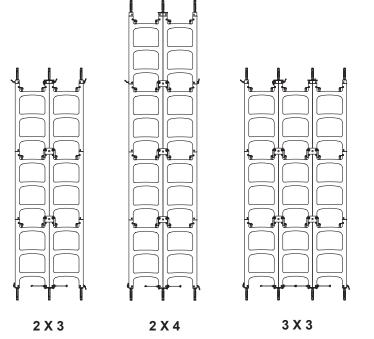
REBS[®] CML - ASSAULT

CML MULTI WIDTH CONFIGURATION

Use the CML ASSAULT connector(s) to connect several standard CML ladder sections together in various configurations. Allowing for even more rapid and easy entry of multiple operators simultaniously.









CML Assault Packages	
Name	Part no.
CML ASSAULT 2 x 3	BE000665
CML ASSAULT 2 x 4	BE000666
CML ASSAULT 3 x 3	BE000667

^{*}Other kits/packages can be made upon request

REBS® **CML SYSTEM OVERVIEW**

REBS CML Section BE007564



Top Adapter with Pigg Release

BE007630



REBS Hook Tactical 7" / 10" BE004512 / BE005746



REBS Hook 10"CML Right / Left

BE000298 / BE000299



Wall Stand-off BE007599



REBS Wire Ladder Wide 1,5 m BE002481



Rubber Top BE007565



Flexielement BE004636

Rubber Foot BE007566



REBS Hook Dual 6,8" Tactical BE004514



Quick Release Pin ø12 x 35 mm BE007689



Bridge Line Kit BE007786



Stretcher Handles Tops

Female Left BE000241

Female Right BE000242



Stretcher Handles Feet

Male Left BE000239 Male Right BE000240





Angle Connectors

Left Side BE007691 **Right Side** BE007692





CML Top Adapter with Pigg Release, **Step Fork and Rope Clamp**

BE007567



CML Step Fork BE007596



CML Rope Clamp BE007597



Backpack BE007687





CML PACKAGES TABLE

Wire Ladder Angle Wide Connector Kit	BE007569	-			-	-	-	1-2
Wire Ladder Wide	BE002481	-	Optional (Maritime)	-	-	-	-	•
Stretcher Handles Male	L:BE000239 R:BE000240	1	1	1	1	-	1	
Stretcher Handles Female	L:BE000241 R:BE000242	1	-	-	-	1	1	-
Wall Stand-off	BE007599	-	1 - 4	-	-	-	-	
MaxGrip Hook	BE001720	-	Optional (Urban)	,	,	,	٠	,
CML Right/ Left Hook		-	2	-	-	-	-	•
Tactical Hook	BE004512	-	1 - 2	-	-	-	-	-
Flexi element	BE004636	-	1 - 2	-	-	-	-	-
Bridge Line Kit	BE007786	-	٠	-	1	-	1	•
Top Adapter w/ Pigg & Bridge Kit	BE007567	-	-	-	1	-	1	-
Rubber Top Rubber Foot W/ Pigg	BE007630	-	1	-	-	-	-	-
Rubber Foot	BE007566	-	-	2	2	-	-	2
Rubber Top	BE007687 BE007565 BE007566	-	-	2	2		-	2
Back Pack		1	Optional	Optional	Optional	Optional	Optional	Optional
Section(s)	BE007564	2	1 - 8	1 - 5	8	ဗ	9	2 - 8
FUNCTION Section(s)	Part. no.	Stretcher Kit	Hanging	Leaning 4,5 m max.	Leaning 7,2 m max.	Bridge 3 m max.	Bridge 5,4 m max.	Scaffolding





LIGHTWEIGHT OPERATOR LADDER (LOL)

The Lightweight Operator Ladder (LOL) system consist of lightweight, quick to deploy, telescoping ladders. Built with carbon fiber composite, engineered to minimize weight and maximize strength.

The ladders are highly portable, quick to deploy, and useful in a wide range of scenarios. The ladder can be partially extended to suit task specific requiements. And deploy in leaning configuations, hung by REBS hooks, A-Frame, and scaffolding configurations.

LOL-10 and LOL-15 have 10 and 15 ft. reach respectively. And up to 20 ft. with joining adapters. LOL-10UL is an UltraLight version with 10ft reach. All 3 versions are avaliable as standard stiffness/modulus or high stiffness/modulus versions.

	LOL-10	LOL-10UL	LOL-15
Standard Modulus	BE000661	BE000660	BE000662
High Modulus (S)	BE000658	BE000657	BE000659

Optional configurations / extras:

- Tactical connector / top adapters Enables the use of REBS hooks with tactical connector.
- Joining adapters Joins two LOL-10/15, for length or A-frame configurations.
- Scaffolding section Used with two LOL-10/15 for lateral span
- **Backpack straps** For easy carry
- **Common Foot Adapter (CFI)** Height adjustable feet



LOL-15



2x LOL-10. Scaffold section. Joining adapters, Backpack straps, and CFI



2x LOL-10, Joining adapters, Scaffold section, and CFI





LOL-10. 2x REBS Tactical hooks. Backpack straps. Top adapters





ATLAS TACTICAL LADDER SYSTEM (ATL)

The ATL is the foundation of an ultralight Litter/Ladder/Bridge system designed for operators conducting austere special operations missions. Built on a core Atlas Devices ladder technology backbone, the ATL system combines the packable, height-conformable strength and tailor-ability of a ladder and bridge with the speed, efficiency, and security of a vertical/horizontal hoist-able patient litter. The integrated handle designs enable effective patient manipulation and longer duration carries which provide a multi-mission tool that is useful through primary and contingency phases of operations. Two ATL ladders can also be connected too-free into a extended 15 ft ladder by using the ATL-JOIN kit.

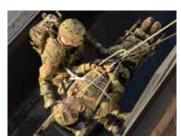












Bridge

Ladder

Litter

Hoist

CAPABILITIES AND SPECIFICATIONS

- Deployment time: <5 seconds</p>
- Secondary positive joint locks can automatically engage on deployment
- Joints manually lockable for noise control
- Stow time: <10 seconds
- Tool free joining of up to 2 full ATL segments to yield 4,6 m / 15 ft ladder
- Compliant with relevant portions of NFPA 1931015, ANSI-ASCA14.2-2007

RECOMMENDED MISSION PROFILES

- Direct Action
- Personnel Recovery
- Asset Recovery
- Confined Space/ Structural Collapse
- CASEVAC/TACEVAC
- Urban Ops
- Maritime Ops
- Jump / MFF Ops
- Crevasse

Length	2,1 m	7 ft
Stowed envelope	410 x 480 x 230 mm	16" x 19" x 9"
Total weight	4,5 kg	10 lbs
Capacity (all configurations)	181 kg	400 lbs

KITS

RACC PATIENT PACKAGING KIT

Load rated vertical/horizontal hoisting patient packaging system including hoist bridle, patient straps, and retention/ stowage covers. Originally co-developed with Roco Rescue.

MODULAR SYSTEM INTEGRATED GEAR (MSIG) PACK

An ultralight anodized aluminum MOLLE-style semiflexible panel backpack that allows vertical and horizontal mounting options integrated into the ATL with the addition of the speed clip accessory.





ATL CONFIGURATIONS & ACCESSORIES

USE CONFIGURATION: EXTENDED LADDER

(Requires 2x ATL units and 1 ATL-JOIN kit)

With a pair of extra outer rails from the ATL-JOIN kit, two complete ATL units can be joined tool-free to create a double length 15 ft ladder.

CAPABILITIES AND SPECIFICATIONS

(1 pair of ATL outer joining sections with tool less connection)

- Total Length: 15 ft (176 in) / 4.6 m (447 cm) rung to rung
- · Load capacity: 350 lbs / 159 kg as ladder at 75 degrees (Safety factor >2)
- Stowed dimensions: 19 x 16 x 18 in / 48 x 41 x 46 cm
- Deployment: <10 sec
- · Partial deployment allows on-the-fly tailored height
- · Tool-free assembly and separation of individual ATL units
- Folding and stowing method identical to single ATL unit



MULTI - HANDLE HOOK

- Extends carry handles for easier load carrying.
- Can create tabletop to hold patient in inclined or declined position, or hold level above ground to reduce ground contact conduction heat loss.
- In hook mode can extend the reach of an ATL by hooking over wall or rail like a pool ladder.

CAPABILITIES AND SPECIFICATIONS

- Weight: < 0,7 kg / 1,5 lbs (pair)
- Quickly change configurations in < 5 sec
- · Stow along with ATL unit with negligible increase to stowed volume
- · Ergonomic grip handle protects attendant's fingers
- · Configurable carbide tipped skid/grip feature
- Rotational adjustment locking joint
- · Collapsible stow position
- · Tool-free rapid on/off to ATL



Multi - handle - lock

SKID PUCK

Configurable end caps for stable positioning or smooth draggable wear surface.

CAPABILITIES AND SPECIFICATIONS

- Weight: < 0,45 kg / 1 lbs (pair)
- Tool-free rapid on/off to ATL
- · High impact plastic construction
- · Carbide spikes grip at all ladder angles and catch on edge for uneven bridging
- · Replaceable carbide spikes
- · Negligible impact on ATL stow volume



Skid puck



LADCARB CARBON ATV BRIDGE

LADCARB CARBON ATV/QUAD BRIDGE is a new revolutionary product allowing light quad bikes up to 650 kg to cross ditches or brooks up to 3 meters and to overcome lower walls. In addition to this, the product can be used as a loading ramp, as a single-track footbridge up to 6.8 m and as a multi-function assault ladder meeting all requirements of the EN 1147 Standard.

The bridge made of extremely strong, light and durable carbon composite tubes is designed for maximum portability and versatility. The whole set can be transported on the ATV rack (either on one rack as a whole or it can be divided on front and rear rack) and deployed by one man in less than 3 minutes. The set consists of six 4-rung sections which can be easily connected using ball-locking pins. Unique flexible connectors allow placing of track on uneven terrain. Antislip top and bottom endings not only protect the ends of stiles against damage but also allow using of the product as a leaning ladder.

Thanks to endurance of the structure, single or connected sections can also replace indispensable snow/sand recovery tracks.











Specifications	
Maximum lenght	3,5 m/ 11,5 ft
Section lenght	1,22 m/ 4,0 ft
Total weight (1,0 m / 1,5 m)	26 kg / 57.33 lbs
MBL ATV Bridge(2 tracks/3.1m)	1300 kg/ 2,860 lbs

REBS

LADDER REEL

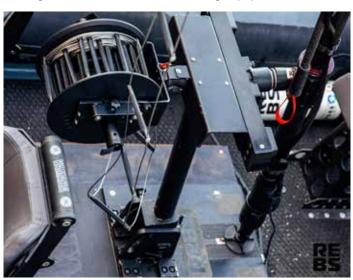
The Ladder Reel is used to efficiently operate wire ladders up to 15 m (50 ft) long. Its functional, strong, flexible and lightweight design makes it perfect for fast operation of wire ladders, but is also beneficial for transportation and storage. It features a carabiner hook for securing the ladder to the reel and a snap hook for holding the ladder in place when it is rolled on. A collapsible handle on each side enables fast and precise handling.

OPERATION

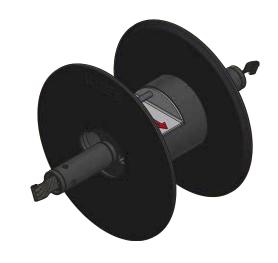
Hook the ladder on to the center of the empty Ladder Reel with the carabiner hook. Roll the wire ladder onto the reel. When the ladder is rolled completely into place, the snap hook is used to secure the ladder in the wound position to ensure it cannot unwind. Collapsible handles unfold from each side, each with a nylon strap on its end. Pull the strap to extend the handle, and twist to lock.

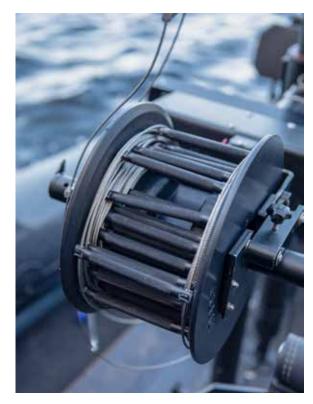
CONSTRUCTION

The Ladder reel is constructed from rubber castings around a spring steel insert. This ensures high performance, and flexibility with high strength, and the rubber sheath prevents damage and abrasion to surrounding equipment.



Specifications	
Capacity	15 m / 49 ft
Weight	3 kg / 6.6 lbs
Dimensions	Ø310 x 175 mm / Ø12.2 x 6.9 in
Part no.	BE005538







The handles quickly and easily collapse into the ladder reel, for easy transportation and handling.

The handles enables fast spooling of the wire ladder on and off the ladder reel.

REBS® WIRE LADDERS

The REBS wire ladder has the greatest strength to weight ratio of any wire ladder avaliable on the market. Our wire ladders have been developed with input from professional users and feature innovative solutions for superior performance in tenuous situations. All ladders are delivered thoroughly tested, and ready to use. The rungs are diamond knurled and provide a durable high grip surface.

Wire ladders are often used in combination with telescopic poles. The ladders are strong and rugged, but also compact in size, exceptionally light weight, and pack compactly and easily.

Our wire ladders are delivered completely prepared for immediate use. Every ladder is fitted with thimbles, proper connectors and checked and approved before they are put in stock for fast delivery.

Wire ladders are kept in stock in the standard lengths: 1,5 m, 5 m, 10 m, 15 m and 20 m (5, 16,5, 23, 33, 49 and 65,5 ft), but custom lengths can be delivered upon request.

The ladder has a market-leading strength to weight ratio, and minimum breaking load (MBL) of 1,080 kg.

The wire ladder is made with the highest quality components and materials. The Ø3 mm (1/8 in) wire rope and thimble are made from 316L stainless steel and the rungs are black anodized 6082 T6 aluminum.

The rungs are fastened to the wire rope with a innovative and very strong mechanical bond. The bond has been tested to 470 kg on a single side without breaking.

Available lengths			
Length	Part no.	Weight	
1,5 (1,30) m / 4,9 ft	BE002460	0,33 kg / 0.73 lbs	
5 (5,20) m / 16,4 ft	BE002420	0,92 kg / 2 lbs	
7 m / 23 ft	BE002538	1,20 kg / 2.6 lbs	
10 m / 32,8 ft	BE002461	1,75 kg / 3.8 lbs	
15 (14,80) m / 49,2 ft	BE002462	2,43 kg / 5.35 lbs	
20 (19,90) m/ 65,6 ft	BE002463	3,26 kg / 7.2 lbs	

Specifications	
Available lengths	1,5 - 5 - 7 - 10 - 15 - 20 m
Wire MBL	1080 kg / 2381 lbs eye-eye
Step MBL	180 kg / 396 lbs (24 mm / 1" center load)
Step width	137 mm / 5.4"



REBS **WIRE LADDERS** SYSTEM OVERVIEW





Wire rope end with thimble and carabiner hook..

STRONG AND WELL BUILT

The ladder rungs are slightly arched to achieve high strength and all edges are smooth and rounded. The result is a very strong construction and superior climbing comfort.

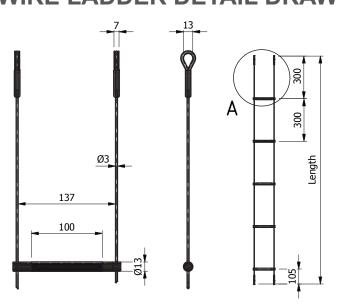
WIRE LADDER PROTECTOR

BE000461 is a protecion sleeve for the wire ladder. Especially useful when using the ladder over a sharp edge of a ship.





WIRE LADDER DETAIL DRAWING







All wire ladders but the 1.5m version are delivered in a black nylon bag as standard. The 1.5m length comes standard with a quick deployment pouch. (pictured to the left)

REB5®

WIDE WIRE LADDER

The wide wire ladder is a good alternative when you want more room for your hands and feet. It is strong, light and easy to climb. The wide wire ladder is also optimized for use with the CML and Pool Ladder.

The wide wire ladder is suitable for both urban and marine environments.

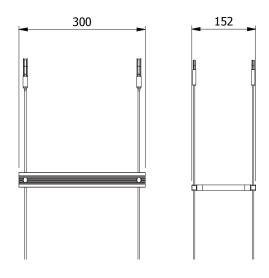
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The wide wire ladder was made to enable a more comfortable climbing movement. Each step has provides a large and flat anti slip surface. The ladder is easy to connect to any rigid ladder and light and easy to carry around.

The steps are made of high quality aluminium alloy. The steps are made with an integrated anti slip profile. The wire is made from 316L stainless steel.



WIRE LADDER COMPARISON: WIDE WIRE LADDER VS WIRE LADDER



Length	Weight	Wire	MBL Steps	MBL Wire	Part no.
1,5 m / 4,9 ft	1,4 kg / 3,1 lbs	Ø4 mm	1000 kg / 2204 lbs	1000 kg / 2204 lbs	BE002481
3 m / 9,8 ft	2.5 kg / 3,3 lbs	Ø4 mm	1000 kg / 2204 lbs	1000 kg / 2204 lbs	BE002482



ROPE LADDER

A rope ladder with aluminum steps. Super compact in size and low weight. Can be fired from a launcher or used with our other poles. It is developed with input from professional users and has high end features for maximum performance.

The rope ladder is used where a ladder with the least size and weight is required. It is supplied with our launchers as a standard part of the launcher packages.

The Launcher is able to fire a hook with rope ladder 25 meters (82 ft) vertically, and the Compact Launcher is able to achieve a 16 m (53 ft) vertical placement. The rope ladder features high tensile fiber vertical lines with aluminum steps, and is extremely compact in size and low in weight. It was designed with input from professional users to optimize its performance and specifications.



The minimalistic approach of a step ensures the lowest possible weight.



The top part of the ladder has rubber protection covering the rope to protect the ladder from sharp edges.





Placing the rope ladder with a graphnel hook to the roof of a building using the REBS Launcher.



Specifications	
25 m Part no.	BE002477
16 m Part no.	BE002458
6 m Part no.	BE004206
Rope strength	900 kg / 1984 lbs eye-eye
Step strength	340 kg / 750 lbs
Step width	135 mm / 5,3 in

REBS

WEB LADDER

The web ladder is a good alternative especially for urban operations, where low noise is important. It is strong, light weight and easy to climb.

The rigid steps are constructed using 3/8 inch solid "carbon" fiber" rods which are inserted into a specially woven, multilayered specially designed rope sheath with a slip resistant, textured surface.

The main advantages of web ladders are high strength and abrasion resistance, and low weight and noise.

The main bodies of the ladders are constructed of extremely lightweight Kevlar webbing to eliminate stretch while in use. The ladder is very suitable for boarding of vessels in combat situations, and can also be used to egress from urban buildings. Ladders can be linked together and are compatible with drag/grappling hooks or extension poles to gain access to unreachable areas.

The Urban model has two standoffs that helps climbing comfort. For urban use it is also noteworthy that the web ladders are very guiet in use. It is delivered ready for use with two carabiners.

The Maritime model has three sets of rubber standoffs built into ladder on top ten feet as well as extra three soft steps between the top four steps. This makes it easier to position and climb over ship sides, railings and so on. It is delivered with two carabiners.

The ladders are delivered in a black nylon bag.



Step detail: The steps are constructed using rigid "carbon fiber" rods in a specially woven multi-layered rope sheath. The "rungs" are made from Kevlar webbing.



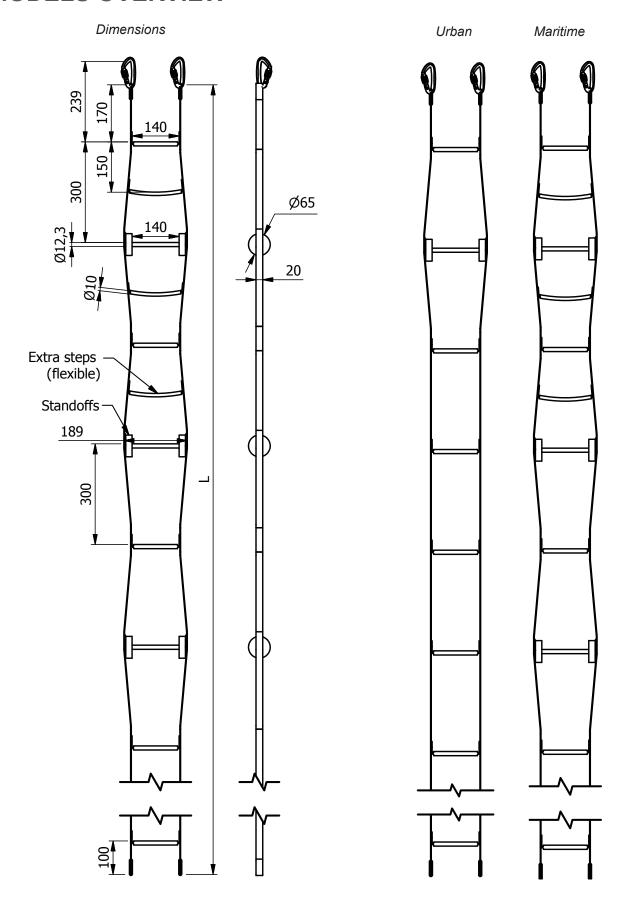
Urban Web Ladder top: Two carabiners for fastening and two standoffs on the second step

Part Name	Part no.	Length	Weight	MBL Step	MBL Webbing
REBS Web Ladder Urban 6 m	BE000050	6 m / 20 ft	1,0 kg / 2.2 lbs		
REBS Web Ladder Urban 10 m	BE000051	10 m / 33 ft.	1,4 kg / 3.1 lbs	380 kg / 840 lbs	1400 kg / 3085 lbs
REBS Web Ladder Maritime 10 m	BE008200	10 m / 33 ft	1,7 kg / 3.7 lbs		

(Extended lengths may be avaliable, reach out to our sales team)



WEB LADDER MODELS OVERVIEW



Upgraded!

REBS[®] FIFI LADDER HOOK

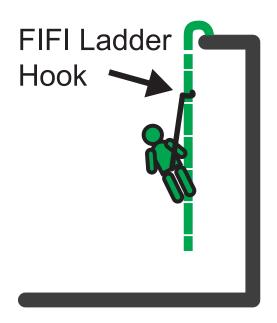
The FIFI Ladder Hook (BE000676) is a compact safety hook made for use with our wire ladders.

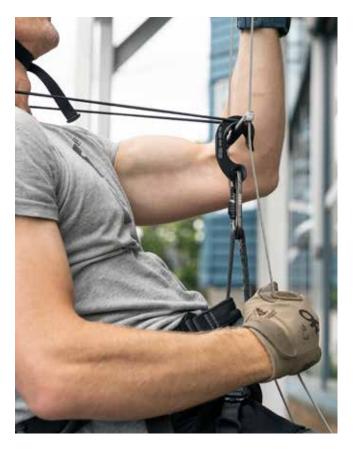
The wide arch on our FIFI hook will spread out the weight of the operator across a bigger portion of the step. This greatly reduces the chance of breaking the steps, compared to an ordinary FIFI hook.

The FIFI ladder hook connects to your harness and is preferably used with retrieval lines near the chest area so it can be located quickly and hung onto to a ladder step. The FIFI hook supports the load of the operator and is useful for resting or situations where two free hands are needed. When used with retrieval lines, the user can simply resume climbing and the retrieval lines will pull the hook off the step and return it to its position near the users chest.

The FIFI ladder hook is precision machined from a single piece of high performance aluminium alloy. It has a MBL of 960 kg but the limiting factor will be the step MBL which is 200 kg when the FIFI ladder hook is placed on the center of the step.

Ideal for use with the HCHM2 All-in-one harness solution (BE000715)







DISTANCE WHEEL

BE000085 Distance Wheel can be added to any of our wire ladders. The Distance wheel can reduce pinching and make climbing easier and safer.







A major increase in operational safety can be achieved, by adding the Wire Cutter to your tool kit. (BE000482)

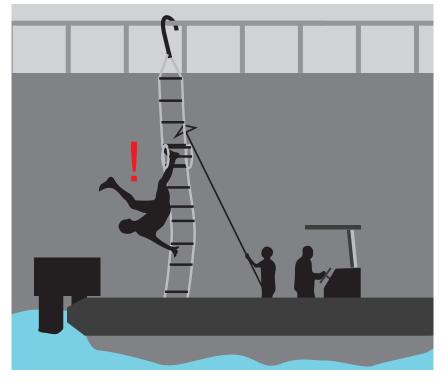
The Wire Cutter is a pole mounted tool that will allow you cut straight through steel wire ropes up to 5 mm diameter. This capability can be crucial in case where a steel rope unintentionally snags or tangles onto gear, or personnel. The wire cutter standard kit includes all operating parts and a telescopic pole.

The illustration below shows a typical scenario for using a wire cutter. An operator could get stuck in a dangerous position hanging from a wire ladder. This is especially critical if the operator ends up in or under water.

Without long reaching tools there is also a high risk of pinching the operator between the ship side and the RIB. In this situation the Wire Cutter is a great tool for cutting the wires quickly and from a distance, and thereby freeing the operator from this position.

Specifications	
Max length	4000 mm
Min length	2391 mm
Measurements	W:312 mm x D:92 mm
Weight cutter only	1,0 kg
Weight full assembly	2,1 kg
Cut capacity	Ø5 mm steel wire









HOOKS INTRODUCTION

Hooks are available in single and dual configurations, and are delivered in several sizes between 2,5" and 10" to accommodate a large range of different boarding and entering operations and fixture points.





Some users prefer the dual hooks because of the increased stability they provide. The disadvantage of the dual hooks is that the forces from climbing in the ladder may cause the hook to "walk" or move if it is suspended on the hook tips.



Dual Hook

The nominal dimension of the hook is equal to the size of the hook opening: a 5" hook will fit perfectly around a cylinder with a diameter of 5".



HOOK INTERFACES

Pigg Release

REBS hooks can be supplied with several different interfaces that enable their use with each of the different placement systems including carbon poles, giraffe and windup poles, and Rolatubes. The different interfaces includes:

All REBS® hooks are made to be strong, light and efficient. Strength ratings are provided in two different scenarios: arc load and tip load.

ARC LOAD

The optimal way to fasten a hook is within the arc, as this gives the best distribution of forces through the hook, giving the best load rating.



Rolatube

Rolatube attachments allow for easy placement and separation of the hook from the pole, similar to the pigg release.

The Pigg Release system is an adapter

with a pin that connects into the top

adapter of a placement tool, such as a telescopic pole. After the hook is attached to the ledge, the pin can be pulled, and the Pigg release will let go of the pole,

leaving behind a clean anchor.



TIP LOAD

Tip loading increases the forces on the hook, lowering its rating, but can be beneficial as the hard metal tip insert digs into most surfaces for maximum grip and minimum risk of losing its hold. Note that arc loading is preferred when available. All hooks are tested prior to deliver unique serial number.



Tactical connector

The Tactical connector consists of a conical slot which gives the system a great fit and is secured with a quick release pin.





The hooks are specified with a Minimum Break Load, which means that the hook will not fail when loads of up to the MBL are applied. Permanent deformation at loads approaching the MBL is allowed and expected.

SAFETY FACTOR

A minimum safety factor of 2 is recommended when planning and executing operations but users shall work out their own directives based on the conditions and the scenarios of the application. Unforeseen factors like sea conditions, minor falls, harmonic climbing and similar events can result in significant dynamic loading that may cause the total load to exceed the MBL rating. Please take contact for more guidance or training if necessary.

REBS® HOOK RANGE



REBS Hook 2,5" Titanium with Rolatube L adapter	
MBL (Tip)	1400 kg / 3086 lbs
Weight	0,37 kg / 0,82 lbs
Part no.	BE000356
Compatible with	Rolatube



REBS Hook 5" Titanium with Rolatube L adapter	
MBL (Arc)	2000 kg / 4409 lbs
Weight	0,6 kg / 1.0 lbs
Part no.	BE000363
Compatible with	Rolatube



REBS Hook 2,5" Titanium with Pigg Release	
MBL (Tip)	1400 kg / 3086 lbs
Weight	0,38 kg / 0.84 lbs
Part no.	BE000352
Compatible with	Telescopic Pole



	REBS Hook for Giraffe Tracer	
١	MBL (Tip)	1500 kg / 3306 lbs
	Weight	1,7 kg / 3.7 lbs
	Part no.	BE003346
	Compatible with	Giraffe Tracer



REBS Hook 5" Titanium with Pigg Release	
MBL (Arc)	2000 kg / 4409 lbs
Weight	0,65 kg / 1.50 lbs
Part no.	BE000332
Compatible with	Telescopic Pole Windup Pole



REBS Hook 5" Titanium	
MBL (Arc)	1800 kg / 3968 lbs
Weight	0,75 kg / 1.6 lbs
Part no.	BE000330
Compatible with	Telescopic Pole Windup Pole Giraffe Tracer



REBS Hook 7" Titanium with Pigg Release	
MBL (Arc)	2200 kg / 4941 lbs
Weight	0,84 kg / 1.85 lbs
Part no.	BE000212
Compatible with	Telescopic Pole Windup Pole



REBS Hook 7" Ti	tanium
MBL (Arc)	1350 kg / 2976 lbs
Weight	0,83 kg / 1.82 lbs
Part no.	BE000210
Compatible with	Tactical Ladder CML Ultralight Pole Ladder



REBS Hook 10" Aluminium		
MBL (Tip)	1080 kg / 2380 lbs	
Weight	1,3 kg / 2.86 lbs	
Part no.	BE000106	
Compatible with	Telescopic Pole Windup Pole	



REBS Hook 13" Tactical	
MBL (Tip)	1800 kg / 3968 lbs
Weight	1,9 kg / 4,2 lbs
Part no.	BE000435
Compatible with	Skypole Windup Pole Telescopic Pole CML UPL Tactical Ladder



REBS Hook MaxGrip with Pigg Release	
MBL (Inner two spikes)	1000 kg / 2204 lbs
Weight	1,5 kg / 3.3 lbs
Part no.	BE001725
Compatible with	Telescopic Pole



REBS Hook MaxGrip with Tactical Connect	
MBL (Inner two spikes)	1000 kg / 2204 lbs
Weight	1,3 kg / 2.9 lbs
Part no.	BE001720
Compatible with	Tactical Ladder CML Ultralight Pole Ladder

REBS®



REBS Hook Dual 4" Titanium	
MBL (Tip)	1260 kg / 2778 lbs
Weight	1,2 kg / 2.4 lbs
Part no.	BE000331
Compatible with	Telescopic Pole Windup Pole Giraffe Tracer Ultralight Pole Ladder



REBS Urban Hook with Carabiner mount	
MBL	550-1680 kg*
Weight	0,62 kg / 1.37 lbs
Part no.	BE000281
Compatible with	Ultralight Pole Ladder CML Tactical ladder Any other equipment with tactical interface



REBS Hook Dual 6" Titanium	
MBL (Tip)	820 kg / 2204 lbs
Weight	1,28 kg / 3.3 lbs
Part no.	BE000211
Compatible with	Tactical Ladder CML Windup Pole Giraffe Tracer Telescopic Pole Ultralight Pole Ladder



REBS Hook Dual 6,8" Tactical	
MBL (Tip)	1000 kg / 2204 lbs
Weight	1,8 kg / 4 lbs
Part no.	BE004514
Compatible with	Tactical Ladder CML Ultralight Pole Ladder



REBS Hook Dual 8" Titanium		
MBL (Tip)	660 kg / 1455 lbs	
Weight	2,4 kg / 5.3 lbs	
Part no.	BE000333	
Compatible with	Telescopic Pole Giraffe Tracer Tactical Ladder Ultralight Pole Ladder	



REBS Hook 7" Tactical	
MBL (Tip)	1880 kg / 4145 lbs
Weight	0,9 kg / 2 lbs
Part no.	BE004512
Compatible with	Tactical Ladder CML Ultralight Pole Ladder



Tactical Adapter Shaft with Pigg	
MBL	1000 kg
Weight	0,36 kg / 0.8 lbs
Part no.	BE008192
Compatible with	All tactical hooks



REBS Hook 10" Tactical	
MBL (Tip)	1250 kg / 2756 lbs
Weight	1,3 kg / 2.9 lbs
Part no.	BE005746
Compatible with	Tactical Ladder CML Ultralight Pole Ladder Windup Pole w/ adapter



Tactical Adapter With Locking Pin	
MBL	1000 kg
Weight	0,68 kg / 0.8 lbs
Part no.	BE000357
Compatible with	All tactical hooks



Locking Pin I	Locking Pin Release Assembly		
MBL	N/A		
Weight	0,37 kg / 0.8 lbs		
Part no.	BE002504		
Compatible with	Any hook w/ mounting bracket		



Tactical Adapter Shaft w/ Ring fastening	
MBL	1000 kg
Weight	0,46 kg / 1 lbs
Part no.	BE008120
Compatible with	All tactical hooks



Pigg Release Assembly	
MBL	N/A
Weight	0,09 kg / 0.2 lbs
Part no.	BE002476
Compatible with	Any hook w/ mounting bracket



Special Carabiner Hook		
MBL	2040 kg	
Weight	0,08 kg / 0.17 lbs	
Part no.	BE000018	
Compatible with	Any hook w/ mounting bracket	

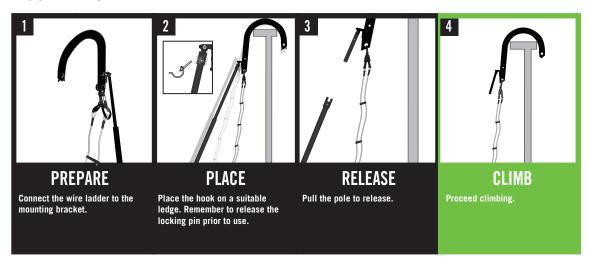


Ring Fastening Assembly		
MBL	1000 kg	
Weight	0,14 kg / 0.3 lbs	
Part no.	BE002516	
Compatible with	Any hook w/ mounting bracket	

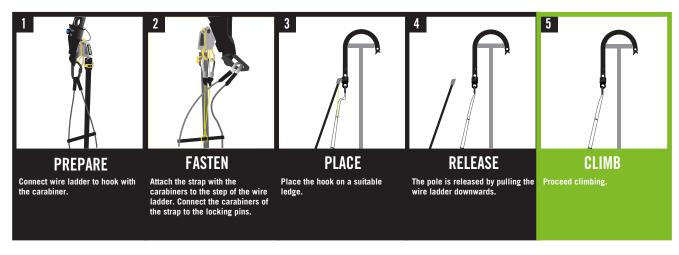
POLE RELEASE ALTERNATIVES

The mounting bracket is suitable for various applications. Alternative pole release solutions are available to suit most boarding operations. These include the standard pigg release, the ring fastening and the locking pin release system.

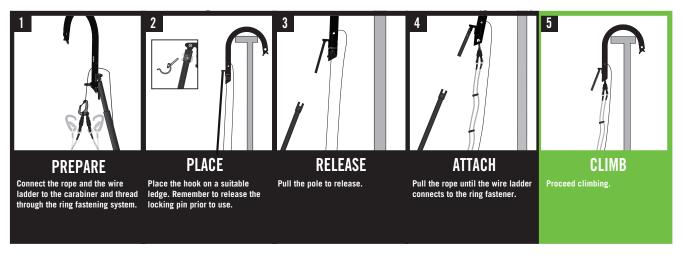
PIGG RELEASE



LOCKING PIN RELEASE SYSTEM



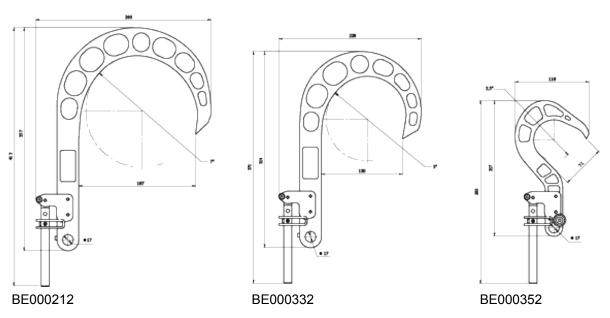
RING FASTENING (9 M AND HIGHER)



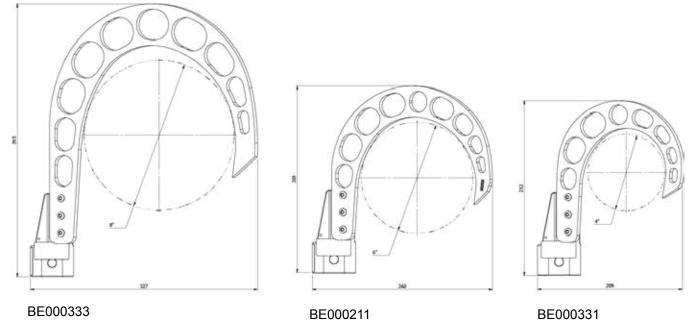
TITANIUM GRAPNEL HOOKS COMPARISON

Titanium Grapnel Hooks are optimal for boarding, reaching a higher advantage point, or climbing and accessing buildings. Single and Dual titanium hooks are made of aerospace grade (Grade 5) titanium and are assembled with precision craftsmanship to ensure excellent strength and durability. All hooks are tested and approved prior to delivery. Used for both maritime and urban operations.

SINGLE HOOKS







MAXGRIP HOOK

The MaxGrip Hook is a rugged and versatile hook for urban use. Its design gives the operator freedom to adapt the hook to suit task specific requirements. The titanium/aluminium teeth offers serious grip and digs into almost any urban surface. The MaxGrips hook is compatible with rigid ladders and pole systems.

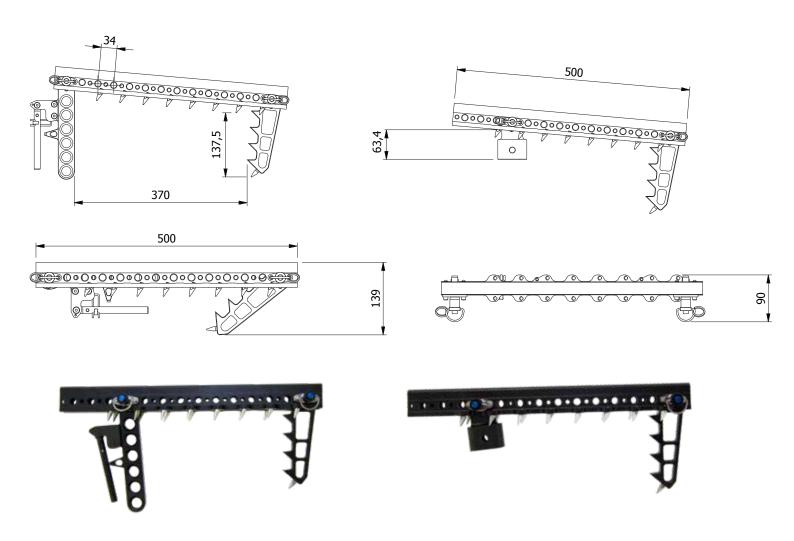
The shape and design of the MaxGrip Hook makes it great for ledges, window frames and roof tops.

Specifications	
Maxgrip Hook with Pigg Release	BE001725
Weight	1,5 kg / 3.3 lbs
MaxGrip Hook with Tactical Connector	BE001720
Weight	1,3 kg / 2.9 lbs
Compatible with	Tactical Ladder, Carbon Ladder, CML, All telescopic poles

The two innermost spike rows and front spike tip are all made from grade 5 titanium and will penetrate even hard metal surfaces. The other spikes are made from high strength aluminum alloy that will also penetrate most hard surfaces. This ensures a very good grip on most surfaces and ledges. The teeth are easily replaceable.

The light weight high performance hook has a large maximum hook opening of 370 mm / 14,5" and will fit over a variety of different structures. It can also be collapsed into a compact volume for transportation. This makes it easy to pack and transport.

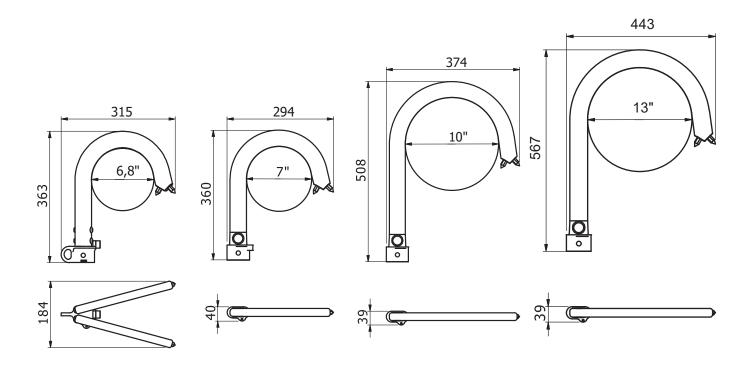
The holes along the side of the hooks allows the user to change the position of both connector and front spike in increments of 34 mm and thereby varying the hook opening. This makes the hook more efficient in several situations.





TACTICAL HOOK

Tactical hook is the name of our line of hooks which are extrusion forged in high quality aluminium to form a unique hollow strong and versatile hook. Used with the tactical adapter shaft it provides some really unique features.



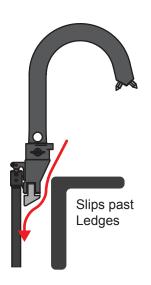
The smooth extrusion forged hollow body design of the tactical hook makes the hooks both light weight and strong. The hooks works great with any of our systems featuring a tactical connector.

Tactical Adapter Shaft

The latest development in the tactical hook range is the tactical adapter shaft, which now makes it possible to use the tactical hook with a pole and rope ladder. The tactical adapter shaft also has an anti-snag shape helps makes sure that the hook does not disconnect unintentionally. The tactical adapter shaft is a strong construction with a MBL rating of 1000 kg, and does consequently not reduce system MBL.

The tactical adapter shaft features a built-in ring fastening as well as the pigg release. This means that all conventional pole release techniques are available for the tactical hook range when combined with the tactical adapter shaft. The tactical adapter shaft enables the use of all pole release alternatives.

Tactical hook range			
Part Name	Part number	Weight	MBL (Tip)
REBS Hook Dual 6,8" Tactical	BE004514	1,8 kg / 4 lbs	1000 kg
REBS Hook 7" Tactical	BE004512	0,9 kg / 3.3 lbs	1880 kg
REBS Hook 10" Tactical	BE005746	1,3 kg / 2.9 lbs	1250 kg
REBS Hook 13" Tactical	BE000435	1,9 kg / 4.2 lbs	1800 kg



Tactical Adapter Shaft Anti-snag profile

TACTICAL HOOK HANDLE

We have added a new handle, Tactical Hook Handle (BE000377) that is mounted at the base of our tactical hooks. The handle simplifies the transition "over the edge". The handle is easily mounted by the operators and used mostly together with the UPL and tactical ladders, but can also be used together with the wire ladders.





SAFETY TACTICAL HOOK

The tactical hooks are equipped with an extra safety hole at the tip of the hook. The hole is used to attach safety on the hook when climbing. During training we always recommend the operators to attach safety line to the system, and this hole will always be easily accessible for attaching a safety line.





REBS **URBAN HOOK**

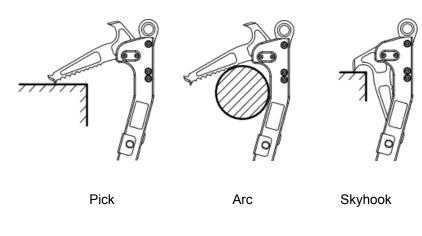
The Urban Hook is a strong and practical hook made for urban climbing. Its intuitive design gives the user freedom to customize it for optimal use. The highstrength steel tips and teeth give optimal grip and can dig in to almost every urban surface: Concrete, metal and wooden materials, including when container locks are engaged. This Urban Hook is ideal for urban climbing operations with 2-3 UPL sections.

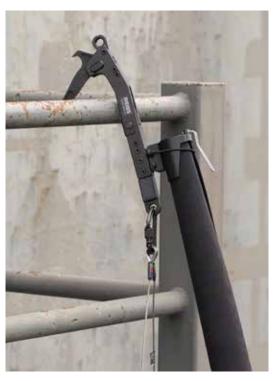


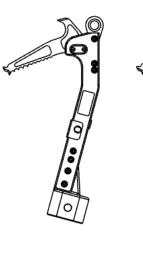
Urban Hook opened / closed with Carabiner Mount E000281

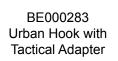


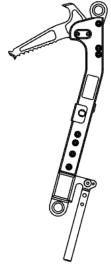
Load types:



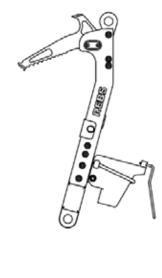








BE000282 Urban Hook with Pigg Release



BE000677 Urban Hook with Rolatube Adapter



REB5 **SKYPOLE**

REBS has long supplied a similar pneumatic pole system, the Giraffe Tracer, which extends up to 15 meters. As the global distributor of this system for many years, we have gained significant expertise, having sold over 160 units. Building on this extensive experience, we have now developed the new 20-meter Skypole system.

The pole is typically used from a Rigid Inflatable Boat (RIB) to place a hook and ladder on a larger ship, but can also be used in other situations on other structures including on land.

The Sky Pole is made of edge breaking carbon fiber technology from automotive industry gives unique stiffness and ruggedness to the tubes. This increases the operational safety and effectiveness. Selected materials are optimized to give low weight and the centre of gravity is designed to be lowest possible.

The hook is safely locked in place while extending the pole. When pressure in the pole is reduced ie. retracting the pole, the hook is unlocked and releases easily. This gives the opportunity to release the hook while the pole is standing vertically.

The new locking mechanism avoids the hook to fall off due to harsh operational conditions and accidentally fall down.



Pictured: Poleman assistant bar, and Skypole handle



NEW!

REBS®

SKYPOLE STANDARD PACKAGES

We supply SkyPole in complete packages with the most common components, but we also offer custom packages and parts on request for specific orders.

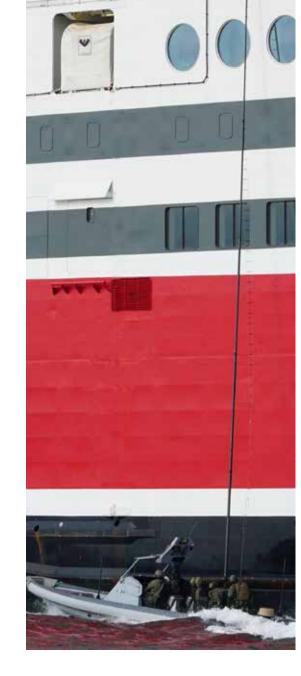


13" Tactical Hook
The Skypole makes
it possible to lift even
heavier tools, larger
ladders, even rigid
ladders. The New
13" hook suits this
well. Also compatible
with the tactical hook
handle, like pictured.

REBS SkyPole Packages		15M LW BE000472	20M HD BE000471
Part name	Part no.	Pcs.	Pcs.
REBS SkyPole 15M LW	BE000432	1	-
REBS SkyPole 20M HD	BE000243	-	1
REBS Hook 13" Tactical	BE000435	1	1
SkyPole Hook Flexi Adapter	BE000414	1	1
Bottle 7,2 liter 300 bar	BE000580	1	-
Bottle Twin 2 x 7,2 liter 300 bar	BE000581	-	1
SkyPole Air Regulator 200/300 bar	BE003355	1	1
REBS Wire Ladder 15M	BE002462	1	-
REBS Wire Ladder 20M	BE002463	-	1
REBS Ladder Reel	BE005538	1	1
FIFI Ladder Hook	BE000477	1	1
Distance Wheel	BE000085	6	6
Wire Ladder Protector	BE000461	2	2
SkyPole Cup Base	BE000582	1	-
Pole Rail Stand	BE000585	-	1
Transport Bag	BE000469	1	1
SkyPole Maintenance Tool Kit	BE000436	1	1
REBS Poleman Harness	BE000036	1	-
REBS Poleman Assistant Bar*	BE000614	-	-

^{*}Optional extra

Specification SkyPole		
	15M LW	20M HD
Article number:	BE000432	BE000243
Top Section (mm)	34	44
Bottom Section (mm)	64	84
Extended Lenght(m/ft)	15M/49,2FT	20M/65,FT
Collapsed Lenght(m/ft)	4,7M/15,4FT	5,2M/17FT
Operational weight	Appr. 15 KG	Appr. 24 KG
Full extension	8 - 10	10 - 12
Full retraction	4 - 5 s	6 - 8 s



We are able to deliver the SkyPole up to 24 M upon request.



GIRAFFE TRACER PNEUMATIC POLE

The Giraffe Tracer is a pneumatic powered extension and retraction pole for boarding and entering. The Giraffe Tracer is available as a: 4,4 m retracted / 15 m extended (14,5 ft retracted / 50 ft extended) complete boarding system. The Giraffe features an easy to use pneumatic system with push button control for precision up and down movements. The control handle is collapsible and adjustable to retain a slim profile when not in use.

OPERATION

Use the push-buttons to activate the efficient pneumatic system. Thanks to the simple controls the operator can concentrate on the aiming and timing aspects of the operation. Key performance numbers for the two poles lengths are:

Performance		
Length	Full extension	Full retraction
15 m / 50 ft	8 s	11 - 14 s

The retraction button has two speeds: push it half-way in to release the pressure and let gravity retract the pole. If more force is required, push the retraction button completely to activate the vacuum system to quickly retract the pole.

The rapid action eccentric handle lock is prepared for use or collapsed into transportation-position in a few seconds. The versatile baseplate(s) are available in multiple sizes to allow the pole to be attached to nearly any location, such as the deck of a RIB.

The outer surface of the pole tubes are smooth to reduce friction, noise, and ensure efficient extension and retraction.

The air that is released during retraction is dampened by dual silencers. The bottom mount on the pole is designed for the most common boat deck mountings with a diameter of 63,5 mm (2,5 in).

The baseplate allows the pole to be attached to e.g. the deck of a RIB, and is delivered in multiple sizes.

BUILD QUALITY

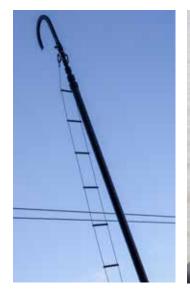
Lightweight tubes are constructed from unidirectional pre-impregnated carbon fiber, built for the highest strength and stiffness with the lowest possible weight. All metal parts are made of stainless steel or hard anodized 6061-T6 aluminum. All threaded holes have stainless steel inserts for long operational life.

Specifications	
15 m Tracing height	15 m / 49.2 ft
15 m Storage length	4,4 m / 14.4 ft
15 m Weight	13,5 kg / 29.8 lbs
OD Bottom Tube	Ø72 mm / 2.8"
Hook weight w/ release	1,7 kg / 3.7 lbs





GIRAFFE TRACER PNEUMATIC POLE - DETAILS

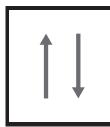






SAFETY SYSTEM

The standard solution is a rigid hook-attachment but also available is this spring loaded twisting system that reduces bending moments to the system in the case the hook "collides" sideways during the operation.



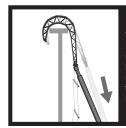
UP AND DOWN

The challenge with pneumatic tubes are getting them down. The REBS Giraffe-Tracer™ has an extremely efficient vacuumed system for retracting the telescopic pole.



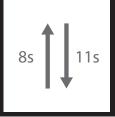
CONTROL UNIT

The control unit is designed to be intuitive and fast to use. Push the up-button to extend. Depress the down-button halfway to release the air pressure, or fully to activate the vacuum system.



SAFETY LOCK

The hook is designed so that it must be bent backwards to release it from the pole. This happens naturally as the pole is pulled away when the hook has attached to the railing.



SPEED

Speed and simplicity of the operation is essential - to be able to erect the pole as late as possible can be critical. The REBS Giraffe-TracerTM Pole erects in just 8 seconds and retracts in only 11 seconds.



NON-ROTATING

The tube-profiles interlock, stopping the individual segments from rotating independently. This gives the operator greater control of the hook during an



EXTENDED STRENGTH

The hook is able to handle extreme situations and can hold over 1000kg when hanging by the tip alone. The tip is a sharp hard metal insert that digs into most surfaces.



ROTATING HANDLE

For easy transport and stow away, the REBS Giraffe-Tracer™ is equipped with a rotating handlebar. This enables great control during operation and a small form factor during transport.



ADJUSTABLE HANDLE

The handle is easily adjusted in height to accommodate different operators and scenarios.



AERODYNAMIC HOOK

The REBS Giraffe-Tracer™ hook has an open triangle trusswork which, in addition to being a strong and lightweight design, makes the hook aerodynamic when exposed to wind, minimizing the twisting of the hook in the wind



FLEXIBLE BASE PLATE

The REBS Giraffe-Tracer™ pole is delivered with a flexible pole mount for enabling the pole to be positioned easily.



ENDURANCE

The REBS Giraffe-Tracer™ carbonfibre tubes are noncorrosive and thus have a long life time, all air seals are easy to maintain and service.

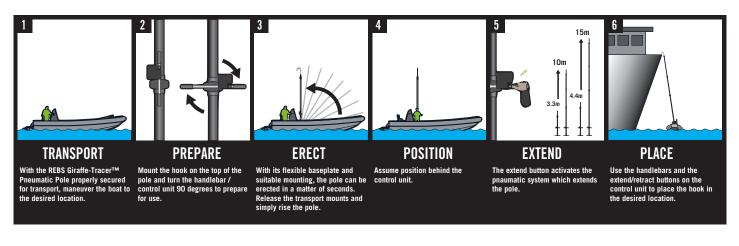


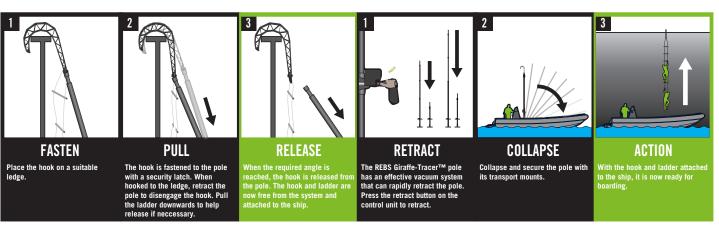
GIRAFFE TRACER PNEUMATIC POLE STANDARD PACKAGES

We supply the Giraffe Tracer in complete packages with the most common components, but we also make custom packages on request for specific orders.

REBS Giraffe Tracer Packages		15 m BE006700
Part name	Part no.	Pcs.
REBS Giraffe Tracer 15 m	BE003345	1
REBS Hook for Giraffe Tracer	BE003346	1
Air Regulator 200/300 bar	BE003352	1
Bag 15 m	BE000469	1
Mounting Brackets	BE003350	1
REBS Wire Ladder 15 m	BE002462	1
Giraffe Cup Base	BE000578	1
Bottle 3,0 liter 300 bar	BE003431	1
REBS Ladder Reel	BE005538	1
REBS Poleman Harness	BE000036	1
Maintenance Kit	BE008068	1

Optional extras			
Part Name	Part no.		
Baseplate Assembly 490 x 490 mm	BE006132		
REBS Wire Ladder 5 m	BE002420		
Hose Extension 2m	BE390191		
Hose Extension 5m	BE390194		
Swivel Joint	BE000263		
REBS Poleman Assistant Bar	BE000614		





REB5® **POLE RAIL STAND**

The Pole Rail Stand assists with handling of the SkyPole, the Giraffe Tracer, or the Windup pole under operational conditions. The stand improves precision and controllability. All while restricting to a safe range of movement, and a way to securely 'park' the pole in several positions.



Standard Packages	
Туре	Part no.
SkyPole 20m stand	BE000585
SkyPole 15m stand	BE000586
Giraffe stand	BE000587
TLP Stand (Windup pole)	BE000588

Specifications	
Floor area	490 x 570 mm
Height	1000 mm
Weight (+/- 1kg dependent on type)	55 kg





POLE RAIL STAND - PACKAGES

Standard Packages details		Skypole 20m	Skypole 15m	Giraffe stand	TLP stand (Windup)
Part name	Part no.	Pcs.	Pcs.	Pcs.	Pcs.
Pole Stand Base	BE000584	1	1	1	1
Pole Rail	BE000395	1	1	1	1
Skypole Cup Base	BE000582	1	1	-	-
Skypole 15m Pole Adapter	BE000673	-	1	-	-
Giraffe Cup Base	BE000578	-	-	1	-
Giraffe Pole Adapter	BE000683	-	-	1	-
TLP Cup Base	BE000589	-	-	-	1
TLP Pole Adapter	BE000684	-	-	-	1







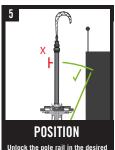


Turn the handlebar/control unit 90 degrees to prepare for use. Lift the Giraffe up, mount it in the Pole Rail and secure it. The inclination helps keep the pole secured to the



On the pole rail is a integrated holder for ladder reel. This holder also features an adjustable brake that keeps the reel from spooling out unintentionally.

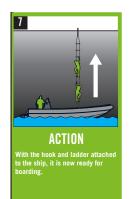


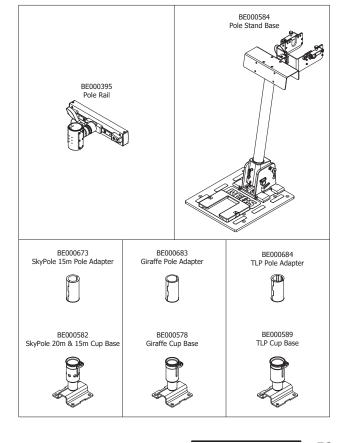


Unlock the pole rail in the desired direction and to the desired max angle. The pole is now free to be used for boarding, but constrained from moving in undesirable directions.



The Giraffe is quickly removed from the pole rail and the pole rail itself can quickly be disassembled and removed if neccesary.





TELESCOPIC POLE

The Telescopic Pole is a versatile and robust tool for many different purposes. Available in various versions and lengths, with diverse adapters to suit any type of operation. Custom made adapters are available on request.

The manual telescopic pole consists of multiple carbon fiber segments telescoping into each other. At the end of each segment is a quick-action clamp with a lever that securely locks the internal segment in place. Pivot the lever to open position, and the internal segment is free to move. Adjust the pole segment to a set length and push the lever back down into the locked position. Repeat for all the segments to extend the pole to the desired length.

The height of the collapsed pole determines which situations it is most suitable. The poles up to 6 ft. are easy to manage by a single operator on dry land or a boat, and are great tools for boat-to-boat boarding. The longer poles are made for diving and are easy to use and extend from within water, or to reach the top of a building on land.

The manual telescopic poles are made from carbon fiber, polyamide, and anodized aluminum which provide excellent salt water resistance. Telescopic systems should be cleaned with fresh water after operation at sea to ensure proper functionality over their lifetime.

The poles come in several different lengths and versions, see the next page for more information.









TELESCOPIC POLE - DETAILS

Part no.	Name	Collapsed length	Full length	Weight	Sections
BE002404	2,8 m	0.8 m / 2.7 ft	2.9 m / 9.6 ft	0,85 kg / 1.9 lbs	6
BE002473	6,8 m	1.2 m / 4.0 ft	6.8 m / 22.3 ft	2,35 kg / 5.2 lbs	9
BE000688	7,1 m	1.4 m / 4.4 ft	7.1 m / 23.3 ft	3.72 kg / 8.3 lbs	7
BE002464	9 m	1.9 m / 6.1 ft	9.2 m / 30.1 ft	4 kg / 8.8 lbs	6
BE002465	10 m	3.6 m / 11.7 ft	10.1 m / 33 ft	3,8 kg / 8.4 lbs	3
BE004835	12 m	2.8 m / 9.1 ft	12 m / 39.3 ft	5.6 kg / 12.3 lbs	5
BE002466	15 m	3.3 m / 10.8 ft	15 m / 49.2 ft	5,9 kg / 13 lbs	5

(Measurements rounded to first decimal)



REBS Micro Boarding Package 1		BE004300
Part name	Part no.	Pcs.
REBS Hook 2,5" Titanium with Pigg Release	BE002526	1
REBS Telescopic Pole 2,8 m Carbon Fiber	BE002404	1
REBS Rope Ladder 6 m	BE004206	1

Additionals: Bag: BE294813

REBS Boarding Package Set 1	BE002180	
Part name	Part no.	Pcs.
REBS Hook 7" Titanium with Pigg Release	BE000212	1
REBS Telescopic Pole 9 m Carbon Fiber	BE002464	1
REBS Wire Ladder 10 m	BE002461	1

Additionals: Bag BE003340



Pictured is our most compact pole. Extending from 0,75 m to 2,8 m and only weighs 0,85 Kg.





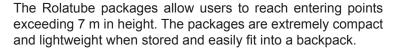
ROLATUBE

The Rolatube is made from an ultra low volume composite material that coils into a very compact roll. Once deployed the Rolatube rapidly snaps into a rigid pole. The Rolatube is a versatile tool suitable for boarding, urban operations, diving operations, and beyond. Or suitable as a stop mast, a signal mast for surveillance, or any other uses where a portable, compact and collapsible pole is needed.



COMPOSITE STRUCTURE THAT ROLL-UP

For the top end of the Rolatube, the custom made top adapter can be supplied with either 2,5" / 5" Titanium Hook or Urban Hook. The Rolatube hook adapter releases from the Rolatube pole after the hook is placed. The adapter also allows the hook to be repositioned and removed by using the Rolatube pole. Combining the Rolatube pole with the top adapter and the 5 / 7 m (16.5 / 23 ft) wire ladder results in a very portable climbing system with great versatility, low weight, and excellent reach.





Rolatube 3 m Backpack Packa	BE003654	
Part name	Part no.	Pcs.
REBS Rolatube 2,5" 3 m Black	BE003658	1
REBS Wire Ladder 5 m	BE002420	1
REBS Hook 2,5" Titanium with Rolatube L adapter	BE000356	1

Rolatube 5 m Backpack Package		BE003655
Part name	Part no.	Pcs.
REBS Rolatube 2,5" 5 m Black	BE003540	1
REBS Wire Ladder 7 m	BE002538	1
REBS Hook 5" Titanium with Rolatube L adapter	BE000363	1
Bag	BE002506	1

Optional	
REBS Urban Hook Rolatube adapter	BE000677









WINDUP POLE

The Windup Pole is a high-performance, windup action telescopic pole, with a reach of 15 meters. It is light, fast and strong. Designed for use on land and at sea. The main difference compared to standard telescoping poles is the winding deployment action. Resulting is less handling and a quicker deployment.

The Windup Pole is a telescopic pole with a manually operated winch and belt system to extend it.

All parts of the Windup Pole are designed for both land and sea use, and withstand immersion in sea water. The telescoping tubes are made from high strength hybrid carbon fiber composite.

The top adapter of the pole is compatible with all of our grapnel hooks with the hulk adapter. Similar to the manual telescopic poles, the windup pole is used for placing a hook with an attached ladder or rope onto a ledge or railing.

The windup pole is extended while in vertical position for easy operation.

BE000211

Tactical

REBS Hook Dual 6" Titanium



The Windup Pole has an automatic brake which keeps the pole from collapsing unintentionally. It also features both wind-up and wind-down action which, in certain cases, is absolutely necessary in order to retract the pole.

All belts and moving parts are contained inside the pole for a reliable system with few pinch points.



Specifications	
Reach (extended)	15 m / 49 ft
Retracted length	4,1 m / 13.45 ft.
Weight	15,8 kg / 34.8 lbs

Rebs Windup Pole Packages		BE006841 (with 6" Dual Titanium Hook)	BE006840 (with 10" Aluminum Hook)
Part	Part no.	Pcs.	Pcs.
REBS Windup Pole 15 m TLP61/15-4.2	BE000025	1	1
TLP Cup Base	BE000589	1	1
REBS Hook Dual 6" Titanium	BE000211	1	-
Tactical Adapter Shaft with Locking Pin	BE000357	1	-
REBS Hook 10" Aluminum	BE000106	-	1
REBS Wire Ladder 15 m	BE002462	1	1
Wire Ladder Protector	BE000461	1	1
Bag	BE000469	1	1
REBS Ladder Reel	BE005538	1	1
REBS Distance Wheel	BE000085	6	6
REBS Poleman Harness	BE000036	1	1





REBS LAUNCHER

The REBS Launcher enables users to access high-up entry points by launching a grapnel hook on to a permanent fixture and then ascending ropes fixed from that point. The Launcher is perfect for entering buildings, bridges, ships, platforms or cliffs as well as crossing ravines or rivers, both for military and rescue scenarios.

The REBS Launcher is designed in close co-operation with the Norwegian Forces.

The REBS Launcher is powered with pressurized air, which facilitates low noise operation and enables easy reloading from ordinary diving bottles.

The grapnel hooks in high strength aluminum alloy and titanium reach distances up to 50 meters height and a horizontal distance of 100 meters. A climbing ladder can be launched as high as 25 meters. The power of the launcher can be preset on the fly by adjusting the pressure using the pressure gauge.

The Launcher can be used several times at various heights for each tank refill. The number of shots between refills depends on the pressure used for each shot.



Specifications	
Maximum height with grapnel (Ø9,5mm rope)	30 m / 98 ft
Maximum height with rope ladder	25 m / 82 ft
Maximum length with grapnel	100 m / 328.1 ft



The Launcher Piston Kit reduces both recoil and sound levels, providing both tactical and HSE benefits. It is easily installed on existing units, and is also recommended as a standard part on new deliveries. Contact us for more information.

For ease of transportation and increased comfort at very high pressures we provide a REBS Launcher stand platform which can be bolted to any flat surface and we also provide custom interfaces for any boat or vehicle.

A flexible solution is the Launcher Mount that can be used both with a flexible padded base, or a the rubber pad. Allowing the Launcher to be fired safely even while rested on the ground.



Shoot with the REBS Launcher from a ground supported position with the Launcher Mount Kit (BE000113).

REBS®

REBS LAUNCHER SYSTEM OVERVIEW MOST COMMON PARTS

REBS Launcher BE002442



System for External Bottle V.2

BE003752



Piston Kit BE000485



Storage Box BE002480



Bottle 1,0 liter Composite BE000620



Rope/Ladder Container V.2

BE003674



REBS Rope Ladder 25 m BE002477



REBS Grapnel BE002513



Mount Kit



REBS Rope Sterling Ø9,5 mm 40 m

BE000555



BE000113



Toolset BE002537



REBS Launcher Single Platform

BE007374



Fill Line Valve V.2 BE004009



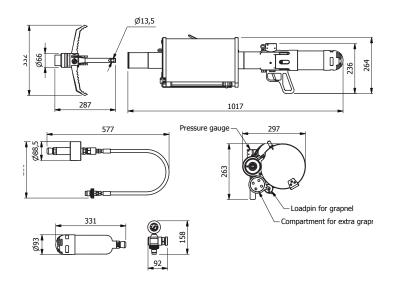


LAUNCHER - STANDARD PACKAGES

REBS Launcher packages		Tactical Package 1 BE000163	Tactical Package 2 BE000164
Part name	Part no.	Pcs.	Pcs.
REBS Launcher	BE002442	1	1
Piston kit	BE000485	1	1
Bottle 1,0 liter Composite	BE000620	1	2
Rope/Ladder Container V.2	BE003674	1	1
REBS Grapnel	BE002513	1	4
REBS Rope Sterling Ø9,5 mm 40 m	BE000555	1	1
Toolset	BE002537	1	1
Fill Line Valve V.2	BE004009	1	1
System for External Bottle V.2	BE003752	1	1
Storage Box	BE002480	1	1
REBS Rope Ladder 25 m	BE002477	1	1

Detailed Specifications	
Bore	67 mm / 2.6"
Length	1070 mm / 42.1"
Weight (without grapnel and rope)	7 kg / 15.4 lbs
Grapnel length	250 mm / 9.8"
Grapnel weight	1200 gram / 2.6 lbs
Standard grapnel MBL (tip)	600 kg / 1323 lbs
Pressure air bottle	1 liter / 300 bar
Grapnel maximum height (vessel position)	Rope Ø9,5 mm / 0,37": 30 m / 98 ft (vertical)
Grapnel maximum distance (man held position)	Rope Ø6 mm / 0,24": 100 m / 328 ft (horizontal)
Grapnel maximum height (vessel position)	Rope Ladder: 25 m / 82 ft (vertical)
Capacity rope container	2 x 50 m Ø6 mm / 2 x 164 ft Ø0,2"
Rope size	Ø6 - 11 mm / Ø0.2 - 0.4"
Rope ladder length	25 m / 82 ft

LAUNCHER - SPECIFICATIONS



REBS®

COMPACT LAUNCHER V.2

The Compact Launcher is a smaller version of the original REBS Launcher, and has been developed for more versatile use than the big brother. Whereas the REBS Launcher is designed to be the ultimate boarding tool with unmatched performance, the Compact Launcher is designed to be a light weight, compact in size line thrower for many different applications.

The Compact Launcher is a high performance pneumatic launcher that has been designed for use in maritime and urban environments. The Compact Launcher grants high reliability, reach and versatility.

Based on end user experience from the bigger REBS® launcher and customer requests, the Compact Launcher with collapsible stock was designed. The system is very effective to use in many scenarios including diving, boat-based and land-based climbing operations.

The Compact launcher is powered by pressured air and the 0.35 L bottle can be easily be re-filled from a normal 300 bar diving bottle. Lower pressure diving systems can also be used to charge the tank. Users can set the firing pressure on the fly depending on the height needed. A compact rope container can be mounted on the barrel and fits 115 ft of 8 mm rope or 53 ft of rope ladder. Multiple shots can be fired from a single bottle charge.

The Compact Grapnel with spring-loaded folding arms will hook into any object such as wire, fences, railings, and structural and natural features. It can be used to deploy a climbing rope, flexible ladder or a horizontal traverse line.

The Piston Kit upgrade reduces both recoil and sound levels, providing both tactical and HSE benefits. Contact us for more information.





It is easy to maintain and has a long and robust service life with proper post operations care. The Compact Launcher leverages the 12+ years of operational service and lessons from its "big brother".

The Compact launcher is available in several kit options. A custom made transportation and storage box makes the Compact Launcher highly transportable and user friendly.



Specifications		
Maximum height with grapnel (Ø9.5mm rope)	25 m / 82 ft	
Maximum height with rope ladder	16 m / 52.5 ft	



COMPACT LAUNCHER SYSTEM OVERVIEW

MOST COMMON PARTS

REBS Compact Launcher BE000083



Maintenance Kit BE004878



Piston Kit BE000057



Fill Line Valve BE004263



Bottle 0,35 liter Aluminium BE004204



REBS Rope Ladder 16 m BE002458



Rope/Ladder Container BE004262



Compact launcher Carry System BE000400



REBS Grapnel BE007838



REBS Rope Sterling Ø9,5 mm 30 m BE000554





COMPACT LAUNCHER STANDARD PACKAGE

REBS Compact Launcher packages		Standard Package BE000165
Part	Part no.	Pcs.
REBS Compact Launcher	BE000083	1
Piston Kit	BE000057	1
Bottle 0,35 liter Aluminium	BE004204	1
Rope/Ladder Container	BE004262	1
REBS Grapnel	BE007838	2
REBS Rope Sterling Ø9,5 mm 30 m	BE000554	1
Maintenance Kit	BE004878	1
Fill Line Valve	BE004263	1
REBS Rope Ladder 16 m	BE002458	1
Compact Launcher Carry System	BE000400	1

COMPACT LAUNCHER CARRY SYSTEM

The Compact Launcher Carry System is dveloped to make it easier to carry the Compact Launcher during operations. With this bag you may easily bring the Compact Launcher as a backpack or a bag, This also suits into the hard Storage Box.



The Bag contains everything you need for an operation.



Spareparts, Grapnels, Maintenance Box and Fill Line Valve are below the bag in the box.

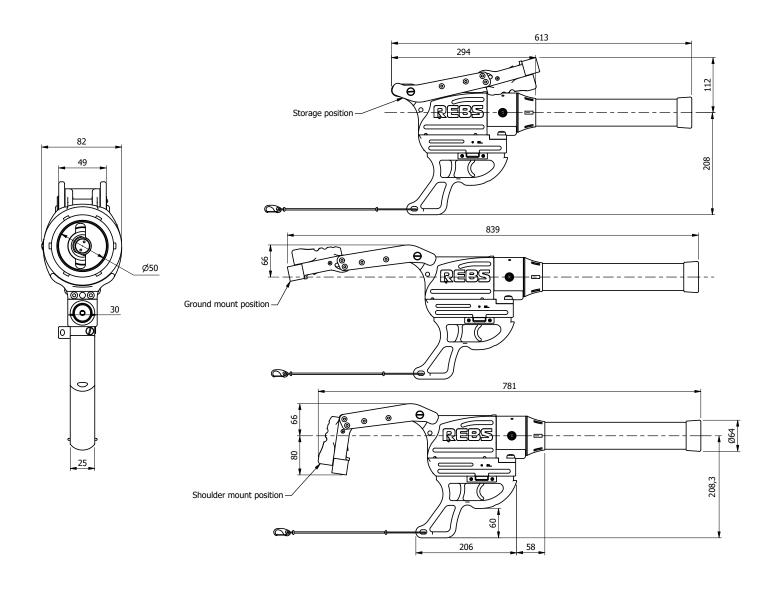


Soft Bag that fits within the Storage Box



The Storage Box

COMPACT LAUNCHER SPECIFICATIONS



Specifications		
Bore	50 mm / 2.17"	
Length assembled with stock out	839 mm / 33"	
Weight (without grapnel and rope)	4,4 kg / 9.7 lbs	
Standard grapnel length	252 mm / 9.92"	
Standard grapnel weight	792 gram / 1.75 lbs	
Standard grapnel MBL (tip)	420 kg / 926 lbs	
Pressure air bottle	0,35 liter / 300 bar	
Grapnel maximum height (vessel position)	Rope Ø9,5 mm / 0,37": 25 m / 82 ft (vertical)	
Grapnel maximum distance (man held position)	Rope Ø6 mm / 0,24": 60 m / 196.85 ft (horizontal)	
Grapnel maximum height (vessel position)	Ladder: 16 m / 52.5 ft (vertical)	
Capacity rope container	Ø6 mm : 2 x 30 m	
Rope size	Ø6 - 11 mm / 0.2 - 0.4"	
Rope ladder length	16 m / 52.5 ft	





ATLAS POWERED ASCENDER APA-5

Lightweight and powerful, the Atlas Devices APA-5 is a multi-mission device that hauls combat rescue loads, extends warfighter stamina, and reduces mission exposure.



INTERCHANGEABLE BATTERY

A quick connect, powertool-like battery allows for on-thefly swapping of batteries for extended operation, packload distribution, and improved mission planning.

POWERFUL

Able to lift over 600 lbs directly, the lightweight system improves force protection and reduces the operational footprint by replacing a 6-9 man haul team and complicated haul systems for CASEVAC missions.

To achieve a tactical advantage, perform material haul, or rescue casualties, military doctrine often requires the ascent of men and materiel over steep obstacles in mountainous, urban, and maritime environments. This is a highly technical and physically exhausting task that consumes the warfighter and impacts mission planning. To eliminate the burden of vertical obstacles, Atlas Devices developed the APA-5.

Building upon its theater-proven predecessor, the Atlas Powered Ascender is a rugged, battery operated ascender that easily integrates into current SOPs and COTS climbing equipment. Whether operating at maritime depth, in a desert dust storm, or 100' AGL in a helicopter, the Atlas Powered Ascender is a force multiplier that effortlessly reduces time and exposure during vertical operations.

LIGHTWEIGHT

Designed for the dismounted warfighter, the ascender weight is about the same as two 150' lengths of 7/16" static rope.







APA-5 ACCESSORIES

WIRELESS REMOTE / WIRED REMOTE

The wireless remote control is an optional accessory that can operate the APA-5 from a distance. The remote is designed to mimic the user interface of the main ascender, including fully proportional ascent and descent control in both fast and slow modes. The remote communicates with a wireless receiver module that is integrated with the ascender as an add-on item. The wireless remote control expands the capability of the ascender especially in "hands off scenarios" such hoisting into a helicopter, where it is necessary to have control of both the ascender and the incoming load at the same time. The wired version of the remote control is similar but is plugged directly into the ascender unit auxiliary remote port.



WIRELESS RECEIVER

The wireless receiver is an optional accessory that pairs with the wireless remote. The receiver module seamlessly integrates within the ascender system, creating a low profile, reliable unit with wireless operating capabilities. Just like the ascender, the wireless receiver is fully waterproof, rugged and performs in any environment.



SMALL DIAMETER ROPE DEVICE

The APA-5 ascender is able to operate a wide variety of rope diameters form 6.0-11.0 mm when the Multi-diameter Rope Capability option is selected. In addition to modifications to the rope interaction mechanism on the APA-5 unit, the Small Diameter Rope Device is included with the system to optimize operations with small diameter ropes (6.0 - 8.0 mm). This patented lightweight and compact device is a modular attachment that can be rapidly engaged with a bight of rope.



EDGE PROTECTION GUARD

The Edge Protection Guard is an optional accessory that safely directs load in applications where the ascender is used as a winch loaded against a ground plane. The Edge Protection Guard provides increased stability, traction and protects vital parts of the ascender system in these scenarios. Its unique design allows for a hot swap battery interchange while operating the system under load. When the guard is not in use, the modular guard can easily be disconnected with a quick release pin.



STANDARD DISTANCE / HIGH CAPACITY BATTERY (INTERCHANGEABLE)

The APA-5 features an interchangeable battery. The power supply can be replaced during operation, while under load, and while fully submerged. For operations that require additional time and a larger power supply, Atlas Devices offers a high capacity battery which offers 2x the ascending distance of the Standard Distance Battery in a package that is less than 2x the size and weight of the Standard Distance Battery.



ATLAS DEVICES TOUGHLINE

Atlas Devices' ToughLine is a static kernmantle rope developed specifically for the demands of powered ascent. Leveraging a Technora sheath and optimized weave construction, the Atlas Toughline is the ideal rope for use with Atlas Powered Ascenders and provides superior abrasion resistance, shape and prolonged life - especially with heavy loads. Although other kernamantle ropes can be used by the Atlas Powered Ascenders, the Toughlines have consistently outperformed other ropes in all environmental conditions ranging from iced, wet, sandy, dirty, and soiled environments without any degradation in performance. DO NOT use Atlas Powered Ascenders with twisted nylon, hemp "gold line," or other non-kernmantle ropes!

Atlas toughline (Static Kernmantle) rope overview			
Diameter (mm Ø)	MBS (lbf)	Weight (g/m) / (lb/100ft)	Atlas PN
10,5	10000	71,68 / 4.8	ATL-150-10.5
9	6500	54,6 / 3.6	ATL-150-9
8	4500	41,68 / 2.8	ATL-150-8
6,5	4500	29,51 / 1.4	ATL-150-6.5







ATLAS POWERED ASCENDER APA-4

HIGH SPEED CLIMBING

Atlas Devices' APA-4 is a multi-mission high speed single-person ascender based on Atlas's proven technology and adapted for use where speed and versatility are priorities. The APA-4 lifts up to 350 lbs directly, climbs at up to 3.5 ft/second, handles ropes from 6-11mm in diameter, operates at maritime depth, and has a hot-swappable battery. A manual brake release allows descent with no battery, and an integrated 2:1 attachment allows users to build mechanical advantage systems quickly and easily to lift loads up to 700 lbs (expert use only). Also as with all products in the Atlas Devices family, it is compatible with all APA-5 batteries and remotes.









Specifications	
Weight	15.6 lbs / 7.1 kg
Dimensions	11.4 x 6.5 x 5 in / 28.9x16.5x12.7 cm
Weight w /std. battery	22.9 lbs / 10.4 kg
Weight w / high cap. battery	28.1 lbs / 12.8 kg
Dimensions w / std. battery	13.2x5.1x11.7 ln / 33.6 cm

Ascent distance per charge, standard battery, single user: 700 ft @ 250 lbs / 213 m @ 113 kg

Ascent distance per charge, high capacity battery, single user:1400 ft @ 250 lbs / 427 m @ 113 kg

Ascent speed: Variable (high speed)

Lift capacity: 350 lbs / 158 kg

Rope diameters: 6.5 - 11 mm

Submergence rating allows connect /disconnect at depth. Ergonomic design for interchange at during operation.

Redundant mechanical battery interlock.

Recharge battery upon descent. Compatible with APA-5 remotes.





ASCENDER COMPARISON





APA-5

Two-person loads, rescue, aircraft hoisting, maritime boarding

- -Lift capacity: 272 kg
- -Submersion: 10-30m
- -Weight: 6,7 kg
- -Wireless Remote Control -Standard Battery
- -High Capacity Battery
- Day of Capacity Batte
- -Rope: 6,5-11mm
- -Charger
- -Battery Edge Protection
- -Travel Case





APA-4

Single person high speed climbing, urban access, maritime boarding.

- -Lift capacity: 158 kg
- -Submersion: 10-20m
- -Weight: 7 kg
- -Wireless Remote Control
- -Standard Battery
- -High Capacity Battery
- -Rope: 6,5-11mm
- -Charger
- -Battery Edge Protection
- -Travel Case



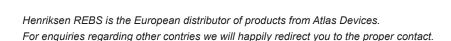
APA-2

Single person climbing, launch and ascend, urban access, maritime boarding.

Lift capacity: 158 kg

- -Submersion: 10m
- -Weight: 6,2 kg
- -Wireless Remote Control
- -Low Profile Battery
- -Rope: 6,5-9mm
- -Charger
- -Travel Case









THE COMPLETE SYSTEM



In the crucial work of building, maintaining and repairing live electrical transmission and distribution infrastructure, accessing work positions can be challenging, dangerous, and costly.

Atlas Devices products and techniques help linemen and electricians complete jobs safer, faster, higher, and with twice the efficiency in a handheld portable solution. By adapting our field-proven military solutions toward the utility sector's unique energized requirements, we have given line crews powerful enhancements to their efficiency and safety. With our solutions, line crews have completed jobs up to 8 times faster, gained immediate on-site rescue capability with smaller teams, and get first man up in only minutes in true compliance with OSHA-required 100% attachment. An Atlas Devices Solution can build and promote a Return on Investment in as little as 1-2 jobs per system.



REBS Compact Launcher BE000165



Atlas Ascender APA 5-U BE000378



MAGNETIC CLIMBING SYSTEM

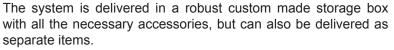
The Magnetic Climbing System (MCS) consists of a pair of shoes and hand grips. The MCS is used for efficiently climbing ferromagnetic surfaces. The system can provide access to ships and structures where hook and climb is not possible, and can even be used by divers to board a ship from the sea.

Magnetic Climbing System (MCS)

An extremely powerful magnetic climbing system that easily supports the weight of one fully equipped operator. The system consists of a pair of lever-operated magnetic shoes and hand grips for climbing on ferromagnetic surfaces. It works equally well for urban and maritime climbing of steel structures, and can be used from a submerged approach or from boat to boat.



The system has a quick release function for rapidly exiting the magnetic shoes in case of an emergency.







REBS Magnetic Climbing System		BE005737
Part name	Part no.	Pcs.
REBS Hand Unit Left	BE007574	1
REBS Hand Unit Right	BE007575	1
REBS Foot Unit Right	BE007576	1
REBS Foot Unit Left	BE007577	1
Handle Slings	BE357666	1
Storage Box	BE006687	1
Handle Plate	BE116593	1
Quick Release Pull Wire L 700	BE117649	2
Thigh sleeve	BE357673	2
Calf sleeve L Large	BE357672	1
Calf sleeve R large	BE357667	1



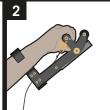
REBS®

MAGNETIC CLIMBING SYSTEM USAGE PROCESS



PREPARE

Fasten the security line on the swiveling connector on both Magnetic Climbing Handgrips and secure the line to the climber harness.

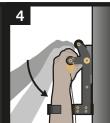


GRAB

Grab a hold of both handgrips. The side where the arm brace allows the arm to pass through should be on the outside.



CONNECT



PLACE

Carefully rotate the handgrip to fasten the magnet silently to the



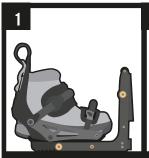
RELEASE AND RISE

Rotate the handgrip backwards to release the magnet with the easy release lever.



SCALE

Repeat steps 3 and 4 to scale up vertical metal surfaces.



PREPARE

Enter the Magnetic Climbing Shoe Place the shoe with the front and fasten the binding.



PLACE

wheel against the surface.



PLACE

Rotate the shoe carefully towards the surface to attach silently.



RELEASE AND RISE

Rotating the shoe outwards releases the magnet with the easy release function.



SCALE

Repeat steps 2 and 3 to scale up vertical metal surfaces.



PREPARE

Open the step-in-binding to prepare the Magnetic Climbing Shoe for use.



PLACE FOOT

Place foot inside the binding.



CLOSE

Close the clasp on the step-in-binding to prepare for adjusting.



ADJUST

Use the tightening clasps on the binding to adjust the binding properly. Once adjusted, you only need to use the backside clasp to fasten and loosen the binding.

MAGNETIC CLIMBING SYSTEM MAIN FEATURES



SECURITY LINE

Between the swiveling fasteners on the Systems Handgrips is a security line to which the user is connected. This line enables the user to release the hand grips and have both arms free.



EASY RELEASE

The easy release system enables the powerful magnets to be easily detached from the climbing surface.



HIGH FORCE

The Magnetic Climbing System uses extremely powerful magnets that attaches to metal surfaces with great force, and the system easily supports a fully eqipped operator.



STEP IN BINDINGS

The system is connected to the user with easy to use and efficient step in bindings. Once adjusted you only need to use a single clasp to fasten or unfasten the Magnetic Climbing shoe.



WALL ROLLERS

The Magnetic Climbing System has plastic wheels so that the system can be placed and repositioned quiet and smoothly on the climbing surface.



SCUBA TUBE

The Scuba Tube provides an easy and efficient way of transporting equipment safely and dry under water.

It has two ports that can be used to route cables or wires through the lid, and that way keep electronics and batteries dry. It is available in different lengths to suit different transportation needs. A modular design lets you combine sections to your capacity needs. The Scuba Tube is rated for maximum 100 m depth.

The Scuba Tube is equipped with a vacuum valve for building up a vacuum inside the Scuba tube and to release the vacuum in order to easily remove the lid. Handling of the Scuba Tube is made easy by the large and accessible handle on the lid. In the other end is a fastening point for underwater towing. Use this point to tie in a rope or clip in a carabiner with a towing line. Opening and closing of the air tight lid is made simple with efficient cam lever dual action (force open / force close) handles.





SCUBA TUBE - MODULES AND DIMENSIONS

Configuration Template For Scuba Tube Systems Top View | Description Size | Description

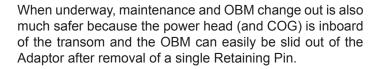


Scuba tube configuration examples*						
Туре	Internal Volume (L)	Outer Length mm / in	Inner length mm / in	Weight kg / lbs	B.N.W.* Kg / lbs	
500+500	57,7	1142 / 45"	940 / 37"	30,5 / 67.2	70,5 / 155.4	
500+400	52,0	1042 / 41"	840 / 33"	28,9 / 63.7	64,0 / 141.1	
500+310	46,8	952 / 37.5"	750 / 29.5"	27,4 / 60.4	58,1 / 128.1	
500	31,2	682 / 26.9"	480 / 18.9"	22,2 / 48.9	40,2 / 88.6	
400	28,3	582 / 22.9"	380 / 15.0"	20,5 / 45.2	33,6 / 74.1	
310	23,1	492 / 19.4"	290 / 11.4"	19,1 / 42,1	27,7 / 61.1	
260	20,2	442 / 17.4"	240 / 9.4"	18,2 / 40.1	24,5 / 54.0	
Top + Base	4,7	222 / 8.7"	20 / 0.8"	13,9 / 30.6	9,8 / 21.6 (sinks)	

^{*}Custom sizes or design available on request. Contact us for more information about special projects.

TRANSOM ADAPTER

Transom Adapter has designed to enhance the capability of rapidly deployable Inflatable Boat Platforms. When coupled with a short shaft OBM, the adaptor allows the boat to be bundled and air dropped with the motor already fitted to the transom. To deploy, the motor can be indexed from parallel to perpendicular with the transom and then with the operation of a foot pedal, the OBM is then lowered into the water. All of which can be carried out by single operator without any tools. When coupled with the fast inflation system and inflatable floor, setup time and operator exertion is significantly reduced.



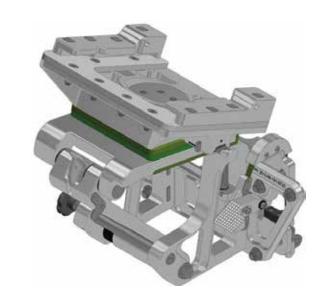
The design also offers flexibility as it can be fitted to multiple in-service inflatable boat models (currently fitted to Zodiac & Wing Inflatables) and can integrate a range of OBMs as well (currently run with Tohatsu & Raider OBMs). BDI design, manufacture and certify the items, the design can be adapted to meet user requirements and preferences. Transom Plates can also be provided for fitment of long shaft motors or twin OBM applications if required.

All components are CNC machined from 316 Stainless Steel and Marine Grade Aluminum so that the design is suited to the maritime environment and the system as a whole has been designed with ease of inspection and maintenance in mind

Specifications	
Part no.	BE000091
Material	AISI 316 / Aluminium alloy (marine grade)
Weight	20 kg / 44 lbs
Typical capacity	40 - 55 HP







REBS®

TRANSOM ADAPTER DETAILS



STOWED CONFIGURATIONObm is locked above and parallel to transom.



RAISED CONFIGURATION

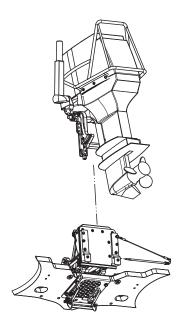
OBM is locked above and perpendicular to transom. OBM is retained by a single pin. Once removed, the OBM slides out of the bracket for quick and safe changeout at sea.



UNDERWAY CONFIGURATION

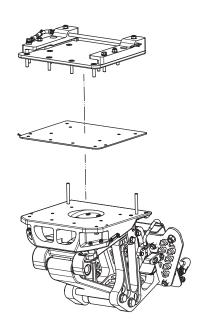
OBM is locked in the operational/down position.

The OBMs full range of trim, steering & shallow water drive settings still available.



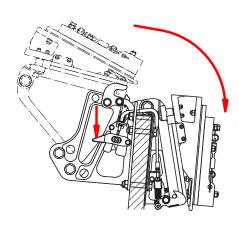
REMOVAL OF OBM

The OBM is easily removed by disengaging the retainer pin. The motor can be safely removed whilst on the water because the motor COG is inboard of the transom during the entire procedure.



UNDERWATER CACHING

The transom adapter assembly is designed to integrate with underwater engine bags used in underwater caching.



SIMPLE OPERATION

A single foot pedal is used to lower the OBM into the underway position.

REBS®

MAGNET ASSEMBLY KIT

The Magnet System - Diving Kit (BE000301) is a module-based system with various components, which can easily be configurated for your needs. The kit is built up for use in special operations in the marine environment, especially for fastening on ferritic steel ship hulls.

The kit contains magnets with a wide range of different magnetic force, from a range of 7 kg and up to 520 kg. The holding force of the magnets is theoretical and will be varying with different surfaces, such as paint thickness, rust or thickness of the steel.

SQUEEZE RELEASE MAGNET

The Squeeze Release Magnet is a magnetic anchoring point, used to fasten to surfaces made of ferritic steel.

The handle of the releaser provides an easy and silent way to attach and detach the magnet from the contact surface.

SR990003 Lifting eyebolt

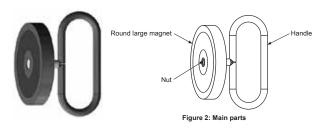




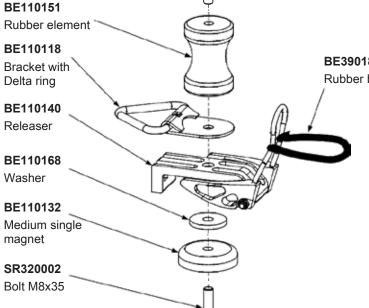
TWIST RELEASE MAGNET

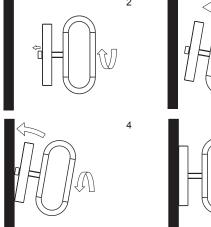


The Twist Release Magnet (BE000158) is a magnetic anchoring point. Twisting the handle provides silent and easy attachment and release to surface made if ferritic steel.









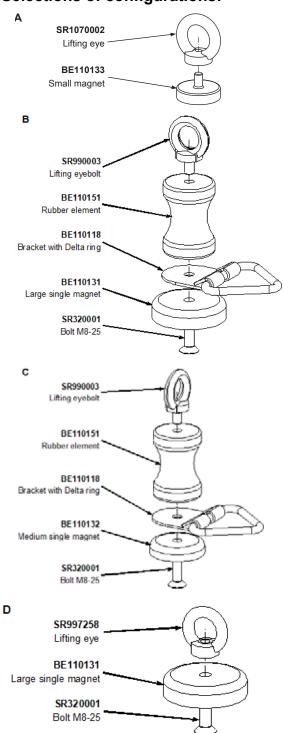


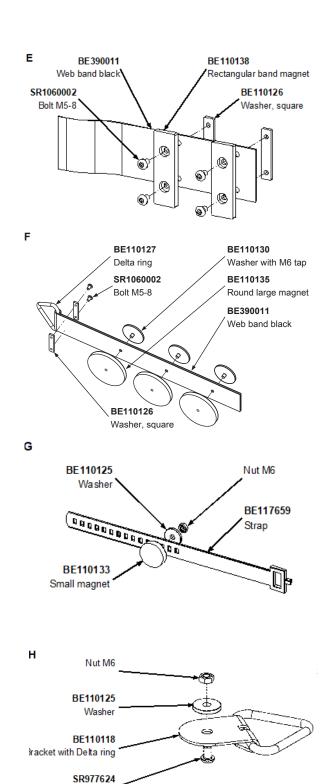
BE000427 configuration



The Band Magnet is a versatile magnetic anchor system. The system offers many different configurations for attaching anchoring structures for different objects to surfaces made of ferritic steel.

Selections of configurations:





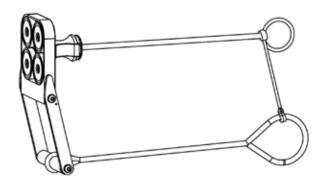
Bolt M6-10

MOORING MAGNET



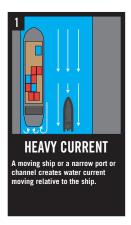
The Mooring Magnet (BE000157) is a magnetic anchoring point with a maximum adhesive force of 520 kg. The unit is designed as a quick mooring point to the boat, removing the need for throttling with the motor to adjust the position of the boat. This makes the operation easier and more quiet in areas with current in the water or a moving object. The unit have a handle to attach and detach.

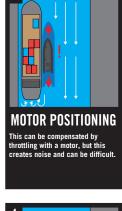
The kit contains magnets with a wide range of different magnetic force, from a range of 7 kg and up to 520 kg. The holding force of the magnets is theoretical and will be varying with different surfaces, such as paint thickness, rust or thickness of the steel.

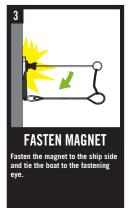


Specifications		
Part no.	BE000157	
MBL Straight pull	520 kg*	
MBL 740 angle pull	130 kg	
Weight	2,6 kg	

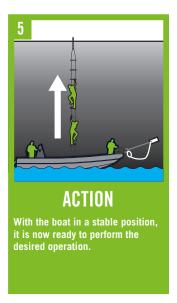
^{*} Theoretical strength

















ROPE CLIMBER

The REBS Rope Climber is a lightweight, compact and robust tool for efficient single rope ascension. It features large collapsible anti-slip surfaced foot supports which makes it both compact in size and efficient in use.

MAIN FEATURES

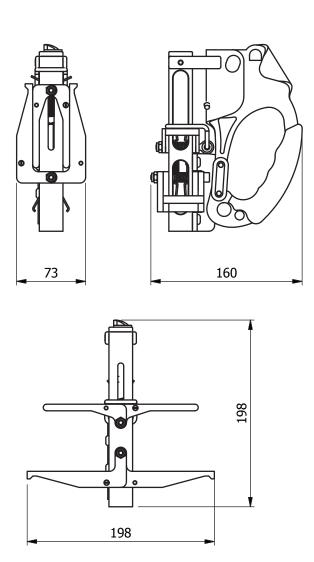
A collapsible rope climber that enables rapid deployment and rope fastening. Deployment is permitted by an integrated rubber cord release, making it quick and easy to use. It is also designed to allow one-handed fastening if required.

The handle is equipped with a mechanical thumb lever for quick and effective engagement/disengagement on the middle of the rope. Chrome-plated steel cam allows continuous ascent, even on wet ropes.

The anti-slip foot rests automatically adjust themselves to the user by spring-loaded upper arms which clamps onto the boots. Its large knurled surface allows the user to operate while using boots and/or fins.







Specifications	
Part no.	BE004710
Material	Aluminium alloy
Finish	Matte black
Weight	0,7 kg / 1.54 lbs





Helix Operations provides a complete capability for vertical access and rescue in mountain, maritime and urban environments for security, defence, and rescue operations.

They are based in the mountains of North Wales and have a heritage of almost 40 years supplying tactical climbing solutions to end users. Over that time, they have worked with and become a main supplier of tactical climbing equipment to the UK MOD and have provided equipment and systems to many other nations.

Helix Operations provides access solutions worldwide for security, defence and rescue operations. They provide equipment, systems and training to enable operators to work with speed, ease, and safety when accessing objectives across a wide range of environments; mountain, urban or maritime.

REBS distributes all Helix Operations products.

Find the full selection at www.helixoperations.com/tactical — we can supply any item you see there.





HCMH2 All-In-One Harness Solution with Ferro Concepts Bison Belt and DOM (BE000715)

Helix Operations, Ferro Concepts and DOM Systems have collaborated to create a bespoke system which gives operators the ability to mount kit without compromise whilst using the HCMH II Harness

This harness solution builds on the well-regarded Ferro Concepts Bison Belt™ designed to be light and slim whilst not sacrificing functionality. Along with the Helix DOM Comfort Belt is the best solution to add comfort when wearing thin clothing or carrying heavy load.

A comprehensive solution, this set-up provides unmatched versatility and reliability for operators in the field. Its innovative design ensures that all necessary gear can be carried without sacrificing mobility or comfort. Also avaliable as a standalone sit harness (BE000696)



Misty Mountain Operator Sit Harness (BE390906)

The Misty Mountain Operator Sit Harness is the multipurpose harness of choice for Naval Special Warfare. Load rated to 15kN and suitable for fall arrest in accordance with UIAA 105 Type C.

Designed to meet the requirements of SEALS, Green Berets, Commandos and PJs.

Features an Austri Alpin Cobra buckle, front and rear attachment loops, four small gear loops, molle outer attachment webbing for mounting mission essentials, and a Velcro tab for stowing a Fifi hook.







Benchmade 8 Safety Cutter		
Blade Steel	440C	
Blade/Finish	Coated	
Part no.	BE390893	
Use	Tactical/Rescue	



DMM Pivot	
Colour	Matt Grey
Weight	72/145 g
Part no.	BE390887
Compatible with	8,7-11 single mm ropes /7,3-9,2 twin ropes



Petzl ASAP		
Colour	Orange	
Weight	295 g	
Part no.	BE390894	



Petzl Pirana	
Colour	Black
Weight	90 g
Part no.	BE390888
Compatible with	Single ropes 8-13mm



Petzl ASAP'SORBER		
Colour	Black/Yellow	
Weight	125 g	
Part no.	BE390895	
Lenght	20 cm	



Phantom Screwgate Carabiner		
Colour	Matt Grey	
Weight	42 g	
Part no.	BE007990	
kN	24/9/9	



K-Pro Rope Protector		
Colour	Blue/Red,Black/Olive	
Lenght	50-80 cm	
Part no.	BE390896	



DMM Patroller	
Size	190x70x40mm
Weight	560g
Part no.	BE000716
Rope	6 ≤ 14mm



Petzl RIG	
Colour	Black / Yellow
Weight	400 g
Part no.	BE390885
MBL	200 kg



Highnovate RAFA	
Opening Range	10-45cm
Weight	2.8kg
Part no.	BE000678
Max Working Load	200kg



DMM Anka	
Colour	Matt Grey / Black
Weight	169 g
Part no.	BE390886



Petzl Cordex Plus Gloves		
Colour	Black/Beige	
Size	XS-XL	
Part no.	BE390899	
Material	Leather	



Slings- Dynatec	
Lenght	30-400 cm
Width	8mm
Part no.	BE390900
kN	22

REBS[®]



HELO SPECIAL INSERTION AND EXTRACTION



The unique construction of the Marlow Fast Rope allows for comfortable control throughout the descent and makes it easier to slow down and brake. The suppleness of the construction means that the rope is not hard on the hands and less force is required that with other ropes. Oil and general spillages do not affect speed or control during descent as the Marlow Fast Rope will absorb liquids. Available in standard 40mm nominal diameter and thinner 32mm nominal diameter version.



Each Marlow Fast Rope is delivered in a storage bag.

Each Marlow F.R.I.E.S can carry 6 fully equipped personnel with it's loop and lanyard system and can also be used as a regular Fast Rope.



ROCO RDX

The Roco "RDX" Fast Rope descent control device, provides added descent control for fast rope operations. Especially during tandem operations with heavy equipment or K-9's. Similar to a belay device, but without the added weight.

REBS TRAINING

REBS Training Modules:

Basic

1-4 days)

The REBS Tailored Basic Maritime Interdiction Course (1-4 days) is designed to get the teams quickly up to speed on the tactical implementation of high-end boarding equipment.

Advanced

(5 days - 10 weeks modular training course)

The REBS Tailored Advanced Training Course is a complete modular Maritime Interdiction or Counter Terrorism interdictions training course with all assets including HeloOps and Special Operations Craft.

All REBS courses are designed and conducted by world leading specialist in counter terrorism and maritime interdiction. Contact us for information and quote.

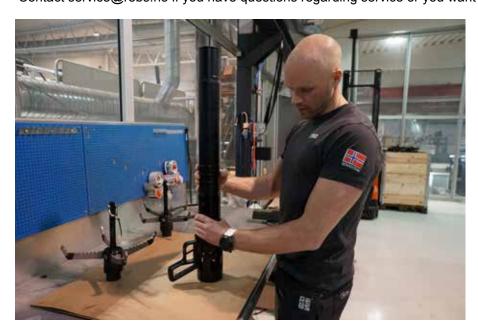


REBS SERVICE AND RECERTIFICATION

To maintain climbing safety and safety with regards to high pressure products, such as the launcher, we recommend that all products is subject to service and recertification every 2 year. Such recertification will also renew the product warranty.

A recertifications includes:

- Changing all predefined items with limited lifetime
- Change any reduced items.
- Test the system for potential defects
- Refurbish to have almost new appearance, technical and visual The work can be done:
- In the REBS workshop
- At customer site by REBS trained personnel. Contact service@rebs.no if you have questions regarding service or you want to start a service program.



RE BS

Reducing **Operational** Risk

Maximizing Operational Performance

HENRIKSEN

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