

safety

ENGINEERING

PRODUCTS AND COMPANY OVERVIEW



On Belay



The OnBelay is an air-over-hydraulic auto belay device that eliminates the need of a belayer when climbing. This device automatically retracts the cable rope when the climber ascends, and controls the speed when they descend or slip off the wall. It also includes a monitor that displays the status of the system at all times.

OnBelay is the only European hydraulic auto-belay device. Its braking system is the same as the one used to stop military aircrafts as they land on Aircraft carriers, implemented in their arresting engines.

Furthermore, our OnBelay has one-of-a-kind Self-Adjusting Speed Limiting Valves that descend users safely at a consistent speed of 1m/s, regardless of the elements, temperature or their body weight.

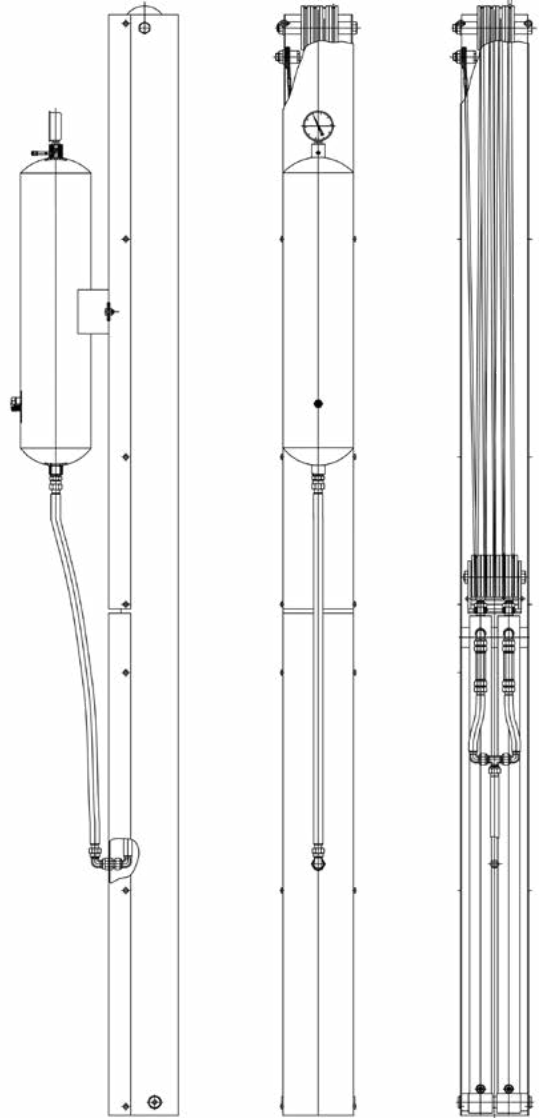
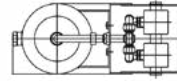
Benefits

- Reduces the needed staff and operational costs
- Minimizes the risk of injuries caused by human error
- Attracts more solo climbers and beginners
- Promotes more solo climbing sessions in mornings and lunchbreaks
- Increases throughput by reducing time for a climb compared to manual belaying

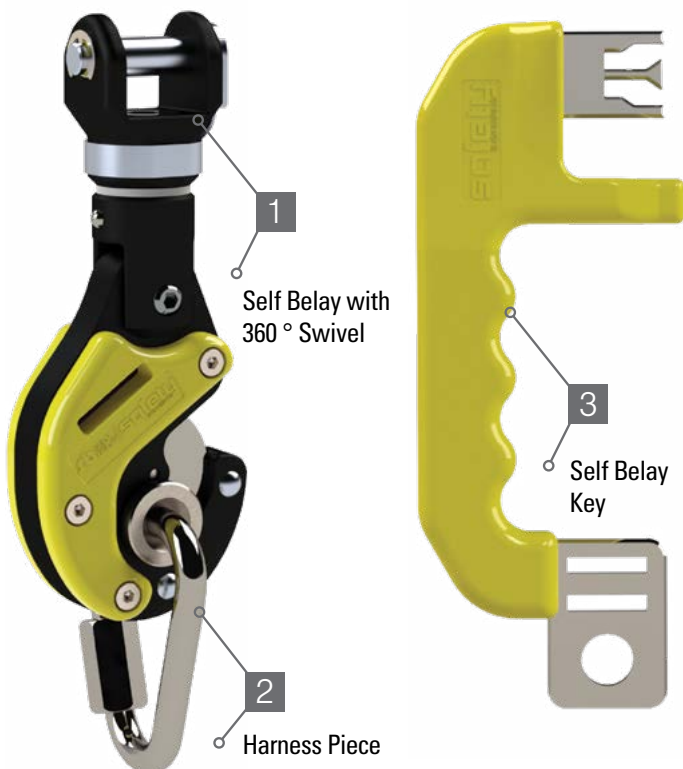
Features:

- CE certified
- Low maintenance cost – the only component that needs replacement is the steel cable
- Redundant in the event of:
 - Loss of pressure in the tank – sound and light alarm system option
 - Loss of up to 50% of the hydraulic fluid
 - Malfunction of one of the hydraulic cylinders
- Minimum downtime – maintenance is done on the spot with no need for shipment of the OnBelay for re-certification

On Belay



TECH SPECS	OnBelay08	OnBelay11	OnBelay14	OnBelay17
Device weight	60 kg (132 lb)	75 kg (165 lb)	100 kg (220 lb)	100 kg (220 lb)
Stroke	7.5 m (24'7")	10.5 m (34'5")	13.5 m (44'3")	16.5 (54'1")
Max. wall height	8 m (26 ft)	11 m (36 ft)	14 m (46 ft)	17 m (55'9")
Descent speed	Aprox. 1.00 m/s (3'3"/s)			
Max. retract speed	Aprox. 1.50 m/s (5'/s)			
Brake	Air-over-hydraulic system with 2 pistons and orifice check valve			
Type of cable	Steel cable DIN3069			
Diameter of cable	6 mm (1/4")			
Safe load	1 person			
Min. climber weight	25 kg (55 lb)			
Max. climber weight	125 kg (275 lb)			



The Self Belay is an innovative climbing connector that increases the safety in climbing and adventure centers by only allowing users to climb when they are properly attached to the belay device.

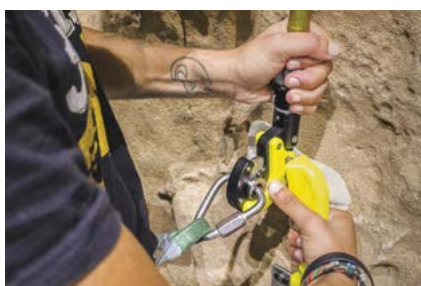
The Self Belay:

- Precludes possibility to clip in the wrong place of the harness
- Cannot be opened during climbing - users can disconnect from the auto belay device only when they are on the ground
- Allows users as young as 5 y.o. to easily use the device on their own.
- Reduces the number of operational staff by up to 40%
- Works with both textile webbing and steel rope auto belay devices.
- Eliminates webbing/rope twisting with 360° swivel action
- Holds certification by the standard EN 362:2004T for personal protective equipment against fall from heights in the category "Connectors".

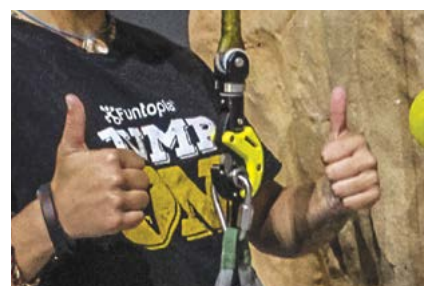
CONNECTING:



1 Insert the Harness Piece in the Self Belay all the way down until it clicks.



2 Take away the Self Belay key.



3 You are now safely connected to the Self Belay and the auto belay device, and may start climbing.

DISCONNECTING:



1 Insert the Self Belay key in the device all the way in.



2 Remove the Harness Piece from the device gate.



3 You are now disconnected from the Self Belay and may move to another auto belay location.

ABOUT US

Safety as a First Priority

Safety Engineering Ltd. was founded in 2012 with the mission to meet the growing need for safety-related products for climbing activities. The company roots back to a dedicated R&D department at Walltopia which naturally evolved into an independent entity, following the rapid growth of the climbing industry.

For more than a decade we've been creating innovations tailored to satisfy the needs of our customers. We've proven our expertise in the discipline of safety engineering by keeping the highest standards of quality and performance in our work. What drives us is the goal is to assure that a life-critical system behaves as needed, even when components fail.



Proven results

Protecting the life of visitors at high-risk climbing and adventure facilities requires novel approaches. This is why we push ourselves to deliver products with unprecedented qualities. We always put safety first and we assure that all risk is eliminated or reduced to the greatest extent. And in the end, the numbers show that our efforts are worth it – **every year our products are the reason for 19 million safe descents of climbers worldwide.**

19 MLN
SAFE
 DESCENTS
 per year



Dedicated to quality

In order to guarantee our products are of the highest quality, we've invested in the most advanced testing facilities on the market. Our team of skilled physicists and engineers works restlessly to ensure we offer better and better safety solutions to our clients, all while complying with multiple international standards and certifications.

