



Fit for Purpose

ManSafe® Standard SRL

Product Testing & Performance



Introduction

With over 35 years of fall protection experience, Latchways has developed the ManSafe® Self Retracting Lifeline (SRL) range; the world's first completely field serviceable Standard SRL.

The ManSafe SRL range offers a dependable means of fall protection and has been specifically designed for use in a number of different environments enabling an unhindered hands-free fall protection solution. Utilising modern engineering and innovative design, they are the most advanced, reliable and cost-effective SRL available on the market today.

The ManSafe Standard SRL has undergone extensive, independently verified testing to ensure consistent, reliable performance.

The ManSafe Standard SRL has been developed with a number of unique features to provide a Smarter, Safer and Stronger alternative to traditional SRLs. This document is designed to highlight the benefits and assist the decision making process.

Checklist

- ✓ Completely field serviceable
- ✓ Frictionless 'Constant Force®' braking mechanism
- ✓ ATEX rated
- ✓ Impact resistant toughened case
- ✓ Meets and exceeds global industry standards
- ✓ 100% Full Contact™ locking mechanism

Completely field serviceable



Wherever the ManSafe SRL is in service, full inspection can be undertaken quickly and easily enabling complete field serviceability—a totally unique range in the market.

The entire range has been developed in a modular fashion to enable simple key component replacement, these parts can be replaced in a matter of minutes and the unit doesn't require historical costly "return to factory" servicing (service charge, labour and downtime).

The replacement components are as follows:

- Cable Assembly
- Energy Absorber
- Labels
- Cases



Meets and exceeds global industry standards



The Latchways' ManSafe SRL range meets and exceeds the following global standards:

- BS EN 360:2002
- ANSI Z359.14-2012
- OSHA 1910.66
- OSHA 1926.502
- CSA Z259.2.2-98
- ISO 9001 Certified company.



100% Full Contact™ locking mechanism



In the event of a fall, the Latchways unit "locks" via pawls engaging into a central tooth disc. The Latchways SRLs feature a patented locking mechanism whereby the pawls are always in contact with this tooth disc, therefore in the event of a fall, lock on is 100% guaranteed. Traditional SRLs also utilise pawls to centrifugally lock into a tooth disc or toothed casing, however the pawls only engage upon lock testing or in the event of a fall. Correct functioning of the pawl mechanism in a traditional unit cannot be felt when in use. The Latchways SRLs enable the user to hear (and feel) the pawls functioning correctly as the lifeline extends and retracts.



Frictionless Constant Force® load absorbing mechanism



Our patented 'Constant Force' braking mechanism, is an intelligently engineered coil of stainless steel, it has no moving parts and does not require adjustment or recalibration for the lifespan of the product. In the event of a fall, the coil simply unwinds and it's this unwinding (metal deformation) which absorbs the energy generated in a fall.

Traditionally, SRLs (or fall arrestors) rely on friction braking to absorb the energy generated following a fall from height. Friction braking materials are typically two materials pressed together at a pre-set tension—resisted movement of these surfaces against each other absorbs the energy. However, to work effectively, the tension between the two surfaces needs to be pre-set and in turn checked regularly, as over time tension can deplete which could affect performance. This re-tensioning is often a complicated procedure and requires specific tools and return to a 'service centre' which incurs additional costs and increased downtime.



ATEX rated



Tested to BS EN 13463-1:2001 equipment group II, category 2 (Ex II 2 G c IIC T6) for use in areas in which explosive atmospheres caused by mixtures of air and gases, vapours or mists or by air/dusts mixtures are likely to occur.



Impact resistant casings



The ManSafe Standard SRL range is encased in an impact modified nylon housing, which is 'egg shaped' to protect the chassis inside. This purely acts as armour—no critical components form part of the casing, meaning that even in the event of severe damage, it can be easily replaced. These cases are also UV stabilised and do not become brittle with age.



Full training and recertification programme



The modular design allows for quick and easy recertification with just a few simple tools. Latchways can offer training enabling personnel to inspect and maintain the product on-site, significantly reducing cost of ownership by minimising unit downtime' throughout the SRL's life.



Smarter. Safer. Stronger.

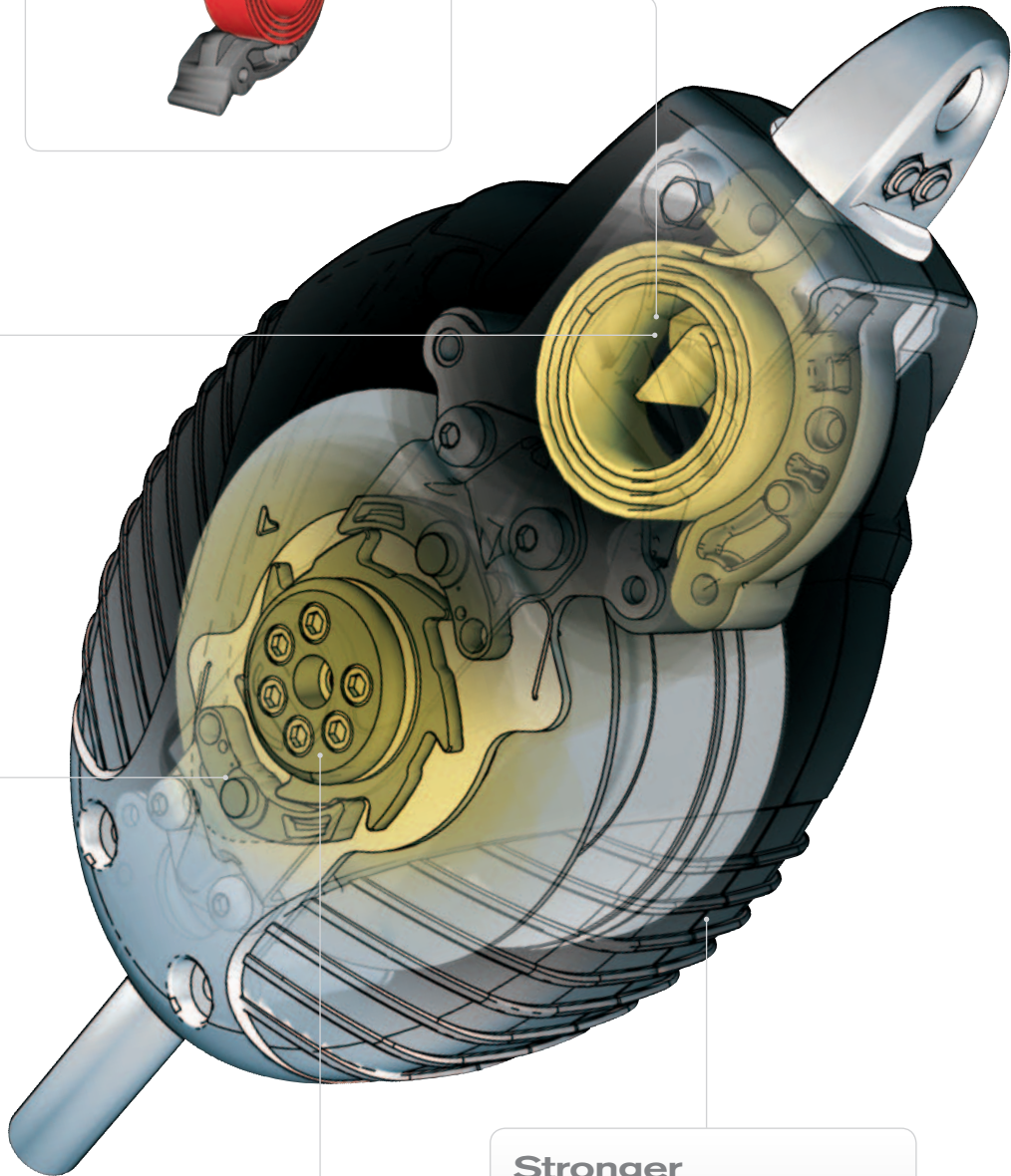
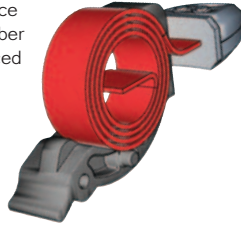
The three key areas that highlight these benefits are summarised under Smarter, Safer and Stronger.

Smarter

Traditional SRLs rely on a complicated friction based braking mechanism to absorb energy in the event of a fall. Maintenance of such braking mechanisms are undertaken in service centres, often due to the complexity and tooling required to undertake the procedure.

- The Latchways Constant Force braking mechanism is completely different and eliminates the requirement of factory servicing, even in the event of a fall.
- Frictionless energy absorption, having no moving parts, it can't go out of adjustment and additionally isn't affected by contaminants or temperature.
- Modular design ensures individual components can be removed and replaced in minutes whilst on site with simple tooling.
- Components reliant on visual inspection, without any complicated mechanical testing.

Latchways Constant Force energy absorber can be replaced in minutes.

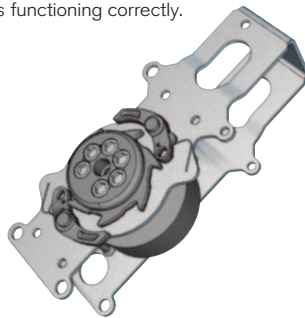


Safer

Locking pawls found in traditional SRLs only engage in the event of a fall, they're held at rest whilst in use. The pawls of the ManSafe SRL are always in contact with the locking tooth disc, ensuring 100% reliability — we call it Full Contact, it creates an audible click (which can also be felt), reassuring the user the unit is functioning correctly whether the cable is extending or retracting.

- Constantly moving, 100% Full Contact locking mechanism cannot freeze, hang up or corrode.
- No wet lubrication to attract dirt and debris.
- Stainless Steel chassis and components ensures SRL is hard wearing in a variety of applications.

The Full Contact pawl mechanism 'clicks' to reassure the user the SRL is functioning correctly.



Stronger

A rugged impact modified nylon case protects the unique modular chassis design.

- Case is manufactured from unique toughened nylon to resist impact damage and protect internal chassis.
- Modular chassis design and case are not integrated allowing the case to serve strictly as the protective armour.

Internal Latchways testing



Works in freezing conditions



Can withstand contaminants



Impact resistant case

Tested operational temperature range: -30°C to +54°C (-22°F to +129°F).

Further testing conducted at Latchways:

- Cyclic testing—SRL cable fully extended and retracted 20,000 times (with component inspection of pawls & tooth disc for wear) ensuring consistent performance from first to last test.
- Fifty consecutive drop tests undertaken on a single chassis (simply replacing the Constant Force Absorber each time) to further verify the withstanding design of the chassis and locking mechanism.

Easy to service, even in the field

The ManSafe SRL's modular design allows for quick and easy recertification with just a few simple tools. This recertification can be performed locally by authorised representatives, or even on-site ensuring the ManSafe SRL has minimal time out of action.



The range

Latchways has redefined functionality, performance and serviceability of SRLs.

ManSafe SRLs are available in a wide range of lengths in both webbing and cable lifelines—so whatever the job, there is a product for you.

Webbing ManSafe SRL

Cable ManSafe SRL



Also available in high-visibility cases





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