

Fit for Purpose

Latchways Sealed SRL

Product Testing & Performance

MSA The Safety Company

LATCHWAYS FALL PROTECTION

Introduction

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

The Latchways Sealed SRL range offers a dependable means of fall protection and has been specifically designed for use in harsh environments such as on oil rigs, wind turbines and other offshore applications; enabling an unhindered hands-free fall protection solution. Utilizing modern engineering and innovative design, it is among the most advanced, reliable and cost-effective SRLs on the market today.

The Latchways Sealed SRL has undergone extensive, independently verified testing to ensure consistent, reliable performance.

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

Checklist

- ✓ Ingress Protection (IP69K)
- ✓ Meets and exceeds global industry standards
- ✓ 100% Full Contact™ locking mechanism
- ✓ ATEX assessed
- ✓ Accelerated corrosion testing
- ✓ Completely field serviceable
- ✓ Constant Force® frictionless braking mechanism
- ✓ Suitable for use in high vibration environments
- ✓ Full training and recertification program

Sealed SRL Specifications

Model	Line Type	Length (m/ft)	Size H x W x D (mm/in)	Weight (kg/lbs)	Anchorage
62810-00UK	Ø 5 mm (0.188″) S/S Cable (7 x 19)	9 m (30 ft)	270 mm x 240 mm x 180 mm (10.62 x 9.5 x 7″)	9.5 kg (20.9 lbs)	Forged/Stainless Steel Snaphook
62816-00UK	Ø 5 mm (0.188″) S/S Cable (7 x 19)	15 m (50 ft)	330 mm x 280 mm x 190 mm (13 x 11 x 7.5″)	12 kg (26.5 lbs)	Forged/Stainless Steel Snaphook
62826-00UK	Ø 5 mm (0.188″) S/S Cable (7 x 19)	25 m (85 ft)	330 mm x 330 mm x 200 mm (13 x 13 x 7.88″)	20 kg (44.1 lbs)	Forged/Stainless Steel Snaphook
62841-00UK	Ø 5 mm (0.188″) S/S Cable (7 x 19)	40 m (130 ft)	380 mm x 380 mm x 215 mm (15 x 15 x 8.5″)	26 kg (57.3 lbs)	Forged/Stainless Steel Snaphook

Latchways Sealed SRLs are also available with galvanized cable and hook assemblies. Please contact MSA for further information.



Ingress Protection (IP)



Verified 'Sealed status'—achieved Ingress Protection (IP)68, ensuring individual internal components are dust tight and IP69K—which allows high pressure, high temperature wash down operations. Testing involves submersion to a 5 m (16.4 ft) depth, testing for ingress and additional testing in a dust 'suspension' for 8 hours to ensure no material ingress into critical components.

Meets and exceeds global industry standards



Standards:

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

100% Full Contact™ locking mechanism



The Full Contact pawl locking mechanism provides a reliable locking mechanism that won't freeze, hang-up or corrode.

ATEX assessment standards



Assessed to BS EN 13463-1:2001 and EN 13463-5: 2003 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, vapors or mists or by air/dusts mixtures are likely to occur.

Accelerated corrosion testing



Accelerated corrosion testing that simulates real life corrosion in a controlled environment for 2000 hours. This is a recognized representative period of 10 years 'real life' use of the Latchways Sealed SRL.

The corrosion resistance testing was independently undertaken by SATRA Technology.

Completely field serviceable



Should a fall occur, the modular design allows for individual components to be removed and replaced in the field within minutes.

A minimum number of replacement component parts further emphasizes simplified serviceability:

- Cable assembly
- Anchor point
- Energy absorber
- Labels

Constant Force® frictionless braking mechanism



Latchways Sealed SRLs employ patented, frictionless braking technology known as Constant Force. This braking mechanism has no moving parts and will not go out of adjustment or require recalibration for the lifespan of the product.

Traditionally, SRLs (or fall arrestors) rely on 'friction braking' to absorb energy generated following a fall from height. Friction braking mechanisms are typically two materials pressed together at a pre-set torque, and resisted movement of these surfaces against each other absorbs the energy. However, the compressive force between the two surfaces can deplete over time, requiring regular offsite recalibration, which often proves expensive and time consuming.

Suitable for use in high vibration environments



Testing to simulate an extreme high vibration mechanical environment, to expected levels considerably higher than the unit will be subjected to in use. Samples were tested through a frequency range of 5 Hz to 1000 Hz for prolonged periods, to check integrity and stability of critical fasteners.

Full training and recertification program



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

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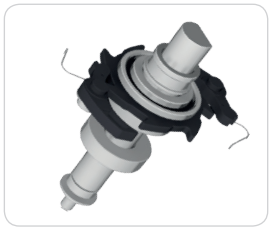
Smarter. Stronger. Better.

Smarter.

Introducing revolutionary Constant Force® technology

Latchways Sealed SRLs employ patented, frictionless braking technology known as Constant Force. This braking mechanism has no moving parts and will not go out of adjustment or require recalibration for the lifespan of







Smarter.

Introducing the Full Contact™ pawl locking mechanism

The Full Contact pawl locking mechanism provides a reliable locking mechanism that won't freeze, hang-up or corrode.

The advanced pawl technology allows a user to both hear and feel the mechanism working providing reassurance that the system is operating properly.

A built-in reserve line provides a back-up means for fall arrest even when the cable is fully extended. The unique carry handle has been tested for use as a secondary retention point, as an additional back up connection.

Stronger.

Engineered specifically for offshore applications

Manufactured from high quality components—following consultation with the Institute of Materials in the UK to ensure material compatibility and durability.

Individual components undergo strict quality control procedures prior to assembly, including critical component batch "x-ray" to ensure material integrity—providing added confidence regarding the Sealed SRL reliability.

Better.

The Latchways Sealed SRL has a number of other unique features

- Internal components are protected by rubber gaskets, ensuring the spring, locking mechanism and absorber are impenetrable to dust and water.
- The modular design allows for quick and easy recertification with just a few simple tools.
- Training is available to enable on-site inspection and recertification, minimizing downtime and significantly reducing lifetime ownership costs.
- Should a fall occur, the modular design permits individual components to be removed and replaced in the field within minutes—allowing quick and easy replacement of not only the cable but also the energy absorber.

Additional fixtures

The additional fixtures that are available with the Latchways Sealed SRL include the following:



The load indicating stainless steel swivel snap hook



The load indicating stainless steel eyelet (European wind energy only)

Spare parts



Replacement Absorber Kit



Replacement Stainless Steel Cable Kit



Replacement Labels



Attachment Point

Testing

The Latchways Sealed SRL was subjected to 2000 hours of salt spray exposure which far exceeds any test requirement by current EN standards. The test results demonstrate the durability of the Latchways Sealed SRL.

A sample of the Latchways Sealed SRL was independently tested for 2000 hours corrosion resistance by SATRA Technology.

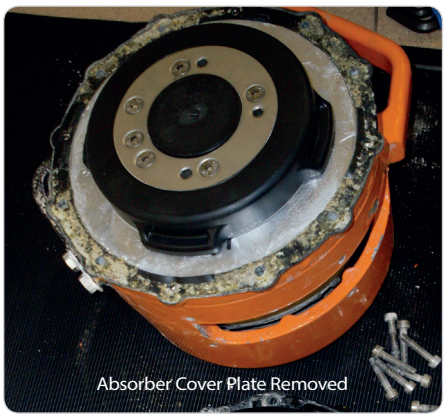
Test conditions

- Corrosion test in accordance with ISO 9227:1990— Neutral Salt Spray
- Temperature: 35ºC (95ºF)
- Fallout rate: approximately 1.2 ml/hr (0.07 cubic in/hr) (average over total exposure time)
- pH of test solution: approximately 6.7 (average over total exposure time)
- Sample was removed and examined for damage periodically throughout exposure and after complete exposure time

Total exposure time: 2000 hours

Test results

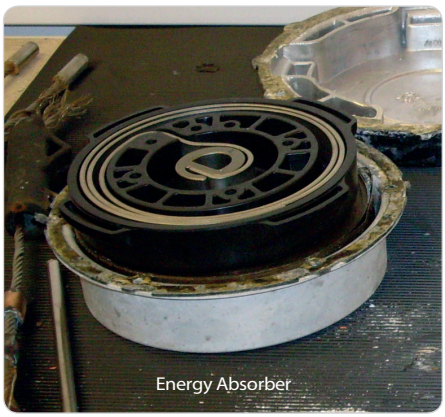
EN 360:2002 Clause/Test	EN 360:2002 Requirement	Result/Comment	Pass/Fail
4.7 Corrosion resistance EN 364-1992 Clause 5.13.	No corrosion to be evident that could affect the function of the device (white scaling or tarnishing is acceptable).	Evidence of light white scaling present on external surfaces. Evidence of slight red discoloration around attachment bolts only. No visual evidence of rust present.	PASS (see note)



Absorber Cover Plate Removed



Spring Housing



Energy Absorber

Note: EN 360:2002 Clause 4.7 requires that the device be subject to 24 hours neutral salt spray exposure. However, to demonstrate the robustness of the Latchways product, the exposure time was increased to 2000 hours, after which the device was found to fulfill the requirements of Clause 4.7.

Tested operational temperature range:

-30ºC to +54ºC (-22ºF to +129ºF).

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.

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FPAL Verify empowered by Achilles Verified 10051550

Sellihca empowered by Achilles Qualified

UVDB empowered by Achilles 75927

Constant Force® is a registered trademark of Latchways plc
Full Contact™ is a trademark of Latchways plc

Images shown are for visual purposes only, hook configuration may vary by indus-

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.

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