# MSA Latchways® **Sealed SRL**

Product Testing & Performance

MSA
The Safety Company

*Because every life has a* ***purpose...***

# Introduction

With nearly 100 years of fall protection experience, MSA offers Latchways Sealed Self-Retracting Lifelines (SRLs), the world's first completely field-serviceable sealed SRLs.

Latchways Sealed SRLs offer dependable fall protection and are specifically designed for use within harsh environments such as oil rigs, offshore wind farms and other offshore applications, enabling unhindered hands-free fall protection solutions. Using innovative engineering and design, SRLs are among the most advanced, reliable and cost-effective available today.

Latchways Sealed SRLs have undergone extensive, independently-verified testing to ensure consistent, reliable performance. Latchways Sealed SRLs offer many unique features to provide **smarter, stronger** and **better** alternatives to traditional SRLs.

## Checklist

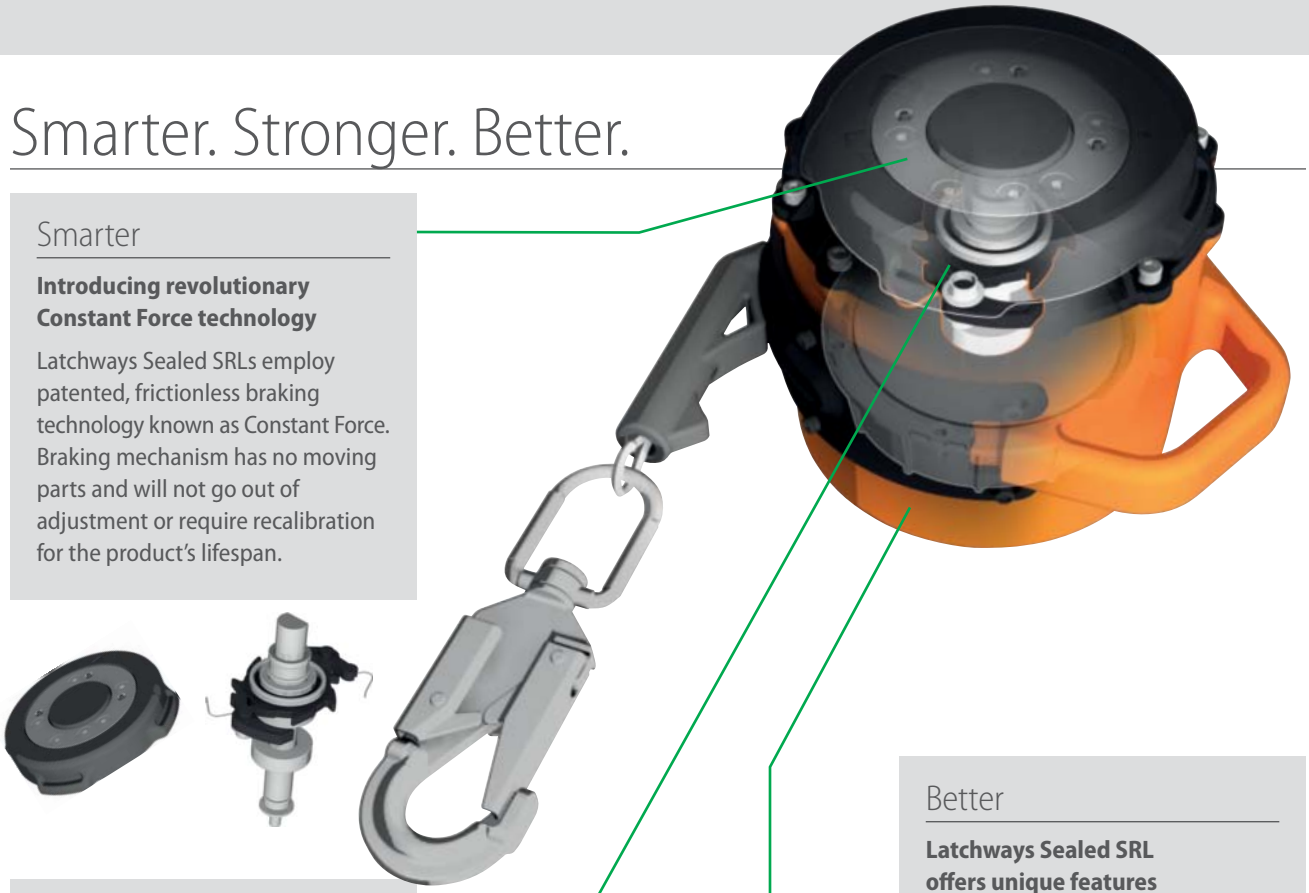
- Ingress protection (IP69K)
- Meets and exceeds global industry standards
- 100% Full Contact™ locking mechanism
- ATEX-assessed
- Accelerated corrosion testing
- Completely field-serviceable
- Constant Force® technology frictionless energy-absorbing mechanism
- Suitable for use within high vibration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

## Latchways Sealed SRL Specifications

| Model | Line Type | Length | Size L x W x D | Weight | Anchorage |
|---|---|---|---|---|---|
| **62810-00US** | Ø 0.188" (5 mm) stainless steel cable (7 x 19) | 30 ft (9 m) | 10.62 x 9.5 x 7" (270 x 241 x 178 mm) | 20.9 lbs (9.5 kg) | Forged/stainless steel snaphook |
| **62816-00US** | Ø 0.188" (5 mm) stainless steel cable (7 x 19) | 50 ft (15 m) | 13 x 11 x 7.5" (330 x 279 x 191 mm) | 26.5 lbs (12 kg) | Forged/stainless steel snaphook |
| **62826-00US** | Ø 0.188" (5 mm) stainless steel cable (7 x 19) | 85 ft (26 m) | 13 x 13 x 7.88" (330 x 330 x 200 mm) | 44.1 lbs (20 kg) | Forged/stainless steel snaphook |
| **62841-00US** | Ø 0.188" (5 mm) stainless steel cable (7 x 19) | 130 ft (40 m) | 15 x 15 x 8.5" (381 x 381 x 216 mm) | 57.3 lbs (26 kg) | Forged/stainless steel snaphook |

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

# Smarter. Stronger. Better.



## Smarter

**Introducing revolutionary Constant Force technology**

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

## Smarter

**Introducing the Full Contact pawl locking mechanism**

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

Advanced pawl technology allows users to both hear and feel the mechanism working, providing reassurance that the system is operating properly.

Built-in reserve line provides backup means for fall arrest even when the cable is fully extended. Unique carry handle has been tested for use as a secondary retention point, as an additional backup connection.

## Stronger

**Engineered specifically for offshore applications**

Manufactured from high quality components following consultation with the Institute of Materials (UK) ensures 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 in Sealed SRL reliability.

## Better

**Latchways Sealed SRL offers unique features**

- Internal components are protected by rubber gaskets, ensuring that spring, locking mechanism and absorber are impenetrable to dust and water.
- Modular design allows for quick and easy recertification with simple tools.
- Training is available to enable onsite inspection and recertification, minimizing downtime and significantly reducing lifetime ownership costs.
- Should a fall occur, modular design permits individual components to be removed in the field within minutes, for quick, easy replacement of both cable and energy absorber.

## Additional Fixtures

Additional fixtures available with Latchways Sealed SRL include:

*Load-indicating stainless steel swivel snap hook*

*Load-indicating stainless steel eyelet (offshore wind energy only)*

## Spare Parts

**Replacement Absorber Kit**

**Replacement Stainless Steel Cable Kit**

**Replacement Labels**

**Attachment Point**

## Testing

The Latchways Sealed SRL was exposed to ~2,000 hours of salt spray, far exceeding test requirements by current standards; test results demonstrate Latchways Sealed SRL durability.

A sample of the Latchways Sealed SRL was independently tested for ~2,000 hours of corrosion resistance by SATRA Technology.

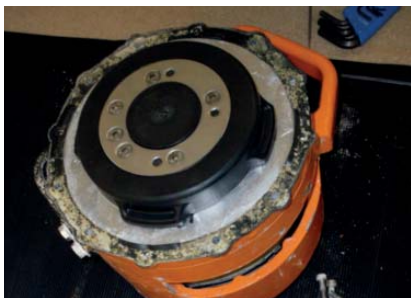
## Test Conditions

- Corrosion test in accordance with ISO 9227:1990—Neutral Salt Spray
- *Temperature*: 95° F (35° C)
- *Fallout rate:* approximately 0.07 $in^3$/hr (average during total exposure time)
- *pH of test solution:* approximately 6.7 (average during total exposure time)
- Sample was removed and examined for damage periodically throughout exposure and after complete exposure time.

**Total exposure time: 2,000 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 observed that could affect device function (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 device be subject to 24 hours of neutral salt spray exposure. However, to demonstrate MSA product durability, exposure time was increased to 2,000 hours, after which the device fulfilled Clause 4.7 requirements .*

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

**Further testing conducted at MSA:**
*Cyclic testing*—SRL cable fully extended and retracted 20,000 times (with component inspection of pawls and tooth disc for wear), ensuring consistent performance from first to last test.

# Latchways **Sealed SRL**

## Ingress Protection (IP)

Verified Sealed Status; achieved Ingress Protection IP68, ensuring that individual internal components are dust-tight, and IP69K that allows high pressure, high temperature wash-down operations. Testing involves submersion to 16.4 ft. (5 m) depth; testing for ingress and additional testing in dust suspension for 8 hours to ensure no material ingress into critical components.

## Meets & Exceeds Global Industry Standards

**Standards:**

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

## 100% Full Contact Locking Mechanism

Full Contact pawl locking mechanism provides 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 2,000 hours. This time span is a recognized 10-year representative period of *real life* use of Latchways Sealed SRLs.

Corrosion resistance testing was independently undertaken by SATRA Technology.

## Completely Field-serviceable

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

Minimum number of replacement component parts further emphasizes simplified serviceability:

- Cable assembly
- Energy absorber
- Anchor point
- Labels

## Constant Force Technology Frictionless Energy-Absorbing Mechanism

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

Traditionally, SRLs (or fall arrestors) rely upon friction braking to absorb energy generated following falls from heights. Friction braking mechanisms are typically 2 materials pressed together at pre-set torque; resisted movement of these surfaces against each other absorbs energy. However, compressive force between 2 surfaces can deplete over time, requiring regular offsite recalibration that is often expensive and time-consuming.

## Suitable for Use Within High-vibration Environments

Tested to simulate an extreme high vibration mechanical environment at levels much higher than units will likely be subjected to in use. Samples were tested through 5 Hz to 1000 Hz frequency range for prolonged periods to check integrity and stability of critical fasteners.

## Full Training & Recertification Program

Modular design allows for quick and easy recertification with simple tools. MSA offers training to enable personnel to inspect and maintain products, significantly reducing cost of ownership by minimizing unit downtime throughout the Latchways Sealed SRL's life.

LATCHWAYS FALL PROTECTION

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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.

**ID 4600-006-MC / September 2016**

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