



Static Grounding Reel  
Model: S-RL

User Manual





LCIE

## ACCUSE DE RECEPTION DE DEPOT DE DOSSIER ACKNOWLEDGEMENT OF FILE DEPOSIT

1 Version : 00

LCIE 21 AR 192 NM

Issue : 00

- 2 Le LCIE, Organisme Notifié sous la référence 0081 conformément à l'article 17 de la directive 2014/34/UE du Parlement européen et du Conseil du 26 février 2014, accuse réception de la documentation technique :

LCIE, Notified Body number 0081 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014 acknowledges receipt of the technical documentation :

N°	Date
Arysafe/ATEX-S-RL, Révis A.0	2021/08

La conformité de cette documentation aux exigences de l'Annexe VIII, point 2, de la Directive 2014/34/UE relève de la responsabilité du fabricant.  
Le LCIE n'examine pas la documentation ou le produit.

The compliance of this documentation to the requirements of Annex VIII, point 2, comes under the responsibility of the manufacturer.  
LCIE does not examine the documentation or the product.

- 3 Fabricant :

Manufacturer :  
**Qingdao Alptec Safety Equipment Co., Lt**  
No.13 Hancheng Road, Qingdao Free Trade Zone,  
Shandong Province, 266555  
China

- 4 Produit :

Enrouleur de mise à la terre statique

Product :

Static Grounding Reel

Type:  
S-RL

- 5 Dossier LCIE N° :

Ce document est émis conformément au Chapitre 3, article 13, point 1.b.i) de la Directive 2014/34/UE.

LCIE file N° :

173920-769916

This document is issued in accordance with the relevant Chapter 3, article 13, point 1.b.i) of the Directive 2014/34/EU.

- 6 Ce document est valable :

Du / From	Au / To
2021/06/24	2021/08/23

This document is valid :

Toute modification du dossier enregistré, à la demande du fabricant, est soumise à un nouveau dépôt de dossier et à l'émission d'un nouvel accusé de réception.  
Il ne peut être ouvert que sur demande express des autorités.

Any modification of the registered file at the request of the manufacturer is subject to a new file deposit and issuance of a new acknowledgement receipt.  
It can only be opened upon explicit request of the authorities.

- 7 Le produit doit comporter le marquage requis par les directives et normes applicables sous la responsabilité du fabricant.  
Il n'est pas exigé que le numéro d'accusé de réception figure sur le produit.

The product shall bear the marking required by the applicable directives and standards under the responsibility of the manufacturer.  
It is not required that acknowledgement number be affixed on the product.

- 8 Détails des modifications

Details of changes

Version / Issue	Description	Date
00	Initial / Initial	2021/08/31

Fontenay-aux-Roses, le 31 août 2021



Chargé d'évaluation ATEX  
ATEX Assessment Officer  
Mohammed HUAJI

## EU Declaration of conformity

Manufacturer Name: Qingdao Alptec Safety Equipment Co.,Ltd.

Manufacturer Address: No.13 Hancheng Road, Qingdao Free Trade Zone,  
China.266555

Product Name: Static Grounding Reel

Model/Type Designation: S-RL

Applicable Directive: ATEX 2014/34/EU

ATEX Mark :  II 2G Ex h IIC T6 Gb

Conformity of Assessment procedure : Internal Production Control,  
and send dossier to Notified Body (A+)

The Technical Construction File had been sent to the following Notified body:  
LCIE (0081)

The Applicable standards and Technical specification

1. EN ISO 80079-36:2016 <Non-electrical equipment for potentially explosive atmospheres-Basic method and requirements>
2. EN ISO 80079-37:2016 < Non-electrical equipment intend for use in potentially explosive atmospheres- Protection by constructional safety "c" >

Authorized Person for the manufacturer:

Name: Qingdao Alptec Safety Equipment Co., Ltd.

Position: General Manager

Signature :



Date : 2021.9.1

I here by am authorized by the board to sign the Declaration of Conformity

## Table of Contents

Preface.....	1
Safety Precautions.....	1
Patents and Copyright Information.....	1
Application.....	1
ATEX certification.....	2
Advantages.....	2
Installation Instructions.....	2
Operating Instructions.....	3
Maintenance.....	4
Specifications.....	5
Trouble Shooting.....	7

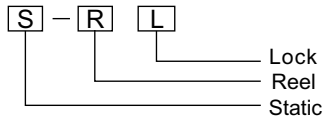
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### Preface

This manual introduces the S-RL series Static Grounding Reels and their safety precautions, applications, operation and maintenance. This Static Grounding Reel is non-electrical apparatus, its documents are reserved by DNV.GL. It's designed and audited according to 2014/34/EU ATEX Directive. It adopts universal flame-proof type, its Ex-marking is Ex II 2 G Ex h IIC T6 Gb. It meets the basic method and requirements of EN80079-36: 2016 for non-electrical equipment for potentially explosive atmospheres.

Model no. naming rule:



The standard cable length is 7meters, 15meters and 20meters. Available in other options.

### Safety Precautions

The installer, operator and maintenance personnel must have basic knowledge of intrinsic grounding practices as well as mechanic skills and a general understanding of intrinsically safe electrical equipment when using this product.

- ✘ Never attach the static grounding cable clamp to terminal or part that is connected to any direct current or alternating current power supply. *Serious injury or death may occur.*
- ✘ Never wrap the static grounding cable around an item including a person or personal limb.

### Patents and Copyright Information

This product is protected under patent number ZL200420098424.8 and is protected by international law against infringement or copying.

Qingdao Alptec Safety Equipment Co., Ltd (Alptec for short hereinafter) has the exclusive copyright of the content of this manual. Alptec reserves the right to update or change the content of this manual without prior notice. Please contact Alptec for updated information.

Issue date: 10.08.2021


### Application


The Static Grounding Reel is suitable for use in areas where highly inflammable and explosive materials are being transferred. Recommended application includes but is not limited to:

- 1) Gasoline filling stations
- 2) Transport tankers, Vacuum Loading and Unloading tankers, Pneumatic tankers
- 3) Railroad tank cars
- 4) Petrochemical Refineries
- 5) Chemical processing and manufacturing industries

## **ATEX Certification**

The Marking signify the S-RL Static Grounding Reel compliance with the 2014/34/EU ATEX Directive. The various markings are described below.

 II 2 G Ex h IIC T6 Gb (Assessed to EN80079-36: 2016)

 Specific mark for explosion protection.

II Equipment Group II: It's designed to be used in in explosive atmospheres other than mins.

2 Equipment Category 2: The equipment is protected against ignition hazards in normal operation where a gas is likely to occur under normal conditions.

G Equipment is intended for exposure to explosive gasses and mists only (not protected against explosive dusts).

Ex Explosion-proof mark.

h Level of Protection, the protection type of the product is "c".

IIC The typical gas of the explosive gas atmosphere is hydrogen.

T6 In normal operation, the maximum environment temperature is 60°C, the maximum surface temperature is 66.6 °C and shall not exceed 85°C.

Gb The equipment does not contain any effective ignition sources during normal operation and expected malfunctions.

## **Advantages**

- 1) The housing and base plate are constructed of corrosion resistant, brushed finished, stainless steel for long life.
- 2) Major internal components are made of rust and corrosion resistant materials.
- 3) The grounding cable can be locked at any length.
- 4) Self-rewinding cable mechanism assures the cable will be retracted at a controlled and constant speed.
- 5) The static cable is polyurethane or nylon coated stainless steel cable for protection of the cable and for easy cleaning
- 6) The static grounding clamp has replaceable, pointed contact pins to assist in piercing through rust and corrosion insuring there is a positive contact for a reliable ground.
- 7) The S-RL's compact design allows it to be installed where space may be limited.

## **Installation Instructions**

■ The S-RL Static Grounding Reel is weather resistant. It can be installed in an enclosed or open area. When exposed to extremely dusty environments it is recommended that the static grounding reel be installed in a protected area.

■ The S-RL Static Grounding Reel must be mounted with the base in a vertical position. Do not mount the reel on its side.

## S-RL Static Grounding Reel

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- Choose an area that will be free of obstructions permitting the operator to have clear access the S-RL Static Grounding Reel.
- Make sure the static grounding cable will not rub or become damaged from obstructions when extending or retracting.
- The mounting surface must be flat to prevent the S-RL Static Grounding Reel's base from being bent or distorted when the mounting bolts are tightened.
- Two (2) bolt holes and two (2) bolts are provided on the base of the S-RL Grounding Reel to enable the housing to be bolted to a solid base. An additional (1) bolt hole and one (1) bolt is provided for the grounding cable connection (the grounding cable (not included) to be supplied by others if required).
- Make sure the mounting base is free of rust and scale so there is solid continuity between it and the S-RL Static Grounding Reel mounting base.

### Operating Instructions

- Inspect the S-RL's grounding clamp to insure it is in good condition and the contact points are in place. Insure the static cable connection to the grounding clamp is secure. Check the rubber cable stop to insure it is in place and in good condition.
- Inspect the S-RL mounting to the base confirming it is securely fastened.

#### *To extend the static grounding cable:*

- Grasp the S-RL's grounding clamp and pull the static grounding cable from the S-RL reel. As the S-RL static cable is drawn out of the housing inspect it for damage.

*Any damaged components of the S-RL Static Grounding Reel must be repaired before putting in to use. S-RL can operate smoothly and evenly in normal operation. If there are obvious vibration, impact, jam and other conditions, please stop using immediately and check the reasons according to the maintenance instructions.*

- When the desired length of static cable has been drawn out, it can be automatically locked at any position within its usable length with a slight tug on the cable.

Take care not to over-extend the cable beyond its usable length.

- The S-RL's grounding clamp must be securely attached to a solid grounding location on the container / equipment the material is being transferred into or from. *Make sure the connection provides good continuity between the equipment or container and the S-RL grounding clamp. The S-RL grounding clamp is equipped with pointed contact tips that help in penetrating rusted and scaly surfaces. It may be necessary to wiggle the S-RL grounding clamp to achieve a good connection.*

#### *To retract the static grounding cable:*

With the grounding clamp free, a slight tug on the cable will release the cable lock mechanism allowing the cable to be rewound. It is permissible to let go of the grounding clamp and cable as it is being rewound. The S-RL Static Grounding Reel is designed to provide a safe and constant cable rewind speed preventing the cable and clamp from being whipped around as it

is being rewound. The design speed of S-RL is about 1 m/s. When drawing out or rewinding the cable, the speed should not be too fast, and should be maintained at about 1 m/s.

In dusty or dirty and wet areas it is recommended that the static cable be wiped off with a wet cloth only as it is being rewound. This will help in preventing debris from building up in the S-RL's housing.

## **Maintenance**

The S-RL Static Ground Reels are nearly maintenance free and will provide years of trouble free service. However, as with any equipment minor maintenance and inspections are required every 3 months, the inspections frequency can also be adjusted according to the frequency of use.

If any defects are found during an inspection, refer to the Trouble Shooting section of this manual for corrective action.

### *Routine Care:*

- Wipe the cable reel housing and base with stainless steel compatible cleaner to remove any external dirt, oil or debris.
- Withdrawal the static cable from the reel housing;
  - ▲ Check the tension of the cable rewind spring. If the cable is too loose or too tight, refer to the Trouble Shooting section of this manual for corrective action.
  - ▲ With the static grounding cable drawn out to it's maximum length:
    - Wipe the static grounding cable with cloth soaked with a mild detergent to remove any dirt, oil or debris.
    - Inspect the entire length for any defects, frays or damage to the cable cover. If any damage is detected, cable must be replaced.
  - Tug on the static grounding cable and allow it to rewind into the reel housing paying attention to the action of the cable rewind mechanism, it should be smooth and uniform as the cable is retracted. If the cable rewind mechanism does not release the cable properly, or obvious vibration, impact and other phenomena occur in the course of operation, please immediately stop using, check the wheel bearing, coil spring, cable and other positions.

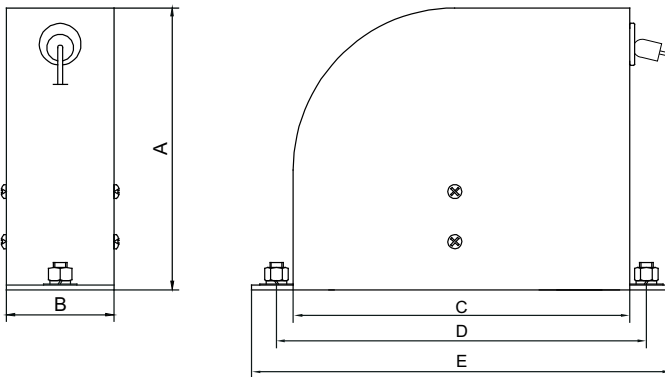
Before each use:

- Inspect the S-RL Static Grounding Reels mounting bolts for tightness.
  - Check to static grounding reel's mounting area to insure it is free from rust and scale.
  - Inspect and insure the static cable rubber stopper is in good condition and in place.
  - Inspect and check the static cable clamp for spring tension, static cable connection and the condition of the static cable clamp contact tips.
  - Inspect the condition of the static cable as it is being drawn from the reel housing.
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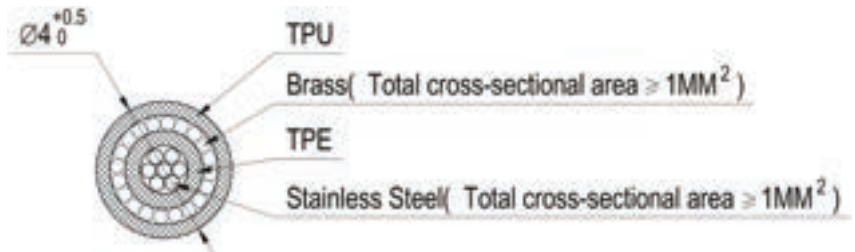
**Specifications**

Specification Items	S-RL 7M	S-RL15M	S-RL20M
Cable lengths	22.97 Ft. (7m)	49.21 Ft. (15m)	65.62Ft. (20m)
Cable Construction	Stainless Steel Inner Core Cable, Brass Shielding, Polyurethane Cover		Stainless Steel Cable, Nylon Cover
Weight	6.61 lbs.(3kgs)	9.03 lbs.(4.1kgs)	11.46 lbs.(5.2kgs)
Static Cable Rewind Force	1.35 lbs (6N) adjustable to 2.25 lbs.(10N)		
A (Height)	170mm	231mm	231mm
B (Width)	62.5mm	69.5mm	77.5mm
C (Reel Housing Length)	168mm	226mm	226mm
D (Bolt Hole / Centers)	194mm	256mm	256mm
E (Base Length)	210mm	276mm	276mm

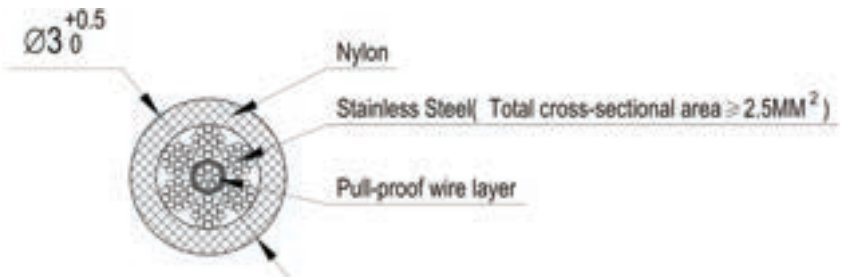
Dimensions



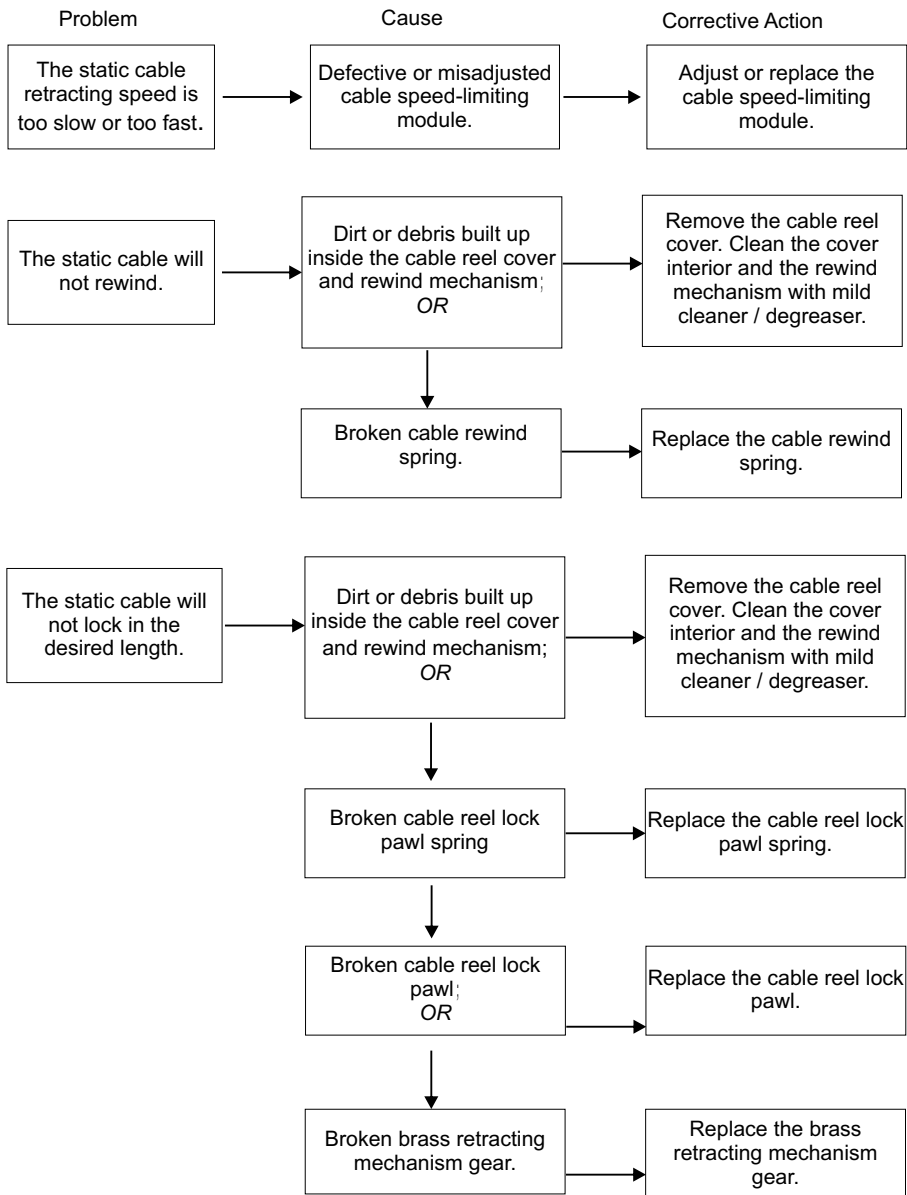
Stainless Steel Inner Core Cable, Brass Shielding, Polyurethane Cover



Stainless Steel Cable, Nylon Cover



**Trouble Shooting**



**Note: Do not open when an explosive gas atmosphere is present.**

