LSR101 Lockable Static Reel

Static reels are used to bond two pieces of equipment to allow static charge to be safely equalised. Static reels are typically used when product is transferred from one tank to another e.g. when pumping between a tanker and storage tank or when fuelling aircraft.

The LSR101 has been developed to provide users with a safe and reliable static earthing reel that when locked won't inadvertently unwind while a vehicle is moving.

The new locking mechanism design is another step further in Liquip's constant drive to improve safety.

Key Features

- Reliable continuity is ensured through the use of a carbon brush on a stainless steel shaft. Stainless steel components are used to ensure corrosion does not break continuity.
- Simple to use locking mechanism prevents the static reel from unwinding due to vibration.
- Comes supplied with 30m of usable length cable for increased visibility at night.
- Manual operation as spring-rewind types have caused accidents when inadvertently released.

Dismantle and Testing

- Test continuity regularly according to your company standards.
- Always remove the cable, brush spring and brush before withdrawing the shaft and fit the shaft first when reassembling.
- Install as per LSR100 installation instructions.

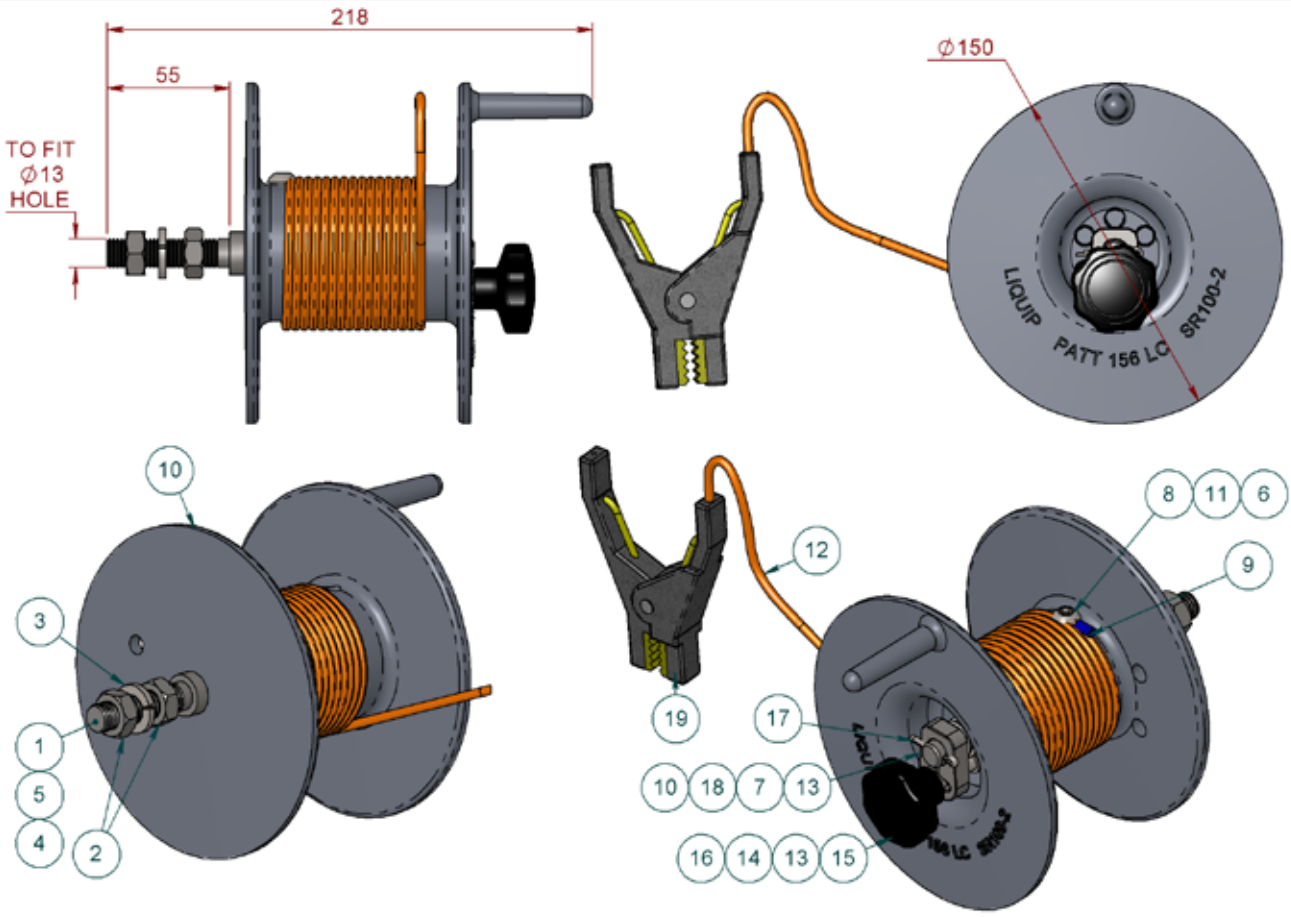
Associated Equipment

- SR200 – Larger diameter reel for faster winding, comes with cable guide fitted.

Specifications

Nominal reel resistance	5 ohms
Meets AS 2809:2	Maximum end-to-end resistance of 10 ohms.
Carbon brush	Runs in sealed section to eliminate dirt and corrosion.
Shaft	Has grease reservoir for all-of-life lubrication.
Materials	• Body - Aluminium • Cable – Fitted with 30m of usable length Orange PVC coated galvanised wire • Shaft - Stainless steel • Brush - Carbon • Static clip – MIL Spec Aluminium
Cable Length	31m ±0.5m
Temperature Range	-24°C to +50°C
Weight	2.0 kg

LSR101 Locking Static Reel



ITEM	PART No	DESCRIPTION	LSR101	MATERIAL
1	LSR100-3	SHAFT - MAIN	1	ST STEEL
2	0805	NUT - HALF	2	ST STEEL
3	0822	WASHER SPRING	1	ST STEEL
4	0159	O-RING	1	NITRILE
5	0223	O-RING	1	NITRILE
6	SR100-4	CARBON BRUSH	1	CARBON
7	0436	SPRING - SHAFT	1	ST STEEL
8	0040	CAPSCREW MET BUTT HD	1	STEEL
9	1409	EYE TERMINAL	1	Z/P STEEL
10	SR100-2	BODY - STATIC REEL	1	ALUMINIUM
11	0437	SPRING COMPRESSION	1	SPRING STEEL
12	9457	GROUNDING CABLE - ORANGE	1	WIRE ROPE
13	LSR100-1	PIN GUIDE	1	ST STEEL
14	LSR100-2	LOCKING PIN	1	ST STEEL
15	58078	KNOB	1	PLASTIC
16	0315	SPRING COMPRESSION	1	ST STEEL
17	0770	SPLIT PIN	1	ST STEEL
18	58080	SPRING (ROLL) PIN	1	Z/P STEEL
19	GTP-1101	MILITARY GROUND CLAMP	1	ALUMINIUM

LSR100 Installation Guide

Good electrical conductivity at the mounting bracket is essential to the performance of the static reel.

The mounting bracket itself must be chosen for its continuity with the vehicle chassis and both sides of the mounting bracket must provide a clean, smooth, bare metal surface of at least 15mm radius from the centre of the 13mm diameter hole. Ensure the inner nut is tightened securely on the shaft and fasten the assembly with the outer nut and spring washer on the other side of the mounting bracket.

For LSR100 fitted with the optional spacer and cable guide, fit onto the shaft first and tighten with the inner nut. The entire reel is then secured to the mounting bracket by the spring washer & outer nut on the other side of the bracket.

Further earthing continuity may be obtained by fitting a ring terminal and wire (not supplied) between the fixed nut and the mounting bracket and running it to a second earthing location on the chassis. Using a multimeter, confirm resistance from clamp to chassis is less than 10Ω.