

# ALCATRAZ<sup>®</sup>

## I N T E R L O C K S

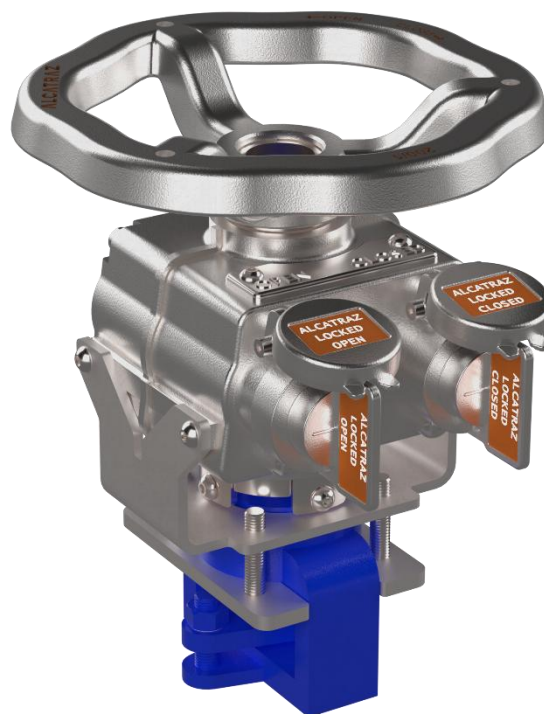
---

Vendor Document Nr.: ALC-PDS-MLS-01


## Product Data Sheet

### Integral Interlocks

ML-S Multi-Turn Lock Small



4	20-03-2026	CY	MD	HB	Final
Rev	Date	Originator	Reviewed	Approved	Description
		Alcatraz	Alcatraz	Alcatraz	

<p><b>Multi-Turn Lock Small</b>  <b>Product Data Sheet</b></p>		
	Alcatraz Doc. No.: ALC-PDS-MLS-01	
	Rev.: 4	Status: Final
	Date: 20-03-2026	

**INDEX:**

1. Product Standard Features..... 3

2. Product Data Sheet ..... 4

3. ML-Small Exploded View ..... 5

4. GAD: ML-Small (Double Keyed) ..... 6

5. GAD: ML-Small (Single Keyed Open)..... 7

6. GAD: ML-Small (Single Keyed Closed) ..... 8

7. Summary of Safety Integrity Steps..... 9

# Multi-Turn Lock Small Product Data Sheet

**ALCATRAZ**<sup>®</sup>  
I N T E R L O C K S

Alcatraz Doc. No.: ALC-PDS-MLS-01

Rev.: 4

Status: Final

Date: 20-03-2026

## 1. PRODUCT STANDARD FEATURES

### ML-S Features

- Integral parallel splined drive-tube
- Mechanically programmed key codes
- TUV Machine Directive Key & Lock Portion
- IP64 Encapsulated Lock portion & Key preventing ingress & contamination
- Bespoke nameplate / tagging lasered onto product surfaces
- Compact design
- Tamperproof mounted solutions
- Interlocked LO / LC or Dual Positions

### Operational Keys

- Mechanically programmed keys
- Unique coding assigned
- IP64 Encapsulated key housing
- IP64 Encapsulated Lock Portion
- TUV Machine Directive Key & Lock Portion
- ASTM E208 25 metre drop test approved
- Bespoke nameplate / tagging
- Electro Polished Surface finished

### Installation

- Cold work permit for installation
- No modification to host equipment
- Bespoke mounting bracket to suit host application
- Bespoke drive bush adaptor to suit host application
- Tamperproof fixings used throughout
- Our **MLS** interlock can be integrated onto all host rising stem operated valves, with a spindle diameter less than Ø 25mm.
- Supplied in various Locking configurations
- **DK** Double Keyed
- **LO** Locked Open Only
- **LC** Locked Closed Only

### Key Options

- Alcatraz can supply the following key options.
- **Replacement** key kit
- **Spare** key
- **Group** key
- **Master** key
- **Commissioning key**  
All the above variants are suitable for our complete product range.
- **Group key**  
Would be used within a dedicated zone, system, or process.
- **Master Key**  
Allows an end client to operate regardless of product type, process logic, situation the full Alcatraz range.
- **Commissioning Key**  
Used during the construction / commissioning phase of a project.

# Multi-Turn Lock Small Product Data Sheet



Alcatraz Doc. No.: ALC-PDS-MLS-01

Rev.: 4

Status: Final

Date: 20-03-2026

## 2. PRODUCT DATA SHEET

### Dimensions ML-S

#### Dimension

Length	(mm)	164
Width	(mm)	125
Height	(mm)	114
Mass of Interlock (kg)*		3,74
Hand wheel sizes	Various Options	
Max. valve spindle Diameter	(mm)	25,04

\* Not including bracket, adaptor & hand wheel

### Certificate & Standards

#### Certificate & Standards

Product Material Cert.*	2.1
Fire Test	ANSI / API 607
ISO	ISO 9001 2015
TUV	EU Machinery Directive 2006/42/EC
IP Rating	IP64

\* 2.2 & 3.1 material certificate available upon request

### Material Grades

#### Material Grades

Interlock housing	SS 316L
Internal Components	SS 316L
Operational Key	SS 316L
Lock Portion	SS 316L
Material Surface Finish	ASTM B912-02 ISBN 978-2-87997-310-4
Bracket	SS 316L
Adaptor	SS 316L
Hand wheel *	SS 316L
Hand wheel	Composed Carbon Steel Coating Interpon D1036
Tag plates	RESOPAL®
Atex	EU 2014/34/EU Atex Declaration of Conformity

\* AISI 316L hand wheels in process of superseding Carbon

# Multi-Turn Lock Small Product Data Sheet

**ALCATRAZ**<sup>®</sup>  
I N T E R L O C K S

Alcatraz Doc. No.: ALC-PDS-MLS-01

Rev.: 4

Status: Final

Date: 20-03-2026

## 3. ML-SMALL EXPLODED VIEW

Hand Wheel



Interlock Key & Lock Portions  
Double, LO & LC Keyed Options



Host valve nut



Bespoke Adaptor



Bespoke Bracket Part 1



Host Valve



Bespoke Bracket Part 2



# Multi-Turn Lock Small Product Data Sheet

# ALCATRAZ<sup>®</sup> INTERLOCKS

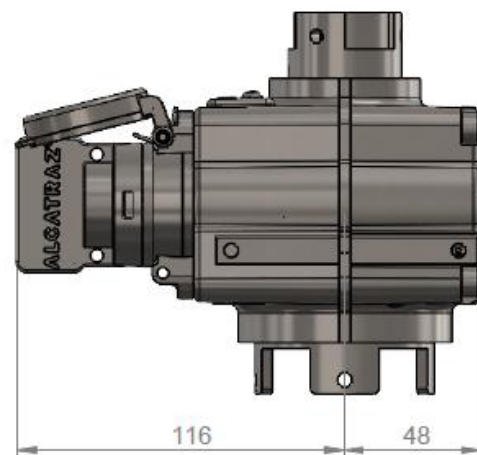
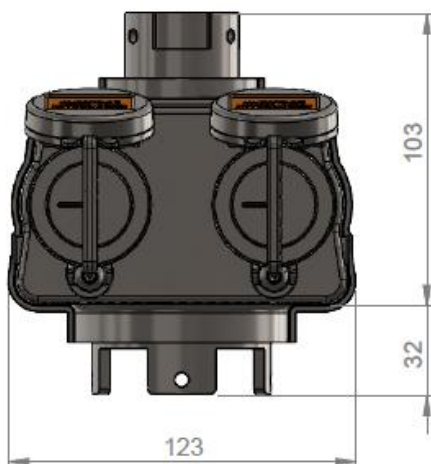
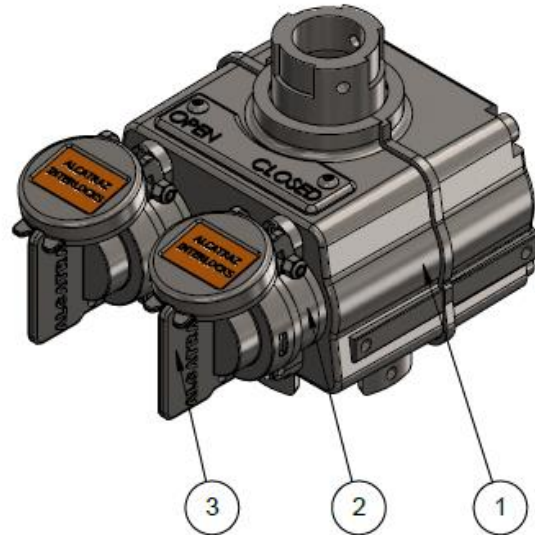
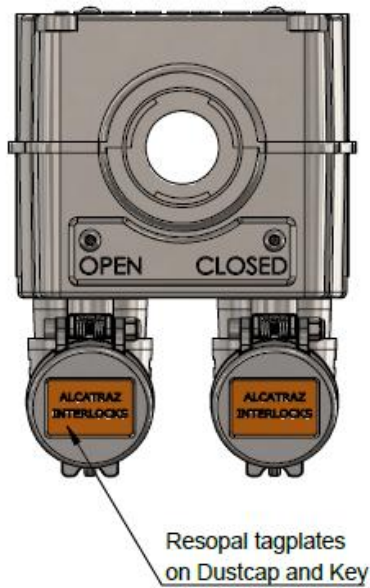
Alcatraz Doc. No.: ALC-PDS-MLS-01

Rev.: 4

Status: Final

Date: 20-03-2026

## 4. GAD: ML-SMALL (DOUBLE KEYED)



### Bill of Materials

Pos	Description	Material
1	Multi-turn main unit	SS 316 – Electro Polished
2	Lock portion including dust cap	SS 316 – Electro Polished
3	Key	SS 316 – Electro Polished
*	Hand wheel	Optional Sizes & Materials

# Multi-Turn Lock Small Product Data Sheet

# ALCATRAZ<sup>®</sup> INTERLOCKS

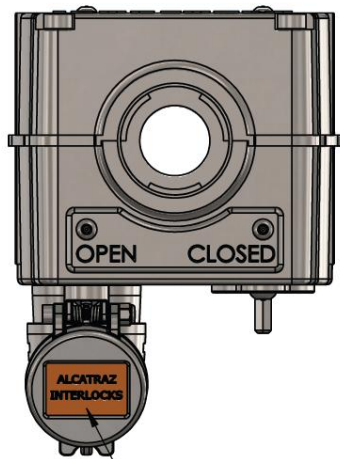
Alcatraz Doc. No.: ALC-PDS-MLS-01

Rev.: 4

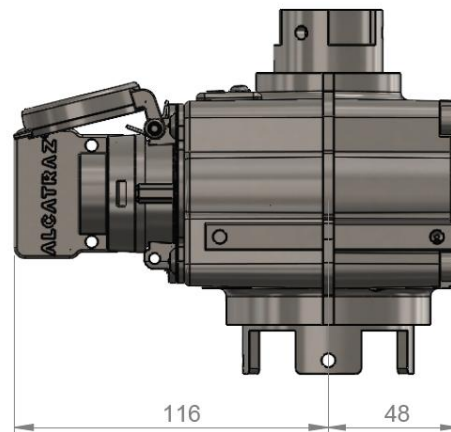
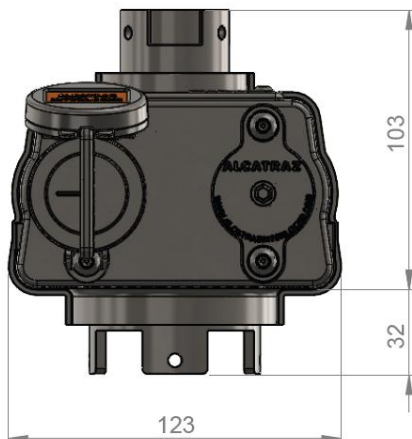
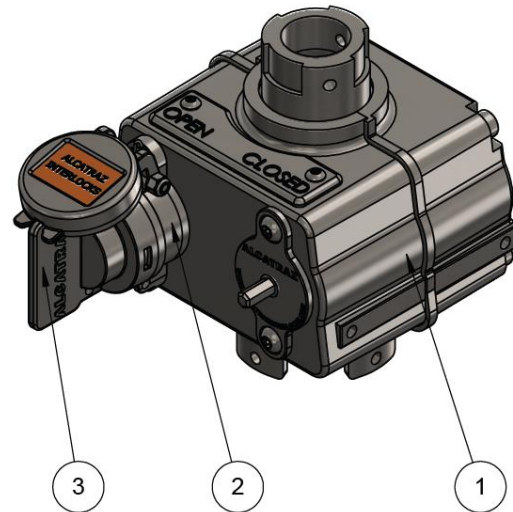
Status: Final

Date: 20-03-2026

## 5. GAD: ML-SMALL (SINGLE KEYED OPEN)



Resopal tagplates  
on Dustcap and Key



### Bill of Materials

Pos	Description	Material
1	Multi-turn main unit	SS 316 – Electro Polished
2	Lock portion including dust cap	SS 316 – Electro Polished
3	Key	SS 316 – Electro Polished
*	Hand wheel	Optional Sizes & Materials

# Multi-Turn Lock Small Product Data Sheet

# ALCATRAZ<sup>®</sup> INTERLOCKS

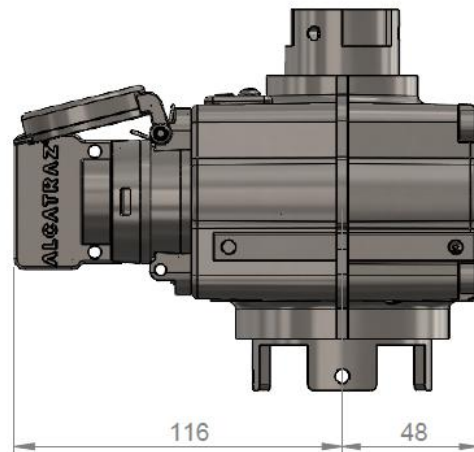
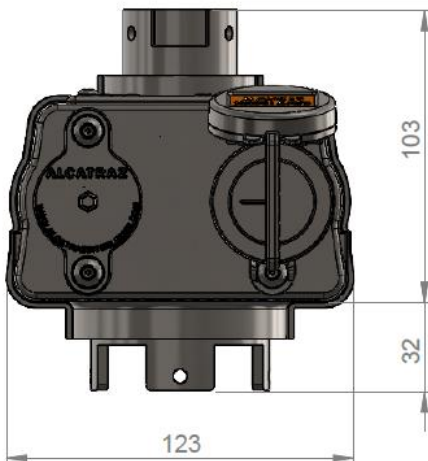
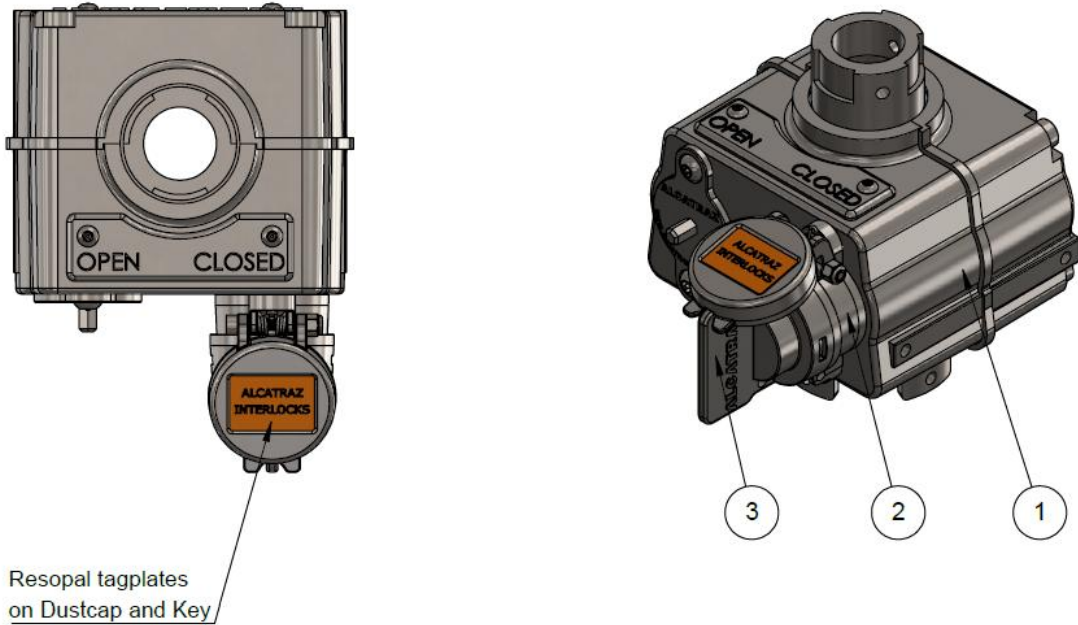
Alcatraz Doc. No.: ALC-PDS-MLS-01

Rev.: 4

Status: Final

Date: 20-03-2026

## 6. GAD: ML-SMALL (SINGLE KEYED CLOSED)



### Bill of Materials

Pos	Description	Material
1	Multi-turn main unit	SS 316 – Electro Polished
2	Lock portion including dust cap	SS 316 – Electro Polished
3	Key	SS 316 – Electro Polished
*	Hand wheel	Optional Sizes & Materials

# Multi-Turn Lock Small Product Data Sheet



Alcatraz Doc. No.: ALC-PDS-MLS-01

Rev.: 4

Status: Final

Date: 20-03-2026

## 7. SUMMARY OF SAFETY INTEGRITY STEPS

Alcatraz Integrity Step	Action	Purpose
Step 1	Insert operational key into key lock portion (LP) in a linear action	First stage linear action, to confirm the <b>Mechanically Programmed Key Codes</b>
Step 2	Rotation of engaged operational key within lock portion (LP)	Second stage action, to engage or disengage the internal interlock input driveshaft & lock finger
Step 3	Operational key encapsulates Lock Portion (LP) housing	Ensuring zero ingress or contamination into the Lock Portion coding (LP)
Step 4	Lock Portion (LP) separates & seals lock body from any external ingress and product tampering	An extra level of defence & separation between lock portion and interlock housing internal workings.  No access / zero possibility to override internal lock workings or have exposure to ingress / contamination
Step 5	Parallel Splined Key (PSK) connection between Interlock drive-tube & its mated assigned hand wheel	Robust mechanical connection whereby the rotational torques & forces are evenly shared across the drive tube connection and mated hand wheel.  Prevents loose handwheels and <b>HSE</b> issue. Plus, there is <b>No</b> operational forces solely focused on the hand wheel fixation screws as per all other brands.

Alcatraz Mechanical Coded Key Interlock devices are in accordance to  
**TUV EN ISO 14119:2013 Type-2 B.2**  
Machine Safety Directive