

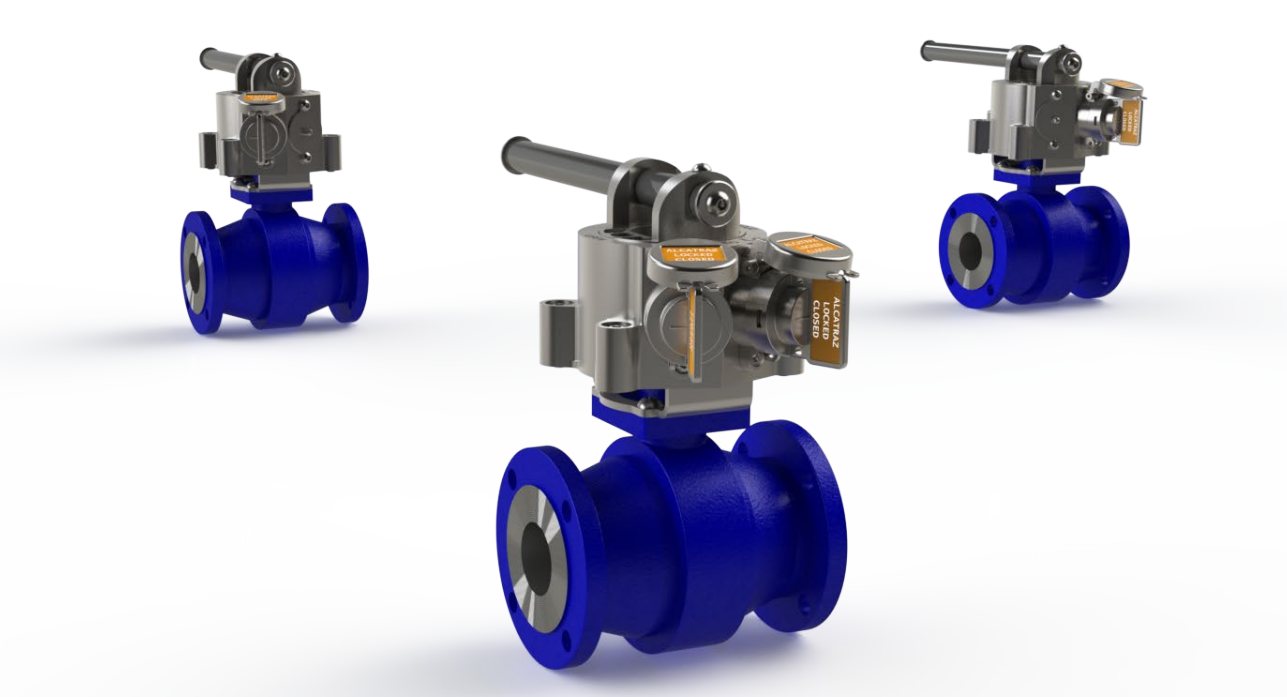
Product Data Sheet Quarter Turn Lock Large		
	Alcatraz Doc. No.: ALC-PDS-QLL-FR04	
	Rev. 1	Status: Final
	Date: 12-04-2024	

Vendor Document Nr.: ALC-PDS-QLL-FR04

Product Data Sheet

Integral Interlocks

ALL <> Quarter Turn Variations: **Large**



1	12-04-2024	CY	DK	HB	Final
Rev	Date	Originator	Reviewed	Approved	Description
		Alcatraz	Alcatraz	Alcatraz	

Product Data Sheet Quarter Turn Lock Large	ALCATRAZ[®] I N T E R L O C K S	
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Product Data Sheet

Quarter Turn Lock

Large

ALCATRAZ[®]
I N T E R L O C K S

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1. PRODUCT STANDARD FEATURES

Features

- ✓ Intergraded 90-degree end stops
- ✓ Adjustable ergonomic lever
- ✓ Mechanically programmed key codes
- ✓ Encapsulated lock portion preventing ingress & contamination
- ✓ Bespoke nameplate / tagging
- ✓ Compact design
- ✓ Tamperproof mounted solutions
- ✓ Interlocked open / closed position
- ✓ Alcatraz 5 step safety integrity design

Operational Keys

- ✓ Mechanically programmed keys
- ✓ Unique coding assigned
- ✓ Bespoke nameplate / tagging
- ✓ ASTM E208 25 metre drop test approved
- ✓ Encapsulated key housing

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

A **Quarter-Turn large** interlock can be mounted onto all host valves with a valve stem flat to flat dimension <40mm

Above these sizes a bespoke solution would be designed by Alcatraz to suit applications needs.

Key Options

- ✓ Alcatraz can supply the following key options.
- ✓ **Replacement** key kit
- ✓ **Spare** key
- ✓ **Group** key
- ✓ **Master** key
- ✓ **Commissioning** key
- ✓ All the above are suitable for our complete product range.

A **Group** key would be used within a dedicated zone, system, or process.

A **Master** Key allows an end client to operator regardless to product type, process logic situation all the Alcatraz products.

A **Commissioning** Key is used during the construction / commissioning phase of a project.

Ensuring the programmed sequence logic does not interfere with steam blowing, flushing or leak testing activities.

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2. DATA SHEET DQLL (DOUBLE KEYED)

Dimensions DQLL

Dimension		
Length	(mm)	163
Width	(mm)	122
Height	(mm)	100
Mass of		3,84
Interlock (kg)*		
Lever sizes *	Various Options	
300 /400 / 500mm		
Max. valve stem width (mm)		40,00

* Not including bracket, adaptor & lever

Material Grades

Material Grades		
Interlock housing		SS 316
Internal components		SS 316
Bracket		SS 316
Adaptor		SS 316
Lever *		SS 316
Operational Key		SS 316
Tag plates		RESOPAL®

* AISI 304 levers available upon request

Certificate & Standards

Certificate & Standards		
Product		2.1
Material Cert.*		
Electro	ASTM B912-02	
Polishing	ISBN 978-2-87997-310-4	
Fire Test	ANSI / API 607	
ISO	ISO 9001 2015	
Atex	EU 2014/34/EU Atex	
	Declaration of Conformity	

* 3.1 material certificate available upon request

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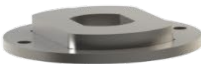
3. EXPLODED VIEW DQLL (DOUBLE KEYED)

Lever



Interlock & Lock Portions

Bespoke Adaptor



Bespoke Bracket

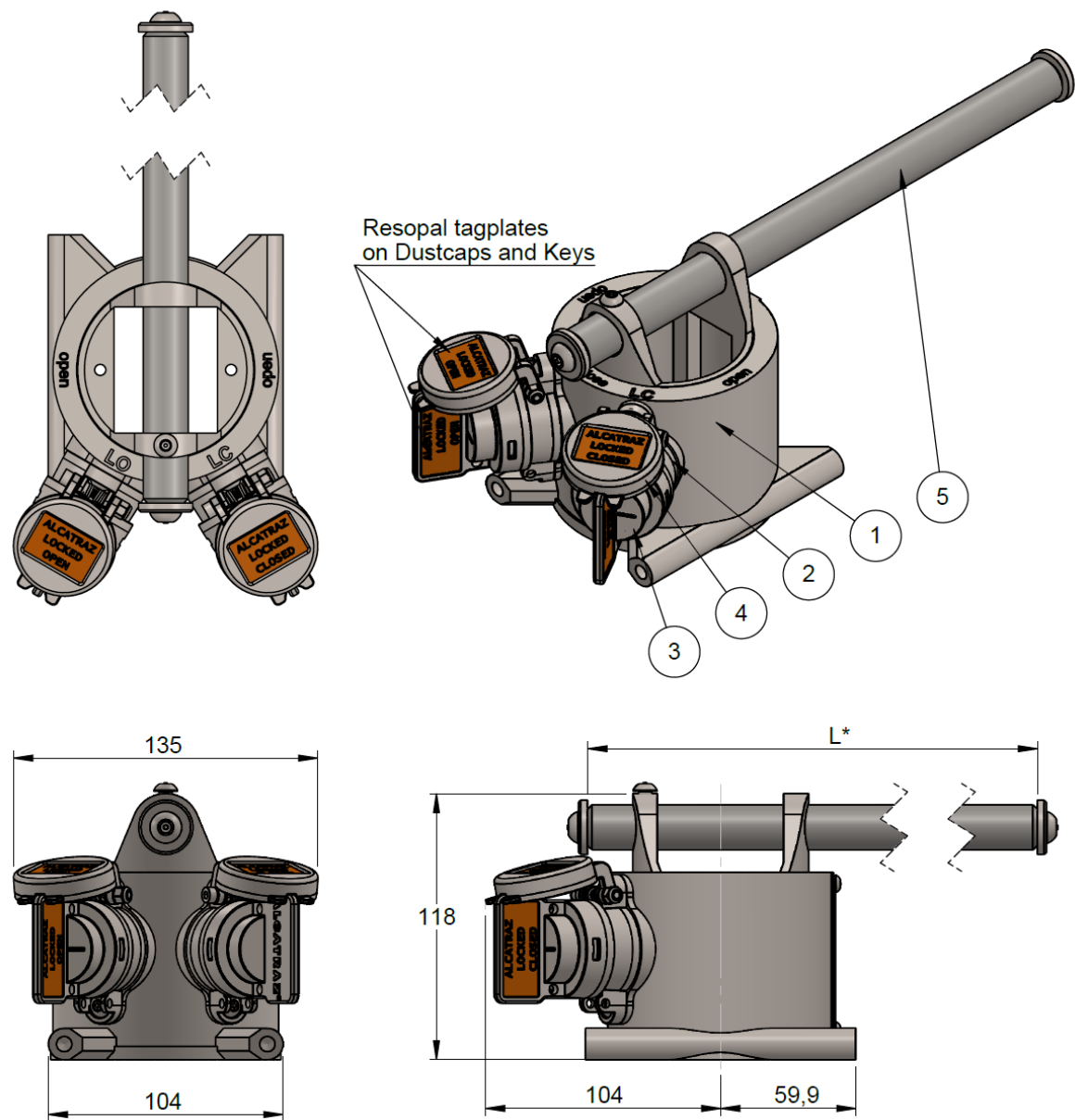


Host Valve



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4.
GAD DQLL (DOUBLE KEYED)



Bill of Materials		
Pos	Description	Material
1	Multi-turn main unit	SS 316 – Electro Polished
2	Lock portion	SS 316 – Electro Polished
3	Key	SS 316 – Electro Polished
4	Dust cap	SS 316 – Electro Polished
5	Lever lengths L* standardly supplied 300 /400 / 500mm	

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5. DATA SHEET SPLL (SINGLE KEY OPEN)

Dimensions SPLL

Dimension		
Length	(mm)	163
Width	(mm)	122
Height	(mm)	100
Mass of		2,99
Interlock (kg)*		
Lever sizes *	Various Options	
300 /400 / 500mm		
Max. valve stem width (mm)		40,00

* Not including bracket, adaptor & lever

Material Grades

Material Grades	
Interlock housing	SS 316
Internal components	SS 316
Bracket	SS 316
Adaptor	SS 316
Lever *	SS 316
Operational Key	SS 316
Tag plates	RESOPAL®

* AISI 304 levers available upon request

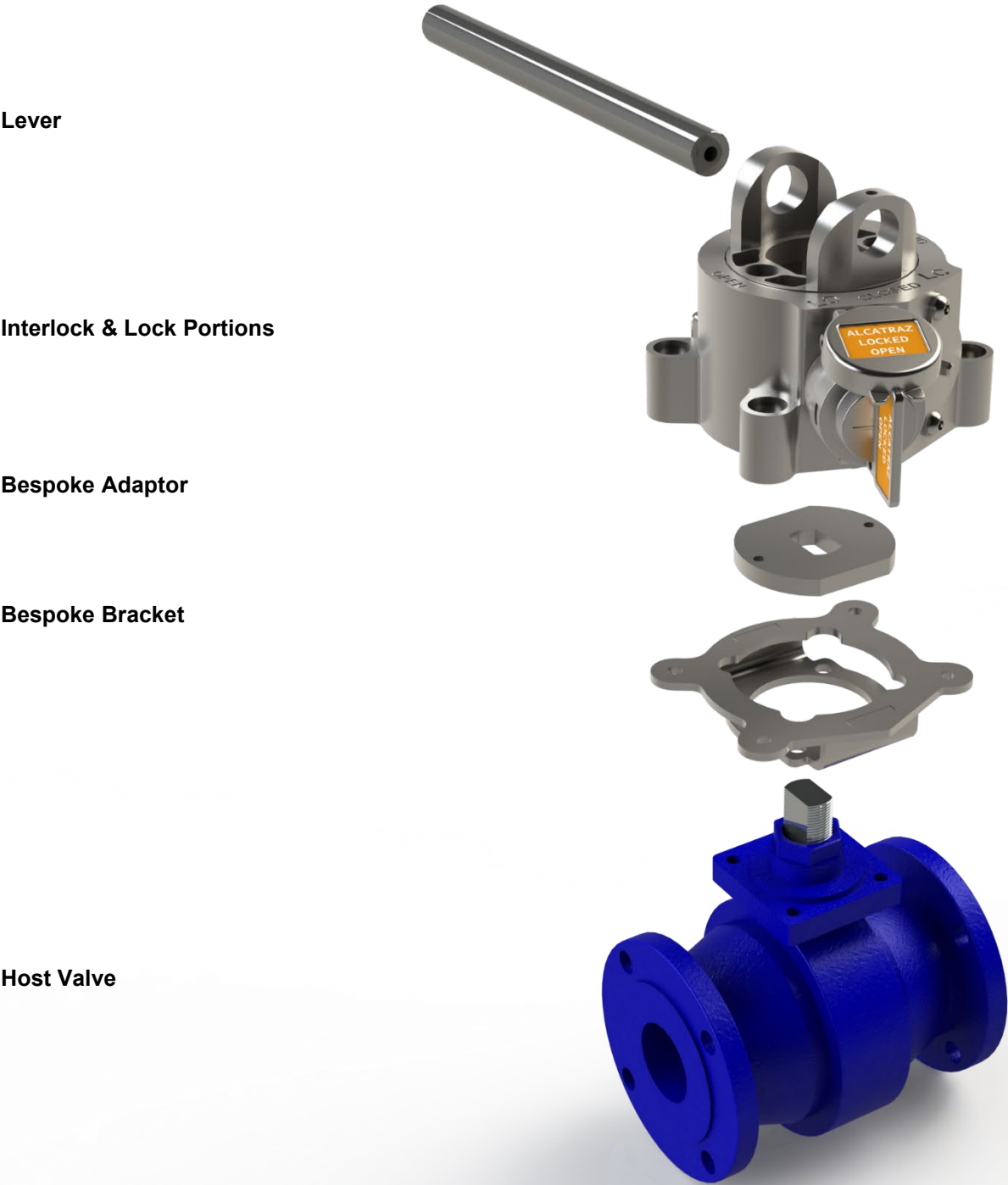
Certificate & Standards

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Product		2.1
Material Cert.*		
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6. EXPLODED VIEW SPLL (SINGLE KEY OPEN)



Product Data Sheet

Quarter Turn Lock

Large

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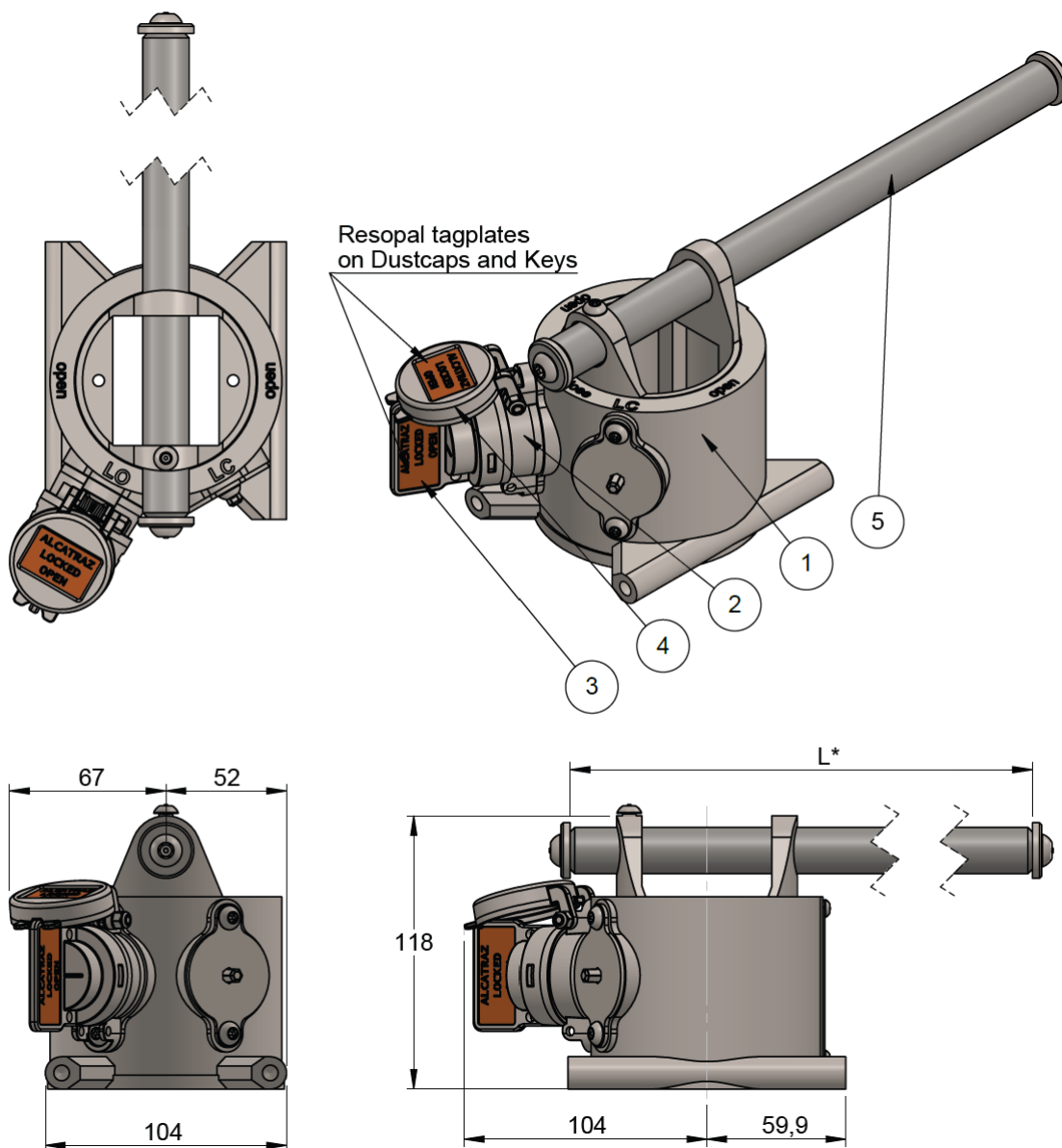
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7. GAD SPLL (SINGLE KEY OPEN)



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
4	Dust cap	SS 316 – Electro Polished
5	Lever lengths L* standardly supplied 300 / 400 / 500mm	

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8. DATA SHEET SQLL (SINGLE KEY CLOSED)

Dimensions SQLL

Dimension		
Length	(mm)	163
Width	(mm)	122
Height	(mm)	100
Mass of		2,99
Interlock (kg)*		
Lever sizes *	Various Options	
300 /400 / 500mm		
Max. valve stem width (mm)		40,00

* Not including bracket, adaptor & lever

Material Grades

Material Grades		
Interlock housing		SS 316
Internal components		SS 316
Bracket		SS 316
Adaptor		SS 316
Lever *		SS 316
Operational Key		SS 316
Tag plates		RESOPAL®

* AISI 304 levers available upon request

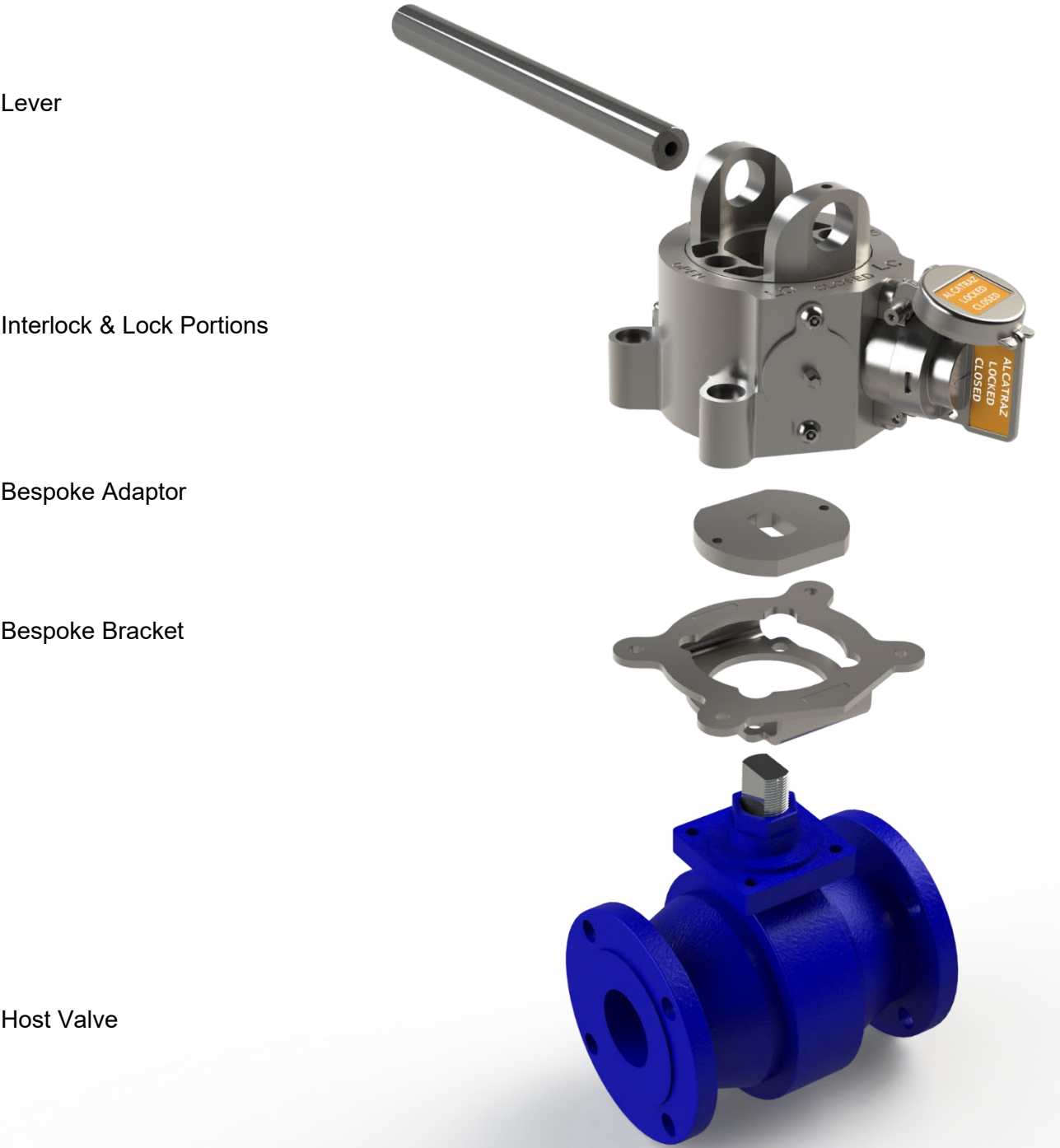
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9. EXPLODED VIEW SPLL (SINGLE KEY CLOSED)



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11. SUMMARY OF OUR 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 Mechanically Programmed Key Codes
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	Key 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	Two moving parts. Intergraded 90-degree end stops ISO footprint connection possibilities between Interlock & its mated valve	Minimization of moving parts Valve protection with intergraded ninety-degree end stops built within actual lock housing. Tamperproof mounting solution including fixation screws.
Alcatraz Mechanical Coded Key Interlock devices are in accordance to EN ISO 14119:2013 Type-2 B.2		