

# High Security Locking Systems



# **Superior Lock Protection**

Designed and built for real peace of mind

For over 100 years, Lowe & Fletcher has been pushing the boundaries of lock innovation and proven reliability. Our high security locks are the result of all that knowledge. Whatever application you have in mind, we are confident we have a locking system that meets your needs. And if that lock doesn't already exist, we'll create it for you. Let's talk.

# What are High Security Locks?

High security locks are specifically designed and manufactured with advanced security features that provide enhanced levels of protection from unauthorized access, picking and manipulation in applications where heightened security is essential.

Standard features of high security locks include:

- Attack resistance
- Picking resistance
- Environmental resistance

# Why choose a high security lock?

High security locks are built to resist physical attack, lock picking and even environmental challenges, like corrosion. They're the perfect partner for when the highest levels of security are essential.

# What makes them so secure?

Everything about these locks is designed to protect your security – from the sheer strength of the materials used to advanced designs, built to defend against forced entry.

We've attacked our locks with chisels and drills. We've tried to force them open with a torque wrench. We've tried pulling out the barrel. We've even had experts try to pick them open. Our locks have been tested to extremes to deliver the most secure systems we can.

And it doesn't stop there. All our high security locks are independently tested and proven to meet and exceed industry standards.

#### Independently tested for:

Performance

Strength

Security

Ourability







Corrosion Resistance



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For information on high security locks or our range of locking solutions, please contact our expert sales team.



# **High Security Dual Tumbler Lock (HSDT)**

The most secure lock in our range. Our innovative High Security Dual Tumbler (HSDT) lock comes with a new, patented locking system that makes it a lock picking nightmare.

As well as boasting more than 380 million lock combinations, the HSDT ensures significantly higher lock picking and torque resistance thanks to the patented number and alignment of tumblers in the cylinder.

To make opening and closing the lock easy, the HSDT comes with an exclusive, high-quality key crafted from steel. For additional security, each steel key is supplied with a security card that must be registered to order replacements. The key can also be customized with a sticker or an over molded head shape.

Manufactured to an industry standard footprint, our HSDT lock can be easily used to retro-fit existing spaces.

#### Certified to BS EN 1303:2015

Our HSDT lock meets all required standards for strength, security, durability and corrosion resistance for both the lock cylinders and their keys.

#### Ideal uses

Perfect for Pay-at-Pump systems, electric car charging stations, ATMs, cash registers, and more.



# High Security Dual Tumbler Lock (HSDT)

# **Standard Features**

- ✓ More than 380 million combinations

- Ohrome or bright nickel finish
- Supplied complete with 2-asymmetrical keys



Certification as per EN1303:2015

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	HSDT	Explanation of the test
Attack Resistance	••••	
Drilling resistance	••••	Tested with 3 drills of a maximum diameter of 12mm
Chisel resistance	••••	Tested with a chisel to cut in the lock
Twisting resistance		Tested with a grip to force a rotation clockwise and anticlockwise
Extraction		Tested with a screw drilled in the lock and pulled to remove the cylinder
Torque resistance	••••	Tested with a torque wrench to measure the maximum torque the lock can sustain
Picking Resistance	••••	
Combinations	••••	The total number of secured combinations (200,000 secured)
Manual picking	••••	Picked by hand with various blades and hooks
Gun picking	••••	Picked with a pick gun with various blades and hooks
Electric picking	••••	Picked with an electrical tool with various blades and hooks
Durability test	••••	
Cycles	••••	Tested to measure the number of insertion of keys before wearing the lock and prevent rotation
Environmental resistance	••••	
Corrosion Resistance	••••	Tested with salt spray test that accelerates corrosion effect
High temperature resistance	••••	Tested at a tempereture up to +149°F
Low temperature resistance	••••	Tested at a temperature up to -13°F

TYPICAL APPLICATIONS





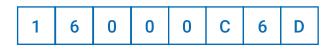




# **Certification EN 1303**

BS EN 1303:2015 is the European Standard which establishes assessment and test criteria for a cylinder to quantify its resistance to physical attack, durability and key security. BS EN 1303:2015 classifies cylinders for locks using an 8-digit coding system. Features assessed include durability, fire resistance, key related security and attack resistance. The resulting 8-digit code can be used to directly compare the performance of one cylinder range against another.

### Our HSDT lock has been classified as:



1

#### Category of Use



Grade 1: Used by careful people with low risk of misuse. The key does not break under the applied torque of 2,5 Nm. After the test, the key can be removed from the cylinder and re-used to operate the same cylinder with a torque not exceeding 1,5 Nm.

Euro-Locks result: Grade 1

2

#### **Durability**



Durability guarantees safety over time. It is measured by the number of cycles the key can endure. The test is performed as follows:

- key entry, 360° rotation, key removal
- key entry, 360° rotation in the opposite direction and key removal.

Grade 4: 25,000 Cycles Grade 5: 50,000 Cycles Grade 6: 100,000 Cycles Euro-Locks result: Grade 6

3

#### **Door Mass**



No requirements applicable for door mass.

Euro-Locks result: Grade 0



#### Fire Resistance



Three grades of suitability for use on fire resistant/smoke-controlled doors: **Grade 0:** Not approved for use on fire resistant and/or smoke control

door assemblies

Grade A: Suitable for use on smoke control door assemblies

**Grade B:** Suitable for use on fire resistant and smoke control doors.

No requirements applicable for fire resistance.

Euro-Locks result: Grade 0

5

#### **Personal Safety**



No requirements applicable for personal safety.

Euro-Locks result: Grade 0



#### Corrosion and Temperature Resistance



Four grades of corrosion resistance and temperature requirements:

**Grade 0:** No corrosion resistance requirements - no temperature requirements.

Grade A: High corrosion resistance 96h - no temperature requirements.

**Grade B:** No corrosion resistance requirement - temperature requirement between -13°F to +149°F.

**Grade C:** High corrosion resistance 96h - temperature requirement between -13°F and +149°F.

The lock is subjected to a salt spray test to determine its ability to function after exposure to a corrosive environment. The test is carried out in different temperature conditions, and the degree of corrosion resistance is rated (low, high) according to the number of hours.

Euro-Locks result: Grade C

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#### **Key-Related Property Safety**



**Grade 1:** 100 (Min. number of effective variations) / 2 (Min. number of movable blocking parts).

**Grade 2**: 300 (Min. number of effective variations) / 3 (Min. number of movable blocking parts).

**Grade 3:** 15,000 (Min. number of effective variations) / 5 (Min. number of movable blocking parts).

**Grade 4:** 30,000 (Min. number of effective variations) / 5 (Min. number of movable blocking parts).

**Grade 5:** 30,000 (Min. number of effective variations) / 6 (Min. number of movable blocking parts).

**Grade 6:** 100,000 (Min. number of effective variations) / 6 (Min. number of movable blocking parts).

Key security is determined by the cylinder or key patent, the number of different keys possible, key duplication protection and the number of pins in the cylinder. Grade 6 ensures the highest level of property security.

Euro-Locks result: Grade 6

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#### Attack Resistance



**Grade 0**: no resistance to drilling - no resistance to mechanical attack.

**Grade A:** 3 to 5 min resistance to drilling - resistance to mechanical attack (except when extracting rotor and/or cylinder).

**Grade B:** 5 to 10 min resistance to drilling - resistance to mechanical attack (except when extracting rotor and/or cylinder).

 $\textbf{Grade C:}\ 3\ to\ 5\ min\ resistance\ to\ drilling\ -\ resistance\ to\ mechanical\ attack.$ 

Grade D: 5 to 10 min resistance to drilling - resistance to mechanical attack.

These measures reflect the level of resistance to drilling, hooking, breaking, tearing, twisting and forcible rotation. Grade D ensures the highest possible resistance.

Euro-Locks result: Grade D

# High Security Rotary Disc Lock (HSRD)

The most corrosion resistant, high security lock in our range. The High Security Rotary Disc (HSRD) lock is manufactured from 100% stainless steel components and finished with an attractive stainless steel finish.

Stainless steel anti-drill discs ensure the HSRD is more than a match for attackers, while the alignment of the tumblers makes it even more impenetrable, thanks to a high torque resistance. Opening and closing the lock is done using an exclusive, high quality key made nickel-plated brass key.

What's more, our HSRD lock isn't just built to withstand attack and corrosion. With over 9 million key combinations and a 10-disc mechanism, it's more than ready to frustrate anyone trying to pick the lock too.

Manufactured to an industry standard footprint, the HSRD can easily be used to retro-fit existing spaces.

#### Ideal uses

Perfect for systems such as ticketing machines, gaming machines and vending machines, and more.



# High Security Rotary Disc Lock (HSRD)

# **Standard Features**

- Stainless steel finish
- Ø Anti-drill disc provides high mechanical attack resistance
- Manufactured to industry standard footprint for retro-fit options
- Comprehensive range of cam options available including straight, notched and offset



## TYPICAL APPLICATIONS









# Radial Pin Tumbler Locks (RPT)

Our Radial Pin Tumbler (RPT) locks come with a 7 or 10-pin mechanism in place of disc tumblers. Pins are arranged radially and opened using a round key.

Our 10-pin mechanism significantly increases pick resistance when compared to a standard 6 or 8-pin. This secure system has an extended key range of up to 10,000 key codes, so these locks are commonly used in applications where security is vital. What's more, our RPT locks are all available with an anti-drill feature to provide even greater protection.

Available in various sizes and lock movements, there really is an RPT lock for virtually every application.

#### **Ideal uses**

Typical applications include gaming and vending machines, car parking posts, jukeboxes, elevators and lifts, or anywhere valuable assets need to be secured.



# Radial Pin Tumbler Locks (RPT)

# **Standard Features**

- Ø 7 or 10-pin mechanism available
- Anti-drill feature available
- Bright chrome finish
- ⊘ Available with a wide range of lock movements to suit any application
- Supplied complete with 2-keys
- Omprehensive range of cam options available including straight, notched and offset









Product ID: 4302

Product ID: 4339

Product ID: 4333

Product ID: 4376

## TYPICAL APPLICATIONS









# **About Lowe & Fletcher**

Lowe & Fletcher design and manufacture locking systems for a broad range of industrial and commercial customers worldwide.

We supply over 80 million products a year, from precision mechanical locks to the latest digital and electronic systems. This breadth of delivery means we can always tailor a system to your exact needs.



## **Specialist Design**

Using computer-aided design and rapid prototyping, we are able to produce a 3D solid model of a lock for customer approval within 24 hours, if required. Whatever you need, our design specialists can make it happen.



## **Precision Manufacturing**

Using advanced primary and secondary manufacturing processes, we ensure our production is efficient, flexible and driven by quality. Automation plays a critical role in manufacturing, while our highly skilled workforce ensures the final quality and assembly of our locks is flawless.



# **Efficient Supply**

Whatever system you need, we can supply it in small or large volumes from our own operations. From initial order enquiry through to dispatch, we are here to help.



## **Proud Heritage**

Since our foundation in 1889, we have gone from making handmade products to becoming the highly flexible, precision manufacturing experts of today. However, that same spirit of John Lowe and Thomas Fletcher still lives on – in our commitment to creating well engineered, innovative products that meet the needs of today's customers, wherever in the world they live.

# Always ready to help

As a specialist manufacturer, we're not just lock suppliers, we're industry innovators. Whatever application you have in mind, our expert teams can make it happen. Let's talk.

Visit our websites for more information:

Lowe & Fletcher www.loweandfletcherinc.com



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