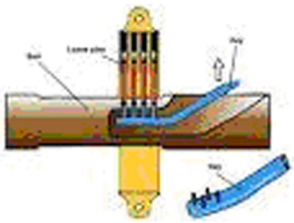
Locking Devices

History

Locks have been around for a very long time. The earliest known lock was made from wood and found in the ruins of Nineveh in ancient Assyria around 4000 years ago. Its construction is said to be the prototype of the modern pin tumbler lock.



Early wooden lock

Metal lock from the 14th century

All-metal locks were first made towards the end of the 10th century and used mainly for doors, chests and strongboxes. Since early times there was a need to "lock up" money, jewellery, clothes, arms and household goods and as a result, craftsmen became extremely proficient in metalwork. Between the 14th and 18th centuries, they produced locks that were both intricate and ornate.

The late 18th and early 19th century saw many advances in lock design and patents were taken out by Robert Barron (1778), Joseph Bramah (1784) and Jeremiah Chubb (1818). In 1848 Linus Yale patented the Yale cylinder lock and today this remains one of the most commonly used style of domestic lock.

20th Century onwards

Modular ¼ Turn Locks

In terms of metal cabinets, enclosures and panels, most locking devices evolved from domestic/architectural designs or were based on products developed for the motor industry. It was only with the advent of CNC technology that panel builders would start to benefit from the modular approach to design and production of locks specifically for the enclosure industry.

Starting with the basic quarter-turn "spanner lock" incorporating square or triangular inserts operated by a hollow key, there is now a very wide range of locking devices for the panel builder and specifier to choose from. There are also many special purpose locking devices to suit particular applications including for instance, compression locks to provide positive sealing and vibration proof closure (See Knowledge Base guide KB07.1 for more information).

In this guide, we have provided a glossary of just some of the many types currently available but it should be noted that we have confined our scope to include only those locks most commonly used on industrial enclosures, cabinets and panels.

Also, terminology can sometimes vary. Where possible we have given the generally accepted alternatives. See page 2.

For more technical information on specifiying a lock please see our Rocfast Assembly Guide. www.fdb.co.uk/rocfast

FDB PANEL FITTINGS
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Ref: KB 01.1

Locking Devices

Lock Glossary

Cam lock:

Simple, general purpose lock with cam or pawl, suitable for small cabinet doors, lockers and drawers.

Quarter turn lock:

Sometimes called spanner locks; simple but robust lock for meter cabinets and industrial enclosures. Can be key or tool operated.

RPT lock:

Radial pin tumbler lock; offers better levels of security. Frequently used on vending/amusement machines.

Miniature versions are often used for PC and laptop security.

Budget lock:

Somewhat of a misnomer since the expression does not necessarily refer to cost. Usually used to describe simple universal latches.

Keypad lock:

Electrical/electronic locks operated by digital keypad

Combination lock:

A quarter turn latch "locked" by numeric combinations. Designed to fit into an industry standard cut-out.

Rod lock:

Provides 2 or 3 point locking for large doors. A single locking mechanism secures centre, top and bottom of the door. For more info see KB05.1 Multi point locking guide.

Compression Lock:

Compression latching enables additional gasket pull-down over that provided by conventional quarter turn locks. They are thus specially well-suited for applications that require quick, secure locking and where high degrees of sealing are required. For more info see KB04.1 Compression lock guide.

"Hygiene" Locks

IP67

Stainless steel locks for food industry/clean room and similar applications.

These locks comply with relevant FDA standards.

IP69K

In addition to the above, locking cylinders can be incorporated into Lever, Tee and Swing handles for use on larger doors.